

# **Pumas in the Grampians Mountains: A Compelling Case?**

**An Up-Dated Report of the Deakin Puma Study**



**John Henry  
May 2001 (Revised 2004)**

## TABLE OF CONTENTS

<b>Preface .....</b>	<b>iv</b>
<b>A Map of Australia showing the Grampians Region of South Eastern Australia .....</b>	<b>vi</b>
<b>South Eastern Australia: Grampians and Surrounding Country .....</b>	<b>vii</b>
<b>Map of the Grampians Mountains with Details Relevant to the Deakin Puma Study .....</b>	<b>viii</b>
<b>CHAPTER 1 .....</b>	<b>i</b>
<b>Drawn into the Puma Mystery of the Grampians Mountains.....</b>	<b>i</b>
First Night.....	i
The Grampians Puma Legend .....	iv
How the Deakin Puma Study Got Started .....	vii
<b>CHAPTER 2 .....</b>	<b>xii</b>
<b>Planning for the Deakin Puma Study.....</b>	<b>xii</b>
The Ground is Prepared.....	xii
Melbourne Zoo Visit: face to face with pumas .....	xiii
Preparing for the Field.....	xvii
The Deakin Puma Study Strategy .....	xxi
Drawing Conclusions from the Study: the Test of Plausibility .....	xxiv
<b>Puma Study Field Trips: an Overview .....</b>	<b>xxix</b>
The Field Trip Routine .....	xxix
Field Trip 1: 21 to 24 October 1976 .....	xxxii
Field Trip 2: 25 to 27 March 1977 .....	xxxii
Field Trip 3: 29 April to 1 May 1977 .....	xxxii
Field Trip 4: 9 to 11 September 1977.....	xxxiii
Other ‘In-The-Field’ Activities in association with the Four Field Trips .....	xxxiv
Conclusion.....	xxxiv
<b>CHAPTER 4 .....</b>	<b>xxxvi</b>
<b>Going to the Source: Testing the American Airmen Theory .....</b>	<b>xxxvi</b>
The Historical Research Approach.....	xxxvii
USA Military Presence in South-Eastern Mainland Australia during 1942.....	xxxviii
Why would USA airmen want to bring pumas into Australia when they arrived here in 1942? .....	xlix
Did They? What is the evidence that puma mascots were in the possession of USA airmen located in either Mt. Gambier or Nhill in March 1942 .....	liii
Conclusion .....	lviii
<b>CHAPTER 5 .....</b>	<b>lxv</b>
<b>Talking to the True Believers: Interviews with Eye-witnesses .....</b>	<b>lxv</b>
Tactic Two of the Deakin Puma Study Strategy .....	lxv
Identification and Selection of Eye-witnesses .....	lxvii
Putting Order into the Eye-witness Narratives .....	lxviii
The Puma Narratives.....	lxxiii
Assessing the Credibility of the Study’s Puma Narratives.....	lxxix
Puma Narratives of High Rankings for Believability .....	lxxxii
Final Analysis of the High Believability Ranked Puma Narratives .....	lxxxvi
Conclusion.....	lxxxix
Postscript: 1978 to 1981 .....	xc
<b>CHAPTER 6.....</b>	<b>xciv</b>
<b>Assessing the Hard Evidence: Big Cat Artefacts or What? .....</b>	<b>xciv</b>
If Only We Could Catch One! .....	xciv
Bush-Bashing from October to September, 1976 to 1977 .....	xcvi
The Hard Evidence from Bush-Bashing after Pumas .....	c
Hard Evidence Provided by Eye Witnesses and Other Sources .....	cxvi
One Final Piece of Hard Evidence which also Addresses the Feral Cat Question .....	cxxx

Conclusion .....	cxixiv
<b>CHAPTER 7.....</b>	<b>cxixvi</b>
<b>Puma Presence: Beyond Reasonable Doubt?.....</b>	<b>cxixvi</b>
Drawing Conclusions from the Study: the Test of Plausibility .....	cxixvi
Coming to a Final Assessment.....	cxl
Beyond Reasonable Doubt? .....	cli
Back to the American Airmen of 1942 .....	clii
Conclusion .....	cliv
<b>Appendix .....</b>	<b>clvii</b>
Deakin Participants in the Grampians Puma Study .....	clvii
Eye Witnesses Informants to the Deakin Puma Study Group .....	clix
<b>References.....</b>	<b>clxi</b>

## **Preface**

This book is my account of the Deakin Puma Study, a Study conducted from 1976 by Deakin University based lecturers and students, and their families and friends. The views expressed in this book are mine although based on information collected through the efforts of the Deakin Puma Study Group. I was the coordinator of the Study.

The Deakin Puma Study was overtaken by the changes to the institutional context of the people involved. When the Puma Study commenced in 1976, the lecturers involved, including myself, were employed by the Geelong State College – a tertiary education institution dedicated to the pre-service education of primary teachers. By 1977 these lecturers found themselves being employed by a brand new tertiary education institution, Deakin University. And by 1978, the science courses forming the foundation for the Study had been transferred to the new Faculty of Science and the lecturers driving the Puma Study had moved their teaching commitments into the new course opportunities then becoming available in the new University's Faculty of Education. In a very short time the professional context and career possibilities had changed dramatically for my academic colleagues and myself. In grasping the new opportunities, the Puma Study receded into the background for the remaining Study core team members and became associated with a past institutional era of tertiary studies and pursuits.

Without any definitive moment ever being orchestrated by myself or by any other member of the core team, the Deakin Puma Study was allowed to drift without any clear moment of disbandment. In this climate, a report of the Study was never released. But this is not to say that a report was never written.

I had progressively written a draft report as the Study unfolded. At the end of 1977 this progressive report, together with the Study's data-base, was pulled together into a draft final report. But by 1978, there was no easy mechanism for getting the disbanded Study's core team to endorse this draft report. In a real sense, this draft report remained a minority report on the Deakin Puma Study expressing the views of the Study's coordinator only.

I have decided, some twenty three years after writing the original report, to return to its text and present its contents, up-dated where appropriate with more recent information, in a fully expanded book form. Additions have been included in this publication from information generated from the Study's enquiries that became available after 1977. But even so, the bulk of the material reported in this book comes from the efforts of the Deakin Puma Study Group during 1976 and 1977.

The outcome of this re-writing of the earlier report is this book, a version of the Deakin Puma Study Report that I am prepared to put my name to and present to a



wider readership. As before, this report does not carry an endorsement from any of the other participants in the Study.

The book, in the main, maintains the general style of a Project Report although I have softened this style by adopting a more narrative style where appropriate.

I express my appreciation of all those people who participated in the Deakin Puma Study all those years ago. In particular, I thank my colleagues, both students and academic staff, who formed the core team of the Deakin Puma Study Group. For many of the participants in the Study, the memories of those exciting times in the wilderness of the Grampians will still be as vivid as they were in 1976 and 1977. I hope this account of our shared adventures on these 'puma hunts' will rekindle your interest in those magnificent mountains of Western Victoria, the Grampians.

Finally, I acknowledge the role the late Ellis Tucker played in the life of the Deakin Puma Study. It was his direct and unequivocal statement of his own experience of seeing a puma in the Grampians that shifted my own interest in the Grampians Puma Legend from the safety of the cynic's position on the matter. Ellis generously shared the information he had collected on the background to this alien cat phenomenon prior to our involvement from Deakin University. Importantly though, Ellis Tucker was prepared to put his considerable reputation as a respected field naturalist on the line in his own community with his uncompromising and publicly expressed conviction that pumas were present in the Grampians. Perhaps this book will vindicate his quest to prove to others that his own eyes had not deceived him. The other eye witnesses cited in this book may also gain some comfort from the analysis developed and presented here.

John Henry BSc, MEd, PhD.

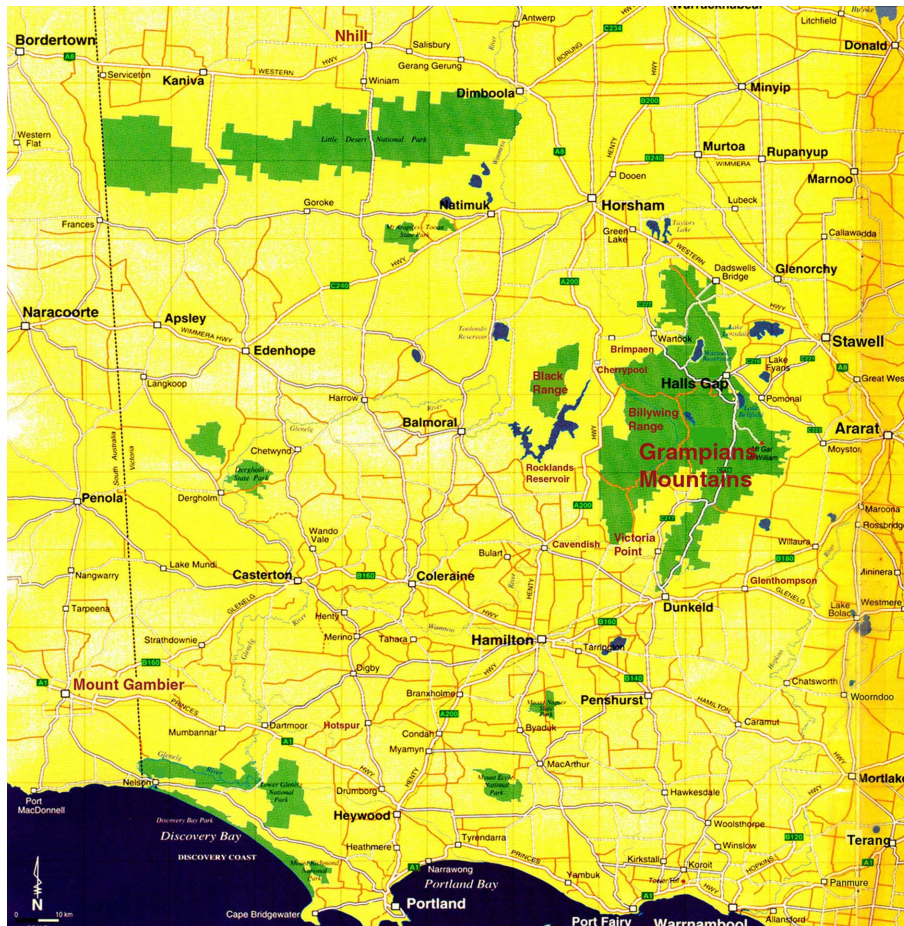


**The Billywing Range of the Western Grampians Mountains rising up from Glenisla Valley**

**A Map of Australia showing the Grampians Region of South Eastern Australia**

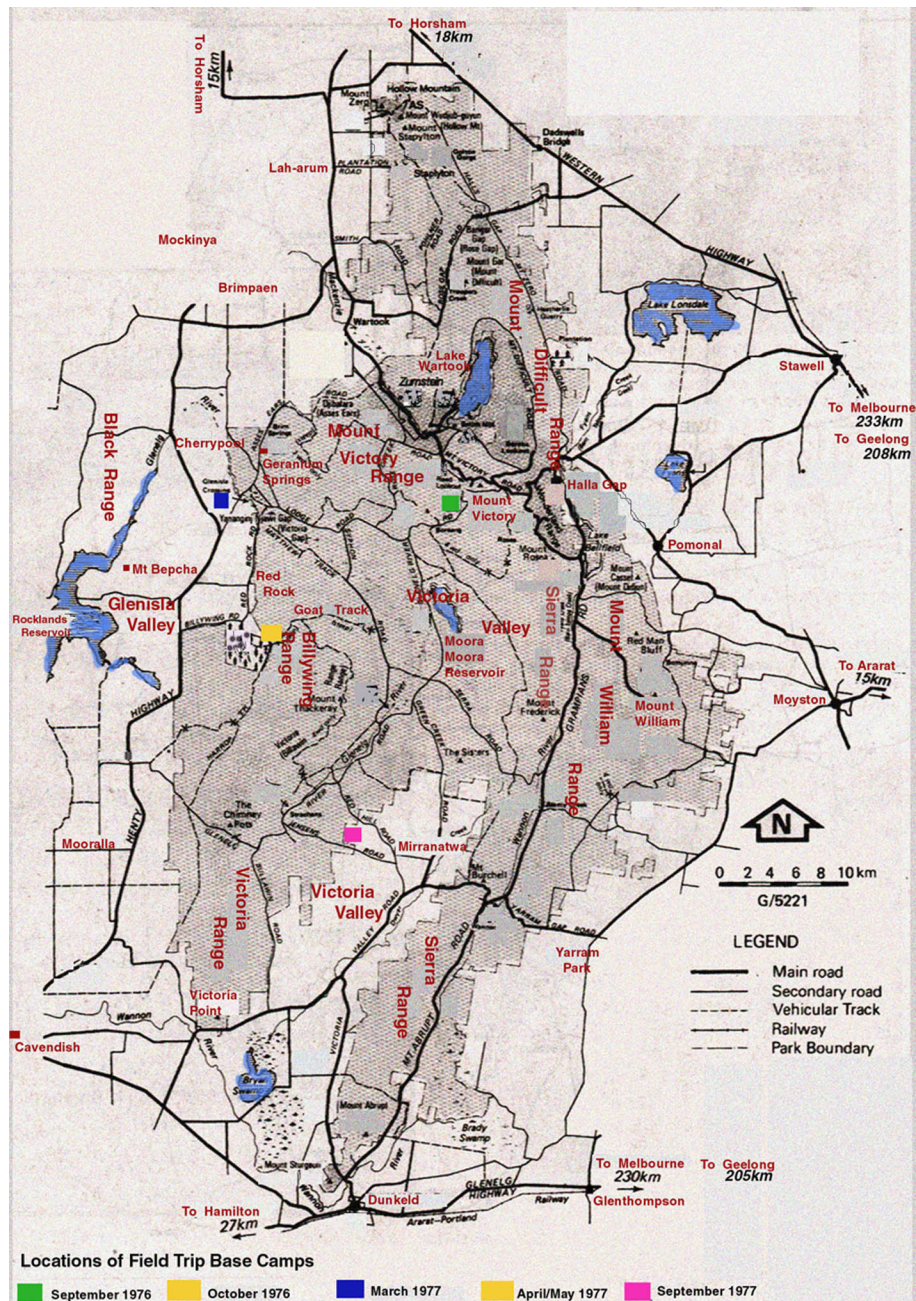


## South Eastern Australia: Grampians and Surrounding Country





## Map of the Grampians Mountains with Details Relevant to the Deakin Puma Study



## CHAPTER 1

### **Drawn into the Puma Mystery of the Grampians Mountains**

#### ***First Night***

“Hey, everybody, there’s something out there that looks pretty weird to me. I’m not kidding ya”. Peter Jacobi was the joker of the group of students. So when he catapulted himself into the circle around the camp fire, jabbering about something unusual out in the bush night, no one took him seriously.

“Have you spotlighted the dreaded yowie of the Australian bush”?

This was one student’s response to the picture of Peter rushing around the circle of relaxing University students with a spotlight in one hand and its power source, a motor bike battery dangling precariously from a strap over his shoulder, all the while pointing excitedly to the darkness beyond the tents at the back of the camp site.

“Come on Peter, have another drink of this. It will warm you up and calm your nerves”, said another while holding out a half empty bottle of green ginger wine.

It was Friday, 10 September 1976. Early Spring in south eastern Australia can get very cold at night so the students had come prepared. There were twelve of us in the camp that night; ten Environmental Science students in the final year of their primary teacher training course, the new wife of one of the students, Bronwyn, and me, the students’ science lecturer.

At this time I was a member of the academic staff in the Science Department of the Geelong State College, a pre-service teacher education college located in Geelong, a large provincial city in the State of Victoria, Australia. In April 1977 this State College was amalgamated with another Geelong-based tertiary institute to form a new University in the State of Victoria– Deakin University. I ran the Environmental Science courses at the College in 1976 and later, at the University in 1977. I taught these courses through a mix of on-campus lectures and periodic field trips to the disparate environmental zones of southern and western Victoria, all within a day’s drive from Geelong.

And so it was that on a bleak Friday night in the September of 1976 my third year Environmental Science students and I were resting in the Australian wilderness after setting up our base camp smack-bang in the centre of the Grampians Mountains of Western Victoria. The purpose of this three-day field trip was to study the natural

communities in the Grampians, survey animals in the area and observe the Aboriginal rock art in the natural shelters of the escarpment and the highlands.

We had set up camp in a cleared camping area at the northern end of a broad central valley called Victoria Valley. Victoria Valley is a horse-shoe shaped valley some 40 km long and 15 km wide opening out to fine wool sheep farming country to the south. Extended chains of magnificently weathered mountains align roughly north/south forming the longer arching walls of the Valley. The eastern wall of the Valley is structured from the 60 km of peaks that make up the Sierra Range, each peak contributing to the Range's dominating grandeur of the Grampians when approached from the plains of Western Victoria. To the west is the Victoria Range shorter by some 20 kms than the Sierra Range but no less impressive. The northern section of the Victoria Range, some 25 km long and up to 8 km across is a distinctive block of mountains with sheer escarpments on all sides. Locals refer to this block of particularly rugged and isolated mountainous terrain as the Billywing Range. The Valley is closed at its northern end by the abrupt almost inaccessible escarpment where the Mount Victory Range joins the Mount Difficult Range at Mount Victory. Our campsite was just off the Victoria Valley Road where it turns east at the northernmost end of the Valley before climbing up the escarpment to high country beyond.

This first night of the field trip was pitch black; the heavens were devoid of moon or starlight. The forested escarpment loomed above the small circle of tents brooding above us but out of sight in the darkness of the night. The low tents, coloured blue and orange, provided an eerie canvassed backdrop to the camp with their orange front walls softly aglow under the effect of the flickering flames of the central campfire. The evening meal was finished and the students were settling into the first night of the field trip with jokes, small talk and the excitement shared amongst young people who know each other well and who have the prospect of a couple of days together camping out in the wilderness. The warmth of the fire and the inner glow of the wine upon full stomachs added to the camaraderie of the group. This weekend was going to be fun!

Peter Jacobi had been fiddling with the spotlights. These were new equipment and we were going to use them the next night to observe the nocturnal marsupials of the area – kangaroos, wallabies and possums were our anticipated targets.

"I'm going to try one of these spotlights out", said Peter to no one in particular, connecting a spotlight to a wet-cell battery secured into a canvas pouch. He swung the strap attached to the pouch over his shoulder and stood up.

"Take it easy with that battery", warned John Burt, a student sitting nearby. "You'll get acid all over yourself if you don't watch it".

"She'll be right", was Peter's response as he picked up the spotlight and headed away from the circle of firelight soon disappearing from view behind the tents.

“Silly bugger. Why leave this fire on a cold night like this”, observed another student. “Give him a go. He might find something out there”. “There should be possums coming out around this time”, commented another as the conversation turned back to the previous campfire banter.

The remaining students and I were quickly absorbed in College gossip and chit-chat, enjoying this time of the day before turning to our cold sleeping bags in the tents behind us. But we were not counting on Peter’s re-entry to the group.

“I’m telling you that there is something out there watching us. I’ve just picked it up in the spotlight”, Peter persisted.

“What did you see, Peter”, I finally asked him.

“Large yellow eyes, that’s what”, exclaimed Peter. “ And close to the ground too!”.

At this the other students let out gales of laughter and jeers. “Give it a rest mate. We’re getting ready for bed, not some wild animal chase through the scrub”.

“Where was it”? asked Rob Riley. Rob was one of the more serious students in the Group.

“It’s under a bush about 30 yards behind the last tent”, replied Peter pointing out to the back of the camp. “And it’s big”.

“Okay then, let’s take a look”. I got up from my camp stool and walk over to Peter. Rob joined us. To the wise cracks of the group by the fire Rob and I followed Peter back to his ‘sighting’. He switch on the spotlight and shone the beam directly onto a patch of bush on the edge of the clearing. Sure enough the spot light picked up two large yellow-green eyes in the darkness. We were now only 20 metres away at most. The eyes were spaced well apart, similar to the spacing of a yearling bullock’s eyes, and initially about 300mm from the ground. The body of the animal could not be distinguished from the surrounding blackness of the scrub. After about 30 seconds the eyes slowly raised to about 600mm from the ground. Peter, in his excitement, turned towards Robin and I and called out.

“Did you see that!” he yelled. In his excitement Peter swung the spotlight beam towards where Rob and I were standing, just a few metres behind him.

“Get the light back onto it”, I hissed. When the light returned to the bush, the eyes were gone. There had been no sound of the animal departing. Nothing was there. It was as if we had been imagining the whole thing. We were standing alone in the cold darkness broken only by Peter’s frantic scanning of the forested gloom with his spotlight beam.

“Hell, what could that have been?” asked Rob.

“Could have been a fox or a dog”, I answered, knowing only too well that foxes’ eyes reflected red light when caught in a spotlight beam, and that it would have to have been a massive dog to have eyes that big and that far apart.

“Damned if I know”, was Rob’s comment as we made our way back to the warmth of the fire.

“What was out there?” Solved the mystery, have we?”

What could I say? “It probably was a large dog. There are plenty of wild dogs up here, you know”.

Little did this group of light hearted campers realise at the time that, over the next year, the Grampians would become almost a second home to them, and the experiences they were to share would occupy their thoughts and imaginations for many years to come. But on this cold, dark early Spring night, there was only time for taking another rise out of Peter, have one last swig of the warming green ginger wine, and say ‘good night’ before heading for the waiting sleeping bags in the tents forming a fragile barricade against the Australian wilderness beyond the camp.

### ***The Grampians Puma Legend***

The folklore of the Western District of Victoria includes the phenomenon of large cat-like mammals in the Grampian Mountains and the surrounding countryside. For anyone who has spent any time in this part of Australia, the story of big cats in the Grampians will be familiar. The local country newspapers, Hamilton Spectator, Ararat Advertiser and Stawell Times News, regularly carry accounts of the latest sightings. Occasionally, these stories are picked up by the metropolitan papers and published to a wider readership.

These media accounts serve to both initiate new groups of Victorian residents into the ‘Grampians Puma Legend’ while keeping the Legend alive for those who are already familiar with the story. Typically the media accounts provide a potted version of the Legend’s key features while reporting on the latest sighting. In this way these media stories both report on the puma phenomenon and perhaps establish the pre-conditions for another sighting sometime in the future. These reports could be interactive with the Legend in ways that assist in its perpetuation. But I will put this point to one side for the moment and introduce you to a selective sampling to these media reports. These newspaper articles provide an easy entry point into the significant elements of the Grampians Puma Legend; the Legend at the centre of the Deakin Grampians Puma Study.



Take as the first example, the following extract from an article that appeared in The Sun News Pictorial, a Melbourne daily distributed throughout Victoria with the highest circulation for a morning newspaper:

Two Wimmera Lands Department officers have seen a black panther-like animal on the fringe of the Little Desert about 50 km north-west of Horsham. ... This animal was as big as a Labrador, was jet black, had a cat-like head with a very small nose and ears and a beautiful cat-like tail.

Occasional sightings of black animals in the Wimmera have been reported for the past six years. They could be descendents of pumas believed to have been released in the Grampians by American airmen during World War 2 (November 1977).

Earlier in October 1969, the Hamilton Spectator published the following report under the Headline ‘ Monsters have been identified’:

Mystery animals spotted at various points in the Western District in the past few years may be American mountain lions. The discovery was revealed at the weekend by a Byaduk man and is a big break-through in the search for the mystery animals.

The latest (sighting), when Mr. L. G. Rentsch got a good close up look at one of the animals at Byaduk, resulted in a positive identification. The answer has come from another Byaduk man, who wishes to remain anonymous. This man was in the RAAF, stationed at Mt. Gambier at a joint Australian-US camp for part of the war.

One day, some of the USAF men showed him some pups they had. He said it was the first time he had seen pups with round ears. It was not until several days later he learned that they were pumas.

Eventually the word reached the Australian and US commanders and the men were ordered to destroy the young lions. Soon after, the US airmen asked the Australians if there was any rough country nearby where they could do some exploring. They were directed to the Grampians.

It was later discovered that the mountain lions were not killed but were let loose in the Grampians.

These two newspaper articles capture the essence of the Legend. The story has a clear and somewhat plausible beginning: that is, American military personnel brought the pumas, as mascot cubs, into the country early in 1942 while based briefly in the

south-eastern regions of the Australian mainland. When they left for the war zone in the north of the Australian continent and the islands of New Guinea and the South West Pacific, the mascots were left to fend for themselves in the rugged Grampians.

The story is re-visited with each new published reported sighting. It is now apparent, from a cursory search through the files of the local newspapers, that the sightings are very common. So common, that the Western District community of Victoria has become split into ‘believers’ and cynics. It is hard not to have an opinion one way or the other on the phenomenon of the ‘Grampians puma’. Diversity of opinion on the veracity or otherwise of a Legendary phenomenon such as the Grampians puma can drive local residents into positions which, under normal circumstances, they would be less inclined to defend with such passion. What is a foolish myth for some has become a clear factual reality for others. Some believers may even go to extraordinary lengths to provide ‘proof’ in the face of small town derision and ridicule. Some residents may even feel that their reputations as solid, truthful and respectable community members may be put at risk by reporting a sighting or claiming too strongly that ‘there is something unusual out there in the bush’.

This quickly sketched backdrop to the Grampians Puma Legend provides an insight to the processes at work in the small communities that make up the Grampians region of Western Victoria; processes that sustain the Legend itself while maintaining a debate over its truth status. As could be expected, this sociological element of the Legend has also been captured by local newspaper reports. By way of example, take this extract from an article in a January 1982 edition of the Hamilton Spectator:

Hundreds of Grampians fringe dwellers had seen one of the elusive mountain lions which allegedly inhabit the Western District, it was claimed this week. But they did not report the sightings – and in many cases did not even talk about it – for fear of ridicule.

That is the opinion offered by a Victoria Valley woman, who says the animal has been sighted by herself and several members of her family. The woman declined to be named because of the consequences which resulted the last time one of her family was quoted in the Press following a sighting.

‘We had a terrible lot of sarcasm and laughter directed at us’, she said. ‘I wouldn’t want that again. Look. There are hundreds of people around here who know this animal is a fact of life but don’t want to get involved’.

A particular irony of the Deakin Puma Study was that its own community of researchers was, over the short time of the Study, not immune to the tensions expressed in the above article.

## *How the Deakin Puma Study Got Started*

There are always many beginnings to study programs, particularly projects involving large numbers of people. The beginning that ultimately gets into the written record is the one central to the principal writer's recollections and first hand experiences. So it is with the Deakin Puma Study and this account. As the author of this report, this then is my narrative of how the Deakin Puma Study originated.

I grew up at Glenthompson, a very small country town less than twenty kilometres from the Grampians, and had my secondary education in Hamilton, a nearby rural city of about 10,000 people. The Grampians are familiar country to me. As a boy I experienced many day trips and camping excursions into the midst of this wilderness country isolated within a flat sea of farmlands turned over to sheep, cattle and grain. I have no recollection of when I first learnt of the Grampians Puma Legend. It must have been in my teens, but I have the strong impression that this Legend was always associated with my growing up in this country region.

As you already know, I had taken a group of Environmental Science students from Deakin University for a three-day field trip into the Grampians Mountains on the weekend 10 to 12 September 1976.

After the excitement of the Friday night when Peter Jacobi had sighted the yellow-green eyes of a large animal close to our base camp, a sighting shared by Rob Riley and me, we carried on as normal throughout the next day, Saturday, 11 September 1976.

Late on the Saturday I had planned to show the students an isolated rock shelter in which there were, to my mind, Aboriginal rock paintings that would capture the students' imaginations. The shelter was at the base of a pinnacle of rock rising out of the middle of the high country that exists above the buttressing escarpments of the Billywing Range.

To reach this high country I drove the students along the western escarpment of the Asses Ears Range, over the Glenelg River where it drains out from the north western gap of Victoria Valley at Glenisla Crossing, and then along the Red Rock Track with the sheer red wall of the western escarpment of the Billywing Ranges reflecting the afternoon sun back to us. I stopped the Land Rover just over the bridge on the Red Rock Track and invited the students to accompany me across the paddock and up the right hand sidewall of the small valley carved into the side of the Red Rock Wall. We struggled up the steep slope for about 300 metres before arriving at a cathedral-like overhanging rock. At its base was a dry shelter with a sandy floor. When the students had assembled beneath the sheer outward reaching rock wall I drew their attention to the faint red ochred figures painted onto the rock face. After about 15 minutes of looking, but not touching, and aware of the late hour of the day, I encouraged the group to head back down the slope to our waiting vehicle.

We then drove the several kilometres around the base of the Billywing escarpment to the Buandik Rock Shelter, another Aboriginal rock art site. Here we began to climb the escarpment along the Goat Track. The Goat Track is aptly named given that it winds its way up the escarpment in a series of tight hair pin bends, with each sharp turn providing increasingly more spectacular views of the expanding flat farm country below.

The old Land Rover roared and lurched its way up the steep gradient until finally the Goat Track straightened out and flattened off into a series of gently dips and rises. We had reached the uplands of the Billy Wing Range. Here the landscape opened out into a kingdom of its own, high above the farms and skirt of bush below. In this high world within the Grampians miniature mountain peaks rose as rocky extrusions from the harsh vegetation – rough barked eucalypts and prickly cypress pines, ti-tree, hakea and grevilleas. This made the bush walking hard going for us when we left the vehicle and headed for one of the miniature pinnacles several hundred metres away. At the base of this pinnacle was the site of the Aboriginal rock painting I wanted to show my students. But the unforgiving nature of the thick scrub made it difficult for us to navigate across the uplands to reach the rock art site. To make matters worse, our path was blocked by a waterway, Cultivation Creek. This watercourse transects the upland plateau of the Billywing Range before cascading over the escarpment of the Range in a spectacular waterfall onto the lowlands below next the Buandik Rock Shelter.

The creek was in flood and the weather had closed in on us. It was now raining, so we all took shelter in the overhang of a nearby rocky outcrop. As we rested out of the rain, the students noticed the remains of three animals eaten out and left to desiccate at the back of the overhanging rock. I helped the students identify the remains. First there was the eaten out skin of an echidna. All that remained was the skin with its spines intact, and the four short legs. Next were the skin, hind leg bones and tail of a brush-tail possum. Finally, the students identified the bones from the hind leg of a wallaby. The muscles had been eaten off the bones. From the arrangement of the toes we deduced that it was from a red-necked wallaby, the most common wallaby of these ranges.

This assemblage of predator leavings raised the interest of the students.

“What animal would be capable of preying on an echidna, a red-necked wallaby and a brush tail possum”? asked one student, assuming that the remains had been left by the same predator.

“Could be a big dog”, suggested one of the students.

“But would a dog be strong enough, agile enough, versatile enough”, the other students pondered. Strong enough to overturn a dug-in echidna and then unravel its tightly held spherical defensive posture while all of its spines were facing outwards?

Agile enough to captured a tree dwelling possum? Versatile enough to then run down a speedy wallaby?



**Prey Remains from the Billywing Uplands Shelter: Remains of an Echidna (top left), a Brush Tail Possum (top right), and a Red-Necked Wallaby (bottom)**

While we were all waiting in this dry retreat from the rain, I decided it was an appropriate moment to introduce another dimension to the discussion.

I told the students that the last time I had been in this upland area of the Grampians was in 1972. At that time I was with my father together with several local secondary science teachers and a prominent member of the Hamilton Field Naturalists Society, Ellis Tucker. I told the students that at that time I was a science teacher at Warnambool High School and that an excursion into the Grampians for science teachers had been organised by the Victorian Science Teachers Association. Ellis Tucker was an expert on the fauna and flora of the Grampians and had been commissioned to lead of the excursion. It was Ellis who had revealed to me the Aboriginal rock art site I had been attempting to show to my environmental science students that afternoon before the flooded creek had blocked our way.

During the 1972 science teachers' excursion, when the party was assembled at the end of the day on the low country at the foot of the Billywing Range, I had tentatively asked Ellis for his opinion on the Legend of the Grampians puma. Much to my surprise, Ellis answered that he had seen one himself. In a matter of fact voice he pointed to the bridge on the Red Rock Track, not 500 metres from where the group had gathered to say goodbye before departing, and said:

“It was 10 o’clock in the morning on a sunny day. I was driving back up that road towards the Glenelg River crossing. When I got

to that bridge a puma came out from the bushes on the side of the road and slowly loped across in front of me. I had a perfect view of the animal for almost a minute. It was a typical cat shape but about 2 feet (600mm) high at the shoulder, 3.5 feet (105mm) long in the body with a 3 foot (900mm) long tail curved down to the ground. It was ginger brown in colour, thick set with a round shaped head and small ears and short neck. It had thick legs for an animal this size”.

The confidence with which Ellis Tucker told of his first-hand encounter with the puma, and the fact that he was a naturalist of considerable reputation and with many years of local experience jolted me from my habitual cynicism regarding the Puma Legend. Tucker’s account was credible and could not be easily dismissed as mistaken identity, fanciful thinking or mischievous story telling.

I relayed this ‘Ellis Tucker story’ to my group of Environmental Science students now huddled together in the rocky shelter in the centre of one of the most isolated uplands of the Grampians, but only a short distance ‘as the crow flies’ above the Red Rock Track that featured in Ellis Tucker’s narrative of his puma sighting.

“Are we sitting in a puma’s den, is that what you’re telling us”, exclaimed Bronwyn Burt, John Burt’s young wife who had come along for the fun of the trip.

The other students looked around nervously into the gathering mist and gloom of the late afternoon. While the boys teased the girls and put on a brave face, it was decided to collect the animal remains for a more detailed study back at the camp and in the laboratory at University. With our trophies secured in our haversacks we beat a hasty retreat back to the Land Rover parked at the side of the Goat Track. After clambering aboard we head across the Billywing uplands for the several kilometres it took to reach the drop-off down into Victoria Valley. Once again the Goat Track took us on a series of sharp twists and turns before we safely reached the Valley floor. From there we drove northwards and then, at the top of the Valley, turned to the east and followed the northern escarpment back to our waiting base camp.

That night at base camp, no one ventured far away from the campfire.

“That could have been a puma out there last night, Jacobi”.

“You were lucky to get out of that one alive”.

“But, maybe it really was a puma”.

“I wonder if they are out there?”

And so the campfire talk continued.

“Well”, I ventured, “Would anyone be interested in a follow-up study to check out this Grampians Puma Legend? We could organise it as a group and run the study over the rest of this year”.

After much further discussion, the idea of a follow-up study focused solely on the Grampians Puma Legend was left up in the air as a ‘good idea’ to be re-visited later.

The next morning, Sunday, 12 September 1976, the discussion continued as we bounced around the back tracks of the Grampians in our Land Rover following our pre-determined Environmental Science field trip itinerary. By the time we said farewell to the Grampians Mountains late on that Sunday afternoon and were heading back through the cleared farmlands towards Geelong, the students had committed themselves to return to the Grampians as ‘puma hunters’.

We agreed to set up a Deakin Puma Study Group and to return to the mountains within a month.



**Some of the students involved the September 1976 Environmental Science Field Trip to the Grampians Mountains resting in the lowland scrub of Victoria Valley.  
From left: Geoff Gray, Michele Morris, Robin Riley, Jenny Ross, Bronwyn Burt, Peter Jacobi and John Burt.**

## CHAPTER 2

### **Planning for the Deakin Puma Study**

#### ***The Ground is Prepared***

Immediately after the Grampians field trip in the remaining weeks of September and the month of October, 1976 a core group of Environmental Science students and I embarked on a reconnaissance exercise. I contacted the Curator of Mammals at the Melbourne Zoo, Ernst Wieher, seeking his response to the field trip events. Ernst thought puma eyes reflected yellow-green in a spotlight. He informed me that pumas ate 15 pounds or more of meat in a meal, and, in his judgement, the predator leavings in the Billywing Range rock shelter were likely to be those of a dog or a marsupial spotted tail quoll, commonly known as a tiger cat.

I also contacted Ellis Tucker, who was now retired and living in Halls Gap. Ellis repeated his puma sighting narrative providing me with a detailed description of the animal – a description consistent in every detail with a puma. Ellis repeated the American Airmen-related origins for the animals in the Grampians, informing me that there were up to six puma cubs in Mt. Gambier in 1942-43 as mascots, only to be released later in the Victoria Range of the Grampians.

Interestingly, Ellis Tucker was to play a continuing role in the Grampians Puma Study but no sign of this contribution was forthcoming in our telephone conversation in September 1976. Tucker's credibility as an eye witness was later to be the key factor in a January 1982 Hamilton Spectator article, yet again reporting on sightings of the elusive puma in the Grampians. The article referred to a Hamilton wildlife expert Dr. Rod Bird, a past president of the Hamilton Field Naturalists Society. Bird was reported as saying that a former member of the Society, "the late Mr. Ellis Tucker, had told members he was confident he saw a puma in the district. 'Most of us would respect his opinion', Dr. Bird said". So for others also, Tucker's eye witness account was proving difficult to dismiss.

I received a folder of newspaper articles from Peter Dryden, a friend in Warrnambool. These articles reporting puma sightings in the Grampians. The student group and I, contacted by telephone the people mentioned in these articles. This avenue of enquiry yielded further detailed descriptions of the animals sighted and an expanding list of people who claimed to have sighted a puma. By the end of September the group had a list of 22 alleged puma observers.



The composite animal description that was coming through to the Group at Geelong from the accounts of these sightings was that of an animal black to brown in colour, 600 to 800mm in shoulder height, 1800 to 2700mm in total length with a 600 to 800 mm tail. The tail was invariably thick and turned up at the end. The body was thick set with heavy legs and large paws. The foot print had four toes and was on average 100mm long and 80mm wide. The head was round and cat-like with small ears.

In addition, more than one animal had been observed on several occasions and the locations of the sightings were widespread, from the Black Range in the west to the Mount William Range in the east. However, the concentration of the reported sightings from the Deakin Puma Study Group's sample was around the Victoria Range and the Glenisla Valley.

The Deakin Puma Study Group, on reviewing the information to hand at the beginning of October, 1976, decided that there was sufficient material to support a comprehensive study of the Grampians Puma Legend. It was agreed that they, as a Group, needed a stronger background in puma biology, appearance and habits. They also needed reference data from which to make judgements on sightings and other puma 'artefacts' that they may come across in the field.

The Group collected published reference material on pumas (*Felis concolor*) and I then arranged for the third year Environmental Science students to visit the puma enclosure at the Melbourne Zoo.

### ***Melbourne Zoo Visit: face to face with pumas***

The visit was arranged through Graham Morris of the Melbourne Zoo Education Service. Our visiting party consisted of my Environmental Science colleague, Ian Robottom, six third year Environmental Science students, Peter Morris, the University photographer, and myself. This was the intrepid group that ventured into the puma enclosure of the Zoo in early October.

This was a productive trip. The Group photographed adult and juvenile pumas; photographed puma paw prints and took plaster casts of puma paw prints. Samples of puma hair and of adult and juvenile faeces or scats were also collected. References on puma biology were also borrowed from the Education Service of the Zoo.

### **What do Pumas look like?**

This question can be answered by looking at the following selection of photographs taken by the Deakin Puma Study Group during the October 1976 visit to the puma enclosure at Melbourne's Zoo.



**Photographs of Pumas at the Melbourne Zoo, October 1976**



**Adult Female Puma: Side View & Standing**



**Adult Female Puma: Side View & Moving**



**Adult Female Puma Front View: Standing and Moving**



**Adult Female Puma: Sitting with Cub**



This is the animal that the Grampians Puma Legend is all about. It is members of this species that people were claiming to have seen in the Grampians ranges and in the surrounding countryside. When the eye-witness accounts are reported in the later chapters you might want to refer back to this set of photographs.

### ***Preparing for the Field***

By mid-October the Puma Study Group had amassed considerable reference material to support a return study trip to the Grampians in search of evidence supporting the presence of pumas in the Grampians.

The reference material took the following forms:

- A checklist of the habits of pumas in the wild;
- Photographs of pumas – adults and cubs;
- Photographs of puma skulls including lower jaw bones;
- Photographs of puma paw print plaster casts;
- Photographs of medium sized and large dogs' paw print plaster casts; and
- Black and white photographs of an assortment of animals that had some features in common with pumas ( large heavy breeds of dogs, wallabies, feral cats, for example) to build up a 'rogues gallery' of animals.

By this stage it was clear to the Deakin Puma Study Group that the pattern of animal descriptions built up from the information provided by the initial sample of eye witness accounts matched the biological data reported in the texts from the Melbourne Zoo. The Deakin Puma Study Group had also learnt important details about puma biology and habits.

The reference texts provided the following information on puma body dimensions:

- total body length (including tail) for males ranges from 1650 to 2850mm, for females 1500 to 2100mm
- tail length for males ranges from 650 to 900mm, for females 600 to 750mm
- shoulder height for males ranges from 550 to 750mm, for females 550 to 700mm
- the average weight of males is 65kg, that for females is 45kg.
- The average adult paw print is 100mm long and 115mm wide
- The common adult colouration is brown but the colour range covers slatey grey, light brown, dark tawny and black.

In addition, the Group learnt that pumas are capable of travelling in excess of 40 km in a single night. Individual animals keep to a territory in which they circuit every 15 to 18 days. Pumas make a variety of calls ranging from low growls, mews, hisses, spits, purrs, whistle-like calls and, finally, screams.

Pumas become sexually mature after 3 years of age. They breed once every 2 to 3 years with an average litter size of 2, though the range is from 1 to 6 cubs. The gestation period is 96 days and pregnant females den in rocky shelters, under trees and in dense bush. No bedding is amassed in the den.

The cubs are spotted and are practically helpless at birth. Their eyes open after about ten days. Cubs are completely dependent on their mother during the first critical weeks of life. She provides them with milk and, at about five weeks of age, carries pieces of meat to them. At two months of age the cubs are able to travel and the mother leads them from the den, never to return.

Puma cubs are taught to hunt by their mother but by the time they reach 18 to 20 months of age, they are self-sufficient and ready to leave their mother. During the first critical weeks of independence, cubs from the same litter may stay together for a short period, but they soon leave each other's company and set out to establish their own territories.

Pumas typically eat every third day, may only take blood from their prey and after eating will often cover the remaining portion. In their native habitat, pumas prey on a wide variety of animals. One study, based on the contents of puma stomachs collected from across 9 States of the USA, found the percentage occurrence of prey species in wild puma stomach contents to be:

• Deer	62%
• Porcupine	22%
• Sheep & Goat	7%
• Horse & Cow	6%
• Other mammals (armadillo, badger, rat, gopher, squirrel, skunk, rabbit)	8%
• Birds	1%
• Carrion	3%
• Grass	2%

A Washington State analysis of the food items in puma droppings found that pumas in this wilderness area were living mainly on hares and deer. These prey species accounted for 56% of their diet. However, the pumas were also successfully hunting elk, squirrels, beaver, rats and mice. Interestingly, 3% of the puma scats consisted of hair and 3% consisted of bone.

Pumas in the wilds of America are capable of existing for long periods without water.

A useful reference for the Deakin Puma Study Group was a study published by Dr. Maurice Hornocker based on his ten year study of pumas in the Idaho Primitive Area of the State of Idaho, USA. From this intensive study, the first to study the dynamics of a mountain lion population, Hornocker found that the average population living in

the 520 square km study consisted of 9 adults. The study revealed that the population consisted of full-time resident adults, cubs under 2 years of age still with their mothers and transient, non-resident adults. In general, the resident population comprised 50% adult females, 30% juveniles and 20% adult males.

Hornocker also found that each resident adult puma kept to a firmly established territory. Territoriality was a primary factor limiting puma populations in a region. Each winter transient pumas, typically young animals, moved through Hornocker's study area but quickly moved on when they recognised the established territory of another puma. Pumas avoided direct contact with each other. Territoriality and avoidance were key puma behaviours.

Pumas are solitary predators with padded paws concealing needle sharp retractable claws, and canine teeth up to 40mm from gum to tip. The puma tongue is covered with coarse bristly projections that assist in cleaning meat from bones. Unlike dogs, the molar teeth of pumas are not designed for crushing bones; their molars are designed to act together to form blades ideal for shearing meat in a scissor-like action into edible chunks.



**Adult Puma Skull**  
(0.5 actual size)

Most kills observed by Hornocker were in rugged bluff areas, on heavily timbered slopes along creeks or in bushy ravine bottoms. Pumas were powerful enough to pull carcasses heavier than themselves along the ground to secluded eating spots. Hornocker found no evidence of wonton killing by pumas in his study area over the 10 year period of his research. On average, a puma would kill one deer every 2 to 3 weeks in the Idaho Primitive Area during winter and less often in summer.

Hornocker referred to the puma as the 'ghost of North America'.

“So shy and ultrasecretive is this solitary animal that it prefers to live in the dense cover of rugged, inaccessible wilderness areas. The mountain lion is perhaps the most adaptable of all the large cats. Mountain lions are capable of living in areas ranging from tropical jungles to deserts, from subalpine forests to swamplands. Historically, they had the widest distribution of any mammal in the Western Hemisphere”.

From these American biological and population studies of pumas, the Deakin Puma Study Group of lecturers and students had acquired a scientifically sound theoretical understanding of this North American big cat. The Group now had a fuller picture of the animal upon which to base their study. With this understanding of puma biology the Study Group were able to discuss with more objective knowledge the possibilities and probabilities of pumas surviving for up to 35 years in the Grampians without unequivocal evidence being available to support the claims of sightings: evidence based principally on eye witness accounts which were growing steadily in number, but still only representing a small percentage of local residents and travellers to the area.

Within only a relative short period of time the Deakin Puma Study Group considered they had gathered sufficient preliminary information to build up a plausible set of conjectures robust enough to support putting a concerted effort into a comprehensive investigation of the Grampians Puma Legend. Based on the sample of people already interviewed by telephone, there was a composite animal description emerging that could be located within the range of puma body characteristics without difficulty. The Deakin Puma Study Group formed the opinion that the dietary preferences of pumas, based on Northern American studies, could be satisfied readily by the known prey animal populations of the Grampians. The equivalent Grampians prey animal list to the reported analysis of puma hunting preferences was thought, by the Deakin Puma Study Group, to be:

<b>Northern American Prey Species</b>	<b>Grampians Prey Species Equivalent</b>
Deer	Deer, Grey Kangaroo, Wallaby, Emu
Porcupine	Echidna
Sheep & Goat	Sheep & Feral Goats
Horse & Cow	Cattle
Other mammals	Possum, rabbits, rats
Birds	Birds
Carrion	Carrion

Kangaroos and emus exist in abundant populations in the Grampians. Wallabies and deer are not uncommon in selected areas. Feral goats are present in the high country and rabbits are still common in the low country.



Based on Hornocker's study and extrapolating to the Grampians, it was thought not unreasonable, in theory at least, to expect the Grampians to support a small stable population of pumas, from which young animals may be dispersing to adjacent wilderness areas and National Parks. This dispersal would be across more open country on partially cleared farmlands, thereby providing greater opportunities for young pumas to come into brief contact with local farmers or people travelling along local roads and tracks.

The Deakin Puma Study Group estimated that the Grampians wilderness area was in the order of 900 square km. By directly extrapolating from the Idaho wilderness territorial data, this could mean that the Grampians may be able to sustain a resident population of 24 pumas of which 12 could be expected to be adult females, with 5 adult males and 7 juveniles.

The Deakin Puma Study Group felt that by October 1976 it was time to return to the Grampians.

### ***The Deakin Puma Study Strategy***

The working conjecture holding the Deakin Puma Study together at this early stage was that:

a small population of large cat-like carnivores was present in the Grampians. This population was centred on the Victoria Range with the members of the population having descended from American Airmen's mascots released in the early 1940s.

The Deakin Puma Study evolved during this formative stage as a twofold project. The first aspect or component of the Study arose from a sociological interest in the processes operating in smaller communities that sustain and reproduce the myth of pumas in the Grampians over several generations. The second was to direct the evidence gathering activities of the Study towards diminishing the truth status of the conjecture above; that is, that there was a small population of big-cats in the Grampians. This was the conservative component of the Deakin Puma Study which was to uphold the null hypothesis that big-cats do not exist in the Grampians unless compelling contrary evidence is uncovered by the Study Group.

Thus, during September and October 1976, the Deakin Puma Study Group had conceptualised its strategy for its investigation of the Grampians Puma Legend. It was decided to broaden the scope of the study to include the interrelated components of seeking out evidence given in support of an established puma population in the Grampians while, at the same time, study the sociology of myth making and the processes that contribute to the persistence of this particular myth in this location of Victoria.

The sociological study was to be integrated with the first component of the study but would be prosecuted more directly through the interviews to be conducted by the Study Group with those claiming to have observed a puma in the Grampians region.

The strategy of the Study involved three evidence seeking tactics.

**Tactic One:      Checking on the American Airmen Theory**

This tactic was directed at the possibility of making contact with American servicemen who had been based in south western Victoria and south eastern South Australia during 1942 and who had knowledge of puma cub mascots firstly, being present, and secondly being released. Alternatively, there was the possibility of making contact with American servicemen who could deny this possibility. The tactic went to the origins of the Grampians Puma Legend and sought clear-cut confirmation or denial.

As with everything associated this Study, the expected outcomes were long shots but it was agreed that the information gathered along the way would be of interest one way or another to the Study.

As coordinator of the Study, it fell to me to pursue this line of enquiry, given the resources I had at hand.

**Tactic Two:      Checking on the Reported Sightings at the Source: Interviewing**

This tactic involved attempts to flesh out additional details surrounding the sightings of large cat-like animals in the Grampians and surrounding farmlands by people prepared to report such sightings and to participate in interviews with members of the Deakin Puma Study Group.

An observation report form was constructed for use by students when interviewing those people who claimed to be puma observers. This was to be used in conjunction with the rogues' gallery photographs and was expected to assist in providing a consistency in the observation data for later analysis. In addition, interview teams were supplied with maps of the Grampians so that people could pin point their sighting locations. Interview teams were issued with reference plaster casts of paw prints, photographs of pumas from the Melbourne Zoo, a tape recorder and a camera with black and white film.

Interview teams were instructed to be courteous and respectful of people's accounts, to encourage the giving of further details, and to never provide an opinion one way or the other on what they had been told.

The interviews were conducted by small teams of students, each accompanied by a University member of staff. These interview teams operated during the period of the Puma Study field trips to the Grampians.

Additional interviews were conducted by members of the Deakin's Environmental Science academic staff. These interviews were with people outside the field trip areas and were followed up because of specific circumstances relevant to the Study.

**Tactic Three: Going Bush in Order to Uncover New Physical Evidence: Bush Bashing and Spotlighting**

This tactic involved the largest number of students and was, by far, the most popular option for students. The tactic was aimed at finding out more about the Grampians wilderness areas as suitable habitats for pumas.

On each Puma Study field trip to the Grampians, students were divided into bush-bashing teams with up to 5 or 6 members in each team. It was recognised that a group of students moving through the bush would be most unlikely to surprise an elusive predator, so the emphasis was on looking for secondary evidence such as paw prints or scats.

Teams were asked to deploy to their allocated area as a unit, concentrate on any rocky outcrops and sandy tracks in the area, record and photograph all relevant observations, and locate the positions of such observations on the maps provided.

Relevant observations for the Study were provided on a list to each team. These included:

- Large carnivore:
  - direct observation of animal: note details on the observation report form
  - paw prints: take a plaster cast and note details on the observation form
  - animal shelter: record details such as rock or other, dimensions, odour, presence of debris (bones, faeces, fur or hair, for example)
  - faeces (scats): record dimensions, presence of fur, bones, feathers, covered or uncovered
  - animal kill: record species, condition, cause of death, amount of meat taken and from which parts, carcass covered or uncovered
  - travel-ways: note any tracks, presence of 'scratch hills'
  - voice: record sounds in writing immediately.
- Other carnivores
  - similar range of observations as above that could relate to marsupial carnivores, feral cats and dogs, and foxes.
- Prey animals

- record details of all observations of emu, grey kangaroos, wallaby species, goat, deer, possums, rabbit and other herbivores
- observations could include numbers of species sighted, tracks, faeces and shelters.

Bush bashing teams were provided with still and movie cameras, reserve film, tape measures, plaster cast making materials, plastic specimen collecting bags, maps, a compass and a whistle, a torch, binoculars, a first aid kit and a rucksack.

During the evening of the Saturday of each field trip, a spotlighting team would venture out in the Science Department's Land Rover. The students were equipped with portable spotlights and batteries. Other equipment taken on these spot lighting ventures was as for the daytime bush bashing teams. Here the intention was to ascertain the density of prey animals at particular locations and to be on the look out for large carnivores.

### ***Drawing Conclusions from the Study: the Test of Plausibility***

The problem soon to be faced by the Grampians Puma Study Group was on what basis was 'evidence of puma presence' to be judged and given credibility. Obviously, some of the evidence expected to be presented to the Group or uncovered by Group members themselves could be judged immediately as not credible 'evidence of puma presence' – or to be more cautious, 'evidence of big cat presence'. This was most clear in those cases of artefacts (paw prints, for example) that matched those of known animals in the area. But what of those cases where the so-called evidence cannot be so readily dismissed?

The Study Group anticipated that it was most unlikely that their members would acquire unequivocal and indisputable evidence of the presence of a puma during the course of the Study. A puma skeleton or key parts thereof, a puma carcass or a live cub in a haversack would have settled the issue beyond doubt. But no such evidence had been forthcoming over the past 35 years, so why should it now? A photograph or movie film clearly showing a puma in the Grampians context would have focused the minds of the Group to the possibility that the animals were really there. But once again it was unlikely that this form of evidence would be forthcoming, and to base the Study solely on such an outcome would have been foolhardy.

The crux of the Grampians Puma Study was to investigate the phenomenon of the Grampians Puma Legend. In order to do so, the Study Group decided to:

- interrogate the evidence offered by others as confirming the truth status of the Grampians Puma Legend;

- seek to uncover further supportive evidence during the course of the Study by conducting a sweep through all possible avenues of support for the Legend and interrogate any further evidence uncovered; and
- build a case for the level of plausibility of the Legend.

This was to be attempted while holding in abeyance the quest for ‘truth’ in the sense of being ‘captured’ by the need to prove what one already ‘knows’.

Admittedly, this position of objectivity was not always easy to maintain. In a Study of this type there is a fine divide between building a case to test the level of plausibility of a Legend and coming to believe that the Legend is in fact not a Legend at all but reality. The energy, time commitment, and personal involvement at an intellectual and emotional level demanded by the Study created at times a dynamic, amongst its large group of participants, not dissimilar to that which galvanised opinions on the Puma Legend in the small communities at the Grampians foothills. The demon of wanting to know for sure if pumas were really in the Grampians was, to be frank, one of the background motivating forces for students participating in the Study. Without this dimension, the clear enthusiasm to be involved, as expressed by the many Deakin ‘puma hunters’, would have diminished markedly.

Against this background of the Study, the Deakin Puma Study Group needed a way to test the plausibility of evidence presented to it by others or uncovered by its own members in the field or through other sources. What was anticipated was second-order evidence of the presence of large carnivores. Evidence of this type would require careful analysis and corroboration from other supporting second-order evidence before these forms of evidence could be taken up by the Study Group as credible evidence. Rigour was to be achieved by the ruthless application of an agreed procedure.

The Deakin Puma Study Group knew, from the preliminary reconnaissance conducted to date, that they would come into contact with the following categories of second-order evidentiary artefacts related to large carnivore activity:

- eye witness accounts of pumas or big cats;
- plaster casts of large carnivore paw prints;
- carnivore scats;
- bones claiming to be parts of pumas or big cats;
- bones of large predator kills; and
- habitats in the Grampians supportive of large carnivores (areas with rocky shelters, seclusion, presence of and access to prey animals, and availability of water).

The test to be applied to these evidentiary artefacts followed these steps:

Step 1: This first step involved answering these two questions:

1. Could this artefact have been produced by an animal species accepted by authorities to be present in the Grampians National Park?
2. What is the probability that an animal of this known species produced this artefact?

If it was deemed that the artefact could have been produced by a known Grampians-based animal species and that the probability was high, then the artefact was deemed as not credible evidence of ‘big cat presence’.

But if it was thought that the artefact could have been produced by a known Grampians-based species but the probability was low, then the artefact was deemed to be potentially credible evidence of ‘big cat presence’.

Step 2 If the answer to question 1 above was ‘**low probability**’, then the questions became:

3. Could this artefact have been produced by an animal species accepted by authorities to be present in Australia but until now unknown in the Grampians National Park?
4. What is the probability that an animal of this known species produced this artefact?

If it was deemed that the artefact could have been produced by a known Australian-based animal species and that the probability was high, then the artefact was deemed as not credible evidence of ‘big cat presence’.

But if it was thought that the artefact could have been produced by a known Australian-based species but the probability was low, then the artefact was deemed to be potentially credible evidence of ‘big cat presence’.

Step 3 If the answer to question 3 above was ‘**low probability**’, then the questions became:

5. Could this artefact have been produced by an animal species accepted by authorities not to be present in the wild in Australia?
6. What is the probability that an animal of this species produced this artefact?

If it was deemed that the artefact could have been produced by an animal species previously unknown in the Australian bush and that the probability was high, then the artefact was deemed to be potentially credible evidence of ‘big cat presence’.

Step 4 Those artefacts surviving the above steps as potentially credible of ‘big cat presence’ were then subjected to the following question:

7. Is this artefact supported in a corroborating sense by another potentially credible artefact?

If the answer to question 7 was ‘no’, the level of credibility of the artefact as evidence of big cat presence was deemed to be low.

But if the answer to question 7 was ‘yes’, the level of credibility was raised as each additional corroborative artefact was added. The more corroborative support for a single artefact from other sources, that is, other artefacts, the stronger the probability that the complex of artefacts is pointing to the presence of big cats in the Grampians.

Bearing in mind the important caveat that the test outlined here relied on second-order evidence corroborating other evidence of the same order, with an intention of building an increasingly plausible case from physical evidence collected in the field for big cat presence in the Grampians. But in the end, with the limitations of second order evidence of this type, the issue would always be one of deciding between competing probabilities. The probability of big cat presence, however high, will never answer the question with complete certainty based on this order of evidence. The highest level of credibility this test of plausibility could achieve was that of ‘beyond reasonable doubt’.

In summary, the overall approach used in the Deakin Puma Study relied on reducing the probability that alternative explanations for a reported ‘puma event’ were more plausible than the initially implausible claim that the ‘event’ was strong evidence for a stable continuing big cat population resident in the Grampians National Park. This was the strict test of plausibility to be applied to assertions that any single ‘event’ was evidence for the presence of big cats, presumably pumas.

What the Deakin Puma Study Group was facing here was the task of building a case for a particular level of plausibility of the Grampians Puma Legend, a level to be determined from an analysis of artefacts, including eye witness accounts, as evidence.

In addition, the Deakin Puma Study Group sought corroborative expert advice on specific artefacts uncovered by the Study itself. The key experts who assisted the Study in this way were:

- Dr. Maurice Hornocker, Unit Leader, Idaho Cooperative Wildlife Research Unit, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho, USA. Dr. Hornocker was, at the time of the Deakin Puma Study, the foremost expert in the world on puma ecology and behaviour. Dr. Hornocker provided the Deakin Puma Study Group with his expert opinion on selected data arising from the Study.
- Mr. Hans Brunner, of the Keith Turnbull Research Institute, Vermin and Noxious Weeds Destruction Board, Department of Crown Lands and Survey, Victoria, Australia. Mr. Brunner had developed a data analysis technique for mammal ecologists based on the identification of hairs in predator droppings. Brunner’s technique had been developed as an adjunct to other survey techniques for

ascertaining the relative sizes of small mammal populations in the Australian bush. In his notes explaining his technique, Brunner states that:

“in south-eastern Australia, the majority of droppings encountered in the bush are likely to be those of foxes although feral dog and feral cat droppings are occasionally picked up. Owl pellets would constitute another source of material”.

Mr. Brunner conducted scat analyses for the Deakin Puma Study Group on several occasions thereby providing significant scientific input to the Study. He also visited Deakin University in Geelong on one occasion to give a lecture on his scat analysis technique to the Environmental Science students.

- Tony Lee, Associate Professor, Department of Zoology, Monash University, Victoria, Australia. Associate Professor Lee’s opinion was sought on one occasion during the Study.

These experts were removed from the Study itself and were contacted at key moments in the Study to provide objective, impartial and knowledgeable opinions as further sources of possible corroboration.

In 2003, after this Deakin Puma Study Report was updated in 2001, the author became aware of the recent field research undertaken by Chris Davey, Wildlife, Pests and Diseases Program, CSIRO Sustainable Ecosystems on wedge-tail eagles. Chris Davey provided invaluable advice on one aspect of the Study in 2003. His advice is included in this revised edition of the 2001 Report.



## CHAPTER 3:

### **Puma Study Field Trips: an Overview**

The most prominent feature of the Deakin Puma Study, as conducted in 1976 and 1977, was the Grampians-based field trips. These Grampians field trips were to be the sites of intensive activity for academic staff and students associated with the Deakin Puma Study. In this Chapter an overview is provided of this key experiential aspect of the Study.

In total there were four field trips associated with the Deakin Puma Study. These were held in October 1976, March 1977, April/May 1977 and September 1977. A field trip was planned for November 1976 but was postponed due to examination and teaching commitments of the student teachers involved in the Study.

#### ***The Field Trip Routine***

Although each field trip had its own focus and character, the main features were kept stable. Each field trip ran from a Friday evening to the following Sunday early afternoon. The period of most intense field study was typically the Saturday (day and evening). For each field trip a specific set of locations in the Grampians was targeted by the Study Group. These became the particular field trip's zone of activity. These zones were selected by the core Study Group from reported sightings and knowledge of the topography together with its judged suitability as a habitat for large carnivores.

Most students travelled to the base campsite for each field trip using their own vehicles and resources accompanied by student friends. Others travelled with University staff in the vehicles provided by Deakin.

For each field trip a base camp was established in a camping area within the Grampians National Park. The Study Group provided tents for students and staff, although students were encouraged to bring their own tents if possible along with all their other camping gear. Study Group members looked after themselves with respect to food and cooking.

The base camps were supplied with equipment and resources relevant to the Puma Study. This equipment included a generator, a battery charger, a master map of the Grampians, reference material, jerry cans and petrol and a laboratory tent with camp tables and stools.

Bush bashing and spot lighting teams were deployed to their allocated areas in the University Land Rover. During the day a small Land Rover team kept in touch with the deployed bush bashing teams by driving along the nearby bush tracks. This team also checked out other tracks in the general area of the field trip study zone.

The interview teams were deployed in University cars made available for the field trip weekends.

On the Friday night of each field trip, the Study Group would assemble for up-to-date information about the next day's activities. The various teams would be finalised and instructions given. Typically these instructions were repeated next morning before people set off for the day.

On the Saturday night the routine was for the total Study Group to assemble around a large campfire after the evening meal. At this time each of the bush bashing teams and the interview teams would report back to the Group on their day's activities and on observations made during the day thought to be of significance to aims of the Study or of general interest. The teams would also display for scrutiny any artefacts collected.

In early field trips the bush bashing teams would return to the base camp on the Saturday night. But this routine was changed for later field trips when the bush bashing teams were expected to find their own shelter for the night somewhere in their allotted area of bush country. This change occurred as the Study Group became aware of the abundance of rocky shelters high up on the escarpment of the Victoria and Billywing Ranges suitable for overnight camping out. This added dimension to the Deakin Puma Study provided the students with a heightened sense of adventure and challenge.

For each field trip I was the designated person in charge although I was always ably supported by my academic colleagues. These colleagues included Ian Robottom, Neville Millen, Richard Tinning, Barbara Wilson, Peter Ferguson, Wilf Carr, and Marisse Evans. Ian Robottom, through his direct association with the Environmental Science program of Deakin, was my closest academic colleague in the Study. Neville Millen was the driving force behind the sociological component of the Study taking responsibility for the Study's extensive interview program of eye witness.

In the second year of the Deakin Puma Study, students involved in the core planning Group in 1976 and the first field trip of 1976 continued to participate in the Study in 1977 although by this time they were had graduated and were employed as teachers in the Victorian State School system.

A few weeks after each field trip, when all of the film shot by each team had been developed, the participants would assemble for an evening barbeque and de-briefing at my home in Geelong. As well as the pleasure of re-living Grampian 'puma hunting' moments depicted on movie film and slides, the students, staff and family

members attending had further opportunity to engage in debate over the Study's core issues – the plausibility of the Grampians Puma Legend and the key forces that kept it alive.

***Field Trip 1: 21 to 24 October 1976***

This field trip attracted 46 participants including 5 academic staff. The base camp was established at the Glenisla Shelter camping ground (Buandik).

The field trip study zone included the Black Range, Billywing Upland, the western and northern escarpment of the Victoria Range and Geranium Springs off the Red Rock Road. Nine bush bashing teams were deployed in these areas over the Saturday and the Sunday. The interviewing team visited people located in or near Cavendish, Mooralla, Wooplpoel, Glenisla, Brimpaen, and Laharum, all townships or localities to the immediate west of the Victoria and Billywing Ranges. The spotlighting team focused on the Glenisla Valley region.

This field trip had an added bonus for those involved. On the Sunday afternoon the Grampians were central to a total eclipse of the sun. Most teams managed to secure a high vantage point along the western escarpment of the Victoria and Billywing Ranges in time to experience the dramatic sight of mid-afternoon darkness rushing across the western plain towards them, increasing in speed as it got closer before engulfing them in night. And then, to experience after several minutes a similar sight in reverse as this time it was day rushing towards them pushing back the night.



**Getting started in the early morning: October 1976 Field Trip Base Camp – Bush bashing teams assemble for their instructions.**

***Field Trip 2: 25 to 27 March 1977***

On this field trip 36 people participated including 5 academic staff. Students attending were from each year in the College/University pre-service teacher education course. The base camp was located in the Red Rock picnic area.

The field trip study zone included Geranium Springs Lowland and Upland, Wallaby Rocks Upland, Asses Ears Escarpment, Camp Creek area, Emu Shelter Escarpment, Red Rock Valley, and Billywing Quarry Escarpment. Eight bush bashing teams were deployed to these areas. The interview team travelled to Horsham, Laharum, Mt. Talbot, Halls Gap and Stawell, interviewing people from further afield than on the first field trip. The spotlighting team checked out the upper Victoria Valley area.



**March 1977: Back at the Base Camp after a day exploring the high country of the North Western Grampians**

***Field Trip 3: 29 April to 1 May 1977***

This field trip had 21 people involved including 2 academic staff. The base camp was set up in the Red Rock picnic ground. The study zone was the Mt. Talbot, Mt. Bepcha and Geranium Springs areas. Three bush bashing teams focused on these areas. The Mt. Talbot and Mt. Bepcha bush bashing teams also interviewed two key people in their areas. The spotlighting team also focused on the Mt. Bepcha outcrop and lowlands back towards the Rocklands Reservoir. One group of 5 students conducted a lair study along the Billywing Quarry escarpment. This team camped out over-night in a rocky shelter.



**Bush Bashers resting in caves in the Grampians Uplands**

***Field Trip 4: 9 to 11 September 1977***

This field trip focused on a new area for the Study Group. This time the study zone the western and northern sides of the Victoria Valley. The Study Group consisted of 38 people including 4 academic staff. Base camp was set up in a vacant farm house on the property of Mr. Sandy MacKirdy in the Victoria Valley.

The bush bashing teams , 8 in all, focused on Branch, Burnt Hut and Vowel Creeks, Paulson's Hill, Crombie Hills and the escarpment west of Victoria Point. The spotlighting team kept to the open paddocks on Bullawin Park and MacKirdy's farm. The interview team interviewed local people in the Mirranatwa region of Victoria Valley.



**Two Bush Bashers perched above the escarpment with Glenisla Valley behind them**

### ***Other ‘In-The-Field’ Activities in association with the Four Field Trips***

Trips to the Grampians and surrounding areas were periodically conducted by myself in the preparatory stages prior to Puma Study Field Trips. I was usually accompanied by one other academic colleague on this trips.

The trips typically focused on areas of the Grampians most closely associated with the recent credible sightings of big cats. Locations were checked for suitability and, if necessary, permission was sought for later access to areas deemed to be worthy of further study by bush bashing teams.

As well as preparing the way for the next field trip’s operation, these trips were useful in that additional eye witness accounts and other associated artefacts were often collected for the Study.

These reconnaissance and follow-up trips were to Hamilton in the south west of the Grampians, to Horsham and Dimboola to the north, and to Stawell and Lake Fyans area to the east. Those localities in the Grampians that were visited for establishing the suitability for field trips were the Black Range, Rocklands and Western escarpment region, the northern Mt. Difficult region and the eastern side of the upper Victoria Valley.

On 18 June 1977 Ian Robottom and I took a party of 8 students and recent graduates on a one day trip to the Grampians. The Group checked out the Victoria Point area and interviewed farmers on the eastern and western sides of the Southern Victoria Range.

### ***Conclusion***

As can be seen from this overview of the field-related activities of the Deakin Puma Study, the logistics of the Study, as a field-based operation, were complex. There was a range of interrelated activities involving a large number of volunteer researchers. In all, 95 people participated in these field trips representing students, recent graduates and academic staff of Deakin University, and included partners and children of students, graduates and staff.

The Deakin Puma Study became a highly significant ‘life experience’ for many of the people involved. For the student teachers and teachers involved with the Deakin Puma Study, their own varied and unique experiences in the Study influenced their conceptualisation of authentic educative activities. These teachers went on to create



learning programs for their own students informed by their first hand experiences of the field activities first made available to them through the Deakin Puma Study.

Students involved in the Study continue to claim that their time as a ‘puma hunter’ in the Grampians, along with their friends (lecturers and fellow students alike), constituted the most memorable event in the period of their undergraduate program.

For the majority of these students, the Deakin Puma Study was an extra-curricula activity as it was not part of their formal teacher education program. For those Environmental Science students who participated, the Study was relevant to their formal studies as an enrichment activity only. But even so, participation in the Study was to become for many a ‘life changing’ experience.

A full list of participants in the Study is included as an appendix to this Report.



**A Bush Bashing Team checking out a large cave in the Billywing Uplands**

## CHAPTER 4

### **Going to the Source: Testing the American Airmen Theory**

In October 1976 I activated the first tactic of the Deakin Puma Study Strategy: *checking the American Airmen Theory*.

This tactic involved ascertaining the factual details of three components of the American Airmen Theory; each component represented by the following questions:

- What was the extent of USA military involvement with the south-eastern region of mainland Australia from 1942 onwards and what were the circumstances of this involvement?
- Are there explanations to be derived from the USA military culture as to why USA airmen would want to bring pumas into Australia when they arrived here in 1942?
- From individuals who were in south- eastern Australia in 1942 (Australians and Americans alike), are there eye witness accounts of pumas in the possession of USA airmen or close recollections of such a circumstance?

Through this tactic the Deakin Puma Study went directly to the source of the Grampians Puma Legend; that the animals were brought into Australia in 1942 as mascots of American pilots only to be later released in the Grampians. The historical events that underpinned the Puma Legend have imbued it with, superficially, a rather plausible answer to the cynic's demand, "Well, if pumas are in the Grampians, tell me how they got there". For the Puma Legend to maintain a sense of credibility, it must have a narrative about its beginnings, a genesis story, if you like, that is believable on first telling; that is, believable without requiring a great deal of complex and detailed additional information. We all know that American military personnel and equipment were in Australia during the Second World War, and the allegation that "the Americans did it" seems to strike a chord of credibility amongst many Australians since that time. Many people seem to accept that explanation as believable without requiring a great deal of additional information.

But this was not the position adopted by the Puma Study Group. The Study Group was not satisfied with the summarised historical accounts for the origin of pumas in western Victoria as published in the local newspaper articles. The Group wanted access to the historical details that seemed to have been lost from popular memory so quickly after the Second World War from 1945. It was anticipated that the fuller factual picture, expected to emerge from more thorough research, would allow the Puma Study Group to make an informed judgement about the probability of pumas



having been imported into Australia under the circumstances surrounding the friendly invasion of Australia in 1942 by the USA military forces.

### ***The Historical Research Approach***

The procedure used by the Deakin Study Group to uncover historical information relevant to the presence of United States Air Force (USAF) personnel in south-eastern Australia in the 1940s involved contacting the following USA and Australian military agencies with specific requests for information:

- Office of the US Air Attache, Canberra, Australia;
- The Air Force Association, Washington D.C., USA
- Research Branch, The Albert F. Simpson Historical Research Center, Department of the Air Force, Maxwell Air Force Base Georgia, USA;
- Aero-Space History, Department of History, Kansas State University, Kansas, USA;
- Headquarters Air Force Manpower and Personnel Center, Department of the Air Force, Randolph Air Force Base, Texas, USA;
- RAAF Historical Section, Director-General of Coordination, Australian Air Force, Department of Defence, Canberra, Australia;

These agencies responded with full information in response to the specific research questions asked of them.

In November 1976, I acted on the advice of the Office of the US Air Attache, USA Embassy, Canberra, and wrote to the Secretary of the USAF Association requesting that the notice below be included in the Association's monthly publication, *Air Force Magazine*.

(Preamble then) I am involved in an historical study of an area close to the Victorian and South Australian Border, and my direction of research requires information from members of the USAF. The personnel concerned were members of the 35<sup>th</sup> Pursuit Group and the 46<sup>th</sup> Air Base Group, who were stationed at Mt. Gambier, South Australia during 1942-43.

Contact is possible by writing to: (Address included).

This notice was duly published. Six retired US Airmen responded and corresponded directly with me over the period March 1977 to December 1981 providing detailed information of their travels to south eastern Australia, their stay in the region and the circumstances of their departure to the war zones further north. Information on insignias and mascots was also provided to the Deakin Puma Study Group by these retired US Airmen.

Later, in November 1981, a similar notice was again published in the *Air Force Magazine*, but this time requesting contact with US Airmen of the 22<sup>nd</sup> Bombardment Group stationed at Nhill in 1942. Two retired US Airmen responded to this request.

Using information received from the USA and Australian military agencies and from the correspondence with the retired US Airmen, a detailed picture of USA military activity during the period of relevance to the Deakin Puma Study, March to April 1942, was re-constructed by the Study Group.

### ***USA Military Presence in South-Eastern Mainland Australia during 1942***

#### **First, some orienting information:**

Before providing an overview of the historical facts of the USA military presence in the areas of Victoria and South Australia within closest proximity to the Grampians National Park, there are some details about the organization of USAF fighting units that need to be explained to avoid confusion. Misunderstandings of this USAF organisation has led to misinterpretations of the historical data in the past, including some false leads taken by the Deakin Puma Study Group.

The descending order of the organisational hierarchy for fighting units in the USAF was, in 1942, Commands, Wings, Groups and Squadrons. The squadron was the basic operational unit.

Groups were named according to their primary function. So, for example, the USAF had Fighter Groups, Bombardment Groups, Air Base Groups and Air Depot Groups. In early 1942, the US Military also had Air Force Groups called Pursuit Groups. Each of these designated Groups were then made up of a number of squadrons.

Squadrons were also named according to function: Antisubmarine, Air Base, Bombardment, Fighter, Observation, School, Service, and Troop Carrier.

Additionally, Groups were also known by numbers, and each Squadron within a Group was, in turn, numbered.

An example of this system is the 35<sup>th</sup> Pursuit Group. The 35<sup>th</sup> Pursuit Group was made up of several squadrons over the period 1940-42. These Squadrons were the 18<sup>th</sup> (1940), 20<sup>th</sup> (1940), 21<sup>st</sup> (1940-42), 34<sup>th</sup> (1940-42), 39<sup>th</sup> (1942-), 40<sup>th</sup> (1942-), 41<sup>st</sup> (1942-) and 70<sup>th</sup> (1941-42).

From this example, a further point is apparent; that is, Squadrons are not stable in a Group but can be discontinued, re-assigned to another Group or replaced by new

Squadrons as personnel and machines (old and new) are re-grouped over time. Once again by way of example, the 35<sup>th</sup> Pursuit Group emerged from 1942 with only three Squadrons, the 39<sup>th</sup>, 40<sup>th</sup> and the 41<sup>st</sup>.

A further example is the 22<sup>nd</sup> Bombardment Group that had within it the 2<sup>nd</sup>, 19<sup>th</sup>, 33<sup>rd</sup> and 408<sup>th</sup> Bombardment Squadrons.

Pursuit Groups were combat units with mainly defence duties over cities and aerodromes. These Groups provided protective cover for bombers and attack capability directed against enemy bombers. A Pursuit Group consisted of headquarters and a headquarters squadron, 2 to 3 pursuit squadrons, 1 to 2 interceptor squadrons and 2 to 3 ordnance companies.

Bombardment Groups were also combat units, subdivided into light, medium and heavy. A typical Bombardment Group comprised headquarters and a headquarters squadron, 3 to 4 bombardment squadrons, 1 ordnance company and 1 chemical company.

Air Base Groups were support units providing general services and repair, maintenance and technical supplies for combat units. Air Base Groups were made up of headquarters and a headquarters squadron, 1 to 2 material squadrons, 1 to 2 signal platoons, 1 to 2 ordnance companies, 1 to 2 quartermaster companies and 1 to 2 chemical platoons.

In the historical details that follow, the account describes the responses of the Allied Command to the rapid advances of the Japanese military forces in late 1941 and early 1942 while at the same time tracing the movements, as can be drawn from the historical records, of the three USAF Groups most relevant to the Grampians Puma Legend. These relevant USAF Groups are the 35<sup>th</sup> Pursuit Group, the 46<sup>th</sup> Air Base Group and the 22<sup>nd</sup> Bombardment Group. The 35<sup>th</sup> Pursuit Group and the 46<sup>th</sup> Air Base Group were in Mt. Gambier at the RAAF Navigation School for a short time in March 1942, and, according to USA historical records, the 22<sup>nd</sup> Bombardment Group was stationed at a RAAF Airbase near Nhill for approximately the same period.

#### **Now for some history: official USA and Australian military sources**

The official military history of USAF in Australia up to May 1942 begins with the US Far Eastern Air Force based with its headquarters in Manila, the Philippines. Following the Japanese attack on Pearl Harbour on 7 December 1941 and American military set-backs in the Philippines, any surviving heavy bombers were re-located on 20 December 1941 to Australia. These bombers landed at the small township of Batchelor, 80 kms south of Darwin. In addition, American sea board formations bound for the Philippines at that time were diverted, because of the hopeless situation there, to Brisbane, disembarking on 23 December 1941.

Also on 23 December 1941 Major General George H. Brett was appointed commander of all US military troops and facilities in Australia, except for the USAF. On 29 December 1941 Major General Lewis H. Brereton arrived in Darwin from the Philippines and established temporary headquarters for the US Far Eastern Air Force there.

In the first two weeks of 1942 the American, British, Dutch and Australian Forces in Burma, Malaya, Java and North Australia were merged into the American, British, Dutch and Australian (ABDA) Military Area. A British General, Sir Archibald P. Wavell, was appointed the Supreme Commander of ABDA Area on 3 January 1942 with General Brett as his Deputy Commander.

The American command over its forces was split. Whereas General Brett was in command of all US Army Forces, General Brereton was still formally commander of the US Far Eastern Air Force and assumed control of all American Air Forces within the ABDA Command. By 9 January 1942, General Brereton had been appointed Deputy Air Commander within the ABDA Command to Air Marshall Sir Richard Peirse, Royal Air Force, while still retaining command of the US Air Forces.

On 15 January 1942 the Headquarters of ABDA was inaugurated in Lembang, Java and General Brereton closed the US Far Eastern Air Force Headquarters in Darwin and transferred his staff to ABDA Command.

The ABDA Command control comprised six groups: NORGROUP in Burma, WESGROUP in Malaya, CENGROUP in Western Java, EASGROUP in Eastern Java, AUSGROUP in Darwin and RECGROUP (sea reconnaissance) also in Java. General Brereton had four Pursuit Groups, one Light, two Medium and two Heavy Bombardment Groups under his command. These Groups were either 'partly already' established or 'partly in the process of formation'.

The Darwin area was used by the Americans for tactical air units; the Townsville area for repair, maintenance and supply; and the Brisbane area as the base for maintenance and aircraft erection. Melbourne was used as the reception and distribution centre for all USAF personnel coming to Australia.

The 'invasion' of Australia by the American military ally began in earnest on 12 January 1942 when the 14<sup>th</sup>, 20<sup>th</sup>, 35<sup>th</sup> and 51<sup>st</sup> Pursuit Groups arrived in Brisbane from San Francisco. A further convoy arrived on 1<sup>st</sup> February 1942, also from San Francisco. This convoy comprised the 45<sup>th</sup> and 51<sup>st</sup> Air Base Groups, parts of the 35<sup>th</sup>, 49<sup>th</sup> and 51<sup>st</sup> Pursuit Groups, 4<sup>th</sup> Air Depot Group and the 808<sup>th</sup> Engineers Battalion.

On 25<sup>th</sup> February 1942 yet another convoy arrived at Brisbane, this time disembarking the 3<sup>rd</sup>, 22<sup>nd</sup> and 38<sup>th</sup> Bombardment Groups, parts of the 35<sup>th</sup> Pursuit Group, and the 35<sup>th</sup>, 36<sup>th</sup>, and 46<sup>th</sup> Air Base Groups. Again, on the 6<sup>th</sup> March 1942, two more groups arrived in Australia. These were the 8<sup>th</sup> Pursuit Group and the 22<sup>nd</sup> Air Base Group.

By the middle of February 1942 Java and the Philippines were lost to the Japanese and, on the 25 February 1942, ABDA Command was formally dissolved. Most of the Netherlands East Indies (now Indonesia) had also fallen to the enemy at this time, though sporadic resistance continued until 7 March 1942 to facilitate the evacuation of USAF aircraft and personnel back to Australia.

Japan consolidated its gains in the Netherlands East Indies and went on to occupy Lae and Salamava on 7 March 1942. At this time Japanese attacks were expected in the Northwest of Australia, in the Indian Ocean Area and as far south as Fremantle. It was uncertain where the Japanese would strike next and attacks were expected almost everywhere along the Australian coastline.

The Japanese had already bombed Darwin on 19 February 1942. On 3 March 1942 there were further Japanese air raids on Broome and Wyndam, showing how vulnerable Australia really was to enemy attack.

In fact the Japanese Airforce attacked Broome on two occasions in March 1942. The first air raid occurred on 3 March when nine zeros and an observation plane arrived at 9:30am local time. The planes concentrated their attack on the Broome aerodrome and the sixteen Dornier flying boats moored in Roebuck Bay. The flying boats were packed with Dutch refugees recently arrived from the Dutch East Indies (now Indonesia). Upon being strafed by the zeros these flying boats exploded incinerating all on board. At the aerodrome all aircraft were destroyed on the ground except for a single US Liberator bomber. The bomber managed to take off but was immediately shot down killing the thirty-odd USA servicemen aboard. The zeros and their observation plane departed at 10:30am leaving behind a defenceless and vulnerable township.

On the afternoon of the same day, the townsfolk of Broome spotted a large ship heading out of the Indian Ocean towards them. People panicked thinking the ship was carrying a Japanese invasion force. Vehicles of all sorts were loaded up and the residents of Broome headed southwards. But the road proved to be impassable. Fortunately for everyone the ship turned out to be a US military tanker heading for an anchorage in Roebuck Bay.

Even so, the residents of Broome decided to depart en masse, this time by pearling luggers. The small armada headed out to sea en route for Fremantle. But without their experienced Japanese navigators (all of whom had by this time been interned by the Australian authorities) many of the luggers never made it to Fremantle and were presumed to have been lost at sea.

The Japanese raided Broome by air again on the 20 March 1942, but by this date the town was deserted.

All these northern Australia attacks created an acute sense of vulnerability and crisis in Australia during these early months of 1942. The military command considered, at

this time, that in order to provide adequate defensive and offensive air strength for Australia, three Heavy, three Medium, three Light Bombardment Groups, six Pursuit Groups, three Transport Groups, two Air Depot Groups and two Engineer Battalions (Air) were needed. These strengths were not available.

Seven critical areas were identified for the defensive deployment of available air forces. These areas were Darwin, Townsville, Brisbane, Sydney, Melbourne, Adelaide and Perth. To defend these Australian cities from Japanese air attack, the USAF deployed three Pursuit Groups, and one Light, two Medium and two Heavy Bombardment Groups.

USAF units in Australia were deployed, as of 9<sup>th</sup> March 1942, in the following locations: Charters Towers, Charleville, Brisbane, Darwin, Katherine, Sydney, Geelong, Ballarat, Nhill and Mt. Gambier. The total US military personnel comprising these units was made up of 1,654 officers, 4 warrant officers and 20,809 enlisted men.

USAF units continued to arrive in Australia in March 1942. On 5 March 1942 the 7<sup>th</sup> Bombardment Group flew in from Java and re-grouped in Fremantle, Western Australia. This Group was to be taken into the 19<sup>th</sup> Bombardment Group and by April 1942 parts of the 7<sup>th</sup> Bombardment Group had been moved to Cunderdin, 150 kms inland from Perth, while other parts had flown across Australia and onto Brisbane.

The 28<sup>th</sup> Air Base Group and the 43<sup>rd</sup> Bombardment Group disembarked in Sydney on 28 March 1942 although the equipment of the 28<sup>th</sup> Air Base Group was misallocated, arriving in Melbourne and Brisbane.

Coordination of USAF units in Australia was proving difficult. This was exacerbated by the fact that in early 1942 there were three separate nations, Australia, Holland and USA, attempting to operate their own air forces in Australia. Closer coordination was obviously needed. On 17<sup>th</sup> March 1942 General Douglas MacArthur arrived in Melbourne from the Philippines and became the Supreme Commander of all Allied Forces in the South-West Pacific Area (SWPA).

The Australian Commonwealth Government assigned the combat sections of the Australian Defence Forces to SWPA and on 20 March 1942 the Allied Air Forces Headquarters SWPA was established in Melbourne with General Brett as its commander.

Attempts were made to preserve the integrity of USAF Groups by locating their respective squadrons in the same area. Two areas were established: the Northwestern Area (Darwin) and the Northeastern Area (Brisbane). Each Pursuit Group, for example, after receiving their equipment, was put into operation as a unit with attached ordnance platoons and medical detachments. But tactical demands continuously forced the shifting of squadrons from place to place, with Area Headquarters directing movements.

By the end of March USAF combat units were being moved into tactical positions. In early April 1942, the 35<sup>th</sup> Pursuit Group was being moved to air bases around Sydney (there had been a Japanese mini-submarine torpedo attack from within the Sydney Harbour). The 22<sup>nd</sup> Bombardment Group was moved to forward positions in north Queensland and was stationed at Townsville in the first few days of April. On 5 April 1942 the 22<sup>nd</sup> Bombardment Group flew the first B-26 bombers into combat in an air strike at Rabaul, New Britain. The Group's air strikes continued through April 1942 against Japanese targets in Northern New Guinea.

The three USAF Pursuit Groups in Australia, the 8<sup>th</sup>, 35<sup>th</sup> and 49<sup>th</sup>, were re-named Fighter Groups and were engaged in defensive operations, protective cover duties and attack missions. During mid March 1942, Squadrons from each of these Fighter Groups had been deployed to the Darwin area and in the last days of April two Fighter Squadrons of the 35<sup>th</sup> Fighter Group had moved into Port Moresby to relieve the hard-pressed RAAF units stationed there.

The historical records indicate that all USAF Groups were moving northwards from the Mt. Gambier and Nhill RAAF bases at or about 7 April 1942.

During April 1942 the Japanese were pouring reinforcements into the occupied Netherlands East Indies, North Eastern New Guinea, New Britain and the northern Solomons. Allied aerial reconnaissance during the first week of May 1942 revealed a formidable Japanese fleet in the Coral Sea sailing to capture Port Moresby and so isolate Australia from its Allies. Allied interception of the Japanese fleet led to the decisive air and naval battle of 7 to 9 May 1942, the Battle of the Coral Sea which resulted in the first major set-back for the Japanese military forces in the Pacific.

The 22<sup>nd</sup> Bombardment Group participated in the Battle of the Coral Sea operating from Townsville. By the end of May 1942, the 35<sup>th</sup> Pursuit Group, now named the 35<sup>th</sup> Fighter Group, was based in the Sydney area with Squadrons in Sydney, Townsville and Port Moresby. The 22<sup>nd</sup> Bombardment Group had been deployed to Townsville; and the 46<sup>th</sup> Air Base Group had been relocated to Daly Waters and the Adelaide River area in the Northern Territory, although one of its Squadrons was detached and moved to Geelong.

#### **Some further historical detail: American and Australian military sources**

The 35<sup>th</sup> Pursuit Group was constituted on 22 December 1939 and activated on 1 February 1940. Two Squadrons (21<sup>st</sup> and 34<sup>th</sup>) moved to the Philippines in November 1941. Headquarters and the 70<sup>th</sup> Squadrons sailed for Manila on 5 December 1941 but returned to America after the Pearl Harbour attack. Headquarters and the 70<sup>th</sup> Squadrons then sailed for Australia on 12 January 1942. Headquarters of the 35<sup>th</sup> Pursuit Group reached Australia in February 1942 and on 27 February sailed from Fremantle onto India. Headquarters was transferred back to Australia in May 1942.

On 23 February 1942, ten pilots of the 35<sup>th</sup> Pursuit Group based in Blimbing, Java and belonging to the 21<sup>st</sup> and 34<sup>th</sup> Pursuit Squadrons received oral orders “to proceed without delay from Blimbing, Java, to Melbourne, Victoria, by military aircraft” (Headquarters, USAF in Australia written orders, 9 March, 1942).

The 35<sup>th</sup> Pursuit group had 408 officers and enlisted men at Mt. Gambier in March 1942 for approximately 2 to 3 weeks

The 46<sup>th</sup> Air Base Group had 779 men located in Mt. Gambier in March 1942 departing around 7 April 1942.

The 22<sup>nd</sup> Bombardment Group was constituted on 22 December 1939 and activated on 1 February 1940. The Group flew antisubmarine patrols off the west coast of USA from December 1941 till January 1942 before been moved to Australia in February 1942. Parts of the 22<sup>nd</sup> Bombardment Group were stationed at Nhill for approximately 2-3 weeks at the end of March 1942 according to James Eastman, Chief, Research Branch, Historical Research Center, USAF (correspondence dated 22 August 1977). It must be noted however, that the RAAF Historical Section could not corroborate this Nhill deployment of the 22<sup>nd</sup> Bombardment Group, stating that “records held in this office which in respect of US formations are scant and in which details of movements of detachments and single units are not indicated” (in correspondence from R. F. Smalley, for Director-General of Coordination – Air Force dated 10 June 1977).

#### **Personal Recollections: correspondence with retired USAF Airmen**

An image of what it was like living through these dramatic times in Australia is available to us from the correspondence of the retired USAF airmen who responded to The Deakin Puma Study Group’s request for information. The letters these men sent to me, after over 35 years had passed since leaving south eastern Australia in March/April 1942, provided information corroborating the official record while adding a rich source of personal details. It is these personal recollections of their brief experiences in south eastern Australia as young USAF Airmen that brings the period alive and opens our minds to the opportunities for importing alien animals into the country.

What follows are short extracts from the letters of these retired Airmen.

C.B. Suarez, CWO USAF (Ret.) wrote on 17 June 1977 as follows:

You are correct we “the 35<sup>th</sup> Fighter Group” consisting the 39, 40, & 41 Squadrons were there in Mt. Gambier although at that time we were not yet officially the 35<sup>th</sup> Fighter Group. I was at that time the 1<sup>st</sup> Sgt of the 35<sup>th</sup> Inceptor Control Squadron – later on I was the Sgt Major of the 35<sup>th</sup> Fighter Group.



And later, in a letter dated 1<sup>st</sup> October 1981, CWO USAF (Ret.) Suarez referred to pleasant memories of Mt. Gambier:

We were billeted by the local people in their homes and us young ones – I was 22 – enjoyed the home atmosphere that they so graciously provided. The family I was billeted with even sent photos of me to my father (I thought then, and now even more so, that that was something special).

Lt. Col. Eugene Wahl wrote on 13 March 1977:

After spending a month in Java flying with Grant Mahoney we were flown out on a B-17. As I recall we spent a night in Broome and then flew to Perth. At this point spent several days required to replace a bad engine. We then took off for Melbourne. I think after a few days we were then sent to Mt. Gambier to organize a group to replace Australian P-40 pilots in New Guinea. We went by train from Melbourne or Adelaide ? which stopped at every station and as I recall was almost thrown off for firing our 45 cal. Automatics out the train window.

Made friends with a young couple who took my friend and myself down a river to the ocean where the surf was the highest I have ever seen it.

On 3<sup>rd</sup> April 1977 Philip Shriver recalled in his letter:

The USS President Coolidge landed in Melbourne February 2, 1942 carrying, amongst other things, over 100 recently graduated pilots from America. We were not assigned to any numbered group and as I recall were called a Provisional Pilots Group. We stayed in tents at Royal Park until February 12 when we travelled by train to Amberly Field near Brisbane by train.

On March 15, 1942, a group of still unassigned pilots left Bankstown, NSW enroute to Mt. Gambier for assignment to the 35<sup>th</sup> Pursuit Group. The original Group had been split up to form several cadres of more experienced pilots who would train the new men.

Our stay was very brief. We had much less contact with the local people here than later on leaves from New Guinea – usually Sydney. However, had I been a native, I would have held a low opinion of Americans judging from the conduct exhibited on our train trip from Melbourne. There was no ranking officer in charge of the contingent of pilots, all second lieutenants, travelling to Mt. Gambier. We had

been issued sidearms, and one clown, whose name I don't remember, insisted on shooting at sheep along the tracks. I have always thought what a great impression that must have left on the ranchers of the country.

Most of the pilots had the opportunity to check out in the P-40 planes assigned to the 35<sup>th</sup> while at Mt. Gambier. One of the things I remember most, aside from flying from a very rough field, was the bitter cold at night in the corrugated iron roofed barracks we were in. Collecting blankets was a major past time.

Lt. Col. USAF (Ret.) George B. Eldridge was a member of the 46<sup>th</sup> Air Base Group. He recollected on 30 March 1977 that:

The 35<sup>th</sup> Pursuit and the 46<sup>th</sup> Air Base Groups arrived in Brisbane on 25 February, 1942 in the same convoy. The orders for Mt. Gambier were dated 2 March. A convoy was made up and after 4 or 5 days the Hugh L. Scott reached Melbourne. The trains waiting at the docks took us not to Mt. Gambier but to Ballarat. There we were billeted upon the townspeople until the RAAF at Mt. Gambier could be made ready. We must have arrived at Mt. Gambier between the 15<sup>th</sup> and 20<sup>th</sup> of March. We of the 46<sup>th</sup> didn't accomplish very much at Mt. Gambier. Our tools and equipment were still in Melbourne and the aircraft had just begun to arrive.

On 7 April, 1942 the 61<sup>st</sup> Material Squadron was detached from the 46<sup>th</sup> Group and sent to North Shore, Geelong to operate the Geelong Erection Depot. The rest of the 46<sup>th</sup> was ordered to Daly Waters, Northern Territory at about the same time.

In a later letter, dated 9 January 1978, Lt. Co. (Ret.) Eldridge made the following observations on Australian culture of the time:

There was a curious sidelight to our arrival in Ballarat. When we got off the train, we had the 1<sup>st</sup> Sergeant call the roll to be sure we hadn't lost anyone. A number of people had turned out to get a look at us. I am not sure everyone realized that Americans are not all of British descent. The Slavic names were novel, but the German and Italian ones caused uneasiness. After they took them home it became apparent that these fellows never thought of themselves as anything but Americans and were really quite ignorant about the old country.

and

When we arrived (at Mt. Gambier) we slept in tents, but as people came and went we were moved into the barracks. The first morning I was awakened by a loud clatter and female voices! The WAAAF

orderlies were going up and down the hall dispensing tea and sternly demanding that we get up. This was totally strange to us. I don't think that any of us had ever seen a female soldier or airman at that time and in any event women in the barracks were a no no regardless of the circumstances. There was no hank panky in this situation but we found it quite an unusual experience.



**USAF of the 46<sup>th</sup> Air Base Group in Mareeba, Queensland late 1942: all were stationed in Mt. Gambier in March 1942. Lt. Col. Eldridge (then a Capt.) is on the right of the group.**

### **Drawing the threads together: the context**

The official history and the retired USAF officers' and warrant officer's personal accounts provide a clear picture of Australia's open borders to the influx of American military personnel and equipment during the period of February to March 1942. The image portrayed is one of intense activity with men being shunted around the eastern seaboard, and moved across the eastern States between Queensland and south western Victoria and into south eastern South Australia, while temporary staging bases were being established for re-grouping, re-assigning and training. There is also the detail of retreating aircraft and airmen departing Java and reaching Melbourne by way of Broome and Perth. The numbers of American service men involved were also considerable. There were almost 1,200 men stationed at Mt. Gambier for up to 3 weeks at the end of March 1942 and, reputedly, up to 2,000 men located at Nhill at the same time. And these men departed Mt. Gambier and Nhill as quickly as they came in early April 1942.

All of this frenetic activity was occurring within a period of Allied military command re-assessment and rapid re-adjustment, modification and re-organisation. The supervision of incoming and temporarily located military personnel by senior officers must have been minimal at best. And added to this chaotic picture was the civilian population's, reinforced by the military historical records, expectation of Japanese air attacks at any place at any time. In this climate of desperate re-guard action and effort to build up sufficient military strength to block the expected Japanese push into Australia's territorial zone, the normal practices quarantining Australia from alien imports would have not been high on the priorities of the duties for Australian customs and police officers. It takes very little imagination to reach the conclusion that these Australian officials would have been facing an impossible task if they defined their duties, with respect to imports, according to established governmental regulations.

As this Allied military build up was concentrated in the early months of 1942 in those locations on mainland Australia relatively more protected from the northern threat of enemy attack, that is the southern regions of the country from Perth to Melbourne, and given that Broome had already suffered an air attack, the most open locations to alien animal imports could be expected to be the west coast of Australia from Broome to Perth, and then across southern Australia to Melbourne.

***Why would USA airmen want to bring pumas into Australia when they arrived here in 1942?***

The explanation for the origin of pumas in the Grampians is, according to the Legend, that these animals were mascots of the US Airmen based at Mt. Gambier. There is also a lesser known claim for the origin of the Grampians pumas; that a puma cub were brought into Australia aboard an American bomber which landed in Nhill in 1942. This puma cub was also claimed, by the Study Group's informant, to be a unit mascot.

The Puma Study investigated this US military cultural aspect of the Legend by attempting to ascertain the extent to which animals appeared on American Air Forces paraphernalia depicting the Groups and associated Squadrons, and whether there was a practice of keeping animals as mascots.

A helpful reference for the Study Group in this regard was the June 1943 edition of the National Geographic. This edition included a feature on American Air Force insignias titled *Aircraft Insignia, Spirit of Youth*. This feature concluded with a large sample of American aircraft insignia - illustrations of 336 insignia for US Army, Navy and Marine Corps aircraft. Of those insignia included in this sample, almost 40% are animal representations and, of the animal-based insignia, almost 20% depict big cats (pumas, tigers, lions, panthers).

By way of example, these National Geographic illustrations of aircraft insignia include the insignia for the 35<sup>th</sup> Fighter and 46<sup>th</sup> Fighter Squadrons. The 35<sup>th</sup> Fighter Squadron's insignia is an oval patch with a blue border depicting a leaping black puma on a grey background. The 46<sup>th</sup> Fighter Squadron's insignia is an oval patch with a heavily built black puma or panther standing squarely on a white cloud against a blue background.

The information supplied to the Puma Study Group from the USAF Historical Research Center provided details on the insignia or emblems associated with the 35<sup>th</sup> Pursuit Group and its Squadrons and with the 22<sup>nd</sup> Bombardment Group and its Squadrons.

The 35<sup>th</sup> Pursuit Group (re-named in May 1942 as the 35<sup>th</sup> Fighter Group) had, as its emblem, an azure shield with an arm grasping a knife pointed to the base. Of the Fighter Squadrons included in the 35<sup>th</sup> Fighter Group, the relevant emblems were:

18 <sup>th</sup> Fighter Squadron (1940)	blue fox firing a machine gun
21 <sup>st</sup> Fighter Squadron (1940-42)	large black panther head with red lightning flash passing behind
34 <sup>th</sup> Fighter Squadron (1940-42)	white ram's head with red lightning flash behind
39 <sup>th</sup> Fighter Squadron (1942-)	a cobra with a rearing head in the clouds (also an eagle in flight)
40 <sup>th</sup> Fighter Squadron (1942-)	laughing devil's head with yellow lightning streak behind (an unofficial insignia was a red devil holding a blue lightning bolt in the right hand)
41 <sup>st</sup> Fighter Squadron (1942-)	a flying buzz saw
70 <sup>th</sup> Fighter Squadron (1941-42)	knight in armour on white charger

The 22<sup>nd</sup> Bombardment Group had, as its emblem, an azure shield with a puma's (cougar's) left paw with claws extended and pointing to the base. Of the Bombardment Squadrons included in the 22<sup>nd</sup> Bombardment Group, the relevant emblems were:

2 <sup>nd</sup> Bombardment Squadron	blue tail fly wearing battle cap riding a bomb (also a stylised goose in a white rectangle on a red circular patch)
19 <sup>th</sup> Bombardment Squadron	a ten pin bowling ball striking 10 pins
33 <sup>rd</sup> Bombardment Squadron	a red dragon's head
408 <sup>th</sup> Bombardment Squadron	winged eye and rays within a yellow triangle

The Deakin Puma Study Group did not acquire any information on the insignia and emblems of the 46<sup>th</sup> Air Base Group.

The Puma (Panther and Cougar) insignias of the 21<sup>st</sup> Fighter Squadron of the 35<sup>th</sup> Fighter Group and the 22<sup>nd</sup> Bombardment Group were designed as depicted below:

**Insignia of the 21<sup>st</sup> Fighter Squadron  
of the 35<sup>th</sup> Pursuit Group**

**Insignia of the 22<sup>nd</sup> Bombardment  
Group**



Before leaving this discussion on animal insignia of the American Air Forces Groups and Squadrons located briefly in south eastern Australia during March 1942, it is important to clear up some confusion that has arisen concerning the black puma insignia of the 35<sup>th</sup> and 46<sup>th</sup> Fighter Squadrons. These Fighter Squadrons have been confused, in the past, with the 35<sup>th</sup> Pursuit Group (later the 35<sup>th</sup> Fighter Group) and the 46<sup>th</sup> Air Base Group by some people interested in the Grampians Puma Legend, including members of the Deakin Puma Study Group. These two Fighter Squadrons belonged to different Groups and were not located in south eastern Australia in 1942. The Deakin Puma Study Group obtained information that the 35<sup>th</sup> Fighter Squadron was part of the 49<sup>th</sup> Pursuit Group first based near Sydney (March 1942) and then deployed to Darwin in April/May 1942.

Now to turn to the matter of whether there was an established practice in the US Forces of keeping animal mascots while in the vicinity of combat zones during World War II.

There was evidence available to the Deakin Puma Study Group that mascots were kept by some USAF Squadrons. One piece of evidence is in the form of a photograph of two American airmen and their Squadron's mascot dog in the June 1943 National Geographic article referred to above.

Further evidence was provided by the correspondence between US airmen and myself between 1977 and 1981. There are two accounts in this correspondence of mascots in the possession of American airmen at Mt. Gambier. The 61<sup>st</sup> Materials Squadron of the 46<sup>th</sup> Air Based Group had a Kelpie type dog as a mascot while at Mt. Gambier. Photographs included with a letter dated 9 January 1978 from Lt. Co. (Ret.) Eldridge show the dog wearing a leather 'vest' on which is printed the name 'Rookie' and 'Mascot'.

In addition, two airmen of the 35<sup>th</sup> Pursuit Group acquired two horses while in Mt. Gambier and, as CWO USAF (Ret.) Suarez put it in his letter of 1 October 1981, “they were disappointed when we got orders to leave and they could not sell them – instead they were told to turn them loose in the prairies”. Whether these horses were mascots as such is a mute point.

#### **Drawing the threads together: a motive**

The information uncovered by the Deakin Puma Study’s historical research on animal insignia and mascots in the USAF indicates that the culture of the American Air Force Services supported the association of mascots with units. There are big cat insignia associated with the 35<sup>th</sup> Pursuit Group (Fighter Group) at the level of one of its Fighter Squadrons, the 21<sup>st</sup> Squadron. This Squadron saw combat action in the Philippines and Java, and pilots of this Squadron retreated from Java to Melbourne a few days before Java and the Philippines were lost to the enemy.

The Deakin Puma Study Group uncovered direct evidence that pilots of the 21<sup>st</sup> Squadron flew into Australia on bomber aircraft from the correspondence dated 13 March 1977 from Lt. Col. E. A. Wahl. The air route taken was from Java to Melbourne with stopovers at Broome and Perth. From the official USAF historical records the Deakin Puma Study Group noted (see earlier section) that in early March the 7<sup>th</sup> Bombardment Group flew into Perth at Fremantle enroute from Java with some of the Group’s bombers then flying onto Brisbane by April 1942.

One assumption is that the flight path of these bombers from Perth to Melbourne included a stop over at Adelaide as airfields had been built at Adelaide, as at the other mainland capital cities, for light bombardment and pursuit aircraft. An alternative assumption is that these retreating USAF bombers flew directly from Perth to Nhill where the 22<sup>nd</sup> Bombardment Group was temporarily stationed in March 1942.

As already stated, it could also be assumed that customs and quarantine controls, as we now know them, would have been non-existent in Broome in February/March 1942 given that Broome was about to be or had been bombed by the time these USAF pilots passed through. This assumption is supported by the historical records of the time that state that by 20 March 1942, just seventeen days after the first Japanese air raid, the civilian population of Broome had departed in a panicky embarkation to sea aboard the available luggers of the town’s pearling industry.

In addition, there are also big cat insignia associated with the 22<sup>nd</sup> Bombardment Group at the Group level. The information uncovered on the movements of this Group indicated direct shipment of personnel and equipment from USA in February 1942. The Deakin Puma Study Group’s research uncovered no direct links between the Squadrons of this Bombardment Group and the war zones of Java and the Philippines prior to February 1942.



The historical facts associated with the 35<sup>th</sup> Pursuit Group, together with the culture of having animal mascots in USAF combat units and the big cat insignia of the 21<sup>st</sup> Fighter Squadron, are not inconsistent with the creation narrative associated with the Grampians Puma Legend. The Study Group acquired historical documentary evidence for:

- the 21<sup>st</sup> Fighter Squadron of the 35<sup>th</sup> Pursuit Group having an aircraft marking featuring a “large, black head of panther”;
- a small group of pilots of the 21<sup>st</sup> Fighter Squadron retreating in haste directly from Java to Melbourne aboard B-17 bombers in late February 1942 after being in the Philippines and Java region for only 3 to 4 months;
- a Bombardment Group (the 7<sup>th</sup>) retreating from Java and arriving in Perth at Fremantle in the first week of March 1942 before being deployed elsewhere in Australia including Brisbane on the east coast; and
- pilots of the 21<sup>st</sup> Fighter Squadron being re-allocated to new Fighter Squadrons in Mt. Gambier as senior experienced pilots, to train newly arrived and inexperienced pilots directly from USA over 2 to 3 weeks, before being deployed around Sydney, Townsville and Port Moresby.

Based upon this documentary evidence, a plausible conjecture could be developed drawing on the USA military culture for animal insignia and mascots, and the circumstances of February 1942, as to why USA airmen may have had, firstly, pumas in their possession in islands of South East Asia and, secondly, why they may have been motivated to bring these puma mascots into Mt. Gambier and Nhill in south eastern Australia during their rushed retreats from Japanese forces in February and March of 1942.

***Did They? What is the evidence that puma mascots were in the possession of USA airmen located in either Mt. Gambier or Nhill in March 1942***

Further evidence was sought by the Deakin Puma Study Group in an attempt to corroborate conjectures relating to the Puma Legend incorporating the known activities of US airmen in South-Eastern Australia in early 1942. The further evidence was sought from people who were in Mt. Gambier and Nhill in early 1942. This evidence could potentially have come from American Airmen and/or from Australians living in the area. The best level evidence at this distance in time from the supposed events would be reported eye-witness accounts.

**USAF Airmen stationed in Mt. Gambier early 1942**

Eye witness evidence was sought by me from my USAF contacts for one last time in 1981. My direct request was worded as follows in a letter dated 1 September to the retired USAF correspondents:

It is now four years since I last wrote to you. As you remember I am engaged in a study of the South Western region of Victoria. I am attempting to prove or disprove a persistent local rumour that personnel assigned to the 35<sup>th</sup> Pursuit Group stationed at Mt. Gambier during March of 1942 had in their possession puma cubs as mascots.

I would be most appreciative if you would provide me with your recollections on this matter.

This letter was sent to all six Mt. Gambier-based USAF informants.

The relevant extracts from the replies to this direct request are listed below.

CWO USAF (Ret.) Suarez:

But to get back to your question, the answer is a definite NO and since I was the 1<sup>st</sup> Sgt I am pretty sure that if there had been I would have been aware of it (1 October 1981).

Col. USAF (Ret.) Shellito:

The 35<sup>th</sup> Pursuit Group did not have Puma Cubs as mascots. I was with this Group at Mt. Gambier and we did not have any mascots at the time (1 September 1981).

Phillip Shriver:

With reference to your inquiry concerning mascots kept by the 35<sup>th</sup> Fighter Group personnel in Mt. Gambier, I can provide information only as applicable to the 40<sup>th</sup> Fighter Squadron which was a unit of the 35<sup>th</sup> Fighter Group. There was definitely no cougar cubs kept by the 40<sup>th</sup>, and I have no knowledge of any such mascots being kept by any American outfit it (11<sup>th</sup> September 1981).

Lt. Col. USAF (Ret.) Eldridge:

I am sorry that I have no information about pumas (alias cougar, alias mountain lion) cubs as mascots for the 35<sup>th</sup> Pursuit Group. It does not seem likely that during the month at Paine Field (USA), the week at San Francisco, three weeks at sea, a week at Brisbane and Ballarat, and the period at Mt. Gambier that the presence of these creatures could be kept secret. At Ballarat we were billeted on the townspeople and the presence of wild cats would be known by a host.

On the other hand, the mountains of Oregon and Washington are one of the few areas where cougars still exist in the wild. During our stay at Paine Field there was a squadron of the 35<sup>th</sup> at Bellingham and one at Port Angeles. Forty years ago there were unsettled areas quite close to town limits of these places.

Many people, especially those who raise livestock, will shoot a cougar on sight. If, and I do say if, someone shot a mother and brought home the babies, then the possibility that they could be acquired does exist. (13<sup>th</sup> September 1981).

And finally, Col. USAF (Ret.) Wilson:

I wish to advise you that I am positive that no one in the 35<sup>th</sup> Pursuit Group had any puma cubs as mascots while stationed at Mt. Gambier during March 1942.

However, I do vaguely remember a rumor that some personnel had such mascots. However, I am also sure that this was a figment of someone's imagination, perhaps enhanced by a few beers with their RAAF friends (1<sup>st</sup> October 1981).

The Deakin Puma Study Group received no reply from Lt. Col. Wahl, the airman who had served in Java and flew back to Melbourne or Adelaide (Wahl was not sure on this point) via Broome and Perth on board a B-17 bomber in February 1942. You might remember that this was the USAF pilot who was "almost thrown off (the train bound for Mt. Gambier) for firing our 45 cal automatics out the train window" (personal correspondence, 13 March 1977).

#### **Australian eye witness accounts:**

The Deakin Puma Study acquired records of three eye witness accounts of USAF personnel with pumas in 1942: two eye witness accounts of pumas with airmen in the Mt. Gambier area and one account of a puma with airmen at Nhill.

One of the Mt. Gambier-related eye witness accounts was included in Chapter 1 of this Report. This was an anonymous account given by an ex-RAAF serviceman who had been stationed at Mt. Gambier and who later in 1969 admitted to seeing puma cubs (pups with round ears) at the joint RAAF-USAF base there.

The other Mt. Gambier-related eye witness account was published in Paul Cropper's 1994 book. *Alien Big Cats: Out of the Shadows*. Irene Addinsall broke her silence at the age of 78 in 1989 when she recalled seeing puma regimental mascots on several occasions near Hotspur in far Western Victoria. Hotspur is a small rural locality about

midway between Mt. Gambier and the Grampians. Miss Addinsall, at the time, was in the Land Army working on her uncle's property 'Kangaroo Park'. The pumas she claimed to have seen were with an US unit camped in the bush next to the property.

There was a man among the soldiers with a light-coloured puma. She had four kittens, three light-coloured and a little dark-coloured one. They were always getting twiddled up in sticks or falling over. The army boss down there said he couldn't stand it. She was getting savage because the kittens were being hurt. She was becoming scotty. He told them to get rid of it.

The boss went down to a party at Heywood (*40 km away*) and got a bit worse for wear. While he was away ... they put the puma on a truck and took her up towards Halls Gap (*town in the Grampians*) to one of those creeks ... and they let her out there in the middle of the night. She didn't want to stay ... wanted to come back with them. There were some rabbits and she ran after them and the kittens ran after her ... that was the last they saw of her (Cropper, 1994, p. 83)

The Deakin Puma Study Group found one eye witness to the presence of a puma cub with USAF airmen in Nhill. This was Mr. Malcolm Weir who lived in Nhill until April 1943. He and a mate, Mr. Roy Coutts, had been stationed as guards at the USAF air base nearby. He reported that an American bomber arrived in Nhill USAF Base in 1942. The bomber flew in from the north, possibly from the Philippines, and had the cub on board. The cub was then taken by road to a locality on the Horsham/Hamilton Road on the periphery of the Grampians called Cherrypool and released.

It is helpful to place the localities referred to in Miss Addinsall's and Mr. Weir's accounts in relation to the Grampians and to each other. By road, Hotspur is some 80 km east of Mt. Gambier across the South Australia/Victoria border and 100 km southward of the nearest point of Grampians wilderness, Victoria Point, the southernmost tip of the Victoria Range. There are several creeks in this area close to the bush and the road. The road crosses the Wannon River within a kilometre of the uncleared bush in the Victoria Point area.

Nhill is approximately 120 km north of Cherrypool by road. Cherrypool is the first place on the road from Nhill to the Grampians region where the road enters uncleared bush. Cherrypool is also where the road crosses the Glenelg River. Cherrypool is on the flat country within the Grampians National Park and is 5.5km to the nearest uplands at Geranium Springs. The direct distance between Cherrypool and Victoria Point is approximately 45km.

The Deakin Puma Study Group received further information in 1977 that two Byaduk residents had purportedly seen puma mascots with the USAF personnel at Mt. Gambier. One of these men, John Kinghorn, could not be contacted. The other, B. Falkenberg, was tracked down in June 1977. In a telephone conversation with me, he

confirmed that he had been at the RAAF Air Observation School at Mt. Gambier in 1942 but had been moved to Sale in Gippsland, Eastern Victoria early in that year. He had received a letter from a RAAF mate still based in Mt. Gambier in which the puma mascot rumour was mentioned. Over the years he had lost contact with his mate. B. Falkenberg refused to reveal his mate's identity to me.

**Drawing the threads together: well did they?**

The above is the total of the data of an eye witness type that the Deakin Puma Study Group were able to obtain. The American accounts vary. There was absolute rejection of the presence of pumas in Mt. Gambier or associated with the 35<sup>th</sup> Pursuit Group by three informant. One informant had no knowledge of any pumas being present at Mt. Gambier and considered the event as unlikely though possible. He then suggested a way pumas could have been captured in the western wilderness of North America. The fifth informant had knowledge of the story while in Mt. Gambier but was dismissive of its truth value.

Miss Addinsall's first hand account has some interesting points. She referred to the American servicemen with the puma adult and cubs as being in the US Army. This would indeed have been the situation. The USAF Groups at Mt. Gambier were US Army Airforces not a separate Air Force Service as was the relationship between the RAAF and the Australian Army. This point was clarified by one of the Study Group's American informants:

The 46<sup>th</sup> Air Base Group were responsible for supply and maintenance in support of the 35<sup>th</sup> Pursuit Group. Since we were part of the army, some of these functions were performed by army services branches. Now these services would be consolidated (Eldridge, 9<sup>th</sup> January 1978).

In addition, her general account of the release area places this at the nearest location of wilderness country to Hotspur with seclusion, prey and water.

This latter point can also be made about Mr. Weir's account. If one was looking for a direct road route from Nhill to the most accessible wilderness country in the Grampians with seclusion, prey and water, and taking the shortest time while following the simplest directions, Cherrypool would be where one is most likely to end up.

Mr. Weir's account, in terms of bombers flying into Victoria from the north of Australia, is not inconsistent with what we know of aeroplane movements at the time. One of the Deakin Puma Study's American informants wrote of his flight out of Java via Broome and Perth to Melbourne. He was flown out in a bomber in late February 1942 arriving in Melbourne in early March:

After spending a month in Java ... we were flown out on a B-17  
(Wahl, 13 March 1977)

If Lt. Col. Wahl's flight path taken by bomber aeroplane from Java to Melbourne was the favoured route, and there are good military and geographical reasons to think that it was, then it is not unreasonable to expect that these bombers would include a stopover at the USAF 22<sup>nd</sup> Bombardment Group Base at Nhill, midway between Adelaide and Melbourne, and on the direct flight path from Perth into south eastern Australia.

But did they? Did one or the other or both events reported by Mr. Weir and Miss Addinsall ever take place in March of 1942? Mr. Falkenberg's information doesn't really help us at all except to place the beginnings of the puma mascot story right back into early 1942 through communications by RAAF personnel at Mt. Gambier.

We cannot say for sure if the USAF pilots did bring in puma mascots to southern Australia from the historical evidence uncovered. What we do know is that the story was at least known but not believed by one American airman stationed at Mt. Gambier in March 1942. We know that the story was communicated by at least one Australian stationed at the Mt. Gambier RAAF Navigation School to another RAAF staffer stationed elsewhere in early 1942. And we also have two accounts from other Australians, one appointed to the Land Army and the other a guard with the RAAF, of events involving pumas from that time that are consistent with the American military activities of the period in question. We also have a conjecture from another World War II American pilot on how puma mascots could have been captured by members of a Squadron within the 35<sup>th</sup> Pursuit Group, before leaving for war zones in the South-West Pacific.

## ***Conclusion***

Americans arrived in south eastern mainland Australia in a rush taking the locals by storm. There were plenty of them; about 1,200 to be fitted into the Mt. Gambier region and about 2,000 to be lodged around Nhill. Accommodation facilities were strained and makeshift arrangements were hurriedly put into place. These men, some fresh from 'the States', others from recent combat in the Philippines and Java, would have attracted much local interest in a time of crisis for both the civilian population and the American military personnel alike. The young American airmen and their support services soldiers would have introduced a nonconformist, if not exotic, element into the stable, rural and dominant Anglo-Celtic-derived 1940s Western Victorian/South eastern South Australian way of life. These young men with their different names, culture, manner and appearance to that which most Australians at this time were accustomed, would have been an irresistible focus of attention, gossip and myth-making for many of the locals.

These airmen men stayed only too briefly, less than four weeks. But they left an unexpected legacy, one that continues to grow and develop without their direct knowledge or acknowledgement. The young American airmen (or supposedly, some of them) let loose either a fabrication that became a creature of the region's imagination or, alternatively, a population of alien predators amongst the good folk of Western Victoria. Their unexpected legacy has become a continual reminder that "the Americans were here". Without it, their brief existence on the western plains surrounding the Grampians would most likely have been largely forgotten by now. But not so. Their legacy is the Grampians Puma Legend.

The historical facts uncovered by the Deakin Puma Study do not deny the possibility that the genesis events incorporated into the Legend did happen. Or, to put it another way, the information analysed in this Chapter does not in any way refute the essence of the commonly reported version of the creation narrative of the Grampians Puma Legend involving USAF personnel. But significantly, the historical facts uncovered by the Study Group and reported here do not prove the veracity of the Grampians Puma Legend's creation narrative. What these historical facts do allow is the more elaborate accounts of events that may or may not have happened.

With this in mind and drawing on the historical information now available through this chapter, the Deakin Puma Study Group was able to lay out for critical scrutiny two oppositional conjectures incorporating the factual elements now available.

#### **The 'Established Myth' Conjecture:**

The plausibility of this conjecture is dependent on accepting that, amongst the rural population of Western Victoria, there were people gullible enough to be taken in by tall stories introduced to them by American airmen in March 1942. This conjecture is also dependent on accepting that there have been a continuing percentage of the local communities surrounding the Grampians Mountains who are then prepared to believe these tall stories over the proceeding decades in the face of no hard factual evidence. The tall stories gradually attained the status of a self-reproducing myth in these communities, the Grampians Puma Legend, as unexpected, but not out of the ordinary, occurrences in the Grampians Mountains and in the surrounding countryside were experienced and then interpreted as evidence supporting the truth status of the myth itself. The Deakin Puma Study Group referred to this conjecture as the 'established myth' conjecture. This conjecture underpinned the sociological dimension of the Deakin Puma Study.

The essence of this conjecture is that, perhaps as an outcome of Australian and American rivalry, RAAF and USAF personnel traded tall stories with each other during their brief time together in Mt. Gambier, and maybe in Nhill. The Australian's exaggerated tales of the Australian bush were soon matched by the Americans with accounts of puma mascots in the Air Bases. These accounts were fed into an environment ripe for gossip and embellishment in the local community and beyond

by some of the RAAF servicemen, as Mr. Falkenberg's account suggests. And so the Grampians Puma Legend had its beginnings.

In later years when a local or a visitor reported an unusual animal sighting in the country around or within the Grampians, someone remembered the Puma Story from 1942. In time, this story gradually became the accepted explanation by many people for these sightings, including those who were involved directly in the sightings themselves. By the 1960s the local newspapers began to take notice of these reported sightings of 'strange beasts' in the Grampians and, in reporting the eye witness accounts, felt compelled to provide a consistent background to the accounts. In this way, the USAF pilots from 1942 based in Mt. Gambier became known more widely as the most likely importers of these beasts, now obviously pumas, into the Grampians. With the emphasis on USAF pilots based at Mt. Gambier, the Nhill component of the story was lost from both journalistic and local memory.

By reporting the eye witness accounts, the regional newspapers, whether intentionally or not, became a dynamic element in the spread of the Puma Story and in ascribing to it a heightened level of credibility; "I read it in the papers, so it must be true". By the mid 1970s, thirty years after the USAF pilots first planted the seed, their tall story of puma mascots had grown to the level of established myth status in the south west of Victoria, now ready to be catapulted onto a wider unsuspecting audience.

#### **The 'Abandoned Mascots' Conjecture:**

The plausibility of this alternative conjecture is dependent on the internal consistency of the narrative when tested against the known historical facts. This conjecture, in essence, 'tests' against selected historical details the summarised and stripped down story of American airmen importing puma mascots into Western Victoria and then abandoning them in the Grampians Mountains. The historical details of relevance are, of course, those of the US military units known to have been located in south eastern Australia in 1942 but selected and woven into a fuller narrative. The concept of a 'test' in this situation comes from the idea that the more expanded a 'story' becomes the more likely it is that gaps in its plausibility will emerge. Unlike a summarised account low on detail, an expanded account is more vulnerable to refutation. Consequently, this process leads, inevitably and deliberately to an elaboration of the original story. The Deakin Puma Study Group referred to the elaborated conjecture that emerged from this process as the 'abandoned mascots' conjecture.

This conjecture accepts as fact the historical circumstances of the USAF in the South West Pacific from November 1941 and weaves a narrative about puma mascots through these facts incorporating the eye witness accounts of either Miss Addinsall or Mr. Weir or both.



The conjecture could start in the north-western USA Air Bases of the USAF or further out in the Pacific, but importantly there needs to be, eventually, more than one puma sent out to sea in 1941. A likely candidate is the 21<sup>st</sup> Fighter Squadron of the 35<sup>th</sup> Pursuit Group enroute to the Philippines in November 1941. On board ship is a female puma Squadron mascot, a match of sorts to the Squadron's insignia – a black panther head.

The USA is not at war with Japan, and the US airmen reckon there will be room enough for their mascot at the well established and substantial American military bases located in the Philippines. But they are not in the Philippines for more than a few weeks before events beyond their control start to overtake them. Pearl Harbour is bombed in December, 1941, war is declared by the USA against Japan, and the Japanese begin to rapidly overrun South East Asia in January 1942. The 21<sup>st</sup> Squadron withdraws to Java and then after a month are ordered to withdraw to Southern Australia, a full continent away from the war zone.

Before retreating, the remaining pilots of the 21<sup>st</sup> Squadron load their puma mascot, now with newly born cubs, onto one of the departing B-17 bombers of the 7<sup>th</sup> Bombardment Group. In late February they fly to Broome, then onto Fremantle. Bombers are flying onto eastern Australia from Fremantle. Fighter pilots of the 21<sup>st</sup> Fighter Squadron embark once again as passengers on the B-17 bombers with their puma mascot and cubs. The bombers land for re-fuelling at the RAAF Air Base in Nhill now the temporary location for the re-grouping 22<sup>nd</sup> Bombardment Group of the USAF. There, the puma and her four cubs are unloaded and taken by road to the Mt Gambier RAAF Navigation School, a distance by road of approximately 350km. Once there, the pumas are soon removed to a less obvious spot. They are taken to one of the outlying bivouacs set up by the US Army for training purposes well away from the RAAF Air Base. This bivouac is near Hotspur.

By the end of March it is clear that the USAF units are to be soon relocated to the north of Australia. The mascots are by now an encumbrance. The 35<sup>th</sup> Pursuit Group is mobilising for imminent combat in northern Australia and Port Moresby, and the luxury of maintaining an increasingly troublesome adult puma and her fast developing cubs is no longer an option. Secondly, the prime reason for having these animals in the 35<sup>th</sup> Pursuit Group no longer exists. The pre-1942 Squadrons within the Group are in the process of being discontinued after the fallback from Java with their personnel being re-assigned to the newly formed 39<sup>th</sup> and 40<sup>th</sup> Fighter Squadrons joining the newly arrived fresh recruits from the United States. The 21<sup>st</sup> Fighter Squadron is amongst those being discontinued and so the *raison d'être* for its puma mascots vanishes. As the mascots of the two newly formed squadrons are a cobra and an eagle for the 39<sup>th</sup> and a devil for the 40<sup>th</sup>, there is now no allegiance to the small family of pumas in the USAF bivouac in the bush at Hotspur.

Instead of shooting their now redundant mascots, the servicemen decide to dump the puma and her now active cubs at the nearest appropriate site possible. Local information guides them to Victoria Point in the Grampians.

Separately, and possibly a few weeks later, another bomber arrives at Nhill, Victoria from the Philippines via Java after taking the long coastal route from Broome to Adelaide. This bomber has yet another puma mascot on board. But this time the 340km road trip to Mt. Gambier is out of the question given that preparations are well under way for imminent mobilisation to the north. Perhaps this particular mascot has nothing to do with the 35<sup>th</sup> Pursuit Group, being instead a mascot of the 22<sup>nd</sup> Bombardment Group - the 22<sup>nd</sup>'s insignia being a shield with a puma paw prominently displayed, remember.

Either way, time is of the essence as the 22<sup>nd</sup> Bombardment Group is also being relocated to northern Australia where it will play a significant role in attacking Japanese bases in New Guinea and in the Coral Sea Battle of 7 to 9 May 1942. The puma cub must be disposed of, and a small group of US servicemen, under local advice, take the cub by road and dump it at the first place that qualifies in their minds as 'mountain lion country'. This is Cherrypool on the forested lowlands abutting the Grampian Ranges.

The Victoria Point pumas survive. Maybe the Cherrypool cub makes it also. These predators mature and form the nucleus of a breeding colony centred on the Victoria and Billywing Ranges incorporating the Victoria Valley to the east and the Glenisla Valley to the west to the shores of Rocklands Reservoir. The puma colony includes the dark cub of the 'Mt. Gambier' litter. As the colony is both small and closely related from the outset, the Grampians puma colony gene pool has a higher frequency of genes for dark colouration than is the norm in the wild populations of the Americas. Consequently, dark and black offspring become common in the Grampians puma colony over time with each new generation. The build up of numbers in the puma colony is slow at first. Maybe inbreeding is the cause but after 20 years the pumas are spreading along the western ranges of the Grampians across to the Black Range in the northwest and south to Mt. Napier near Byaduk in the south. By the 1970s, isolated and dispersed young animals reach the Little Desert scrublands west of Dimboola.

As the population slowly increases in size, reports of sightings of strange beasts, big cats and black panthers begin to spread through the local communities, eventually coming to the notice of journalists working for regional newspapers. People remember the puma stories from the American USAF Air Base at Mt. Gambier in 1942. The Nhill puma incident is not remembered, or known, by those who make contact with the local journalists. And so the commonly understood version of Grampians Puma Legend is published and proclaimed again and again with every new eye witness account reported in the press.

**How to decide**

The first tactic of the Deakin Puma Study strategy provided the Study Group with historical details rich in interpretative scope. The expanded historical details provided a backdrop from which the Study Group could propose two plausible but diametrically opposed conjectures for the creation of the Grampians Puma Legend. One conjecture was clearly aligned with the Study's null hypothesis that there are no big-cats in the Grampians or surrounding countryside and that the reported puma sightings are just unexpected but normal occurrences in the Australian bush re-interpreted by observers to fit the Grampians Puma Legend. This conjecture was at the core of the sociological component of the Deakin Puma Study that was exploring the processes by which myths become established, and are maintained and reproduced over time in rural communities. The other conjecture just as clearly was not aligned with the Study's null hypothesis, and if proven would change substantially the character of the debate over the Grampians Puma Legend. Importantly, both narratives, as alternative conjectures for the origin of the Legend, illustrate how the Grampians Puma Legend has sufficient depth and substance, whether fictional or not, to entered into the realm of sustainable animal mythologies that demand a following of true believers opposed by equally ardent cynics.

The question now is how can we decide between these two alternative conjectures? But the question may be more complex than this. The possibility exists that we have a situation in Western Victoria where elements of both conjectures are at play. There may be myth maintenance based on spurious interpretation of perfectly normal events in the bush mixed with rare but actual sightings of big-cats. This intriguing possibility adds an increased level of complexity to the Deakin Puma Study as it keeps both conjectures alive at the same time.

The next two Chapters of this Report will introduce you to the further 'evidence' that was uncovered by the Deakin Puma Study Group through the implementation of its second and third tactics constituting its research strategy. These tactics interrogated the evidence typically put forward by true believers of the Grampians Puma Legend, evidence that is routinely dismissed by the cynics who demand nothing less than a captured puma or a puma corpse as the level of evidence required before shifting from their entrenched position of disbelief.

But how does this evidence stand up to organised, rigorous and reasonable but sceptical scrutiny? It is onto this question that we now focus our attention.

## The Route of Retreating US Air Force Personnel and Aeroplanes: February – March 1942



The ‘abandoned mascot’ conjecture, outlined above, hypothesises that there was more than USA military personnel aboard the bombers retreating from Java and landing at the US Air Force military base outside Nhill, northwest of the Grampians. The conjecture postulates that at least two of these bombers had puma mascots on board.

## CHAPTER 5

### **Talking to the True Believers: Interviews with Eye-witnesses**

#### ***Tactic Two of the Deakin Puma Study Strategy***

The second tactic of the Deakin Puma Study Strategy, as outlined in Chapter 2, was to make direct contact with people who had volunteered to having observed large cat-like animals in the vicinity of the Grampians and its surrounding farm country. The intent of the Deakin Puma Study Group, through this tactic, was to gain more detailed information from each eye-witness in order to be able to diminish the plausibility of the claim that a big cat had been definitely sighted. In criminal law the accused is innocent until proven guilty; in the Deakin Puma Study, eye-witnesses were assumed to have been mistaken until additional information suggested otherwise. So, eye-witnesses were not to be believed in the first instance, although it was accepted at the outset that absolute proof of big cat existence in the Grampians based on eye-witness accounts alone was not an achievable goal.

The assessment of the veracity of events, as reported through eye-witness accounts, is an issue that is constantly addressed in our criminal courts. Here there is the notion of being judged guilty ‘beyond reasonable doubt’. If this judgement cannot be reached, then the accused person must be deemed innocent. For the Deakin Puma Study, the corresponding notion would be that of judging an eye-witness account as being an accurate description of an observed reality beyond reasonable doubt. If this judgement could not be reached, then the eye witness account must be deemed to have been one of mistaken identity. Making these judgements was to be the challenge for the Deakin Puma Study interview teams.

This challenge was met through the testing of different orders of explanation. The first order of explanation to be tested by the interview teams was whether each eye-witness had seen something else and had mistakenly thought they had sighted a big cat, typically identified as a puma. The second order of explanation, to be considered as a possibility by the interview teams, was whether each individual big cat event, as portrayed by self-proclaimed eye-witnesses, was in fact fabrications concocted by the relevant eye-witnesses for reasons only to be guessed at - maybe simply in order to have one’s name in print in the local newspaper, or maybe to shore up an earlier big cat sighting claim with further supporting evidence. Who can tell what motivates people to come into the public spotlight? The third order of explanation, only to be seriously considered after the first two orders of explanation had been tested and found wanting, was whether the eye-witness was telling a believable story about a sighting of a large cat-like animal, and it was unlikely that the eye-witness had

confused the observed animal with any other animal species known to be present in the Grampians and surrounding country.

To reach a judgement as to which order of explanation was the most plausible for each of the eye-witnessed events investigated by the Deakin Study Group, the Study Group interview teams were required to gently interrogate the identified eye-witnesses, drawing out fuller accounts of their claimed sightings. The posture of the Study Group members during the interview process was always one of respect for the eye-witness and their narrative. Each eye-witness was given opportunities to suggest alternatives to their original big cat identification. In the end, the interview teams were required to treat each individual eye-witness and their offered narrative with, what can only ever be, a subjective judgement of 'believability' – do we judge this eye witness as telling a believable account of a big-cat sighting or do we judge that this eye witness was mistaken or lying.

So the procedure associated with this second tactic of the Deakin Puma Study Strategy was to:

- make initial contact with reported eye-witnesses, typically done by myself over the telephone;
- after explaining the Deakin Puma Study to the eye-witness, request that they be interviewed by the Study Group's interview team in the near future;
- set up a date and time for the interview (usually at date coinciding with a Deakin Study Group field trip to the Grampians);
- interview each eye-witness, typically in their home, using an Observation Report Form especially prepared for this purpose by the Study Group;
- photograph any artefacts (typically plaster casts of paw prints) that the eye-witnesses may have in their possession;
- chat about any other relevant topics the eye-witness might want to discuss;
- and after each interview, complete any notes, recap the event and make a judgement on the believability of the eye witness's narrative; and
- if there had been more than one eye witness present at the 'puma event', then repeat the above procedure with each associated eye witness separately.

Data from each interview was then presented by the interview teams to the Deakin Puma Study Group as whole for analysis and interpretation. Where there had been more than one eye-witness present at a 'big-cat-sighting-event', the separate eye-witness narratives were cross checked for any discrepancies.

This was the labour intensive procedure employed by the Deakin Puma Study Group in its implementation of its second tactic to unravel both the veracity and the sociological 'drivers' of the Grampians Puma Legend. This procedure was implemented over the period 1976 to 1977 involving self-proclaimed eye-witnesses of big-cats in the Grampians environs.



**Deakin Puma Study Core Group members finalising the Interview Team's Itinerary: October 1976. Neville Millen (pointing) with the author on his immediate right.**

### ***Identification and Selection of Eye-witnesses***

The primary sources for identifying big cat eye-witnesses in South Western Victoria were published stories in the local district newspapers. But as the Deakin Study Group members sifted through these newspaper articles it became clear that there were many more reports over the years than could be followed up in the intensive way adopted for the Study. The Study Group decided to focus on reported sightings that satisfied these criteria:

- were located in the Grampians precinct;
- took place within the past ten years; and
- were reported by locals; that is, people living in the communities in and surrounding the Grampians, communities bounded by Hamilton to the south, Casterton to the west, Horsham to the north, and Stawell and Ararat to the east.

Newspaper reports of sightings further a field, at earlier times or by visitors to the area were put to one side. But even so, given this culling of reported sightings, those reports satisfying the Study Group's criteria eventually lead to over one hundred and twenty two self-proclaimed eye-witnesses of large carnivores in the Grampians for the period 1966 to 1976, with most concentrated from 1970 onwards. During the intensive phase of the Deakin Puma Study, September 1976 to September 1977, it was only possible to make contact and interview thirty nine of these identified eye-witnesses. From 1978 a further nine eye-witnesses were interviewed making a total of forty eight people interviewed about their big-cat sightings. Also an additional eight eye-witnesses provided the Deakin Study with information through mailed correspondence. The final eye-witness informant database for the Study was derived from fifty six people.

Therefore, the second tactic of the Deakin Puma Study Strategy involving the analysis of eye-witness evidence for a big-cat population in the Grampians was based on the expanded eye-witness accounts of thirty nine locals.

It must also be remembered that the business of interviewing puma eye-witnesses drawn from the local Grampians communities by an external University-based team of investigators was never going to be a straight forward process. As mentioned in the first chapter, the Puma Legend had its believers and cynics in the local cities, small towns and farming communities. Reported puma sightings can be quickly equated to alcohol-induced hallucinations, a most common response by disbelievers to reports of big-cat sightings. To step forward and report a sighting under these circumstances required a preparedness to cope with a certain amount of teasing at best, and ridicule at worst, from fellow community members entrenched in the debunking camp. Some people had come to regret their short period of ‘fame’ and were now hoping that their puma episode would, if not quickly fade in the collective community memory, be relegated to past history only rarely, if ever, to be re-visited.

To this environment surrounding the Grampians Puma Legend in the local communities of Western Victoria, add the intrusion of a university-based Puma Study. Several outcomes became possibilities simultaneously. For some reported eye-witnesses, the Deakin Puma Study was seen as a vindication of their experience; it carried the possibility of adding an externally referenced credibility to what they have been trying to tell people all along. “If university researchers are prepared to believe me, then so should you”. For others, the arrival of the Study Group was an unwanted intrusion into their re-settled lives threatening to re-open what had been an embarrassing episode in their recent past. And for still others, the Study Group carried the potential of a more expanded and perhaps extended spot in the public limelight.

The Deakin Puma Study Group came to experience all of these responses to its intervention into the lives of self-proclaimed eye witnesses of ‘big-cat events’ over the course of the Study.

### ***Putting Order into the Eye-witness Narratives***

The Deakin Puma Study Group attempted to provide some consistency and comparative structure to the interview data by requiring the interview teams to follow an interview protocol framed by the specially designed Deakin Puma Study Observation Report Form.

#### **The Observation Report Form**

This observation form gave a structure to the information received from each eye-witness. The form was divided into the following sections:



- Observer data: Name, address, age and eye sight acuity;
- Sighting data: Location of sighting and map grid reference;  
Date and time of day, visibility, from what distance,  
for how long;  
Other observers, if so, names and addresses.
- Observed mammal data: Dimensions – height at shoulder, length of body and tail;  
Head details – shape, muzzle and neck length, shape and size of ears;  
Foot prints – length and width of print, number of toes, presence or absence of claws, distance between front and rear prints;  
Description of gait, speed of movement;  
Fur colour.

Finally, eye-witnesses were shown untitled black and white photographs of a variety of mammals and asked to identify features in each photographed animal that more-or-less matched the features of the animal they claimed to have sighted in the Grampians. The interview teams referred to this set of photographs as the ‘rogues gallery’.

#### **Deakin Puma Study Rogues Gallery**



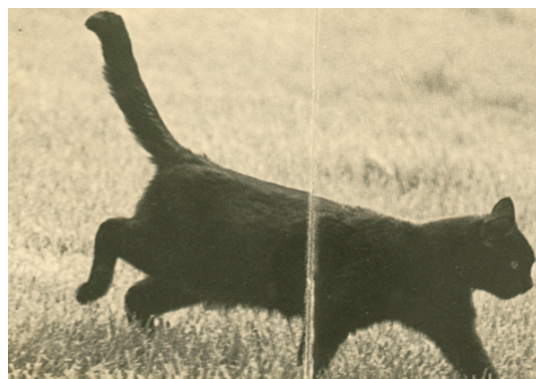
**Wallaby**



**Mastiff Dog**



**Labrador Dog**



**Feral Domestic Cat**



**Feral Domestic Cat**



**Adult Male Puma**

These photographs were shown to eye-witnesses after they had completed their observation report and were shown individually and separately beginning with the wallaby photograph and ending with that of the adult puma.

Interview teams also had with them, as additional prompts for information, photographs taken at the Melbourne zoo of adult male and female pumas and juvenile pumas. Included with these additional photographs were also photographs of paw prints made by large and medium sized dogs, domestic cats, foxes and pumas.

All eye-witness narratives were put through this interview protocol which lead each informant to consider the possibility of alternatives to their original conclusion that they had seen a big-cat, possibly a puma.

#### **Developing a Believability Ranking System for the Puma Sightings**

The Deakin Puma Study Group, when confronted with detailed eye-witness accounts from the interview teams, decided to rank the 'puma observation events' according to factors which could reasonably be associated with the plausibility or otherwise of an individual account. These factors were:

- corroboration;
- clarity of observation;
- observer expertise;
- frequency of sightings by an eye-witness.

It was argued that where there was more than one observer to a claimed puma sighting, and the several observers gave similar accounts, then the claim had added believability.

Clarity of observation was defined by lighting, distance and duration. If an observation had been at night or in poor daylight, at a distance greater than 150 metres, or for less than 10 seconds, then the claim was deemed by the Study Group to have lowered believability.

Added credibility was given to sightings that included observers who spent much of their working time or their recreation time in the vicinity of the surrounding

wilderness and who could be expected to be familiar with the Australian bush and its animal inhabitants. Forestry workers, naturalists, farmers and shooters, for example, were considered by the Study Group as being credible informants according to this factor.

When an interviewed eye-witness offered information during the course of the interview about additional independent puma sightings to which he or she had been personally involved, this was taken as an indicator of decreasing believability in the original account. This may have been unfair to some informants, but the logic being applied here was derived from the recognition of the decreasing probability of an apparently rare event occurring more than once for a single individual.

It should be noted however, that often during the course of an interview, eye-witnesses would provide several names of other people known to them who had observed pumas in the Grampians quite independently of their own puma event. Thus, from the original list of eye-witnesses gleaned from local newspaper articles, an ever growing community of puma observers was generated over the course of the Study. It therefore became apparent to the Study Group that there was a widespread network of ‘puma true believers’ in existence, members of which were linked through their individual experience of a ‘puma observation event’.

While this network of ‘true believers’ may have influenced the later re-telling of a puma sighting to interview teams of the Study Group, this possibility was not factored into the Study’s believability ranking system.

Accepting the four factors that were included in the Study’s Believability ranking system and the reasoning associated with each factor, the Study Group applied the following believability template to each of the interviews and its puma sighting narrative.

#### **Puma Sighting Believability Template**

<b>Number of Observers</b>	<b>Clarity of Observation</b>	<b>Observer Expertise</b>	<b>Frequency of Sightings</b>	<b>Believability Ranking</b>
2 or more	Clear day light Less than 150 metres Observed longer than 10 seconds	Occupation or recreation contributing to ‘Australian Bush Expertise’; eg. Forestry Worker, Farmer, Shooter, Naturalist	1	A hit in each cell of this row of the template adds to the overall credibility of the claim

1	Other combination of light, distance and duration	Occupation or recreation unlikely to contribute to 'Australian Bush Expertise'	2 or more	A hit in each cell of this row of the template subtracts from the overall credibility of the claim
<b>Believability Ranking of a Reported Puma Observation Event</b>		<b>4 Green hits = High Believability</b> <b>3 Green hits = Moderate Believability</b> <b>less than 3 Green hits = Low Believability</b>		

It must be stressed that a low believability ranking according to this system does not mean that the sighting was not in fact a true and accurate account. It simply means that the eye-witness's claim for truth status can be more readily attacked by a cautious sceptic. For example, a single eye-witness's account is more readily dismissed as mistaken or fabricated than that of two or more corroborating accounts. The more corroborating eye-witnesses to the same event, the stronger the case for believing what is claimed.

Similarly, if the event being interpreted by an eye-witness can be shown to have been observed under conditions which decreased the visual clarity of the occasion, then claims as to what was actually seen can be more readily discredited. This is the defence barristers' old standby method of attack when cross-examining eye-witnesses to their clients' alleged criminal acts. "As the light was dim, as you were some distance away, or as everything happened so quickly, surely you could be mistaken in identifying my client".

Unusual events occur from time to time in the Australian bush. A wallaby can suddenly appear out of nowhere and then vanish just as quickly. Feral deer can appear on a track in an instant and vanish without trace just as quickly. Large feral dogs can quietly slink away through the scrub trying not to create a disturbance, showing only their hind quarters. People unfamiliar with the bush environment and with pumas on their mind could readily deduce, after the fact, that they had just seen the elusive big cat of the Grampians, when what they really saw was a wallaby, a deer or a feral dog. A defence against this form of argument is the expertise of the observer to the supposed big-cat sighting. The more familiar observers are with the Australian bush, and with what can happen out there, then the less likely they will be fooled into believing they saw something completely exotic, like a puma.

The probability argument has already been introduced to explain why multiple sightings by a single eye-witness were treated with suspicion by the Study Group. The Study Group were aware that some 'true believers' went to incredible lengths to vindicate their claims. Some people spent a great deal of time searching for pumas in the Grampians and, in individual cases, reported success on several occasions. This

was difficult territory for the Study Group, but the concern was to protect any conclusions the Study might reach, from the influence of people who could only be too readily dismissed as puma zealots by reasonable sceptics. With this concern in mind, the Deakin Study Group took the hard line, and downgraded any eye-witness accounts provided by people who made claim to have been involved with more than one sighting.

Concrete supporting evidence of an alleged puma sighting was not included at this stage to the believability template. The reason being that the majority of puma observation events had no corroborating photographs, plaster casts or scats. Where artefacts of this type were available to the interview teams it was not always possible to link the artefact conclusively to the animal observed. Data on these artefacts were collected by the Deakin Puma Study Group from eye-witnesses and from other sources for later analysis. This analysis is the subject of the next chapter.

### ***The Puma Narratives***

The narratives provided by eye-witnesses fell into two categories. The first category was of descriptions of animals that were not big cats. These accounts were in the minority representing only five out of the thirty nine interviews included in the Study. The eye-witnesses placed into this narrative category were probably describing dogs or foxes, although one claimed to have seen a Thylacine – a dog-like marsupial that has been extinct on mainland Australia for over 3,000 years. These accounts were put aside, though they were of interest to the Study Group from the standpoint that the eye-witnesses concerned had come to the Group's attention through information and newspaper reports that they had seen big cats in the Grampians. These examples are indicators of the degree of slippage or elaboration between the time of an original sighting and the time the account of that sighting was circulated into the wider community. Alternatively, these examples could be an indication of the extent to which people are prepared to amend their original reports over time into a revised account that is less controversial. Large domestic dogs dumped in the bush and gone wild are a generally recognised feral problem accepted by Grampians people and local farmers as a fact of life. To have sighted one of these animals is therefore an entirely plausible event, not subjected to ridicule by one's neighbours.

The second category of narratives collected by the interview teams included clear and unequivocal descriptions of big cats. The character of these narratives was, in the main, detailed in respect to the features and behaviours observed. The eye-witnesses typically expressed surprise and astonishment as their immediate reaction during their puma observation event. They claimed that this reaction caused them to give the observed animal their fullest attention. The Deakin Puma Study collected thirty four narratives that could be allocated to this 'big-cat' category.

### **Big-Cat Narratives: What People claim to have seen**

Included below is a selection of eye-witness puma narratives, representative of the thirty four big-cat narratives collected by the Deakin Puma Study Group during 1976 and 1977.

#### Garth Rees of Mockinya:

The animal was three times as heavy as a Labrador dog, heavy in the chest with very thick legs. It had a thick tail which was about half of the animal's total length of 6 to 7 feet (2 metres). It stood about 20 inches (half a metre) at the shoulder, and had a wide head with a rounded nose and small rounded ears. Its neck was strong and short. The coat was smooth and a dull black colour. The animal was very timid and slinked along like a cat. Its movements were very quick.

(sighted in December 1971 at a distance of 50 metres on a clear late afternoon for about 30 seconds on the observer's farm)

#### Harry Shrive of Douglas:

My son and I surprised the animal in a lake on our farm, it was ankle deep in the water about a chain and a half (50 metres) out in the rushes. We chased it in the Land Rover for about 4 minutes and were alongside it before we lost it in the thick rushes around the lake. The animal was about the same height as a racing greyhound but twice as broad across the back. It was a heavy set animal, strong with a big chest. Overall it was about 6 feet (1.8 metres long) including a 2 foot long thick tail. Its head was cat-like with a pug muzzle, small stubby ears and a short thick neck. Its coat was a shiny black colour. It bounded along with an up and over movement which looked nothing like a dog. It was quick as we were doing 40 to 45 mph (60 – 70 kmph) keeping up to it.

(sighted in February 1976 at a distance of 50 metres on a clear mid afternoon for about 4 minutes)

#### Les Becker of Dunkeld:

A dark brown to black animal about 30 inches (three quarters of a metre) high at the shoulder and about 6 feet in total length bounded onto the road 6 feet (2 metres) in front of the car on the passenger side. It almost hit the front wheel. Its body was thick set. Its head was small and was held low so the sighting of the head was brief. The animal was very flexible, not rigid; it was agility plus. It bounded onto the road then turned, rolled and leapt back into the scrub in a movement unlike that of a dog, fox or kangaroo. The



whole thing took about 30 seconds. It was a four footed animal and definitely not a wallaby.

(sighted in January 1977 at a distance of 2 metres on a clear morning for about 30 seconds)

Garry Middleton and Barry Henderson of Stawell:

We sighted a sleek black animal in good condition sunning itself in the middle of the road. It looked like a young animal. I was with Barry Henderson and, at the time, we both worked as surveyors for the Lands Department. The animal was a big cat about 2 feet high at the shoulder with a 7 foot body including a 3 foot tail. It was about 4 times the size of a normal cat. Its legs were thicker than those of a dog or cat and its tail was straight with the same thickness throughout. Its head was round with a flat muzzle. The ears were short and flat. It sat up and then sprang from a sitting position onto rocks on the side of the road, a distance of about 15 feet (4.5 metres) and vanished into thick ti-tree scrub.

(sighted in September 1976 at a distance of 50 metres on a clear mid afternoon for about 10 to 20 seconds)

Mr & Mrs J Ryan of Yarram Park (extracts from a letter to me written in May 1977 from Bundaberg in Queensland):

At the time I was working at Yarram Park (a sheep and cattle property on the eastern side of the Grampians) and was in the area every day. On the 11 February 1974 I took my wife to the haystack on the northern side of the Yarram Park road. As we drove quietly toward the haystack I repeated the story of Cam Anderson of Willaura recently sighting an unusual cat disappear into the corner of the haystack. As we sat there observing the haystack, I looked down the road and at the culvert 75 yards away was sitting what at first appeared to be a large black domestic cat. As it was sitting right at the edge of the road I was able to compare it with the height of the grass and it did appear to be rather large. It was sitting on its haunches just as a domestic cat does. We observed this for the best part of 20 seconds.

The animal then got up very casually and slowly walked across the road so that we had a full side-on view in perfect weather. I tried to observe accurately but some points were more noticeable than others. The first impression was that it was very long and the tail caught my attention – it was also comparatively long and thick. The first half of the tail sloped down then the end was parallel to the ground.

The hind quarters appeared very powerful in comparison with the size of the body, but appeared to be crouched for the entire walk across the road. The highest point of the body was the shoulders. By comparing with the top of the grass, the shoulders would have been 30 inches. The chest did not appear to be very deep and the front legs seemed to be rather powerful. The head was round with a small snout.

When the animal reached the other side of the road, it dropped lazily to the ground and lay in the grass. I then quietly walked over to the fence and walked slowly to where he was. When I was about where I thought he would be, I quietly stood on top of a fence post and looked. He was approximately 10 yards away slinking through the grass toward the culvert. I only saw him for a few seconds but I noticed the colour, black, and the coat was shiny and not fluffy but lying close to the skin. The top of the back was flat and the shoulders had large muscles which I could see working very clearly.

I looked on the road for foot prints but could not see anything clearly.

(sighted in February 1974 at a distance of both 70 and 10 metres on a clear late afternoon for a total of 30 seconds)

#### Ivan McInnes and daughters of Victoria Valley:

I saw the animal in the paddock below the house on our farm. I was with my two daughters aged 9 and 11 years. We could see it easily in grass about 12 to 18 inches high. It ran through a mob of sheep, kangaroos and emus travelling with a fast smooth movement in a direct line. The animal was heavily built with heavy shoulders, thighs and legs. It was larger than a dog, had a long body, a thick neck and a head similar to a big cat. I didn't notice its tail. It was a tawny colour.

(sighted in May 1977 at a distance of 100 metres on a clear late afternoon for 1 minute)



Michael Harrison and daughter of Horsham:

We were driving slowly along the Asses Ears Road as it had just been pouring and was about to start raining again. At Geranium Springs where the creek crosses the road we saw a black animal less than 50 yards in front of us running directly away from us. It was jet black and Alsatian dog-size but too wide across the back and shoulders to be a dog. The tail was curled up and thick, and an even thickness all along. It had a round head and a solid neck but I couldn't see its face. It had thick legs, thick as a man's arm. It sort of loped along with its head lowered. I lost it when I tried to get hold of the camera from the glove-box. Donna kept watching it and described it as 'running like a bear'.

(sighted in September 1974 at a distance of 50 metres on a dull afternoon at 3pm for up to 1 minute – Michael for less than 10 seconds and his daughter, Donna, for 1 minute).

and finally, George Paulson of Victoria Valley:

It was 6:30 am on a clear morning and I was out checking the sheep. I saw the animal loping across the paddock next to the one I was in. I chased after it in my Land Rover. I came at it on an angle but the animal kept running straight. I got to within 50 yards of it and then followed next to it along the fence before I had to stop at the cross fence. It was about 2 feet 6 inches at the shoulder and 5 feet long overall including an 18 inch tail. It had a boofy solid head that seemed to come straight from the body. The eyes were yellow and slitty in shape. It was well muscled in the shoulders; I could see the whole front end of the animal moving. The tail was heavy and curved. It probably weighed about 100 pounds. Its coat was black and shiny. I reckon it was a young animal by the look of it.

(sighted in January 1977 at a distance of 50 metres on a clear early morning for up to 3 minutes)

This selection of eight puma narratives covers the range of eye-witness accounts given to the Study Group interview teams. Amongst this selection of sighting narratives are puma observation events which include the abrupt appearance of a big-cat to car-borne travellers along the few major roads through the Grampians region, animals deliberately crossing open country, and animals relaxing in secluded areas and then taken by surprise by the sudden appearance of human intruders. These are the typical circumstances surrounding the reported puma observations investigated by the Deakin Study Group.

The selection of puma narratives also covers the range of observed physical features and behaviours included in thirty four big cat narratives collected by the Deakin

Puma Study Group. There are no other big-cat narratives, collected by the Study Group, which provide details that diverge from the population parameters that can be synthesised from the selected narratives above. Given this situation, it is now possible to distil these Grampians puma population parameters from the above narratives before proceeding any further.

#### **Physical and Behavioural Parameters of the Grampians Puma Population based on Eye-witness Narratives**

From its collection of puma narratives the Deakin Puma Study Group determined that if there was a population of pumas in the Grampians then its members would have the following features and behaviours:

<b>Physical Feature</b>	<b>Range</b>
General appearance	Heavily built as a mature animal, up to 3 times as heavy as a medium sized dog through to leaner in the chest and legs in younger animals
Colour	Tawny through to Black
Head and Neck	Head is round, solid and wide. The ears are not prominent and rounded; the muzzle is short and blunt. The neck is thick and short.
Shoulder height and appearance	Height varies from 450 mm through to 750 mm. The shoulders are well developed with clear musculature.
Hind Quarters	Hind quarters are also well muscled and lower than the shoulders when standing, but held higher when walking.
Body	The body is broad and deep and between 900 mm and 1200 mm long.
Tail	The tail is long ( 450 mm to 750 mm) and thick without obvious tapering. It is held in a low curve down to the ground.
Legs	All legs are solid and much heavier than those of a dog or domestic cat. Hind legs thicker than front.
Movements	Moves fast with great agility; capable of leaping over 4 metres from a crouching position; when covering open ground its movement is a bounding lope; slinks close to the ground to avoid being seen.
Behaviour	Timid, avoids contact with humans.

But before drawing any conclusions about the veracity of the detailed picture that has emerged from this synthesis of puma population parameters based on the narratives of eye-witnesses, it is necessary to return to the puma sighting believability template introduced earlier in this chapter.

*Assessing the Credibility of the Study's Puma Narratives.*

The Study Group assessed the credibility of each puma narrative collected during 1976 and 1977. Only those puma narratives which were awarded a believability ranking of 'High' are included in this section.

### Puma Narratives with a High Level of Believability

The puma narratives with a high believability ranking are included in the table below.

<b>Puma Narrative</b>	<b>Number of Observers</b>	<b>Clarity of Observation</b>	<b>Observer Expertise</b>	<b>Frequency of Sightings</b>	<b>Believability Ranking</b>
Hiatt, Schubert & Clark	3	Clear day light at 4pm, at 30 metres, for 3 minutes	Hiatt a Forestry Commissioner, others were rural relief workers	1	High
Hamilton & Smith	2	Fine morning at 7am, at 120 metres, for 3 minutes	Both Duck Shooters, Smith also a farmer.	1	High
Middleton & Anderson	2	Clear sunny day at 3 pm, at 50 metres for 20 seconds	Surveyors for Department of Crown Lands and Survey	1	High
McInnes, McInnes & McInnes	3	Fine afternoon, at 5:30pm, at 100 metres for 1 minute	Farmer and naturalist	1	High
Shrive & Shrive	2	Clear day at 3 to 4pm, at 50 metres for 4 minutes	Farmers	1	High
Ryan & Ryan	2	Perfect visibility at 6pm, at 75 metres for 30 seconds	Farm workers	1	High

You will note that four of the eight puma narratives included in the earlier selection of representative samples of puma narratives were not assessed by the Study Group as having a high believability. The assessment of these four puma narratives was as

follows:

<b>Puma Narrative</b>	<b>Number of Observers</b>	<b>Clarity of Observation</b>	<b>Observer Expertise</b>	<b>Frequency of Sightings</b>	<b>Believability Ranking</b>
Becker	1	Clear dry day at 9am, at 2 metres for 30 seconds	Department of Social Security Officer	1	Low
Paulson	1	Good visibility at 6:30am, at 50 metres for up to 3 minutes	Farmer	2	Low
Rees	1	Clear sunset at 7pm, at 50 metres for 30 seconds	Farmer	2	Low
Harrison & Harrison	2	Dull afternoon at 3pm, at 50 metres; adult observer for less than 10seconds, child observer for 1 minute	Postal Clerk	1	Low

By being alone at their puma observation event three of the eye-witness narratives were scored down. Becker was also scored down because his occupation did not bring him into regular contact with the Australian bush. And both Paulson and Rees had claimed to have seen a puma on more than one occasion, thereby being docked another point by the Study Group. This was the case for both George Paulson and Garth Rees even though their second sightings involved 2 other observers. The sighting by Harrison and his daughter was scored down on two accounts; the day was dull and the adult observer, assumed to be the more reliable, saw the animal for less than 10 seconds, and the observers were not in the bush country on a regular basis.

Of interest also is the ranking given to the puma narrative derived from the prominent local field naturalist, Ellis Tucker, who you will remember as being influential in the

background to the Deakin Puma Study and who also contributed to the Study itself, as will be explained in the next chapter. Tucker’s puma narrative was assessed as follows:

<b>Puma Narrative</b>	<b>Number of Observers</b>	<b>Clarity of Observation</b>	<b>Observer Expertise</b>	<b>Frequency of Sightings</b>	<b>Believability Ranking</b>
Tucker	1	Clear day at 10am, at 60 metres for 30 seconds	Prominent field naturalist	1	Moderate

By being alone at the time of his puma observation event, Ellis Tucker’s narrative was unable to score the maximum believability ranking.

### ***Puma Narratives of High Rankings for Believability***

Four of the six high ranking puma narratives have already been included in this chapter. These are those of:

- Shrive & Shrive;
- Middleton & Henderson;
- Ryan & Ryan; and
- McInnes, McInnes & McInnes

There is added information associated with these puma narratives that is relevant to the Study. The Deakin Study Group interview team that spoke to Harry Shrive noted that he was

An ‘old-timer’ grazier of 72 years from the west side of the Black Range. Despite his years he showed a sharp memory and gave careful consideration to all questions.

Similarly the interview report on the Garry Middleton interview noted that

Mr. Middleton presented a report on the incident (the puma sighting) to Mr. G. Douglas of the Vermin and Noxious Weeds Board. He also found a large fur covered scat containing bones and feathers on the Major Mitchell Plateau (of the Grampians).

Garry Middleton was interviewed in person by the interview team in his hometown of Stawell. He arranged for his partner in the puma observation event, Barry

Henderson, to complete the Deakin Puma Study Observation Form independently to himself. Henderson was away from Stawell at the time of the interview team's visit. Henderson's account fully corroborated that of Middleton.

The interview team's report of the Ivan McInnes interview noted that

Ivan farms a bush block off the Bullawin Road near Victoria Point, and that he lives in a 'naturalist-type' family with his wife painting birds for the Gould League of Victoria (an Australian bird naturalist and protection association). Appeared upset that the animal he and his two daughters saw wasn't more Thylacine-like.

There was no interview team report accompanying Mr and Mrs Ryan's puma narrative as this narrative came to the Study Group via a letter from the Ryans after they had moved from Yarrum Park on the eastern edge of the Grampians to Bundaberg in Queensland. I had interviewed the Yarram Park manager's wife, Joy Potter early in 1977 about her own puma observation event and she put me in contact with the Ryans.

#### **The Two Additional High Believability Ranking Puma Narratives**

The two remaining puma narratives that passed through the believability template with a positive hit on each believability factor are introduced below with accompanying interview teams assessments where available.

#### Hiatt, Schubert & Clark narrative:

Robert Hiatt and Tom Schubert were interviewed by the Deakin interview team in person and separately. Hiatt lived in Cavendish; Schubert lived in Mooralla, while Trevor Clark lived in Hamilton where he was interviewed over the telephone.

The three of us were driving along the Victoria Valley Road when we came around a corner and surprised two young animals playing like kittens on the road about 100 metres away. Both were black in colour and similar in size. As we drove up we lost sight of one quickly while the other one was observed for a minute and a half from a distance of 20 metres. It sprung 10 feet up the bank, crept away through the scrub moving slowly and cautiously up the slope of the gorge from the road side. It sort of slinked up the hill with its head and shoulders lowered, stopping to look back before starting off again. Its belly was on the ground. We got a good view of the second animal. It was about 2 foot 6 inches at the shoulder with a 3 foot long body and a 2 foot 6 inch tail down curved. Its head was square with a short muzzle and a heavy lower

jaw and short pricked ears that looked too small for its head. The neck was thick set and short. Overall the animal was thick set with solid legs and big feet. The animal was over 100 pounds and thick all round. These were big cats just like pumas.

(Sighting in Spring 1973 at 4pm at a distance of 150 to 20 metres for over a minute).

The Deakin interview team recorded that :

Tom Schubert was a man of 60 years who was impressive through his honesty. It was reported by his eye-witness colleagues that he was reluctant at first to look at the animals as he had been very sceptical of others in the past who had claimed to have sighted big-cats in the Grampians.

and

Robert Hiatt (about 35) gave a good solid interview. Appeared quick, perceptive and not prone to sensationalism.

#### Hamilton & Smith narrative:

Both David Hamilton and Wally Smith were interviewed separately; Hamilton in person in his home at Hamilton and Smith over the telephone. David Hamilton lived in City of Hamilton south of the Grampians where he worked in the City Engineer's Office. Wally Smith was a farmer from Minhamite in south western Victoria.

We were at Rocklands Reservoir early on the Saturday morning checking out suitable places for setting ourselves up for the duck opening the next Saturday (start of the duck shooting season). We had been checking out spots from our boat when we pulled into shore and started to walk along the shore. We turned a corner and saw a big cat about 120 yards away drinking at the water's edge. It was leaning forward with its weight on its front feet and its face at the water surface. When it saw us it seemed to panic, scrambling at the muddy embankment trying to get away. It finally got up the bank by leaping 10 to 12 feet. When it landed it took off at a fast pace over fairly open country towards Mt. Bepcha in the distance. We watched it for about a mile before it disappeared amongst the trees.

It was a tawny-brown colour but darker on the back than on the belly. It was between 2 feet and 2 feet 6 inches tall at the shoulder. Its body was about 4 feet long with a two and a half foot tail which curved down. The head was pugged with short ears and a short but definite neck. The face shape was cat-like. The head appeared small for the body size of the animal. When it got moving the



head was lower than the rump and it had a bounding loping movement just like a cat but unlike the way a dog runs. The animal had thick straight legs

When the big cat was out of sight, we walked over to the spot where it had been drinking. There were fresh foot prints everywhere. We picked out two deep prints right at the water's edge where the animal had been drinking. The toe pads and everything was really clear. We put twigs upright in the mud next to these prints so that we could easily find them in a week's time after the duck opening when we would come back with plaster of paris and take casts of the prints.

Next Saturday at about 11 am after the duck shoot was finished for the day, we went back to the puma drinking spot with our bag of plaster. When we got there we found the foot prints that we had marked with twigs. They didn't look as good as they did last week, but just back from them further from the water were sharper tracks that we must have missed last Saturday. So we decided to take plaster casts of these sharper tracks. We took two casts of these and then before leaving decided to take casts of the two prints we had marked a week ago. So we brought back four plaster casts of foot prints from the animal we had seen drinking there a week earlier.

(Sighting on March 1976 between 6 and 7am at a distance of 120 metres for 30 seconds and then from 120 metres to up to a mile away for 2 to 3 minutes).

The Deakin interview team recorded that:

David Hamilton was a man in his mid thirties and impressed as an honest straight-forward man with a respected position in the town where he lived and worked.

and

Wally Smith was a 43 year old farmer with 30 years experience as a hunter of foxes, rabbits and ducks. Smith impressed the interview team as the more skilled observer.

Both Hamilton and Smith separately marked their observed animal's escape route from Rocklands Reservoir towards Mt. Bepcha on separate maps provided to them. As with the interviews, these separately drawn routes showed only minor discrepancies in detail.

The background story on how the Deakin Puma Study Group acquired the Hamilton & Smith puma narrative became significant to the final analysis of this alleged puma

observation event. I had left a telephone message at David Hamilton's workplace after reading articles reporting his sighting that had been published in the local newspaper, the Hamilton Spectator. These articles had been sent to me by local people aware of the Deakin Puma Study. David responded with a short letter providing his full contact details. The Hamilton and Smith big-cat sighting had apparently caused a great deal of interest in the local region, as noted in the following extract from one of the Hamilton Spectator articles:

Mr. Hamilton, of Strachan St., Hamilton, and a friend, Mr. Wally Smith, of Minhamite, set the Hamilton district buzzing with talk about the Grampians puma legend when they reported seeing a mysterious animal drinking beside Rocklands Reservoir.

Mr. Hamilton returned to the sighting area and took casts of the animal prints the animal left in the soft soil near the water's edge. Besides the view he and his friend had of the animal, they say the prints are much bigger than any left by a normal domestic or wild cat.

The print casts can be compared with the size of Mr. Hamilton's hand as the picture above shows. (Hamilton Spectator, March 1976).

Two photographs accompanied this newspaper article; a shot of David Hamilton holding two print casts in the palm of his up-turned hand, and an inserted close-up photograph of two print casts side by side. It was the close-up photograph of the casts of the supposed puma paw prints that caught my attention and convinced me to include David Hamilton and Wally Smith in the Deakin Study interview schedule.

Why would a respected man in a provincial country city report a story of a puma sighting in the Grampians and send a letter to the Deakin Study Group offering to show the casts of "the cat's footprints" and to provide "any further information", when the photographed paw print casts in the published newspaper article were definitely those of a medium to large dog and not those of a cat – big or small? Why would David expose himself to the risk of public ridicule from the 'puma legend cynics' in his community by providing them with this ammunition? These questions were of interest to the Deakin Study Group whatever the answers and well worth a trip from Geelong up to Hamilton to check out. But the full telling of this aspect of the Hamilton & Smith episode must be put on hold, to be re-visited in the next chapter.

### ***Final Analysis of the High Believability Ranked Puma Narratives***

Leaving aside any claims for physical supporting evidence, the Study Group's assessment of the puma narratives, adhering strictly to its believability ranking system, distilled the thirty four collected big-cat narratives down to six with high believability rankings. Therefore, the second tactic of the Deakin Puma Study Strategy had thrown up six narratives of alleged big-cat sightings in the Grampians region that were considered to have passed the reasonable sceptic's first and second order of explanation – those of mistaken identity and fabrication.

However, the Study Group decided to apply an even stricter credibility test to the remaining six puma narratives. Of these narratives, two were thought to still be vulnerable to attack by a reasonable sceptic. These were the Shrive & Shrive narrative and the McInnes, McInnes & McInnes narrative.

Harry Shrive's son, who had accompanied him while they chased the big-cat on his property, had not been interviewed by the Study Group. He had been away when the interview team had made the trip out to the Shrive farm. Thus Harry Shrive's account had not been corroborated. On this basis, the Shrive narrative was relegated to a moderate believability ranking and removed from the final shortlist of puma narratives.

Ivan McInnes's supporting eye-witnesses were his two young daughters, aged 9 and 11. It could be argued that the girls were not, in fact, independent witnesses but had been influenced by their father in the reporting of their observations. The Study Group was, of course, not making this statement as an accusation. The Group was, as before, acting to protect any conclusions of the Study from being demolished by a plausible argument advanced by a reasonable sceptic. Accordingly, the McInnes, McInnes & McInnes narrative was also relegated to a moderate believability ranking and removed from the final shortlist of puma narratives.

The four remaining narratives were:

- Ryan & Ryan (February 1974 on Yarram Gap Road, eastern Grampians);
- Middleton & Henderson (September 1976 on Jimmy Creek Road, eastern Grampians);
- Hiatt, Schubert & Clark (January 1973 on the Victoria Valley Road, central Grampians); and
- Hamilton & Smith (March 1976 on the eastern side of Rocklands Reservoir near Mt. Bepcha, western Grampians).

As mentioned earlier, the final part of the structured interview protocol adopted by the Deakin Study interview teams involved showing each interviewee a 'rogues gallery' of untitled black and white animal photographs. In the sequence of six photographs shown to interviewees the final one was that of an adult male puma in side view. This sequence was followed so as not to influence interviewees' memories and subsequent descriptions of their observed animals with a readily available puma reference. The sequence was also followed in this order so as to give each eye-witness the

opportunity to abandon their claim that they had seen a big-cat, and switch to another less controversial conclusion still more-or-less consistent with their reported observation details.

In addition, photographs of paw prints of dogs, domestic cats, foxes and pumas were shown to the informants if they had made any claims about seeing paw prints associated with their observation event.

Of the eye-witnesses associated with the four short-listed high believability puma narratives, this final stage of the interview protocol was conducted with Robert Hiatt, Tom Schubert, Gary Middleton, David Hamilton and Wally Smith. Terry Clark, Mr and Mrs Ryan and Barry Henderson were not put through this final stage of the interview protocol due to difficulties in making the necessary arrangements in the time available to the Study Group members - Terry Clark was in Casterton, the Ryans were in Queensland and Barry Henderson had moved to Melbourne.



**Adult Male Puma (Rogues Gallery Photograph)**

When shown the photograph of the adult male puma, as the final photograph in the rogues gallery sequence, the recorded responses of the five eye-witnesses associated with three of the four highly ranked puma narratives were as follows:

Robert Hiatt: “That’s it, but black. The face was a bit shorter though”.

Tom Schubert: “That is very much like it, but it was black. The jaw is the same and the tail was as thick. Same big legs, thick and heavy”.

Garry Middleton: “Like the animal but not as heavy in the legs and shoulders though its legs were much thicker than a dog’s or a cat’s. The tail is the same”.

David Hamilton: “ Very similar though it’s too thick in the legs. The head was not as far out from the body, had a shorter neck”.

Wally Smith: “ This is very much like him, heavy body, though the tail didn’t seem as long and the neck was shorter”.

In all cases, the reaction to the puma photograph was one of recognition and direct correspondence with their observed animal, though noting some degree of discrepancy in specific features. The observed animal and the puma in the photograph belonged to the same general family of mammals, in the minds of the eye-witnesses whose accounts had been awarded high believability rankings by the Study Group.

Of the five eye-witnesses whose accounts are being considered here, only David Hamilton and Wally Smith had commented on the paw prints left by their observed animal. These paw prints, they claimed, had been clearly left in the mud at Rocklands Reservoir on that March 1976 morning. Both reported in their interviews that the prints were about 3 inches long and 3 inches wide with 4 toes, and showed no claw marks. These observations by Hamilton and Smith raise questions of fact when one notes the March 1976 Hamilton Spectator photograph of David Hamilton holding two plaster casts of paw prints in which claws are clearly present at the end of each toe.

## ***Conclusion***

What did these Western Victorian locals really see?

This chapter began by stating that absolute proof of big-cat existence in the Grampians by eye-witness accounts alone was not an achievable goal. The best that could be hoped for was to rigorously assess each eye-witness narrative by filtering them through the three orders of explanation introduced at the beginning of this chapter. These orders of explanation were that an eye-witness was either mistaken, fabricating or in fact telling a believable story difficult to dismiss as something other than what was being claimed. This chapter has reported on the processes used by the Deakin Study Group to move the collected eye-witness narratives through these orders of explanation.

The Deakin Study Group arrived at the position in late 1977 where it had, at least, four puma narratives which could not be reasonably dismissed as constituting mistaken identities nor fabrications. For this small set of puma narratives, the balance of plausibility had shifted in their direction. Consequently, these narratives were considered by some members of the Deakin Study Group to lend support to an emerging and considered view that there was an established big-cat (possibly puma) population spread across the east/west dimension of the Grampians. The second tactic of the Deakin Puma Study Strategy had thrown up this tantalising possibility as a probability, though not all involved in the core group of the Deakin Puma Study were prepared to consider the probability of this possibility at any level above zero.

But further evidence collected by the Deakin Puma Study, in the form of physical artefacts, was still to be fully analysed. This further evidence had been acquired through a combination of the third tactic of the Study's Strategy – bush bashing and

spotlighting – and from material provided by a small number of the ‘true believers’ amongst those already interviewed.

The presentation and analysis of this additional evidence is the subject of the next chapter.

### ***Postscript: 1978 to 1981***

Although the intensive data collection period of the Deakin Puma Study was from September 1976 to September 1977, a Study such as this develops a momentum of its own. This momentum gave the Study a continuing life through the involvement of the people contacted and interviewed by the Study Group in the first place. The Deakin Puma Study, quickly became part of the ever-expanding meta-narrative surrounding the Grampians Puma Legend. In March and April 1977 both the Wimmera Mail Times (Horsham) and the Hamilton Spectator ran articles on the Deakin Puma Study under headlines which read:

**PUMA SEARCH STARTS** ( Wimmera Mail Times, 28 March, 1977)

**THOSE CATS – REAL OR IMAGINED?** ( Hamilton Spectator, 12 April, 1977)

So, after 1977, when the Deakin Puma Study Group disbanded, reports still filtered into Deakin University. As the coordinator of the Study, people wanting to have their ‘puma’ sighting recorded or wanting additional information on the outcomes of the Study regularly contacted me. By 1981, I had decided to make a final information sweep of the people who were named in the expanding Deakin Puma Study files; people who had not been interviewed before, and who satisfied the original selection criterion set by the Study Group’s interviewing tactic - that is, only to interview people living in the southwest of Victoria and who had supposedly seen a big-cat in the last ten years.

So in September 1981, I mailed out the Study Group’s Observation Report Form (minus the ‘Rogues Gallery section’) to thirty four people with the following accompanying letter:

I am involved in an investigation of the existence of a large carnivore population in the Grampians of Victoria. One line of investigation has been to contact people who have seen large ‘cat-like’ animals in the area.

Your name was given to me by individuals already contacted on this matter. I understand that you have observed an unusual animal in the Grampians area. If this is the case I would appreciate it if you would complete the enclosed Observation Report Form, add

any additional relevant information and return the form to me at the above address.

The level of response was low – six replies, five providing details of their puma observation event. Two of the latter are of particular relevance to the proposition that there are plausible puma narratives amongst those collected by the Deakin Puma Study Group during 1976 and 1977. Both replies included completed Observation Forms accompanied by letters

The first was from a 37 year old farmer whose property was near Balmoral, a rural town to the west of the Grampians on the Glenelg River where it is dammed to form Rocklands Reservoir. He wrote across his completed Observation Form, which included his name and full contact details, “I would prefer that this does not get into the Newspapers”.

The farmer’s description of the observed animal fits completely within the physical and behavioural population parameters for Grampians pumas deduced earlier by the Deakin Study Group from its collected puma narratives. The farmer’s sighting was at a distance of 60 metres for up to 4 minutes in the company of his wife. It was 7 pm on a June night in 1976. His letter provided this narrative:

We saw an animal about the same size and colour as a Labrador dog (sandy gold colour) with a pup-cub about the size of a large Tom cat. The animals looped like a cat and had large shoulders, short necks and long thin tails much as you would expect a cat to have.

The time of the sighting was early evening in winter and it was dark. I had a spotlight and very good headlights – driving lights 100 watt quartz Halogen – and also I looked at it through a 8 power ‘Leopold’ telescopic (rifle) sight. Why I didn’t shoot it I’ll never know, but I suppose it was something to do with the shock of seeing something you don’t believe existed, and it did have a pup-cub.

I hope this is something like you are after. By the way, I was sober. I don’t drink and shoot. I definitely saw this animal and believe it to be some sort of cat.

The second reply was from Ron Howlett, a 58 year old Inspector of Lands with the Division of Inspection and Vermin and Noxious Weeds Destruction, Department of Crown Lands and Survey. Howlett was based in Ararat, a rural city to the east of the Grampians. He had sighted a strange animal in the Wannon Valley of the Eastern Grampians in the company of two other Lands Department inspectors. Howlett was careful not to embellish his description as the animal had been 400 metres away. He saw it in good light at 11:30 am in January 1981.

The animal we observed was too far away to gather detail for the “Observation Report Form”. It slowly crossed the main sealed road. We agreed that it was the height of a big merino wether but considerably longer. It definitely had a long tail. It appeared to be slowly loping, appeared black and at a distance, appeared cat-like.

Howlett had appended a three page letter to his Observation Form. After introducing himself in his letter, he began the substance of his reply with this sentence:

During 1975 to 1977 several people reported seeing these animals, and I became interested in them, and I started a bit of a file on the subject.

He then provided details on nine reported big-cat sightings in his area of responsibility, the farm country between Ararat and the Grampians. These reports include the Gary Middleton and Brian Henderson report (referred to by Middleton during his interview with the Deakin Study Group), and one from L. H. Wheeler, a Senior Inspector Lands with the Crown Lands and Survey Department. Inspector Wheeler had “chased one of the animals into the hills a few miles North West of Ararat” in 1975.

Ron Howlett concluded his letter thus:

I wish you luck with your investigations, there was a time when reports were very common-place in this vicinity; and I travelled many miles, and asked a thousand questions on the subject.

I am firmly convinced that such animals do exist.



**Farm Country to the north east of the Grampians: Halls Gap is immediately below with Lake Lonsdale in the top right hand corner of the photograph. This is part of the farm country over which Ron Howlett had responsibility as an Inspector of Lands**



Quite independently of Inspector Howlett's letter, I also received another letter from an Inspector of Lands with the Crown Lands and Survey Department. This additional letter was from Inspector Frank Webb and arrived in 1978. Inspector Webb was based in Penshurst, a small country town south of the Grampians. He wrote,

The big cat was sighted at the southern end of the Grampians on the track to the Dunkeld Golf Course, approx 4 years ago during a spotlighting expedition. There were five people present. It was beige-tan with a cat tail and orange eyes in the spotlight.

By the end of 1981, the Deakin Puma Study Group had collected the names of one hundred and twenty two people living in the vicinity of the Grampians who had reported seeing big-cat type animals either in the Grampians Ranges or in the surrounding countryside. Of these, fifty six had been either directly interviewed (forty eight) or had provided information by mail (eight). The area within which these sightings was located stretched from Byaduk in the South to Dimboola in the North, a distance of 165 kms, and from Balmoral in the West to Ararat in the East, a distance of 100 kms. The total area forms a rectangle of 1650 square kilometres within which the Grampians are centred.

Importantly, amongst these reported eye-witnesses were residents of the area with the major 'on-the-ground' responsibility for the Grampians wilderness and surrounding farming country; that is, senior officials and employees with the two Government Departments responsible for forests and lands. These Departments were the Forests Commission of Victoria and the Department of Crown Lands and Survey, a Commonwealth of Australia Government Department. And, significantly, the other group of reported eye-witnesses with major 'on-the-ground' responsibilities in the area were the local farmers and graziers. Add to this mix of 'experts', a respected local field naturalist and retired farmer, Mr. Ellis Tucker.

Five forestry workers, seven inspectors of lands, one prominent field naturalist and numerous farmers and graziers, all working every day out in the Grampians countryside and bushlands, reported to the Deakin Puma Study Group between 1976 and 1981 that they had, at some time in the recent past, seen big-cats similar in type to pumas. These eye-witnesses were considered by the Study Group to constitute, of the residents available in the rural southeastern Australian community, the closest approximation to a group of 'expert eye-witnesses'.

What were these people seeing if their puma narratives are to be disbelieved?

## CHAPTER 6

### **Assessing the Hard Evidence: Big Cat Artefacts or What?**

#### ***If Only We Could Catch One!***

“If only we could catch one, or just see one”, was the plaintive cry of many an exhausted University student after a day bush-bashing through the Grampians prickly scrub and rugged rocky outcrops of the Grampians Mountain ranges. Many Deakin students got to know the Grampians wilderness first hand and became quite familiar with its topography, and its fauna and flora. But never did any Deakin student come face-to-face with a puma or any other big-cat for that matter.

Bush-bashing students rarely saw any of the mammalian wild life known to be living on the slopes of the Grampians and in the up-lands. Occasionally students would see a red-necked wallaby or a grey kangaroo. Emus were spotted sometimes. On rare moments, feral mammals were sighted by some bush-bashers. Sightings of feral cats were the most common amongst these sightings. A large wild dog was once seen quietly slipping away down a wooded slope and around a rocky outcrop. One team of intrepid bush-bashers observed a small herd of feral goats far-away across a deep gorge on an adjacent highland. They were white and stood out clearly for the students against the dark grey slaty rocks. But this was the only time goats were ever seen by Deakin students on the Puma Study, even though they exist in large numbers throughout the Grampians high country. Just once, a single large feral sambar deer was sighted, and then only for a split second by one person. This deer observation however, was disputed as no one else in the team saw it – they had been looking the other way. When they turned in response to their team member’s cries to, “look at this”, there was nothing to see, not even a rustling branch, a hoof print, nothing. How could an animal that big just vanish! How? You might also ask.

The third tactic of the Deakin Puma Study Strategy was never really intended to give students a reasonable opportunity to chance upon an elusive and secretive predator such as a puma. A team of five or six young people making their way through rough country was always expected to give plenty of warning of its presence in the normally still and silent bush of Australia. No, the object was to look for secondary evidence of the presence or otherwise of mammalian species, an important skill to be developed by any aspiring Australian field naturalist given the secretive nature of Australian native mammals and their preference for nocturnal activities.

Each bush-bashing team’s items of equipment no doubt supported their members’ expectations that they would ‘capture’ a puma, if only on a still photograph or as a

moving image on a Super 8 mm movie camera (1976 and 1977 was in the days before miniaturised hand-held video cameras). But it was not the cameras that were the essential items of equipment. It was the plastic scat bags and the bag of plaster of paris that gave the true clues to the bush bashing teams' mission in the bush for the Deakin Puma Study. Animal tracks and faeces were to be the main forms of evidence of the presence of mammals in any bush-bashing teams allocated area of scrutiny. At least these items could not be put to flight by an approaching team of students.

The aim of tactic three of the Puma Study Strategy was not only for the students to have an enjoyable time in the Australian wilderness and to learn, from first hand experience, as much as they could of its environmental characteristics. Be in no doubt, this was a significant aim of the whole exercise, an aim that was to make a lasting impression on the teacher education students and on their friends and family members who accompanied them. But, in the context of the Puma Study itself, the key aim was for these teams of students and their acquaintances to gather up-close information on those areas of the Grampians containing suitable habitats for large predators. Related to this second aim was the gathering of concrete evidence or artefacts that could, perhaps, be later linked to large carnivores.

Suitable habitats were thought to be areas approximating to those described by Maurice Hornocker in his puma research project in the Idaho Primitive Area of the USA. These habitats were secluded country with ready access to prey animals, and a combination of rugged bluff areas, heavily timbered slopes along creeks and/or bushy ravine bottoms. In addition, these suitable habitats would have sheltered areas out of the weather in the form of rocky overhangs or caves with softer, sandy bottoms. A supply of water was also needed to complete the habitat requirements, though with the availability of farm dams on abutting sheep and cattle farms, this habitat feature was not given a high priority in the context of the Grampians Study.

Hard evidence or artefacts linked to the presence of large carnivores in the Grampians were expected to be the remains of prey animal kills, faeces (scats) and paw prints.

Consistent with the null hypothesis position taken by the core members of the Deakin Puma Study Group on its investigation of the Grampians Puma Legend from the outset, the Group's expectation for this third tactic of its overall strategy was that any evidence uncovered would support the following propositions:

firstly, there was in existence populations of large carnivores in the Grampians and,

secondly, there would be no hard evidence to show that big-cats, pumas or otherwise, would be amongst these populations of large predators.

Consequently, it was anticipated that any large carnivore scats found in the Grampians by the bush-bashing teams would be those of introduced predators such as feral

domestic cats, wild dogs and foxes. Similarly, it was anticipated that any carnivore paw prints found would be those of dogs and foxes, with any larger tracks being made by dogs of Labrador size and upwards. Feral cats were thought not to be heavy enough to leave clear tracks in the Australian bush.

The students who took to the bush with great enthusiasm may have set their sights higher, but the Deakin Puma Study Group's core team maintained a null hypothesis orientation to the puma question; that is, there are no pumas in the Grampians, and any large carnivore activity in the area is that associated with either dogs, foxes or, perhaps, feral house cats.

### ***Bush-Bashing from October to September, 1976 to 1977***

Bush-bashing is an appropriate term for the arduous task faced by these teams of young people. They had to be keen, fit and, at times, courageous to complete their survey of the areas allocated to them. In every case, these teams headed out into areas without roads, tracks or any easy access beside the occasional wallaby or kangaroo footpad through the scrub. The scrub consisted of ti-tree, grevillea and banksia with, here and there, groves of Australian cypress growing on steeper slopes. The taller trees were wattle and stringy-bark eucalypts, growing more thickly on the eastern escarpment of the ranges than on the western and northern slopes. Grasses covered the ground on the floors of the valleys and ravines and on the lower reaches of the slopes before these became too steep and rocky. The higher slopes and bluffs were dominated by massive rocky outcrops that blocked any attempt to walk in a straight line either upwards or across the escarpment. Clambering up, over, along and down was the way forward during the course of the day. Students would often find themselves negotiating along the edge of a sheer drop of over 50 metres or more to rocks below.

But the rewards for these students came from the Grampians Mountains themselves. Very quickly each morning, the students and others making up these bush-bashing teams would find themselves swallow-up by this inhospitable bush, and isolated from all except themselves. As you can imagine, these intrepid puma hunters found themselves in breathtaking country with superb views out over the vast lowlands and countryside below, and daunting views of the majestic cliffs towering above them. They found themselves in pristine wilderness areas with no sign of anybody else ever passing through before them. One team, however, did find a cave far off in the uplands where humans had clearly been before, but not for at least 200 years. In a far off cave they found Aboriginal rock art still bright in its red ochre, sheltered for over 200 years from the driving rains of southern Australian winters.

Of an evening, after a full day in the Grampians wilderness, the bush-bashing teams would collapse back at the base camp after being collected by me in the trusty old Land Rover from designated rendezvous points along bush tracks scattered

throughout the Grampians Mountains, but each one adjacent to a team's allotted area of wilderness. At camp the air would be full of accounts of the adventures of the day as students and friends prepared their evening meals before settling around the communal campfire for the more formal 'after dinner' de-briefing.

The areas of the Grampians bush-bashed by these teams were:

- Western escarpment and uplands of the Grampians: Victoria Range, Billywing Range, Red Rock Valley;
- Northern escarpment and uplands of the Grampians: Geranium Springs, Wallaby Rocks, Asses Ears, Emu Foot Shelter Valley;
- Eastern escarpment and uplands of the Grampians: Victoria Point, Victoria Range, Chimney Pots, Victoria Valley hills; and
- Far Western Grampians and Glenisla Valley: Black Range Mt. Bepcha, Mt. Talbot.

In all, across the four Field Trips into the Grampians beginning in October 1976 and ending in September 1977, twenty eight teams of students were deployed in the most likely large carnivore habitats along the western and northern escarpment of the Grampians, across the Glenisla Valley to the isolated Black Range, and along the escarpments overlooking Victoria Valley within the heart of the Grampians. Given that the minimum number of students to a team was five and each team spent on average of two days in the bush on each Field Trip (in some cases staying out overnight), this total on-the-ground effort amounted to 1,120 person-days devoted to scouring selected areas of the Grampians wilderness for concrete evidence of the presence of large carnivore predators.

Bush-bashing teams were not deployed to their areas at random. Prior knowledge of the areas in terms of habitat features and vicinity to reported puma observation events were taken into account. The Deakin Puma Study's core team frequently sent bush-bashing teams into localities that offered preferred puma habitat features, according to Hornocker, in the closest vicinity to recent eye witness reports of puma sightings. In this way, there was, in practice, attempts to tie together the data collected through tactic two, interviewing eye witnesses, with data collected from tactic three – going bush in order to collect large predator artefacts.

The spotlighting outings conducting during the nights of Field Trips were also linked strategically to areas connected to reported eye-witness accounts of big-cat sightings and bush-bashing team first-hand scrutiny. By looking precisely at where big cats were supposed to have been seen in the Grampians, the Study Group was giving the null hypothesis the highest probability of being overturned, simply by maximising the chance of stumbling upon new hard evidence contrary to the null hypothesis that big-cats are non-existent in the Grampians Mountains. The argument being advanced here is that if you want to disprove that the large carnivores in the Grampians are big-cats of the puma variety, then you concentrate your on-the-ground survey resources exactly where these animals are supposed to be, and then turn up ample concrete evidence of dog, fox and/or feral domestic cat activity without a skerrick of hard

evidence pointing to big-cat residents. You don't turn your gaze away from locations where pumas are supposed to be. You look, and look as carefully as you can, directly at these exact places with the expectation that nothing linked to a big-cat will turn up.

Well, what did twenty eight bush-bashing teams of University students and their acquaintances, providing 1,120 person-days to the task, manage to turn up in a series of strategically located searches of the Grampians wilderness over an almost 12 month period in 1976 and 1977? The outcomes of these searches are now considered.

## **The Joys of Bush Bashing for the Deakin Puma Study**



**An intrepid bush basher scrambles along a rock ledge**



**with a sheer wall of rocks above**



**and more rocks below**

## ***The Hard Evidence from Bush-Bashing after Pumas***

The presentation of hard evidence begins with the appraisal of large carnivore habitats in the Grampians Mountains with commentary on the distribution of predator kills.

### **Habitat Appraisal, and Distribution and Make-up of Kills**

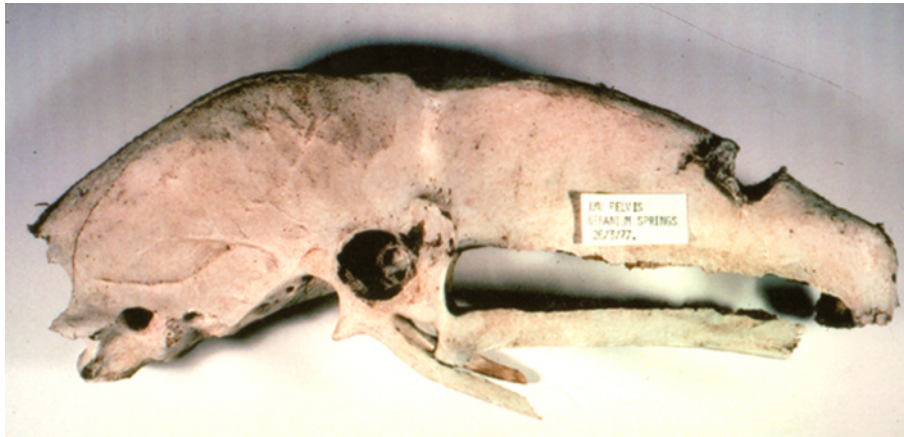
The pre-Study's positive evaluation on the suitability of the Grampians to provide ample localities fitting the Hornocker puma habitat features was borne out fully by the reconnaissance and surveys completed during October 1976 and September 1977. Rocky shelters were so common in the areas investigated that on several occasions later in the Study bush-bashing teams would set out on two-day-overnight excursions without worrying about taking tents. The students and the Study's core team were completely confident that there would always be several caves large enough for a team of six somewhere up there along the escarpments in each team's allotted area. This was always the case. These shelters would often have tracks of wallabies and goats in the sand along the bottom. Herbivore droppings were also common, most typically those of goats.

The bush-bashing teams also found many kills. Small animal kills, such as the remains of wallabies and possums were found in the back of several upland shelters. Larger kills were found in the vicinity of shelters lower down the escarpment, but never in them as such. These larger kills were the remains of sheep and kangaroos. Other kills were found in secluded grassy patches in the lowland valleys close to rocky outcrops with ample shelters. These kills were the remains of sheep and kangaroos, as before, but also mixed with these were the bones of deer and cattle.

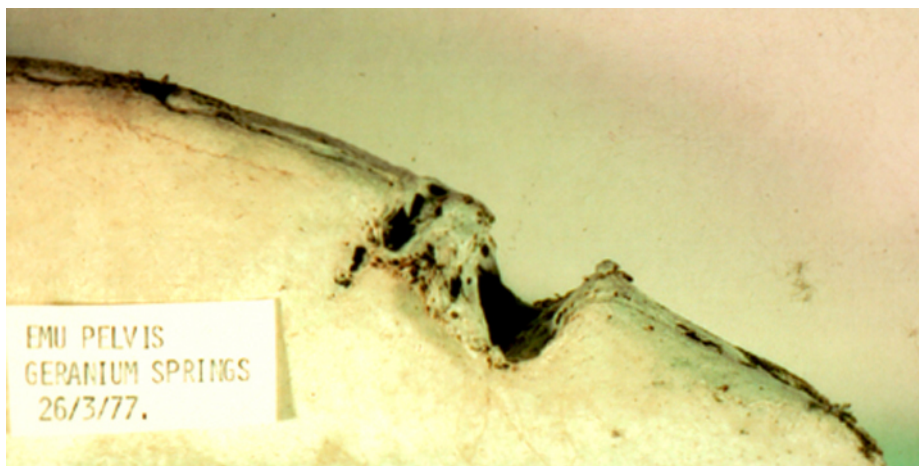
In one locality, Geranium Springs Valley, four sheep kills were found 300 metres up the very steep side of the valley, each on separate rocky ledge with caves adjacent. It was thought most unlikely that sheep would make their way up to these spots themselves given the absence of grasses and the sheer climb involved. The sheep bones were not crushed. Gnawing marks were absent except along the margins of the scapulas and the bottom angle of some jaw bones.

In the same valley a deer skull was found some distance into the valley. This valley also contained scattered emu bones in its deeper reaches. At one emu kill, the pelvis had a deep notch across and into the upper margin towards the back. The wound was inflicted into fresh bone with considerable force from behind. The notch was unlikely to have been made by a dog, for example, devouring the carcass as the large bony structure had not been broken up by gnawing or crunching, as is the habit of dogs. The single evidence of predator attack on this bone was this lone but substantial notch 50 mm long, 35 mm wide and 25mm at its deepest, showing the movement of a force down into the back surface of the pelvis, and then across to the left hand side through the still living bone of the adult emu.





**Emu Pelvis (0.25 actual size): Notch on upper surface to the right**



**Emu Pelvis: Close-up of notch (0.75 actual size)**

In life, this bone had been covered by feathers, skin and a layer of fat and muscle. If the notch wound had been inflicted on the emu while it was standing upright, it was estimated that the predator would have been much heavier and more powerful than a large dog.

Although the uplands of the ranges provided abundant secluded habitat areas, the most evidence of predator activity, in terms of prey animal kill remains, was in the lower country below the escarpment rim where the creeks had carved short deep valleys into the high cliff walls of the northern and western ranges, and in the few isolated rocky hills with their aprons of scrub surrounded by semi-cleared farmlands. Here, in these rocky outcrops, some kilometres out in the flatlands from the towering mountain ranges, the bush-bashing teams found shelters whose entrances and surrounds were strewn with the remains of meals consumed by very eclectic predators. At one of these outposts of the mountain ranges, Mt. Bepcha, the left-over bones of cattle, sheep, emus, kangaroos, wallabies, rabbits, possums, cockatoos and even tortoises were found by the Study Group's bush-bashing teams.

Spotlighting provided the Study Group with the best information on the abundance of kangaroo and wallaby populations in the Grampians close to reported puma observation sites in the vicinity of the high predator activity locations. Grey kangaroos were literally present in mobs of several hundred out on the open country a few hundred metres from these locations. Red-necked wallabies were less abundant but common. Black wallabies were not sighted by the Study's spotlighters. Rabbits were plentiful. During the day emus were often seen, particularly in the Red Rock area and in the more open country between Mt. Bepcha and Rocklands Reservoir.

As mentioned earlier, water availability was not given a high priority in the Study Group's appraisal of the potential for big-cat habitats in the Grampians given the availability of farm water catchments on the lowlands abutting the mountain ranges. However, the Study Group did note the drier climate of the western and northern ranges of the Grampians compared to the central Victoria Valley and eastern ranges. The central valley and eastern ranges has all-year-round surface water in the form of the Moora Moora Reservoir and the Wannon River. These water supplies are both well within the wilderness area of the Grampians and, as such, are fully accessible by animals under the protection of dense scrub and forest cover. Similarly, the northern ranges, though drier, are the water catchment for the rural communities to the north of the Grampians including the city of Horsham. A man-made reservoir, Lake Wartook, is situated in the centre of these ranges. The Grampians wilderness has reclaimed the shoreline of this lake away from its dam wall thereby facilitating secluded access to the water's edge.

In contrast, surface water becomes a rare commodity in the uplands of the western ranges of the Grampians in the long summers and dry early autumns. This region of southeastern Australia enjoys a Mediterranean climate of winter rains and hot dry summers. The return of rain after summer is always unpredictable, and farmers watch out for the 'autumn break' and breath a sigh of relief when it comes. But often they are required by nature to wait until well into April. Throughout this western region of the Grampians, including the Victoria, Billywing and Asses Ears Ranges, mammalian residents must retreat to the lower slopes to access fresh water. If these animals move east, they find drinking water along the secluded shores of Moora Moora Reservoir deep in Victoria Valley. But if they move westward, the only drinking water available to them is on the flat country below the highlands; in exposed water dams dotted across the farmlands of the Glenisla Valley, from irrigation channels running out from the Moora Moora Reservoir and along the open shoreline of Rocklands Reservoir.

#### Habitat Assessment:

The Deakin Puma Study Group's appraisal of the Grampians wilderness as suitable habitat for a big-cat population, based on the reports of its bush-bashing teams including data from its spotlighting surveys, was in the affirmative. Big-cats should be able to survive and breed in this country.

Locations with shelters, seclusion, year-round water availability and retreat avenues into extended cover or high country were abundant. Of these, those locations with extensive kill remains were in the northwestern ranges and Glenisla Valley, either facing out onto open farmlands or surrounded by farmlands. These latter locations were pinpointed by the Study Group as those sites providing the most suitable large carnivore habitat in those regions of the Grampians surveyed in 1976 and 1977.

These most suitable habitat locations were:

- Geranium Springs Valley;
- Red Rock Creek Valley;
- Mt. Talbot; and
- Mt. Bepcha.

A leading expert on the habitat requirements of pumas independently supported this assessment of the Grampians habitat by the Deakin Puma Study Group. Ellis Tucker had written to Dr. Maurice Hornocker of the Idaho Cooperative Wildlife Research Unit, University of Idaho, USA in 1969. As noted in Chapter 2, Hornocker was the foremost researcher into the population dynamics of pumas in their native wilderness environments. Ellis Tucker provided Dr. Hornocker with a detailed description of the Grampians environment and then asked him for his assessment of the suitability of this environment for sustaining a population of pumas. Dr. Hornocker replied in a letter dated 13 January, 1970. His assessment of the Grampians environs was:

The mountain lion is an extremely adaptable animal and it is not unlikely that it could establish itself in an area such as you describe. Since lions are also quite secretive it is not surprising that they have not been positively identified if in fact they have established themselves. At one time in the United States lions inhabited practically the whole of the country with its diverse habitat types. I believe it is quite possible that lions are established in your area.

In this letter, made available to the Deakin Puma Study Group in March 1977, Dr. Hornocker confirmed the Study Group's assessment that the Grampians do provide suitable habitat for an established big-cat population possibly consisting of pumas from North America.

#### **The Geranium Springs Valley Habitat**



**Lowland scrub to the west of Geranium Springs Valley**



**High Country above the Geranium Springs Valley Escarpment**



**Looking across the Glenisla Valley to the Black Range beyond – the view from the mouth of a cave above the Geranium Springs Valley in the late afternoon**

### **The Mt Bepcha Habitat**



**Mt Bepcha, an isolated mountain in the Glenisla Valley viewed from above the Billywing escarpment. Water of the Rocklands Reservoir is to the left of Mt Bepcha and the Black Range is at the back.**





**Rocklands Reservoir with the Black Range beyond: the view from the summit of Mt Bepcha to the southwest. The cleared country from the water's edge to the left is the country over which David Hamilton and Wally Smith saw a big-cat running back towards Mt Bepcha in March 1976**



**The rocky outcrop shelter below the summit of Mt Bepcha where numerous predator kill remains were found by the Deakin Puma Study Group**

### **Scats Collected and Analysed**

The teams of students scoured the bush for animal scats. The overwhelming majority of scats that came back to base camp in small plastic collection bags and in coat pockets were herbivore droppings. These were, in the main, wallaby and goat droppings from high up on the escarpment.

Only rarely were predator scats found and brought back (always in the plastic bags!). These scats ranged in size from 40mm in length and 20mm across at the widest section up to 150mm long and 30mm across. One additional scat, collected in March 1977, was significantly different in appearance and size to the other predator scats

brought in by the bush-bashing teams. It was 80mm long and 50mm wide, and it contained a considerable amount of undigested fur and elongated bones.

The puma scat collected during the Study's Core Group visit to the puma enclosure at the Melbourne Zoo prior to embarking on the Study's Field Trips to the Grampians was used as a reference when examining the carnivore scats collected by the Deakin Puma Study in the Grampians. This reference puma scat was 110mm long and 45mm wide.

Only twelve predator scats were ever brought to base camp by the bush-basing teams. These were found in the following locations:

- Billywing Uplands: 2 scats;
- Black Range: 1 scat;
- Mt. Bepcha: 4 scats;
- Yarram Gap: 1 scat; and
- Geranium Springs Valley: 4 scats.

I arranged through the Vermin and Noxious Weeds Destruction Board, Department of Crown Lands and Survey, for one of their scientists from the Keith Turnbull Research Institute in Frankston, to undertake an analysis of a selection of the Deakin Puma Study's predator scats from the Grampians. The analysis technique had been pioneered by Mr. Hans Brunner and involved the electron microscopic examination of hairs in a scat. From the species-unique pattern of scales on each hair found in a scat, it was possible to identify the prey digested and, if grooming hairs were present, the identity of the consuming predator. The Deakin Puma Study Group provided Hans Brunner with puma hairs, also collected from the Melbourne Zoo puma enclosure in 1976 to add to his mammalian hair identification reference data base.

Mr. Brunner agreed to examine nine of the Study Group's twelve scats in April and May 1977. His results were:

- |   |  |
|---|--|
| • Billywing Upland scat, 150mm by 30mm:     | Prey was Brushtail Possum<br>Predator was <i>Canis familiaris</i> (dog)    |
| • YarrumGap Scat (size not recorded)        | Prey was Rabbit and House Mouse<br>Predator was <i>Vulpes vulpes</i> (fox) |
| • Mt. Bepcha Scat 1 & 2 (size not recorded) | Prey was sheep and cattle<br>Predator was <i>Vulpes vulpes</i> (fox)       |
| • Mt. Bepcha Scat 3 (size not recorded)     | Prey was sheep<br>Predator was <i>Vulpes vulpes</i> (fox)                  |
| • Mt. Bepcha Scat 4 & 5 (size not recorded) | Prey was water rat & cattle<br>Predator was <i>Vulpes vulpes</i> (fox)     |
| • Geranium Springs Scat 1, 60mm by 25mm     | Prey was rabbit<br>Predator was <i>Vulpes vulpes</i> (fox)                 |
| • Geranium Springs Scat 2, 80mm by 50mm     | Prey was sheep & fox<br>Predator unknown                                   |

## **Geranium Springs Scat 2**

Geranium Springs Scat 2 had produced a surprising result from the Brunner analysis.

Hans Brunner's written report on the Geranium Springs Scat 2, dated (28 April 1977, read:

Sample contained log bones (60mm) from a fox foot. I cannot remember seeing bones of this length in either cat, fox or dog scats before.

Unfortunately there are no grooming hairs of the predator present.

The Deakin Puma Study Group had photographed the scat before sending it off the Hans Brunner for analysis. This is what it looked like in comparison with a puma scat collected by The Study's Core Group from the Melbourne Zoo in October 1976.



**Geranium Springs Scat 2 (top); Female Adult Puma Scat from Melbourne Zoo (below) – 0.8 actual sizes**





**Geranium Springs Scat 2 (0.8 actual size)  
showing long bones**



**Geranium Springs Scat 2 (0.8 actual size)  
showing foot bones**

Further expert opinion was sought on the Geranium Springs Scat 2. I sent photographs to the Department of Zoology at Monash University in Clayton, Victoria, requesting an opinion on its origin. This Department of Zoology was, at the time, at the forefront of research into Australian mammals. The reply to this request was:

I have forwarded your letter to Hans Brunner at the Keith Turnbull Research Station for his opinion. Frankly the pellet looks like a regurgitated pellet but its size and contents are surprising. Hans should be able to give you an informed opinion. Doug Dorward is of the opinion that it is a fox or dog pellet – regurgitated, and we agree with him (Associate Professor Tony Lee, 17 May 1977).

Unbeknown to Tony Lee, Hans Brunner had already given the Deakin Study Group his opinion. Brunner did not know what animal had produced the scat, or pellet for that matter, and could not say where it had come from. From his extensive experience of collecting and examining predator scats in relation to his pioneering work in developing and then implementing his unique mammalian surveying technique, he had never before seen a scat like the Geranium Springs Scat 2.

The questions asked within the Deakin Study Group with reference to the Geranium Springs Scat 2 were:

- What predator would consume both a sheep and a fox?
- What predator has a feeding habit such that it consumes long sheared bones without crushing or crunching them first?
- How big would the predator have to be in order to pass a scat 50mm in cross-section?
- How plausible is the claim by other biologists that the scat is not a scat at all but a regurgitated pellet from a fox or a dog?
- If the artefact is a regurgitated pellet, then why is it scat shaped as if it has been passed through the lower intestinal tract of a carnivore, and not more 'fur-ball' in shape in common with typical regurgitated pellets?

The regurgitated pellet theory provides an explanation that does not require the introduction of a predator species not countenanced by Australian academic biologists of the time as being in the Grampians area, or in the rest of Australia for that matter. As such, for this theory to be accepted as credible one is required to stretch by a considerable margin the known parameters for the size, appearance and contents of regurgitated pellets from foxes and dogs without any further evidence being provided.

There are at least two difficulties with this pellet theory. If the animal regurgitating the pellet was a fox, then it had to have been a cannibal with an unusually large gullet for a fox – it was eating its own kind and it had to vomit up intact a pellet 50mm across and 80mm long containing bones up to 60mm in length. If the regurgitating animal was a dog then this particular dog had the unusual habit of not crushing the bones in its diet before swallowing. Dogs are equipped with molar teeth specifically designed to crush bones into small fragments suitable for digestion. To accept that the scat was indeed a pellet from a dog, one must also accept that this dog had a feeding habit unlike that of other dogs.

Is there a plausible explanation for the size, appearance and contents of the Geranium Springs Scat 2 which accepts its faecal appearance and unusual contents? Cats, in contrast to dogs and foxes, have molars which are not designed to crush bone into fragments. As we learned in Chapter 2, the molars of cats are designed to shear through meat slicing it into edible chunks before swallowing. Big-cats can use their scissor-acting molars to slice through small bones attached to the meat and then swallow whole the meat and the elongated sections of bone. These bones are too big for digestion in the big-cat's gut, and so pass through the animal to be passed out in the faeces.

Could this be the explanation for the origin of the atypical Geranium Springs Scat 2? In Chapter 2 we learnt that pumas, for example are very eclectic in their diet, hunting mammals such as badgers and beavers in their native habitat. So killing and eating a fox at a sheep kill in Australia may not be so unusual for one of these big-cats, if they happened to be there in the first place. We also saw in Chapter 2 that puma scats routinely contain hair and bone.

The question for the Deakin Puma Study Group to resolve, arising from the Geranium Springs Scat 2, was whether the Australian zoologists' explanation that the artefact was a highly unusual fox or dog regurgitated pellet was more plausible than the alternative explanation that it was in fact a scat from a big-cat living in the Grampians. In order to make an advance on the resolution of this question, the Deakin Puma Study core team decided to seek further expert advice.

In May 1977, I wrote directly to Dr. Hornocker at the University of Idaho detailing the hard evidence collected by the Study Group to that point. An introductory paragraph in my letter read:

Our results to date indicate the presence of a large carnivore in the Grampians. Let me hasten to add that a specimen of the animal has not been obtained, nor have any of the students or teaching staff involved in the project sighted a puma. Our evidence is of an indirect nature and as such requires interpretation by somebody more expert in the biology of *Felis concolor* (pumas) than myself.

I enclosed with this letter to Dr. Hornocker photographs of the Geranium Springs Scat 2 and the following information:

The contents of the faeces were analysed and the predator had been preying on sheep and foxes. The long bones in the faeces were 60mm in length and were from the foot of a fox.

Dr. Hornocker was then asked for his opinion in the following words:

Doctor, would you please sift through the enclosed material. We would value your opinion on whether there is anything here that positively indicates the presence of a big cat as distinct from the presence of a large dog.

The North American puma expert provided his considered opinion, in a letter dated 8 June 1977:

The faeces from the Geranium Springs area certainly could be those of *Felis concolor* (pumas).

And later in the same letter:

I cannot say with certainty, but again the faeces look very much like those of *Felis concolor*.

In the cautious language of a scientist, this leading North American expert on the biology of pumas recognised the Geranium Springs Scat 2 firstly, as a scat and secondly, as being consistent with scats produced by pumas in their native habitat. This American scientific opinion supported the alternative explanation proposed by the Deakin Puma Study Group for the origin of the Geranium Springs Scat 2, when provided with the regurgitated pellet explanation offered by the Monash University zoologists with established expertise on the mammalian fauna of Australia. From Dr. Hornocker the Deakin Puma Study Group had received an expert opinion based on a concrete artefact supporting the presence of big-cats, such as pumas, in the Grampians.

Therefore in summary, from the twelve predator scats collected by the bush bashing teams of the Study, one scat, the Geranium Springs Scat 2, provided a possible

physical link to the presence of big-cats in the Grampians. This piece of evidence will be returned to in the final chapter.

### **Paw Prints Casted**

Only one bush-bashing team ever brought a plaster cast of a paw print back to a Field Trip base camp. This exciting event occurred on the second Field Trip in March 1977. One team of six, which included an academic staff member from the Science Education Department of Deakin University's Faculty of Education, had been deployed to the Wallaby Rocks upland behind the Geranium Springs Valley on 26 March 1977. That evening after the evening meal, each team, both interviewing and bush-bashing, gave their reports to the assembled Group on the significant events of their day in the field. As mentioned earlier in Chapter 3, each team would display any artefacts found during the day thought worthy of sharing with the Group and, if judged worthy, would be put aside for future close analysis by the Study's Core Group back at the University.

When it was their turn, the Wallaby Rocks bush-bashing team told how they had found a large four toed paw print in the sand on the floor of a rock shelter in the uplands behind Geranium Springs. They had taken a plaster cast of the print and had carefully brought the cast back. The cast was then produced from a knapsack with due care and placed on the ground in the flickering light of the campfire.

The cast was flat with an irregular edge, but within it was the unmistakably base-pad and four rounded toe-pads of a predator print. Importantly, there was a correspondence in size and overall shape to the large adult male puma print cast taken from the Melbourne Zoo enclosure by the Study's Core Group in October 1976; a cast that had been photographed and copied for every interviewing and bush-bashing team. And significantly, although the toe indentations were shallow, there was no sign of any claws, the marker of a cat family paw print, and the distinguishing marker between the prints of cats and dogs (with the exception being cheetahs and no one was claiming to have seen cheetahs in the Grampian Mountains).

The effect of this presentation on the circle of Deakin Puma Study Group people assembled around the campfire, some thirty people, was profound. Here in their midst was the first substantial piece of evidence that a big cat might actually exist in the Grampians Mountain ranges behind the campsite. I expressed my excitement on the face value of the artefact presented by the Wallaby Rocks team. In the moment, I accepted the veracity of the account and the supporting evidence of the dimly lit artefact without waiting for a closer examination. My excitement, and that of many of the other members of the larger Study Group present that night, however, was to be short lived.

The academic staff member with the Wallaby Rocks team, after her first day in the field associated with the Deakin Puma Study Group, began to speak to the assembled

‘puma hunters’. Her message was that we should be ever wary and cautious about offered evidence purporting to support the presence of big-cats in the Grampians. Evidence could be easily fabricated and, if the Study Group members were too emotionally connected to the cause of wanting to prove that pumas really did exist in the Grampians, then they could be readily taken in by charlatans. She then informed the watching, now silent group, that the paw print cast that had been offer up to the Group that night as evidence of a puma paw print was, in fact, a fake.

“We copied it from the puma photograph in our predator tracks reference set by drawing in the sand”.

The Wallaby Rocks bush-bashing team had clearly proved their point, but at what cost. The campfire meeting was quickly disbanded after I had publicly expressing my annoyance at the way the bush-bashing team had set me and others up so as to make a point that was already well appreciated (or so I had thought!). The next morning, the core team of the Study got the next day’s field activities underway without delay or reference to the previous evening’s ‘lesson-in-objectivity’. But the reality was that the Deakin Puma Study had to absorb and overcome a potentially serious disruption within its core team after the March 1977 Field Trip.

The hoax had struck at the sense of collegiality or, in sporting parlance, at the team spirit relied upon to keeping the complex Study moving along. The Deakin Puma Study was not only complex in terms of its three-pronged investigative Strategy, and also in terms of its organisation and logistics. It was also complex in terms of the differing motivations for participation in the Study’s activities. How was it that this Study galvanised so much interest, energy and preparedness to bush-bash in difficult country from such a large number of student volunteers, and from their partners and friends? The answer to this question, besides the fact that it was great fun, was undoubtedly that many of the participants were being motivated, to some extent at least, by a suspended belief on the ‘puma question’.

This human dimension of the Deakin Puma Study had always to be carefully managed by the Study’s Core Group. For any field study of a myth or legend to be seriously attempted by a university-based team of researchers, the researchers involved are expected to conceptualise the study according to an academically acceptable framework for the investigation. With the Deakin Puma Study, the academic framework had two components. The first was a sociological interest in the processes at work in small communities that sustain and reproduce the myth of pumas in the Grampians across generations. The second was to attempt to diminish the truth status of the conjecture that there was a small population of big-cats in the Grampians. Investigations by the Study Group focused on the second component of the Study in the first instance. Later sociological analysis of the information collected through the first phase was expected then to provide the basis for an exposition on alien cat myth maintenance in south eastern Australia. Two Deakin University academics were leading these investigations. I was co-ordinating the whole Study and leading the investigation on the second component. My background in biological and

environmental science was relevant to this phase. Neville Millen, a sociologist at the University, was leading the sociological phase and his field work contribution was through his leadership of the interviewing teams.

Given this structure of the Study, it was the second component that was the more explicit and of more interest to others. Searching for pumas in order to disprove the likelihood of their existence was a much more motivating activity for most of us involved in the Deakin Puma Study than examining the myth maintenance processes in rural communities. By way of example on this point, the two local newspaper articles on the Deakin Puma Study in March and April of 1977, led with these paragraphs:

A big research team from Geelong State College (Deakin University) is on the trail of the elusive Grampians pumas (Wimmera Mail Times).

And

A Deakin University research team is attempting to prove the existence – or otherwise – of the elusive Grampians big cats (Hamilton Spectator).

The only reference to the broader sociological dimension in these newspaper articles was the final paragraph in the Hamilton Spectator story which noted that “the research is part of a science and sociological course at the university”.

The sociological component of the Deakin Study was the academically safer part of the research. The fore-grounded ‘puma search’ component was less safe simply because the people directly involved had placed themselves in a psychological struggle against a pervasive and seductive myth-sustaining culture. In this context, the struggle became one of investigating the credibility of the myth while at the same time holding its narrative at a distance, at bay so to speak. Under these circumstances, the Deakin Puma Study participants may have at times found themselves being more drawn into crossing the line dividing the sceptical investigator from the tentative believer in ways that they may not have anticipated. On Field Trips, for example, students often asked one another and the Study’s core team members, “What do you think? Do you reckon there are pumas out there?” Irrespective of whether a participant in the Study was a student or a lecturer, a hardened sceptic or a tentative believer, these were the motivating questions that were at the heart of the Deakin Puma Study, whether the Study Group core team was prepared to admit it or not. And as with the surrounding Grampians community of Western Victoria, the Deakin Puma Study Group members coalesced over time into a smaller community of ‘maybes’ and ‘no-ways’, those who were more ready to believe and those who maintained a position of strict scepticism.

Given this situation, the ever-present danger for a study embarking on an investigation of a myth is that of being coopted to the cause of the true believers and zealots prepared to fabricate evidence while presenting as reasonable informants. The

Deakin Study core team had recognised this danger from the outset, and had developed measures to guard against this influence from without the Study Group. What had not been anticipated by me and others was a destabilising hoax from within.

The Wallaby Rocks bush-bashing team had ambushed those participants in the Study who were 'more ready to believe'. In the moments after the presentation of the fabricated print cast this group of participants had been prepared to accept the authenticity of the hard evidence without the usual caution simply because the bush-bashing team was 'one of us', made up of colleagues in a shared project. The immediate consequence of the Wallaby Rocks team's presentation was a clear sense of division within the Study Group assembled around the campfire, a division between those who had been taken in by the hoax, and those who had not; a division between the 'maybes' and the 'no-ways'. That night in March 1977, the Deakin Puma Study Group, in particular its core team and me in particular, experienced a wobble in our motivational force.

The core team had some re-building to accomplish before the Deakin Puma Study was to get back on track. In the end, the Study itself proved that it had generated a life of its own thereby creating a momentum that brought people back to it. Significant data came to the notice of the core team in the week following the March 1977 Field Trip, which rekindled the investigative spirit of the core team. The first was the mystery Geranium Springs Scat 2, which had been found by another bush-bashing team on the same March 1977 Field Trip, and was now appreciated anew by the Group's core team. The second set of data involved the interview team lead by Neville Millen and Peter Ferguson for the March 1977 Field Trip. The team had met with Ellis Tucker, the Grampians field naturalist, in his home in Halls Gap, on their way back to Geelong from the March Field Trip. Ellis impressed the team with the details of his sighting, his correspondence with Dr. Maurice Hornocker, the puma expert in the USA, and his uncovering of the black puma insignia of the 35<sup>th</sup> Fighter Squadron of the USAF, the squadron believed at that time to be the same USAF Unit as the 35<sup>th</sup> Fighter Pursuit Group known to have been based at Mt. Gambier in 1942.

In addition, the interview team had also spoken to Gary Middleton, the Lands Inspector from Stawell, the next town after Halls Gap on the trip back to Geelong, about his sighting and the scat he had found on Mt. William Plateau of the Grampians. Middleton's observed scat had been 100mm long, 30mm thick containing fur, bones and feathers and, therefore, seemingly very similar in size and appearance to the Geranium Springs Scat 2. Thus the interview team arrived back at Deakin University injecting renewed enthusiasm into the Study.

And so the Deakin Puma Study continued throughout 1977. The lasting contribution of the Wallaby Rocks bush-bashing team to the Deakin Puma Study was twofold: a heightened sense of the importance of critical and unhurried examination of purported evidence claiming to support the presence of big-cats in the Grampians; and an extreme cautiousness on the part of the Study's core team members when asked to make any pronouncements on the level of probability that big-cats may be present in

the mountain ranges of the Grampians. After March 1977 the ‘maybes’ were to be much less forthcoming than may have been previously the case. The first legacy was clearly a positive outcome for the Deakin Puma Study; the second legacy was, perhaps, to prove less so in the long term.

As for casts of paw prints of large carnivores in the Grampians collected by the bush-bashing teams of the Study Group, the outcome was a nil return.

### ***Hard Evidence Provided by Eye Witnesses and Other Sources***

The Deakin Puma Study Group was provided with plaster casts, photographs and sketches of carnivore paw prints by eye-witnesses and other custodians of these artefacts during 1976 and 1977. No other artefacts produced by large carnivores other than these were ever brought to the Study Group’s attention. In all, eleven representations of large carnivore paw prints were provided by these eye-witnesses and others. These consisted of nine plaster casts, and two photographs of paw prints, one with an accompanying sketch.

### **Markers of Paw Print Difference**

Before introducing this last set of large carnivore artefacts, it is necessary to have a clear appreciation of the identifying characteristics of paw prints from the different carnivores known to be in the Grampians, and of those claimed to be there. The markers of tracks left by the paws of dogs, foxes, domestic cats and large-cats of the puma variety, and the distinctive features of each are listed below.

- Foxes:

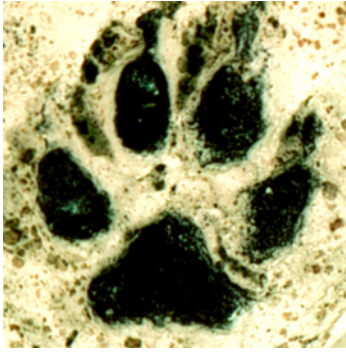


**Fox Paw Print (0.5 actual size)**

The red fox has a paw print made up of a triangular base-pad and four oval toe-pads. The overall shape fits into a circle 50mm across, more-or-less. Each toe pad will leave a claw mark if the print is over 5mm deep. The claw mark is typically less than 10mm in length.



- Dogs:



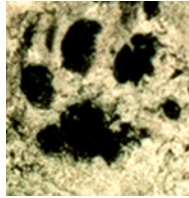
**Medium Sized Dog (Pointer) Paw Print  
(0.5 actual size)**



**Large Sized Dog (Great Dane) Paw Print  
(0.5 actual size)**

Dog prints vary greatly in size depending on the breed. The print has the same five pad components as that of a fox, but the base-pad can be more pronounced relative to the toe-pads and more indented along the two inward sides of its triangular impression. The toe-pads are uniformly elongated ovals being over 1.5 times longer in length than in width. Claw marks show on each toe, which may be between 10 and 20mm in length. A medium sized dog (Pointer) has a paw print 80mm long and 80mm wide. A larger dog (Great Dane or Husky, for example) paw print can be 100mm long and 100mm wide.

### **Domestic Cats:**



**Domestic Cat Paw Print  
(0.5 actual size)**

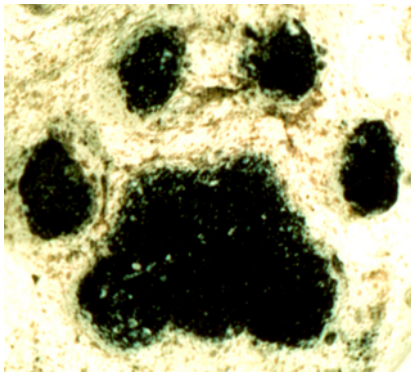
The domestic cat also has a base-pad and four toe-pads. The triangular base-pad has three lobes along the outward back side of the print. The toe pads are oval in shape but less elongated than in a dog. Normally there are no claw marks no matter how deep the print. The print can be 35mm long and 40mm wide.



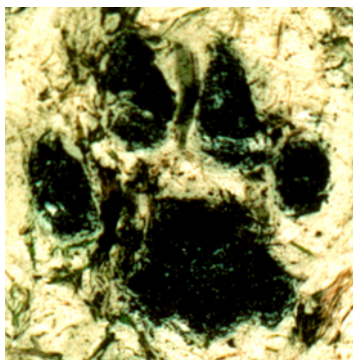
**Domestic Cat Paw Print: Claws extended  
(0.5 actual size)**

If the claws are showing in the print, then the overall paw print changes shape dramatically with elongated claw marks 15 to 20 mm long extending from each toe

- Puma:



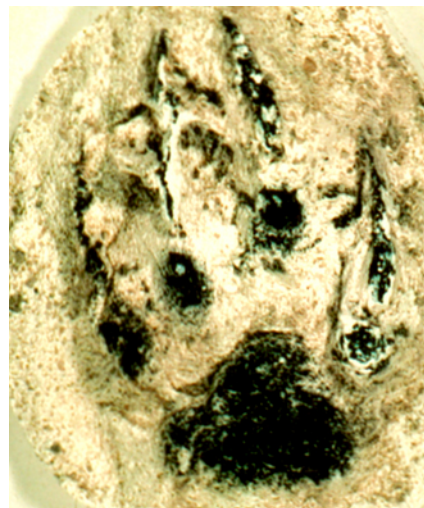
**Male Puma Paw Print**  
(0.5 actual size)



**Female Puma Paw Print**  
(0.5 actual size)

Puma prints also vary in size depending on the maturity and sex of the animal. The average length and width is 100mm and 115mm. An adult female print can be 80mm long and 80mm wide. The print has five pads also: the base-pad is very prominent particularly on the print of the front paw, and in general shape varies from being more-or-less triangular to more trapezoid, with a tri-lobular margin along the back outward edge. The four toe pads can vary from elongated ovals (central toes) to more circular (side toes), and are therefore less uniformly elongated than is the case for medium to large dog prints. Normally there are no claw marks no matter how deep the print.

If the claws are showing in the print, then, as with the domestic cat, the overall paw print changes shape dramatically with elongated claw marks 50 to 60mm long extending from each toe.



**Female Puma Paw Print: Claws Extended**  
(0.5 actual size)

Summary of Key Distinguishing Carnivore Paw Print Features:

<b>Feature</b>	<b>Fox</b>	<b>Medium to Large Dog</b>	<b>Domestic Cat</b>	<b>Puma</b>
Length of Print	50mm	80-100mm	35mm	80mm +
Width of Print	50mm	80-100mm	40mm	80mm+
Base-pad shape	Triangular	Triangular with scalloped inner sides	Triangular with tri-lobular margin along outward back side	Triangular to trapezoid, with tri-lobular margin along outward back side
Shape of 4 Toe-pads	Oval	Uniformly elongated ovals – length 1.5 x width	Oval	Central toe prints more elongated ovals than side toe prints
Claw marks	Present on each toe if over 5mm deep, less than 10mm long.	Present on each toe unless a very shallow print, between 10-20mm long.	Normally absent independent of depth of print. If present, then 15-20mm in length from each toe	Normally absent independent of depth of print. If present, then 50-60mm in length from each toe

The key physical marker distinguishing paw prints of dogs and foxes on the one hand from paw prints of members of the cat or *Felis* group on the other, is the presence or absence of claws. This difference is due to a structural difference in the biological make up of the paws of these two groups of carnivores.

Dogs and foxes have non-retractable claws. These claws continue to grow throughout the animal's life as they are worn away by abrasion on hard surfaces. If the wearing is only slight, the claws can be over 10mm long, but if the animal has been moving over rocks and digging into abrasive soil, then the claws can be much shorter, but still present. Therefore a dog or fox will normally leave a paw print with the claw showing. However, if the claws are very short and the surface is hard so that the print indentation in the ground is only minimal, a dog or a fox may leave a print without the claw marks appearing.

*Felis* cats such as *Felis domesticus* (domestic cat) and *Felis concolor* (puma) all have retractable claws. When these cats are moving about their claws are sheathed inside each toe-pad. Consequently these animals leave paw prints which do not show any

sign of a claw, no matter how deep the impression in the ground. Cats extend their claws when scratching, climbing or capturing prey, for example. When this occurs, claw impressions up to half as long again as the normal paw print are made in the surface layer.

From the summary table above, the following carnivore paw print identification checklist was developed by the Deakin Puma Study Group.

Identification Checklist:

- Step 1: Does the paw print have a base-pad and 4 toe-pads? If Yes, proceed to Step 2.  
If No, then the paw print is not relevant to the Deakin Puma Study.
- Step 2: Is the paw print roughly as long as it is wide? If Yes, proceed to Step 3.  
If No, then the paw print is not relevant to the Deakin Puma Study.
- Step 3: Is the paw print less than 50mm long? If Yes, proceed to Step 4.  
If No, then proceed to Step 8.
- Step 4: Is the paw print up to 35 mm long? If Yes, proceed to Step 5, If No, then proceed to Step 6.
- Step 5: Does the paw print show claw marks approximately 5mm long at the end of each toe-pad? If Yes, then you probably have the print of a small fox. If No, then you have probable have the print of a feral domestic cat.
- Step 6: Does the paw print show claw marks approximately 10mm long at the end of each toe-pad? If Yes, proceed to Step 7. If No then you probably have the print of a large feral domestic cat, or that of a juvenile big-cat.
- Step 7: Does the paw print have uniformly elongated oval toe-pads? If Yes, you probably have the print of a small to medium sized dog. If No, then you probably have the print of a large fox.
- Step 8: Does the paw print show claws up to 20mm long at the end of each toe-pad and uniformly elongated oval toe-pads? If Yes, then you probably have the print of a medium to large sized dog. If No, then you probably have the print of a big-cat.

There is one further animal paw/foot print that must be discussed before moving onto an analysis of the paw print artefacts provided to the Deakin Study by eye-witnesses and others. In the Grampians there are four herbivores that leave large prints with

substantial claw marks at the end of each toe-pad. These animals are the emu, the grey kangaroo and two species of wallaby; the red-necked wallaby and the black wallaby.

The emu's foot print is very distinctive – a three toed and splayed bird foot print up to 150mm long. It is rather difficult to mistake an emu's foot print for anything else!

The hind feet of kangaroos and wallabies have 4 toes. There are 2 large toes and 2 very small inner toes. The small inner toes are joined together except for the claws. These inner toes do not normally, if ever, leave a mark in the animals' foot prints. When these animals are moving more slowly the long hind foot from heel to middle toe (over 300 mm in the case of a kangaroo) leaves an imprint. This foot print is also very distinctive and unmistakable. But when these animals are moving quickly, only the two large toes on each hind foot touch the ground. As these animals move rapidly by hopping, the 2 toes on each hind foot hit the ground together side by side. The initial impression is that of a paw print of a four toed animal with substantial claws at the end of each toe. There are, however, differences between these high speed prints of the grey kangaroo, the red-necked wallaby and the black wallaby. The first two are built for speed, and so the 2 toes on each hind foot stay aligned together pointing directly to the front. Also the central toe, which is the inner toe of each foot print, is substantially larger than the outer toe, so the resulting 2 footed hopping print is quite distinctive as a kangaroo-type print.

But the black wallaby high speed hopping print can convey a different story. These wallabies are heavy-built animals even though they are only 800 mm tall when sitting erect. The hind toes are therefore wider in proportion to their length than is the case for the grey kangaroo and the red-necked wallaby. And when the two feet land together in the high speed hop, the feet and each toe tends to splay out leaving a foot print that superficially looks like that of a large carnivore with a base-pad of sorts and 4 elongated toe-pads with strong sharp claws. The claws on what can be mistaken as the two 'central' toes of the 4 toed paw print appear particularly large and sharp. These black wallaby prints can be 150mm long and 150 to 200mm wide depending on how the animal has landed (remember there are 2 separate hind feet landing side-by-side and together contributing to this impression of a 4 toed paw print). These prints can be recognised for what they are for, on closer inspection, the pseudo base-pad impression in the soil is continuous with each toe-pad and divided down the middle. But to the unwary, this composite 2 footed, 4 toed print can be quite easily mistaken for a large carnivore single paw print. This is more likely to be the case in areas where the black wallaby is uncommon, areas like the Grampians.

Now that all this is clear and we understand what is involved in distinguishing the paw prints of the three carnivore species definitely in the Grampians and one species that may be in there; and armed with an alert about the high speed hopping foot prints of black wallabies, it is time to analyse each of the paw print artefacts provided to the Deakin Study Group by eye-witnesses and others.

## **The Photographs of Paw Prints**

### Peter Roper Photograph and accompanying sketch, Wallaby Rocks Track:

Of the two photographs, the first was provided in November 1976 by Peter Roper. Roper had camped at Zumsteins in the northern Grampians and had driven with his family along Wallaby Rocks track. At an intersection of bush tracks he saw tracks in the sand. The paw prints were large, 110mm long and 80mm wide, with a substantial base-pad and four toe-pads. The toes are uniformly elongated ovals and not splayed. No claws are evident in the paw print in the sand of the bush track.

Assessment: The print should be rejected at Step 2 of the checklist above as its width is approximately 70% of its length. But if we take this print to the next Step, Step 8, we have to make a judgement on the lack of claw marks. The impression in the sand appears very shallow, and the toe-pads are uniformly elongated ovals. The Study Group's assessment was that this was most likely to be a paw print of a large dog.

### Ken Robbins Photograph, Moyston

The photograph is of a large 4 toed heavily clawed print in soft wet sand by a rabbit burrow. This paw print fits exactly the impression made by black wallaby moving at a high speed hop.

Assessment: The print is not a carnivore paw print but that of a black wallaby hopping at speed.

## **The Plaster Casts of Paw Prints**

### Dick Saligari Print Casts, Bulart:

The interview team photographed two predator paw print casts in Dick Saligari's possession. I had also been shown another paw print cast made by Saligari during an early reconnaissance visit to the area. This third Saligari print was kept in the General Store of Cavendish, a small rural town at the south western entrance to the Grampians. All prints were very similar in appearance, being 110mm long and 110mm wide. The base-pads are prominent and the 4 toe-pads on each print are uniformly elongated ovals. Clear claw marks between 15 and 20mm long are present at the end of each toe-pad.



**Saligari Print Cast 1 (0.5 actual size)**



**Saligari Print Cast 2 (0.5 actual size)**

**Assessment:** These three paw prints follow the checklist steps down to Step 8. As each toe-pad is elongated with claws of up to 20mm in length, these prints are those of large dogs; dogs with paws larger than those in the Study Group's Great Dane reference print casts.

### Paula O'Dare, Stawell:

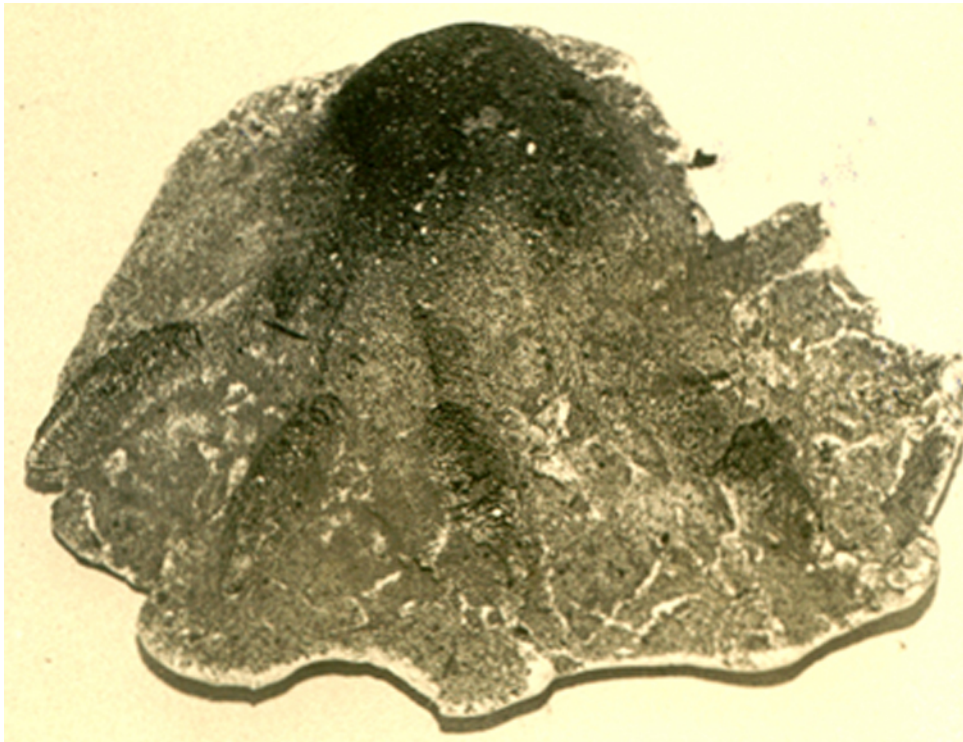
Paula O'Dare, of the Stawell and Grampians Tourist Information Centre showed me two plaster casts of predator paw prints taken with kangaroo tracks in the Pomonal area in 1975. These prints were in the order of 100mm long and a similar width. The 4 toe pads on each print were uniformly elongated ovals each with a short claw mark. The base-pad was generally triangular.

**Assessment:** These two prints follow the checklist steps down to Step 8. From there it is clear that they were made by a large dog.

### Paddy Hynes Print Cast, Mt. Bepcha:



The print cast in Paddy Hyne's possession was made by the late Ted Saligari, brother of Dick Saligari and, according to Hynes was, "a local authority on the Grampians pumas". Ted Saligari had given the print cast to Hynes' teenage daughter. The interview team photographed the cast but Hynes would not allow the cast to be removed from his safe keeping. The print had a prominent rounded base-pad and 4 elongated, finger-like toe-pads, each with a strong terminal claw. The print was 120mm long and 150 mm at the widest point across the splayed out toes. The base-pad was a circle shape, 60mm in diameter. All of the 4 toe-pads were the same length, 70mm, and were clearly jointed.



**Paddy Hynes Print Cast  
(0.5 actual size)**

**Assessment:** The print was rejected as a fabrication. The Study Group identified the toe imprints as most probably being made by a single toe cut from the hind foot of a red-necked wallaby or grey kangaroo. The base-pad, in all probability, was made by a human palm imprint.

David Hamilton & Wally Smith Print Casts, Rocklands Reservoir, Mt. Bepcha:

You will remember from the previous chapter that Hamilton and Smith were the duck shooters who surprised a large cat-like animal drinking at the water's edge of Rocklands Reservoir in the vicinity of Mt. Bepcha in March 1976. They marked two of the fresh prints where the animal had been drinking with twigs stuck into the mud. They returned seven days later with plaster of paris to take their print casts. On this second visit to their big-cat observation site, the two duck shooters noticed fresher tracks traversing the mud patch back from the water's edge behind the twig-marked

prints. In the end Hamilton and Smith secured casts of the two prints marked with twigs at the water's edge, and casts of two of the now fresher tracks from further back.

You will also remember that David Hamilton was later photographed for the Hamilton Spectator holding two of these four paw print casts. This photograph appeared in the Hamilton Spectator article in March 1976, along with an inserted close-up photograph of the handheld print casts.

The prints in the photographs were large, with triangular base-pads and 4 uniformly elongated oval toe-pads with short claw marks clearly visible at the tips of most of the toes. It was these prints that I had identified as dog paw prints when I first saw the published photographs in the Hamilton Spectator in 1976 and decided to invite both David Hamilton and Wally Smith to be interviewed for the Deakin Puma Study.

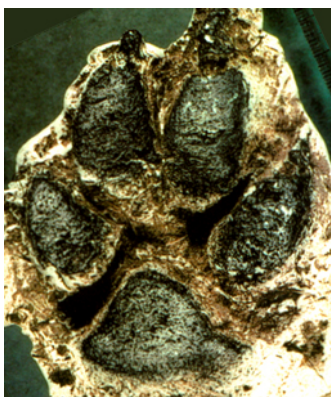
During my interview with David Hamilton, the duck shooter repeated his story of the puma observation event. When I asked if he still had the paw print casts, Hamilton answered in the affirmative and went off to fetch them from another room in his house. He returned with the two print casts that he had been photographed with for the local newspaper article on his big-cat sighting. My now closer appraisal of these two print casts confirmed in my mind that these were casts of dog paw prints.

I then asked David Hamilton if he had kept the other two print casts, the ones he and Wally Smith had marked with twigs on the morning of their 'big-cat observation'. Hamilton said that he still had these prints but they were in another cardboard box at the back of his storage cupboard. He seemed reluctant to fetch these casts saying that they were not as good as the two casts he had already shown to me. Eventually the third and fourth print casts were produced.

On appraising these third and fourth print casts, I reached the tentative conclusion that these two prints were made by a different animal to the one (or ones) that made the first two prints. David Hamilton then generously agreed to allowing me to take the four print casts back to Deakin University for a period of one month. This agreement was fully acted upon by me.

*Analysis of Print Casts 1 & 2* (the ones appearing in the Hamilton Spectator article):

One print was 80mm long and 75mm wide, the other was 80mm in both length and width. Each had a triangular base-pad and 4 toe-pads. The base-pad in one cast was 40mm from base to apex and 55mm across at its widest; and 30mm from base to apex and 45mm wide in the other. In both print casts all toes were uniformly elongated ovals. Claw marks are clearly evident on the 2 middle toes and on one side toe in each cast. The claw marks are fainter on the remaining side toes. The longest claw on one cast is 18mm, and 10mm on the other.



**Hamilton & Smith Print Cast 1**  
(0.5 actual size)



**Hamilton & Smith Print Cast 2**  
(0.5 actual size)

**Assessment:** Using the identification checklist developed by the Deakin Puma Study Group, these 2 print casts move from Step 1, 2 and 3, and then onto Step 8. At Step 8, the assessment is that these paw prints were made by a medium-sized dog or dogs.

The difference in the sizes of the base-pads could be that two dogs were present or that both prints are from the same dog, but one is from a front paw and the other is from a hind paw.

Of the Study Group's dog reference prints, the one taken from a German Short-haired Pointer bitch was the closest match in appearance and size to these Hamilton and Smith prints, being 70mm long and 75mm wide.

It is conjectured that these dog prints were made on the morning of the duck shoot on Rocklands Reservoir at some time prior to the return of David Hamilton and Wally Smith to the location of their big-cat sighting the week before. A dog brought into the area that morning by one of the numerous duck shooters present for the opening of the 1976 duck season could quite easily have made the fresh prints. If this was, in fact, what did happen, then the dog would most likely have been one of the hunting breeds prized by Victorian duck shooters in the 1970s – a Labrador or a German Short Haired Pointer.

*Analysis of Print Casts 3 & 4* (the ones marked with twigs immediately following the big-cat sighting):

The casts showed very clearly the deep paw prints made by the animal sighted. Both prints were 75mm long and 80mm wide. Each print had a base-pad and 4 toe-pads. Both base-pads are 35mm long and 45mm wide and are more trapezoidal in shape than triangular. Both prints' base-pads show a tri-lobular margin along the outward back side of the prints, this feature being clearer in one print, though present in the other.

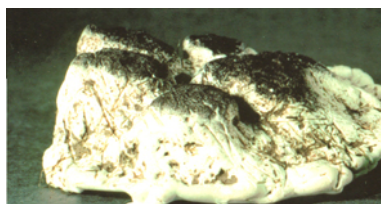
The 4 toe-pads in each print are not uniformly elongated ovals. In each print the 2 central toe-pads are slightly more elongated with the 2 side toe-pads being more circular. The 4 toe-pads in each paw print had left a much deeper indentation in the mud than the associated base-pad. This indentation pattern across the paw print cast is indicative of the animal placing more weight on the front of the paw than at the back. The impression at the back of each base-pad was no more than 5mm deep. In contrast, the front edge of the 2 central toes was 22mm deep in the mud. This uneven distribution of weight is consistent with the animal leaning forwards with its centre of gravity shifting over the front legs; a distribution of weight consistent with the animal leaning forward to drink from the water at the shoreline. Significantly, there are no clear claw marks evident at the end of any of the 4 deep toe-pad impressions on each paw print cast. Interestingly, there are small protuberances at the end of one of the 2 central toe-pads in Cast 3 and at the end of both central toe-pads in Cast 4. But these small protuberances are not consistent with the claw marks, even if badly worn, found in canine paw prints.



**Hamilton & Smith Print Cast 3**  
(0.5 actual size)



**Hamilton & Smith Print Cast 4**  
(0.5 actual size)



**Hamilton & Smith Print Cast 3:**  
**Side View (0.5 actual size)**

Assessment: Using the identification checklist developed by the Deakin Puma Study Group, these 2 print casts move from Step 1, 2 and 3, and then onto Step 8. At Step 8, the assessment is that these paw prints were made by a big-cat.

Of the Study Group's puma reference print casts taken from the puma enclosure of the Melbourne Zoo, the closest match is that taken from an adult female. This female puma's paw print was 80mm long and 80mm wide, with a tri-lobular trapezoidal base-pad, 35mm long and 40mm wide.

The two paw prints, marked by David Hamilton and Wally Smith immediately after their sighting of a big-cat-like animal at Rocklands Reservoir and at the exact location where the animal had been seen drinking at the water's edge, were made by a big-cat of considerable weight, leaning forward. The big-cat who made these paw prints may well be of a similar size to that of an adult female puma.

The Deakin Puma Study Group decided to act with due caution on their assessment of the Hamilton & Smith Print Casts 3 & 4. It was decided to seek further expert opinion on these paw prints. My May 1977 letter to Dr. Hornocker of the University of Idaho, referred to earlier in this chapter, also included photographs of the Hamilton & Smith paw print cast 3. These photographs showed the print from above and then directly from the front and from the left and right sides, all in close-up.

Dr. Hornocker's reply, included in his 8 June 1977 letter, was as for the Geranium Springs Scat 2:

The tracks from the Mt. Bepcha area certainly could be those of *Felis concolor*.

And later:

It would be interesting to learn if this animal is a puma and how it got there.

This Hamilton & Smith Print Cast 3 had been assessed, along with its companion print cast, Hamilton & Smith Print Cast 4, by the Deakin Puma Study Group's core team as probable evidence of a big-cat in the Grampians. The USA-based expert on puma biology who was able to confirm the consistency of Cast 3 with paw prints produced by pumas now supported this assessment.

Therefore once again in summary, from the eleven representations of predator paw prints provided to the Deakin Puma Study from 1976 to 1977, only two provided a possible physical link to the presence of big-cats in the Grampians. These artefacts are the Hamilton & Smith Print Casts 3 & 4. As with the Geranium Springs Scat 2, this predator paw print evidence will be returned to in the final chapter.

### ***One Final Piece of Hard Evidence which also Addresses the Feral Cat Question***

There is a view, held by many people working in the Grampians region and for the Government Departments with responsibility for Victoria's wildlife and national parks, that the sightings of big-cats in the Grampians and surrounding regions are in fact mistaken sightings of over-sized feral domestic cats. This view was put to the Deakin Puma Study Group on several occasions. In a letter to me, dated 10 September 1981, Mr. Roger Edwards of the Cavendish Forest District Office, Forests Commission of Victoria, articulates this alternative narrative to the Puma Legend:

Evidence to support the actual existence of a large cat like animal (eg. Puma) in the Grampians to date is only speculation.

My observations reveal feral cats only, some of which I have trapped measured up to 120cm (1200mm) in length when held up by the back legs (measured in length from paw tip to paw tip). These are the true tabby feral cat, bull neck and thick set animals as big as vixen foxes.

Some are black and I believe these animals have caused the speculation of a larger type of cat by people who are not aware of the change in development of domesticated cats in the wild.

This argument, put succinctly by Roger Edwards, is the one accepted by authorities in Victoria, and by Grampians Puma Legend cynics, to explain the large number of big-cat sightings in the Grampians region since the 1960s. The Deakin Study Group was interested in this explanation that the big-cats being sighted were not big-cats at all but big feral tabby cats. The argument is that the observed animals were, in fact, variants of the domestic cat species, *Felis domesticus* adapted to the Australian bush, and not a different larger species, *Felis concolor*, for example. This became the 'feral cat question' for the Study Group.



The Study Group had two sources of direct data available to it in the period of its investigations into the Grampians Puma Legend from which to make an assessment on the plausibility of the feral cat explanation. These sources were sightings of feral cats by the bush-bashing teams and a feral cat carcass from the Grampians.

### **Feral Cat Sightings**

Feral cats were sighted in the Grampians on rare occasions by Study Group members. In all cases the animals sighted were clearly domestic cats. These cats all fell within the dimensions expected of domestic cats in terms of height at the shoulder, body length, thickness of legs, and thickness and length of the tail. The animals varied in colour but did include black individuals. The observed feral cats in the Grampians were unmistakably *Felis domesticus*.

### **One Dead Feral Cat**

On 29 August 1977, Mr. Ian McCann of the Stawell and Grampians Tourist Information Centre wrote to me as follows:

Herewith the photo copy of the article in the Stawell Times News dealing with the feral cat.

The Stawell Times News article was headlined:

#### **FERAL CAT THE ‘PUMA’?**

Then came a photograph of the dead tabby cat with the lead paragraph to the story underneath.

A huge feral cat has been found dead near Roses Gap and has been examined as the source of “puma” stories in the Grampians.

The article then gave a physical description of the dead cat.

The dead animal was a tabby cat of a very large size and a tape measure indicated it was 86cm long from its muzzle to the tip of its very short tail.

It was described as twice the size of an ordinary domestic cat.

Then came the natural selection theory of tabby cat development in the wilds of Australia.

It is well known in naturalists' circles that when cats revert to the wild, succeeding generations grow to a much larger size than normal.

Interestingly, the Stawell newspaper article referred to the 'expert' group that had inspected the dead feral cat in situ. Included in this group of four were two men who were informants to the Deakin Puma Study – the Halls Gap field naturalist, Ellis Tucker and the Ararat Lands Department Inspector, Ron Howlett. In Howlett's detail report to me in 1981, based on his own file of big-cat sightings in his area of responsibility along the eastern Grampians, there was no reference to this Roses Gap feral cat.

On the basis of this Stawell Times News article, I contacted the editor of the newspaper. He was told that the dead feral cat was the size of a small puma. I then contacted Ian McCann who provided me with the name of the owner on whose property the cat had been found. I made arrangements to meet the property owner, John Kavanagh, at the location of the feral cat carcass.

I drove to the property at Heatherlie approximately 12 km north of Halls Gap along the eastern slopes of the Mount Difficult Range. There Kavanagh showed me the remains of the feral cat and informed me that a rabbit trapper had killed the cat after it had attacked him. He also reported that he had lost a significant number of lambs lately which was probably due to this animal.

I collected the decaying cat's carcass in a plastic bag and brought it back to Deakin University for a laboratory examination. Here it was confirmed that the cat was indeed 860mm long from nose-tip to tail-tip. Its tail measured 150mm. It was estimated that the cat had stood no more than 350mm high at the shoulders. When outstretched, the front paw-tip to hind paw-tip dimension was in the order of 1100mm.

The feral cat's skull was only slightly more robust than the Study Group's reference domestic cat skull, but was still small enough to fit in the palm of a man's hand. The skull was unmistakably that of a *Felis domesticus*. Similarly, the feral cat's leg bones were indistinguishable from those of the Study Group's reference cat specimen. Though the paws were too decayed to make a paw print, it was estimated that the paw print was within the parameters of the Deakin Puma Study's carnivore paw print checklist for identifying domestic cat prints: 35mm long and 40mm wide.





**Roses Gap Feral Domestic Cat Skull  
(actual size)**

**Assessment:** This close examination of the feral cat carcass showed the animal to be in the upper size range of the *Felis domesticus* population. The animal was a domestic cat in every detail and did not approximate in any of its physical dimensions to those expected in a big-cat species such as a puma – not even those expected in a juvenile puma.



**Puma Cub  
(Melbourne Zoo, October 1976)**

The feral cat question had been addressed by the Deakin Puma Study Group via the evidence made available at the time. The conclusion reached, recognising the limited sample size of the ‘in-the-field’ observations, and the one examined specimen, was that the feral cat explanation for big-cat sightings in the Grampians was implausible. Importantly, the Study Group concluded that the feral cat explanation could not

account for the Geranium Springs Scat 2 nor the Hamilton & Smith paw print casts 3 & 4.

## ***Conclusion***

The Deakin Puma Study Group's intensive search for big-cat artefacts through its bush-bashing tactic and the assessment of artefacts in the possession of eye-witnesses and others, brought to light a very small collection of material evidence: only twelve predator scats, nine paw print casts and two photographs of paw prints.

The Study Group's posture with this phase of the Study had been to give every opportunity for its null hypothesis to be refuted; that is, to disprove the hypothesis that the populations of large carnivores in the Grampians consist only of dogs, foxes and feral cats, and do not include introduced big-cats. The probability for refuting this null hypothesis was maximised by triangulating the on-the-ground searches with reported big-cat observation sites and suitable large carnivore habitat locations in the Grampians.

The outcome of this effort was twelve predator scats. Of these, only one, the Geranium Springs Scat 2, provided substantial evidence upon scientific analysis, involving both laboratory tests and expert North American opinion, supporting big-cat presence in the Grampians. Thus from 1,120 person-days of bush-bashing, one small piece of hard evidence was found that put at risk the Study Group's null hypothesis. This Geranium Springs Scat 2 was the only possible evidence found by the Study's bush bashing teams with the possibility of refuting the Study's null hypothesis associated with the third tactic of the Study's research strategy.

Of the eleven paw print casts and photographs, two print casts were deemed by the Study Group not to have been made from the paw tracks of feral cats, foxes or medium-to-large dogs, but likely to have been made from paw tracks of big-cats. This conclusion of the Study Group was supported by expert scientific opinion from North America. This conclusion of the Study Group, supported independently by a respected researcher in the field of puma biological studies, that the Hamilton & Smith Print Casts 3 & 4 were consistent with big-cat paw prints, was taken as further hard evidence likely to put at risk the Deakin Study's null hypothesis that there are no big-cats amongst the large carnivore populations in the Grampians of Western Victoria.

The search for hard evidence by the Deakin Puma Study Group from October 1976 till September 1977 had turned up two significant artefacts produced by large carnivores that pointed directly to the presence of big-cats in the Grampians. These two pieces of hard evidence supporting big-cat presence were also linked to two of the four locations in the north west of the Grampians deemed by Deakin Puma Study

Group as amongst those providing suitable habitats for large carnivores: Geranium Springs and Mt. Bepcha.

The third tactic of the Deakin Puma Study's research strategy had resulted in two separate sets of artefacts linked to the possible presence of big-cats in the Grampians. These artefacts, as plausible evidence of big-cat presence, will now be analysed in conjunction with the outcomes of research tactics one and two presented earlier in Chapters 4 and 5. This final analysis and an integrated interpretation of the combined evidence are developed in the next and final chapter.

## CHAPTER 7

### **Puma Presence: Beyond Reasonable Doubt?**

#### ***Drawing Conclusions from the Study: the Test of Plausibility***

The categories of second-order evidentiary artefacts related to large carnivore activity that the Deakin Puma Study accumulated from the Grampians were of the following types:

- eye witness accounts of pumas or big cats;
- plaster casts of large carnivore paw prints;
- carnivore scats;
- bones of large predator kills; and
- suitable large carnivore habitats.

In addition to this second-order physical evidence, we were able to access a considerable amount of historical information on the activities of USAF units and personnel stationed in the regions close by the Grampians in early 1942. This information constituted the historical underpinning to the Deakin Puma Study.

At this stage of the discussion I will put the historical evidence to one side and focus on the physical evidence. There are two separate sets of artefacts collected during the Study that have emerged from the critical analysis presented in the previous chapter as likely big-cat artefacts and therefore as second-order physical evidence supporting ‘big-cat presence’. These artefacts are the Geranium Springs Scat 2 and the Hamilton & Smith print casts 3 & 4.

Now in order to draw conclusions from this second-order physical evidence, we need to return to the Test of Plausibility introduced in the final section of Chapter 2. Applying this test of plausibility to each of these artefacts generates the outcomes listed in the tables below.

## Geranium Springs Scat 2

The following outcome emerges for this large carnivore scat when subjected to this plausibility test:

<b>Plausibility Test Steps</b>	<b>Response</b>	<b>Probability</b>	<b>Credibility re Big-Cat Presence</b>
Step 1: Could this artefact have been produced by an animal species accepted by authorities to be present in the Grampians National Park?	Yes. As a fox dog or wedge-tail eagle regurgitated pellet	Low to moderate	challenges credibility
Step 2: Could this artefact have been produced by an animal species accepted by authorities to be present in Australia but until now unknown in the Grampians National Park	Yes. Wedge-tail eagle regurgitated pellet	Low as size is well outside wedge-tail eagle pellet range	Potentially credible
Step 3; Could this artefact have been produced by an animal species accepted by authorities not to be present in the wild in Australia?	Yes, Felis concolor, a puma	High	Potentially credible
Step 4: Is this artefact supported in a corroborating sense by another potentially credible artefact?	Yes. High appraisal for habit suitability (Geranium Springs Valley). Abundant bones of large predator kills. Eye-witness accounts of a puma nearby.	To be assessed later	Heightened probability of big cat presence though seriously challenged by Step 1 outcome

The Geranium Springs Scat 2 struggles to survive this plausibility test with a strong probability rating that the complex of artefacts – the scat and its linked corroborating second-order items of evidence – point to the presence of big cats in the Grampians.

Since this Report was released in 2001, I have become aware of field research undertaken by Chris Davey, Wildlife, Pests and Diseases Program, CSIRO Sustainable Ecosystems. Davey's research study focused on wedge-tail eagle populations at Burrondong, near Dubbo in New South Wales. Of relevance to the Deakin Puma Study was his finding that wedge-tail eagles will eat foxes.

The following are extracts from an interview Davey gave on Earthbeat, Radio National on 21 June 2003. In response to a question about the wedge-tail eagle population's diet, Davey's reply included:

By far the majority of the diet is still rabbit, but other components of the diet consist of macropods, small, at-heel grey kangaroos, things like pigs, young pigs, cats, foxes, all turn up in the diet.

His answer to how he went about studying what the eagles ate included:

The best way of doing that is .... to look at the regurgitated pellets that the birds produce. So every now and again the bone material, fur material and so on is stored, and then it's regurgitated, and then if you go up into the nests, or go under the nests, then you can collect all these items up and by methodically going through these pellets, you can get a very good idea of what's in the prey.

You could easily find a bit of cat, and a bit of fox and a bit of pig all in one pellet.

He concluded his interview by claiming that the wedge-tail eagle is Australia's top predator:

Well I believe that it's Australia's top predator because really nothing preys on the wedge-tailed eagle. If you look at the material from nests, and if you have a look in these pellets that we have been talking about, you'll find fox cubs, you'll find cats, you'll find goannas, you'll find all the other major predators in the area.

In response to an email from me in which I included Hans Brunner's description of the Geranium Springs Scat 2, Chris Davey replied as follows:

From your description I agree with Hans Brunner that a 60mm long bone is large to be found in an eagle pellet but I would not think it impossible. The length of the pellet is certainly OK for an eagle but 50mm wide is much wider than anything I have seen. For an 80mm long pellet I would expect it to be

about 30mm wide but I cannot think what else would produce such a long pellet (9 September 2003).

This additional information, when added to the Plausibility Test for the Geranium Springs Scat 2 on page 124 above, weakens the probability that this artefact is evidence of big-cat presence in the Grampians. Taking Davey's research into account, along with his comments on the dimensions of the Geranium Springs Scat 2, it seems to me that, on balance, this unusual artefact is from a wedge-tailed eagle. These birds are common in the Grampians Ranges and in the surrounding farmlands. Based on this new information, it is stretching the bounds of credibility to reject the explanation that this artefact is in fact an outsized eagle pellet in favour of the alternative explanation that it is a scat from a big-cat.

As this scat is now seen as linked to other corroborating physical evidence, I will refer to the whole complex of corroborating artefacts as the Geranium Springs Complex.

#### **Hamilton & Smith Print Casts 3 & 4**

Once again when I ask each question of the test of plausibility in turn for these two associated large carnivore print casts the following pattern emerges:

<b>Plausibility Test Steps</b>	<b>Response</b>	<b>Probability</b>	<b>Credibility re Big-Cat Presence</b>
Step 1: Could this artefact have been produced by an animal species accepted by authorities to be present in the Grampians National Park?	No.	Not applicable	Potentially credible
Step 2: Could this artefact have been produced by an animal species accepted by authorities to be present in Australia but until now unknown in the Grampians National Park	No.	Not applicable	Potentially credible
Step 3; Could this artefact have been produced by an animal species accepted by authorities not to be present in the wild in Australia?	Yes, <i>Felis concolor</i> , a puma	High	Potentially credible

<p>Step 4:</p> <p>Is this artefact supported in a corroborating sense by another potentially credible artefact?</p>	<p>Yes.</p> <p>High appraisal for nearby habit suitability (Mt. Bepcha).</p> <p>Abundant bones of large predator kills.</p> <p>Eye-witness accounts of a puma with direct association between the two print casts &amp; the observed animal.</p>	<p>To be assessed later</p>	<p>Heightened probability of big cat presence</p>
---	--	-----------------------------	---

The Hamilton & Smith print casts 3 & 4 survive this plausibility test with a strong probability rating that the complex of artefacts – the paw prints and the associated corroborating second-order items of evidence –point to the presence of big cats in the Grampians. But in this case I am of the opinion that the corroborating evidence is even stronger than is the case for the Geranium Springs Scat 2. Why? For two reasons: firstly, because the observation of the big-cat like animal by the two eye-witnesses was judged by the Deakin Study Group as one of the four highest ranked puma narratives (refer to Chapter 5); and secondly, the paw prints from which the two casts were made were unequivocally connected to the observed animal by its observers, David Hamilton and Wally Smith.

I will refer to the complex of corroborating artefacts including Hamilton & Smith print casts 3 & 4 as the Mt. Bepcha Complex.

### ***Coming to a Final Assessment***

What must be borne in mind more sharply now than in the earlier discussions is the caveat that accompanied the above test of plausibility when I introduced it in Chapter 2. This caveat is:

Tests relying on second-order evidence corroborated by other evidence of the same order can build an increasingly plausible case from physical evidence collected in the field. But in the end, with



the limitations of second order evidence of this type, the issue will always be one of deciding between competing probabilities. The probability of big cat presence in the Grampians from tests based on this order of evidence, however high, will never put the matter completely beyond doubt. The highest level of credibility this test of plausibility can be expected to achieve is that of ‘beyond reasonable doubt’.

We have now come down to two credible sets of physical data pointing to big-cat presence in the Grampians plus four puma narratives from eye witnesses, all assessed in Chapter 5 as being highly believable. The mass of data collected by the Deakin Puma Study Group has been crystallised down to these few evidentiary elements. We have ended up with five rigorously tested ‘puma events’ (five because one of the four highly believable sightings is within the Mt. Bepcha Complex of artefacts). These ‘puma events’ surviving our full efforts to demolish their veracity are:

- the Geranium Springs Complex of artefacts centred on the Geranium Springs Scat 2;
- the Mt Bepcha Complex of artefacts centred on the Hamilton & Smith Print Casts 3 & 4, and including the Hamilton & Smith puma narrative;
- the Ryan & Ryan puma narrative;
- the Middleton & Henderson puma narrative; and
- the Hiatt, Schubert & Clark narrative.

We can now ask this direct question:

*Do any of these five ‘puma events’ compel a reasonable sceptic to accept that the probability of big-cat presence in the Grampians is beyond reasonable doubt?*

Compel is a strong word, stronger than ‘persuade’. This final assessment can not be made only through persuasion. The evidence must be more than persuasive; it must be compelling. I am in no doubt at this point in the discussion that these five ‘puma events’ are already persuasive of big-cat presence to any reasonable person. But the issue now for us is whether these events are compelling?

In order to allow you to reach an answer yourself to this question of final assessment, I will take you through these crystallised events from the perspective of an unbending sceptic of the Grampians Puma Legend.

#### **The Four High Believability Ranked Puma Narratives**

An unbending sceptic must account for the fact that many people have claimed to have seen big cats in the Grampians. The Deakin Puma Study uncovered 122 reported eye witnesses by the end of 1981. These observed ‘big-cats’ came in a range

of colours - black or shades of tawny-brown, but more commonly black. If these eye witnesses have mistaken some other animal or animals for big-cats, then what was being sighted in the Grampians?

From the perspective of an unbending sceptic, the most plausible straight forward answer to this question is that these people were seeing large dogs or wallabies and genuinely mistaking these for big-cats. I have dismissed the over-sized feral domestic cat theory in the previous chapter as frankly implausible as the source of an explanation for these large animal sightings. The Deakin Group interviewed a small number of eye-witnesses who, on reflection, had changed their identification from big-cat to big dog, but never from a big-cat to a big feral domestic cat.

But what of the bulk of the remaining eye-witnesses? Well, following the logic of the above paragraph, they must have seen wallabies and thought they were seeing big-cats. If these eye-witnesses were not really seeing big-cats then I believe this is the only other possible explanation, other than accusing each eye-witness of lying.

Wallabies, when moving quickly have a hopping posture that is unlike that of the larger kangaroos. Wallabies adopt a movement through the scrub cover of the Australian bush that can be accurately described as a 'hopping-scurry'. This is still a two legged hopping gait with the forelimbs held off the ground. But the body is held more horizontally than vertically with the head on a similar plane as that of the hindquarters. The tail does not swing with an obvious up-and-down counter-balancing action as is the case with the larger up-right hopping kangaroos but is carried in a more horizontal and gently looped posture.

When wallabies are disturbed and take fright, they take off in a dash typically in a direct line. These animals tend to move along pathways through the scrub and seem to be very tightly focused about where they are going. Deviation from their chosen path is not common and I have seen wallabies hop/scurry directly under the front wheels of vehicles travelling at relatively slow speeds along bush tracks. Consequently, a wallaby can often appear suddenly in front of a car travelling through the Australian bush on an isolated road or track and in a second or two cross the road without deviating and disappear just as quickly in the scrub on the opposite side of the road. The length of time the car occupants have to observe the wallaby depends on how observant they are in the first place, on where they were looking when the animal appeared in front of them, and how far the wallaby was in front of the car.

When the sighting is brief, people usually see the wallaby just before it disappears into the bush after crossing the road. And what then makes the most lasting detailed impression on the eye-witnesses is the solid hind quarters and the long thick and curved tail of the wallaby. For travellers in the Grampians bush acquainted with the Puma Legend, this sight of the backside of a fast disappearing wallaby could be mistaken for a puma. "What was that"? "Never seen anything like that before". "Maybe it was that puma"!

This is not as crazy as it might sound. The heavy hindquarters and long thick tail of a puma are, superficially, not unlike the back end of a hopping/scurrying wallaby presented to the observers for only a fleeting moment.

As for the different colours of these supposed puma sightings, we can account for this difference when we remember that there are two wallaby species in the Grampians. The more common species is the red-necked wallaby that is light tawny-brown. The rarer wallaby in the Grampians is the more solidly built black wallaby. Consequently, travellers mistaking red-necked wallabies for pumas claim to have seen tawny-brown pumas and travellers claiming to have seen black pumas are really seeing black wallabies, according to this ‘mistaken wallaby’ explanation for eye witness claims of having sighted pumas in the Grampians.

But you ask, why are most of the reported puma sightings of black ones? There are two connected reasons. Firstly, being rarer than the red-necked wallabies, most people travelling around the Grampians have never seen a black wallaby before and are, therefore, more likely to mistake this animal, unknown to them, with a puma. Most people acquainted with the Grampians will have seen red-necked wallabies before and, therefore, will be less likely to make a mistaken identity. And the second reason is that being more solidly built than the red-necked wallaby, the black wallabies hind quarters and solid tail of even thickness may be a better approximation to an imagined view of the hindquarters and tail of a fast disappearing puma.

I am of the opinion that a percentage of the puma narratives collected by the Deakin Study Group can be accounted for by this ‘mistaken wallaby’ explanation. Where a sighting has been a long way up the track or road from the observers, when the sighting has involved a large animal dashing directly across the road, when the sighting has only been for a few seconds, or when the eye-witness was alone, then the ‘mistaken wallaby’ explanation becomes all the more plausible.

You will remember the discussion on the ‘established myth conjecture’ and the ‘abandoned mascot conjecture’ introduced in the conclusion to Chapter 4. The ‘mistaken wallaby’ explanation hypothesis developed so far in this concluding chapter for eye-witness narratives of their reported ‘big-cat events’ clearly supports the established myth conjecture. Here we have a reasonable and plausible explanation for what people are actually seeing in the Grampians bush drawn from what we know to be occurrences in the Australian bush that fall completely within accepted normality. We also have an explanation that aligns, without implausible extrapolation, the key features of a wallaby observation with those expected of a puma under similar circumstances by a naïve observer of wildlife. And we have within the explanation the interplay between the myth of pumas in the Grampians Mountains and the interpretation of the observed animal after-the-event. The influence of the myth on the conclusion drawn by the observer in turn reinforces the myth itself and adds another ‘puma sighting’ to the evidentiary base upon which the Grampians Puma Legend is maintained and reproduced.

But how would you respond if I were to claim now that this ‘mistaken wallaby’ explanation accounts for the four most believable puma narratives distilled from thirty nine collected during the field work phase of the Deakin Puma Study? You might want to re-read these narratives in Chapter 5 before you answer. Are you convinced that these three forestry workers, two lands department inspectors, two farm workers and two duck shooters actually saw, all up, four black wallabies and one red-necked wallaby, and then in every case mistook these for big-cats?

If you are not convinced that the ‘mistaken wallaby’ explanation adequately accounts for the any or all of these four puma narratives, then how compelling is the alternative explanation, that these people, all with considerable bush experience, did not make a mistake but actually saw big-cats in the Grampians.

My personal view is that this alternative ‘big-cat’ explanation is much more persuasive than the ‘mistaken wallaby’ explanation. For me, these four puma narratives are highly persuasive evidence of big-cat presence in the Grampians. I cannot bring myself to say that they constitute compelling evidence. But then, you might.

#### **Geranium Springs Complex**

Let me re-cap. Geranium Springs Valley is surrounded on three sides by steep rising slopes abutting the sheer western rocky escarpment wall of the Asses Ears Range, just across the Victoria Gap from the Billywing Range. The slopes, in parts, are a 300m climb before the escarpment wall is reached. The mouth of the Valley opens westwards onto low uncleared crown land which connects to the reserved forests surrounding Cherrypool, not 7 km away. This flat country is traversed by the Glenelg River and a water filled channel from the Moora Moora Reservoir. Cleared farmlands are about 1.5km away at the closest point. A bush road, the Asses Ears Road passes by the mouth of the Valley at right angles to the Valley itself.

There are four separate but potentially corroborating second-order items of evidence now to be considered. These are:

- The Valley and its surrounding country meet the requirements for a suitable puma habitat, as described and confirmed by a USA authority on puma biology.
- Along the floor of the Geranium Springs Valley, a number of large animal carcasses were located – a deer, several emus, including the ‘notched’ emu pelvis, and a grey kangaroo. Four sheep carcasses were found on ledges 300m above the Valley floor where the rising slope meets the escarpment wall.
- A puma sighting was reported by a local man and his young daughter on the Asses Ears Road at the opening of the Valley to the low country – the Harrison & Harrison narrative, and finally,
- a predator scat was found on a rock along the escarpment directly above the Valley containing fur and 60mm long sheared bones derived from consuming

sheep and fox meat, and judged by a USA puma authority as being consistent with puma faeces.

How would an unbending sceptic of the Grampians Puma Legend account for this collection of second-order evidence for big-cat presence? A sceptic could say that it is more reasonable to treat these items of second-order evidence as compelling evidence of the presence of large dogs and wedge-tailed eagles, not big-cats. The Geranium Springs Valley and the surrounding uplands and lowlands clearly provide a suitable generalised habitat for any large carnivore. Large wild dogs would be just as happy in this environment as pumas, and we know beyond any doubt at all that large dog populations exist in the Grampians. Therefore, in the first instance, it is more plausible to attribute the kills to large dogs and not to any other possible large carnivore.

Although not seen before in quite the form, size and contents of the Geranium Springs Scat 2, dogs do from time to time vomit up undigested fur balls. Irrespective of the argument developed to the contrary in Chapter 6, an unbending sceptic could still assert that the Geranium Springs Scat 2 was a regurgitated pellet from a large dog or, for that matter, from a wedge-tail eagle.

The research of Chris Davey, accessed in 2003, indicates that, although it is of an unusual size, there is no need to look for a plausible ‘exotic’ alternative for the origin of the Geranium Springs Scat 2. The conclusion to be drawn, based on Davey’s research and the order of corroborating evidence available surrounding the Geranium Springs locality, is that the ‘scat’ is not a scat at all, but a regurgitated pellet of a wedge-tailed eagle deposited on a rock overlooking the Geranium Springs Valley.

The Geranium Springs black puma sighting by Michael Harrison and his young daughter, Donna, was given a low believability ranking by the Deakin Study Group, so I cannot logically make a strong corroborating claim based on this puma narrative.

What is your response to this unbending sceptic’s alignment of the second-order evidence to support the argument that what was found in and around Geranium Springs Valley by the Deakin Study Group was only evidence of the activities of large dogs and wedge-tailed eagles resident in the Grampians? You might want to revisit the detailed descriptions and analyses of each specific item in Chapters 5 and 6 before you reach a decision.

My personal response is that I agree with the sceptic’s comments on the Geranium Springs Valley habitat as being probably just as appropriate for supporting any large carnivore – big-cat or large dog. This item of evidence is certainly in the equivocal category.

Large dogs do hunt and kill each of the prey species identified from the physical remains left in the Valley. There are however two nagging doubts. The first is the deep notch in the upper surface of the adult emu’s pelvis. Could a dog inflict such a

wound? Would a dog be heavy enough and have canine teeth robust and long enough to penetrate this deeply into the muscle and fat along an emu's back to then penetrate another 25mm into the bone? I think this is unlikely, but then the notch could have been inflicted by some other form of blow to the bird's pelvis. It could have come from the grazing trajectory of a large calibre bullet from an illegal hunter, for example.

The second nagging doubt comes from the location of the sheep carcasses high up the Valley sides on ledges. How did they get there? Were they killed lower down the slope and then dragged up there by a large predator for a secluded meal? If so, then the predator was probably not a dog. But they could have wandered up there by themselves, or been chased up there by dogs and then killed? Maybe they just wandered up the 300m steep slope, got stuck up there against the escarpment wall and then perished from lack of water. I have my doubts that this is what occurred on at least four separate occasions – four being the number of sheep kills found by the Deakin Puma Study Group on separate high rocky ledges above the Valley. But even so, although this kill evidence is intriguing, it can be explained in terms of large dog activity or other likely events. The hunting and eating habits of big-cats could readily explain the presence and locations of, and damage to these large prey animal remains, but, as just shown, this 'kill' evidence is also most certainly in the equivocal category.

What about the Harrison & Harrison big-cat sighting? Even though the description given by the two eye-witnesses is within the physical population parameters established by the Deakin Study from the accumulated data drawn from the numerous other reported big-cat sightings in the Grampians, and, more importantly, comparable with the Study's highly ranked puma narratives, this puma observation event was still ranked with a low believability by the core team of the Study. So, even though the animal was reported as being Alsatian dog-size, but wider than a dog across the back and shoulders with a solid neck and thick legs, with a long curved tail of even thickness along its length, and was 'running like a bear', I am forced by the believability test applied to the eye-witness evidence within the Deakin Puma Study to accept that this sighting is not credible, and that the description given by these two eye witnesses must apply to a black wallaby or a large black dog and not to a black big-cat.

Finally we come to the Geranium Valley Scat 2. What do you think of the unbending sceptic's acceptance of the Monash University biologists' assessment that this was simply a most unusual regurgitated fox or dog pellet and Chris Davey's view that it is an unusually large wedge-tailed eagle regurgitated pellet? Well, my opinion of this artefact is that without any compelling evidence to the contrary the expert Australian biologists' opinions must be accepted as plausible. If there is no other independent and compelling evidence that big-cats of the puma variety are resident in the Grampians, why would you want to invent them simply to argue that this scat-like artefact was a piece of puma faeces? Strange as the Geranium Springs Scat 2 may be in terms of its size, appearance and contents from the known intestinal products of dogs and eagles, and consistent though the Geranium Springs Scat 2 may be to the size, appearance and general contents of normal faeces from pumas, without other

compelling evidence to support the presence of big-cats within the vicinity of Geranium Springs, the balance of probability must shift towards the assessment that this artefact is a dog or eagle pellet.

By itself, and now, through our unbending sceptic's arguments, unsupported by the other second-order evidence making up the Geranium Springs Complex, my logical assessment, contrary to my 'gut feeling', is that either a large dog or a wedge-tailed eagle with atypical feeding habits regurgitated this 'scat' as a fur and bone pellet, an event so rare that none of the Australian biologists nor Hans Brunner of the Keith Turnbull Research Institute, an authority on Australian mammalian carnivore species' scats, had ever seen another scat like it in the Australian bush. I hasten to say that I would be prepared to re-visit this assessment of mine on the Geranium Springs Scat 2 if I believed there was compelling hard evidence from another source supporting the case for the presence of big-cats in the Grampians

My personal view is that the Geranium Springs Complex is, as a stand-alone assemblage of evidence, at best persuasive of big-cat presence but at a level below that of the four puma narratives assessed earlier.

What about you? What was your judgement on the Geranium Springs Complex of second-order evidence as being persuasive or compelling evidence for the presence of big-cats in the Grampians?

#### **Mt. Bepcha Complex**

Finally we have come to the Mt. Bepcha Complex of potentially corroborating second-order evidence. As with the Geranium Springs Valley analysis above I will begin by quickly bringing the location clearly back into our minds.

Mt Bepcha is an outpost of the western Ranges of the Grampians situated in the Glenisla Valley through which the dammed Glenelg River has formed the extensive Rocklands Reservoir. Mt. Bepcha is approximately 10km out across open farmland and forest from the Billywing Range and Red Rock escarpment of the Grampians Mountains. The main highway between Cavendish and Horsham passes directly across this open country. The Mount is about 1.5km from the nearest point on the shoreline of Rocklands Reservoir, a source of permanent water. Mount Bepcha itself is surrounded by Reserved Forest country which provides a secluded corridor all the way back to the Western Ranges of the Grampians. Mt. Bepcha also has a number of rocky shelters on its slopes.

The two separate and two connected second-order items of evidence the Deakin Study Group was able to assemble for the Mt. Bepcha location were:

- The Mount and its surrounding country meet the requirements for a suitable puma habitat, as described and confirmed by a USA authority on puma biology.

- At a large secluded rock shelter on the Mount, a considerable number of large and small animal bones were located. The species contributing to this collection of bones ranged in size from cattle to freshwater tortoises.
- A puma sighting was reported by two local men, both experienced duck shooters and one also a farmer, with the observed animal escaping from the water's edge of Rocklands Reservoir back into the trees surrounding Mt. Bepcha.
- Two large carnivore paw print casts securely linked to the observed big-cat, and judged by a USA puma authority as being consistent with puma paw tracks.

Now our unbending sceptic could be expected to attempt to dismiss these locality-bound items of second-order evidence using the same argument applied above with the evidentiary items of the Geranium Springs Complex. That is, it is more reasonable to treat these items of second-order evidence as compelling evidence for the presence of large dogs than to argue that these items are evidence for big-cat activity. This approach when applied to the claim that the Mt. Bepcha habitat is highly appropriate in meeting the needs of big-cats yields the same outcome as for the Geranium Springs Valley habitat. What is supposed to be good for big-cats is as equally good for large wild dogs. I agree. Mt. Bepcha and the surrounding countryside provide a suitable generalised habitat for any large carnivore, dogs or cats.

The sceptic can then move to dismiss the large array of kill remains in the vicinity of shelters on Mt. Bepcha as being only further evidence of the activities of known large carnivores in the Grampians, that is, wild dogs. Although some of the bones are from cattle, dogs could have scavenged these from dead beasts and then brought them back to the Mt. Bepcha shelters. With these explanations for the first two items of second-order evidence from the Mt. Bepcha Complex, there is no unequivocal evidence pointing to the presence of big-cats as these same items can also be reasonably interpreted as pointing to the presence of large wild dogs.

This then leaves two remaining items of second-order evidence from the Mt. Bepcha Complex. What can our unbending sceptic bring to bear with these? Well, the puma observation event contributing to this Complex is the Hamilton & Smith observation which was included by the Deakin Puma Study amongst its four high believability ranked puma narratives. In addition, this Hamilton & Smith puma narrative based on this puma observation event at Rocklands Reservoir has already been assessed by me at the start of this 'Final Assessment' section as being highly persuasive evidence that these men actually did sight a big-cat and not some other animal known to exist in the Grampians, such as wallabies, feral domestic cats, foxes or large dogs. In the face of my assessment, our sceptic can only claim that the two men either mistook a red-necked wallaby or a large tawny dog for a big-cat, or alternatively, they were both lying.

The last item of second-order evidence associated with the Mt. Bepcha Complex consists of the Hamilton & Smith print casts 3 & 4. Remember the print casts 1 & 2 were rejected by the Deakin Puma Study Group as representing dog paw prints,



probably those of a duck shooter's retriever. We can be reasonably certain that print casts 3 & 4 are from the single animal sighted on the shore of Rocklands Reservoir, as these were taken from the paw prints left by the observed big-cat and deliberately marked with twigs in the mud by David Hamilton and Wally Smith immediately after the animal had departed the scene.

Both print casts were assessed by the Deakin Study Group as being those of a big-cat and not those of a dog. Photographs of one of the pair of print casts, cast 3, was examined by a North American puma authority, Dr. Maurice Hornocker. He agreed with the Deakin assessment.

What might be the response from our unbending sceptic to this analysis of the Hamilton & Smith paw print casts 3 & 4. There are two possible responses that come to my mind. The first sceptical response is that the Deakin Study Group, together with Dr. Hornocker, are just plain wrong in their conclusion based on their careful analysis of the print casts. The second response of our sceptic can only be that David Hamilton and Wally Smith have perpetrated an elaborate hoax on the people of Hamilton and beyond, and that the Deakin Study Group was caught up in the deception.

Now I cannot do much about the first response. We could be wrong; that is always a possibility. But there must be a reasonable refutation of our conclusion based on the same data. If you are so inclined, I leave that up to you now that all of the data is before you.

The second response, however, does require a defence from me. The Deakin Study Group experienced print cast hoaxes and fabrications during its work in the field between 1976 and 1977. There were two of these, and both have been discussed in the previous Chapter. Could the Hamilton & Smith print casts 3 & 4 also be fabrications? I will address this question in the same manner as I have approached all other questions of data assessment in this account of the Deakin Puma Study by considering the probability that these two local men set out to trick their community members, possibly to gain some attention through local newspaper publicity.

In order for these men to fabricate a big-cat paw print cast I believe it is reasonable to expect that they would have to know what a big-cat paw print should look like in the first place. If they did not know this essential piece of information, then it is most unlikely that they would have been able to create a facsimile of a big-cat paw print good enough to fool the world's leading authority on pumas in their native state, Dr. Hornocker.

We have seen one fabrication of a puma paw print made by someone without any knowledge of what one should look like; the print cast in Paddy Hynes' possession. The mismatch between this fantasy of a puma print and the real thing was so great that we had no difficulty recognising it as a fake. The Wallaby Rocks bush-bashing team's puma paw print fabrication was a better job as they had a puma paw print

photograph to work from. But even this fake print cast, although convincing at first glance in poor light, was clearly a fabrication on closer, more detailed analysis.

Is there any evidence that Hamilton and Smith knew what a puma's paw print should look like? There is only clear evidence to the contrary. These men, like so many other locals in the Grampians region, could not tell the difference between big-cat prints and dog prints. They were so uninformed about the subtle differences between the two classes of paw prints that they rejected the big-cat prints in favour of dog prints taken from the same location a week after the 'puma observation event'. Hamilton relegated the plaster casts of the paw prints he and Smith had marked with twigs immediately after observing a big-cat drinking at the water's edge, prints securely linked to the observed animal itself, to the back of his storage cupboard in his home while he had himself photographed for public display holding casts of dog paw prints. Is this the action of a man who is intent on perpetrating a hoax onto his own community, a community in which puma eye-witnesses are viewed with cynicism by many?

This returns me to my original question when, in 1977, I saw the photograph of David Hamilton holding up dog print casts while being reported in the Hamilton Spectator as having recently seen a puma. Why was David risking public ridicule? I now know the answer – because he did not know the difference between a dog print and the print of a big-cat.

The best hard evidence for making a strong case supporting the presence of big-cats in the Grampians, evidence linked directly to a high believability ranked big-cat observation narrative, evidence that emerged from the Deakin Puma Study identification checklist as belonging to a big-cat, and evidence that was assessed by a leading puma expert as being consistent with puma tracks, was almost lost from public and scientific scrutiny for ever, in the back of a cupboard in a duck shooter's home in Hamilton. This is not the actions of a man intending to deceive; quite the contrary. These very behaviours of David Hamilton diminish the probability that he and his colleague, Wally Smith, were puma print cast fabricators and imaginative liars. I accept that these behaviours diminish this probability to well below the level required in order to maintain the deception hypothesis as a reasonable possible alternative explanation of the events surrounding print casts 3 & 4.

Therefore, our unbending sceptic's second argument that we have been taken in by an elaborate hoax is, I believe, unsustainable. I don't know about you, but I find this final item of second-order evidence from the Mt. Bepcha Complex, together with the associated and securely connected corroborating eye-witness puma narrative, more than persuasive of big-cat presence in the Grampians. For me, this is compelling evidence.

### ***Beyond Reasonable Doubt?***

There is now for me a cascading effect through the earlier assessments of the evidence included in the Geranium Springs Complex, the remaining items of evidence within the Mt. Bepcha Complex and the three remaining high-believability ranked puma narratives (remembering that one of the original four narratives is the Hamilton & Smith narrative). The compelling evidence supporting the presence of a big-cat in the vicinity of Mt. Bepcha in March 1976, unsettles the sceptic's argument that all of the other evidentiary items of carnivore activities were only dog-related. Is the Geranium Springs Scat 2 now so surely a regurgitated dog pellet? I think not. Now the alternative 'big-cat scat' assessment of this artefact takes on a heightened probability and a new level of credibility. One item of compelling evidence squarely pointing to the existence of a big-cat in the Grampians immediately raises the credibility of the puma narratives that survived the Deakin Study Group's best efforts to dismiss as mistaken identity observations. These puma narratives, ranked as highly believable through a checklist of circumstantial and observation context-related factors, are now even more difficult to dismiss as anything other than what was being claimed by the experienced 'bush-wise' observers in the first place – big-cats of the puma kind.

So, my argument is that the items of compelling evidence from within the Mt. Bepcha Complex force us to re-appraise the other Deakin Puma Study evidence considered plausible but not persuasive of big-cat presence. And so, from this cascade of re-appraisals, a stronger and more comprehensive case in support of the existence of a population of big-cats in the Grampians can be built up.

For example, the compelling evidence that it was a big-cat that was seen by David Hamilton and Wally Smith in March 1976 drinking at the water's edge of Rocklands Reservoir before escaping in the direction of Mt. Bepcha about 2 km away, puts a different light on the rock shelters up on the Mount and the array of prey species bones scattered there. This material can now be interpreted as probable evidence of an extended occupation of the shelters by an eclectic and opportunistic predator such as a puma.

Similarly, if there is now a compelling case for a big-cat occupying the area around Mt. Bepcha, then it becomes not unreasonable to expect, given the size of puma territories and the mobility of big-cats, that these animals are also elsewhere in the Grampians, including the Geranium Springs Valley area. This Valley is only 14km from Mt. Bepcha, not a significant distance for animals that are known to travel over 40km in a night in their native country. On this reasoning, the judgement of Maurice Hornocker that Geranium Springs Scat 2 was consistent with the scats he has analysed from pumas in the wilderness of Idaho, USA has greater purchase in the debate over whether this intestinal product is a dog pellet or a big-cat scat.

Suddenly, the big-cat faecal assessment for the Geranium Springs artefact becomes less contrived and more plausible. This re-focusing on the big-cat scat explanation for Geranium Springs Scat 2 also explains why Hans Brunner had never seen anything

like it before and why the Australian biologists found its size and contents surprising. It also raises the possibility that some of the kill remains in the Valley itself are further evidence of big-cat occupation over time. One could now more confidently propose that the 25mm deep notch into the back of the emu pelvis bone found in the Valley may have been inflicted by a canine tooth belonging to a heavy and powerful adult puma. Puma canines are known to be up to 40mm long. The puma sighting by Michael Harrison and his daughter takes on an enhanced credibility. Maybe Donna's vivid description that the big-cat 'ran like a bear' is reasonable language for a young child when describing her observation of a heavily built, loose muscled, loping big-cat moving directly away and just in front of her.

What effect does the compelling evidence that at least one big-cat exists in the Grampians have on our re-reading of the eye-witness puma narratives included in Chapter 5? I will leave you to re-visit these and come to your own answer to this question.

Let me say at this point that I am of the personal view that the Deakin Study Group did acquire the two items of evidence that unlocked the mystery of the Grampians Puma Legend. These were the Hamilton & Smith puma narrative and its corroborating paw print casts 3 & 4. These two key elements of the Mt. Bepcha Complex, together with the subsequent re-positioning effect that these elements then project onto the other elements of the Mt. Bepcha Complex, those of the Geranium Springs Complex, and the remaining three high believability eye-witness puma narratives, do, in my opinion, compel a reasonable sceptic to accept that the probability of big-cat presence in the Grampians is beyond reasonable doubt.

As I stated earlier in several places, the probability of big cat presence, however high, will never put the question completely beyond doubt based on the order of evidence being analysed here. However, I believe the arguments advanced in this Chapter, building upon the rigorous analyses and conservative assessments in Chapters 5 and 6 of the data collected by the Deakin Puma Study Group, support a level of credibility for the proposition that a big-cat population is established in the Grampians of south western Victoria that is 'beyond reasonable doubt'.

### ***Back to the American Airmen of 1942***

I concluded Chapter 4 of this book by drawing together the historical material on the activities of the USA military forces in late 1941 and early 1942 relevant to the Grampians Puma Legend into two opposing conjectures. I called these oppositional conjectures the 'established myth conjecture' and the 'abandoned mascot conjecture'. Now that I have concluded that the proposition that a big-cat population is established in the Grampians Mountains of Western Victoria can be accepted as 'beyond reasonable doubt', it is the 'abandoned mascot conjecture' that comes to the fore in my thinking about the issue of 'where did these exotic animals come from'?

Obviously we cannot make a direct continuous connection over the thirty four years separating the March 1976 Hamilton & Smith sighting of a big-cat in the Glenisla Valley of the western Grampians with the eye-witness accounts of pumas in the possession of American servicemen in March 1942, accounts which detail the release of these animals at Victoria Point and Cherrypool, 36km and 10km from Mt. Bepcha respectively. I find it intriguing though that thirty four years after the alleged release of an adult puma and her four cubs at Victoria Point, and of a single juvenile puma at Cherrypool, a compelling sighting of a tawny-coloured big-cat is reported from within an easy night's ramble, for a puma, from both supposed release points.

To my mind, the 'abandoned mascot conjecture' is a satisfying account of the probable events leading up to the importation of pumas into south western Victoria and south eastern South Australia in early 1942 through to the eventual release of these animals into the wilderness of the Grampians Mountains. It accounts for why USA Airmen would have pumas with them in the Philippines and Java in 1941. It provides a reasonable explanation for why these airmen would want to evacuate these animals southwards into Australia in early 1942. It explains how these animals may have arrived in Australia more-or-less undetected by coming in through the 'back door' via the circuitous air route from Java into Broome, then onto Perth, and eventually to Nhill at a time when Australians were in the grip of considerable uncertainty, heightened anxiety, and internal chaos with the collective gaze of the country focused tightly onto essential national survival operations under the ever present threat of enemy attack. It accounts for why these animals were not taken north into the war zones of northern Australia and the South West Pacific after March 1942. And it explains why, when the decision was made by departing USA military personnel to literally dump the pumas in the Australian bush, they chose the Grampians as the most suitable location.

Until a more evidence to the contrary becomes available, I am satisfied with a connection between the compelling evidence for a big-cat population in the Grampians and this 'abandoned mascot conjecture' for how these large carnivores got there in the first place. Maurice Hornocker concluded his June 1977 letter to me with these words:

It would be interesting to learn if this animal is a puma and how it got there.

From the discussion advanced through this book to this point, I would answer Dr. Hornocker as follows:

The animal is a big-cat, most probably a member of a resident small puma population in the Grampians originating from USA military mascots imported into south western Victoria on board USA Air Force bombers retreating from the Japanese military

advances into Java in March 1942, via Western Australia and across Southern Australia into Western Victoria.

## ***Conclusion***

The main conclusion of the Deakin Puma Study, from my perspective, is that there is sufficient evidence from a number of intersecting sources to affirm beyond reasonable doubt the presence of a big-cat population in Western Victoria. This population of big-cats most probably dates from March 1942 and had, as its original location, the Grampians Mountain Ranges. There is circumstantial and historical support for the conclusion that these big-cats are pumas, *Felis concolor* from North America.

We have then, I expect, the intriguing possibility alluded to at the end of Chapter 4 that elements of both the ‘established myth conjecture’ and the ‘abandoned mascot conjecture’ are at play in the communities of Western Victoria surrounding the Grampians Mountains. My conclusion is that the Grampians Puma Legend is being maintained and reproduced over time by mistaken, and possibly in a small number of cases, by fabricated reports of puma sightings. These reports, because of their lower levels of credibility as shown by this Study, support a culture of cynicism amongst a proportion of the rural population towards the Grampians Puma Legend and anyone claiming to have eyewitness support for its veracity. These cynics tend to present themselves as less gullible and hard nosed than the ‘true believers’.

But at the same time, I have concluded that on rare occasions, from amongst these hard-bitten cynics, an observation event does occur which actually does involve a big-cat. And also I have concluded that these rare big-cat sightings are most likely sightings of pumas. The puma sightings in this category of observations are much more difficult to dismiss as mistaken accounts or fabrications. But given the climate of cynicism in the surrounding rural communities and beyond, and the official line that any large cat sighting is that of an oversized feral cat, it will be difficult for many to accept this more complex interpretation of the data available to the Deakin Puma Study Group. This more complex interpretation is that many of the eye witness reports of pumas in the Grampians region are definitely mistaken and, in some cases, creations of the imagination, but amongst the total collection of reports there are a smaller number of actual big-cat sightings that are definitely not observations of enlarged feral cats but are, in all probability, sightings of pumas.

From this conclusion and interpretation based on the Deakin Puma Study data from 1976 to 1981, several predictions can be made that are in a form that can be tested over time by others interested in the Grampians Puma Legend.

Based on the conclusion I have drawn from the Deakin Puma Study of 1976 – 1977 with additional data collected up to 1981, I would expect that the Grampians puma colony would continue to grow in numbers. As such, young pumas will be forced by

their instinctive behaviours of territoriality and avoidance to spread beyond the Grampians and into new habitats suitable for meeting their needs. We know that these are extremely adaptable animals, so the main habitat requirement, as I see it, is access to game and seclusion. The country to the immediate north of the Grampians in the Little Desert out from Horsham and Dimboola and further north again into the Big Desert readily meets these requirements. These habitat requirements are also met along the Glenelg River country south of the Rocklands Reservoir right down to the coast at Bridgewater and Nelson.

The more expansive range of suitable habitat beyond the Grampians is, of course, to the east. The Grampians, in the topography of south eastern Australia, appear as a massive western outpost of the Great Dividing Range which reaches down the full length of the east coast of Australia across central Victoria to within 50km of the Grampians at Mt. Lang Ghiran. East of Mt. Lang Ghiran, fingers of forested high country connect to progressively higher, more rugged and more secluded ranges making up the Great Dividing Range of the Ballarat/Daylesford/Kyneton region of Central Victoria. Further east again are the even more secluded wilderness regions northeast of Melbourne and throughout Gippsland.

Given the known characteristics of pumas and the availability of suitable habitats, it is reasonable to predict, given the conclusion I have drawn from the Deakin Puma Study conducted in the second half of the 1970s, that from the 1980s on-wards there would be a progressive increase in the number of reported big-cat sightings in these southern, northern and eastern regions of Victoria, radiating out from the Grampians. As concluded from the Deakin Puma Study data, I anticipate that, in time, these sightings will become a mix of actual and mistaken big-cat observations with expectation that many of the mistaken observations are based on wallabies hopping-scurrying through the bush.

And further, this prediction would carry the caveat that these reported big-cat sightings will be of animals fitting completely within the physical population parameters determined by the Deakin Puma Study in 1976 - 1977. In particular, I expect there will be a high frequency of black big-cats sighted. And still further, I expect that the frequency of these reported big-cat sightings away from the Grampians will be highest in those areas of more concentrated human populations – the Central Victorian Region bounded by Ballarat, Castlemaine, Seymour and Sunbury, for example.

Accepting the 1942 release date for these animals in the Grampians, it took another 25 years before the frequency of big-cat sightings in the Grampians region reached a level sufficient to attract consistent media attention. Therefore it is not unexpected that it will now take another 25 years from the 1976-1977 period for sufficient big-cat numbers to build up in the Great Dividing Range to a population density required to generate sighting frequencies that begin to attract the next phase of media attention. It could take even longer given the more dispersed high country, but this factor needs to

be balanced against the increased likelihood of sightings given the more concentrated human population in this region of Victoria.

I now draw this narrative on the Grampians Puma Legend to a close. I do so with the unsettling feeling that just maybe Peter Jacobi on that bleak and dark night of Friday 10 September 1976 was in fact shining his spotlight directly into the eyes of a black puma crouching only a few metres away from where we were standing.

It has been a long journey since then attempting to cross those few metres to reach a satisfactory level of resolution over what could have been out there that early Spring night in the Victoria Valley heartland of the Grampians Mountains.



## Appendix

### *Deakin Participants in the Grampians Puma Study.*

#### Academic Staff:

John Henry Ian Robottom Barbara Wilson,	Peter Ferguson Richard Tinning Neville Millen	Wilf Carr Marisse Evans Peter Morris
---	---	--

#### Students and Graduates:

John Burt Robin Riley Peter Robinson Peter Koravaar Geoff Gray Butch Riddle Trevor White P O'Brien M. Howard G Downing J Gork Alison Scott Peter Angelevski B Kolivas B Barnard B Jackson G Denham Peter Nelson R Matijevic M Welton A Bernardi D Martin	Teresa O'Keefe Pauline Moloney Karn, en Jeffery Lyn Sinclair Laurie Bellett Matt Green Bill Haseman Tim Ludowyk Peter Jacobi John Powell S Parker Ed Hoyer Phil Payne R Williams D Martin Ann Prendergast Nola Oliver Sue Murrell Andrew Priestly T Walsh T Armstrong J Cole	Jan Little G Wilmot Danny Davis Debbie Read Ingrid Kvant Barbara Cook Denise Simons M Fraser N Rookes Malcolm McKinnon N Jubb John Fry Gary Chapman R Williams Ross Hayward A Scott R Vanderzee G Rhodes Sue Murray Sandy Lynch S Murphy M Browning
---	---	--

#### Family and Friends:

Bronwyn Burt	Ian James	W Cook
Jackie Henry	Helen Tinning	B Simons
Nicole Henry	Jo Tinning	John Prendergast
Lisa Henry	Carrie Tinning	K Prendergast
Timothy Henry	Peter Roper	S Prendergast
Caroline Henry	N Fraser	L Robinson
W Jackson	S Fraser	

## ***Eye Witnesses Informants to the Deakin Puma Study Group***

### **Interviewed**

#### October 1976

Terry Rethus, Glenisla Tom Schubert, Mooralla Dougal Shilcock, Mooralla Robert Hiatt, Cavendish Robert East, Mooralla Garth Rees, Mockingah Trevor Clarke, Hamilton	Ilka Rees, Mockingah Terry Zerbst, Brimpaen Dick Saligari, Bulart Ray Kerris, Cavendish Mrs L. Walker, Victory Point Rd, Cavendish Val. Winfield, Brimpaen Brian Warren, Casterton
---	---

#### March 1977

Evan Macklay, Horsham Harry Shrive, Douglas, Kanagulk Bill Hower, Horsham Michael Harrison, Horsham Donna Harrison, Horsham	Ellis Tucker, Halls Gap Gary Middleton, Stawell Barry Henderson, Stawell Suzanne Lawson, Horsham Joy Potter, Yarram Park, Willaura
---	--

#### April/May 1977

Paddy Hynes, Mt. Bepcha Barry Bell, Mt. Talbot David Hamilton, Hamilton	Wally Smith, Minhamite John Spencer, Dimboola Ivan Boethe, Katyil, Little Desert
---	--

#### June 1977

Mark Johnson, Hamilton Ron McGivean, Victoria Valley Les Becker, Dunkeld Mr. B. Falkenberg, Byaduk	Ivan McInnes, Victoria Valley 2 daughters of Ivan McInnes Laurie Herman, Hamilton
---	---

#### September 1977

Des Paulson, Mirranatwa, Victoria Valley George Paulson, Ballarat Sharon Paulson, Ballarat Gaye Beveridge, Mirranatwa, Victoria Valley	Lindsay Crawford, Victoria Valley Don Anderson, Victoria Valley John Morris, Hamilton Donald Macarthur, Victoria Valley
---	--

1978

Frank Webb, Penshurst	
-----------------------	--

**Contact by Correspondence**

May 1977

Mr. J Ryan, Bundaberg, Qld (formerly Yarram Park)	Mrs Ryan, Bundaberg, Qld (formerly Yarram Park)
---	---

September/October 1981

David Appleton, Balmoral Roger Edwards, Cavendish Ron Howlett, Ararat	Dick Bunwath, Laharum Vera Huff, Hamilton Mr. K Starick, Brimpaen
---	---

## References

- Brunner, H. (April 1977) (May 1977), *Report on Deakin Puma Study Scat Analysis*, The Keith Turnbull Research Institute, Vermin and Noxious Weeds Destruction Board, Department of Crown Lands and Survey, Victoria, Australia.
- Brunner, H., (1975), *Hair Identification – A Useful technique for the Mammal Ecologist*, unpublished pamphlet, The Keith Turnbull Research Institute, Vermin and Noxious Weeds Destruction Board, Department of Crown Lands and Survey, Victoria, Australia.
- Cropper, P., (1995), *Alien Big Cats: Out From the Shadows*.
- Davey, C., (2003), *Personnel Communication to John Henry*, Wildlife, Pests and Diseases Program, CSIRO Sustainable Ecosystems
- Eastman, J. N., (1977), *Personal Correspondence and Air Force Combat Units – Groups*, Research Branch, The Albert F. Simpson Historical Research Center, USAF, HOR, Maxwell AFB, Alabama, USA.
- Eldridge, G. B. (Lt. Col. USAF, 35<sup>th</sup> Fighter Group), (1977), (1978), (1981), *Personal Communication*, Washington, USA.
- Hornocker, M. G., (1970), *Personal Communication to Ellis Tucker*, Idaho Cooperative Wildlife Research Unit, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho, USA.
- Hornocker, M. G., (1970), *Report on the Study of the Mountain Lion Population of the Idaho Primitive Area*, Idaho Cooperative Wildlife Research Unit, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho, USA.
- Hornocker, M. G., (1977), *Personal Communication to John Henry*, Idaho Cooperative Wildlife Research Unit, College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow, Idaho, USA.
- Hubbard, G., (1943), Aircraft Insignia, Spirit of Youth, The National Geographic Magazine, June, p. 710 – 721.
- Jones, R. E., (USAF 22<sup>nd</sup> Bombardment Group), (1981), *Personal Communication*, Colorado, USA.
- Lee, A. K., (1977), *Personal Communication to John Henry*, Department of Zoology, Monash University, Clayton, Victoria, Australia.
- Livingston, L. (1981), *Personal Correspondence and Emblem Information: USAF Groups*, Department of the Air Force, Headquarters Air Force Manpower and Personnel Center, Randolph Air Force Base, Texas, USA.
- Renalds, O. B., (USAF 22<sup>nd</sup> Bombardment Group), (1981), *Personal Communication*, California, USA.
- Robinson, R. W., (1944), *The Marauder: a book of the 22<sup>nd</sup> Bomb Group*, Halstead Press, Sydney, Australia.
- Shellito, R. T., (Col. USAF, 35<sup>th</sup> Fighter Group), (1977), (1981), *Personal Communication*, California, USA.
- Shriver, P. K., (USAF, 35<sup>th</sup> Fighter Group), (1977a), (1977b), (1978), (1981), *Personal Communication*, Oklahoma, USA.

- Smalley, R. F., (1977), *Personal Correspondence and Short History of US Air Forces in Australia until September 1942*, Department of Defence, Canberra, ACT, Australia.
- Suarez, C. B. (Sgt Major USAF, 35<sup>th</sup> Fighter Group), (1977), (1978), (1981), *Personal Communication*, Florida, USA.
- Various Articles from the following Victorian Newspapers:  
Ararat Advertiser, Ararat, Hamilton Spectator, Hamilton, Herald Sun, Melbourne, Stawell Times News, and the Wimmera Mail Times, Horsham.
- Wahl, E. A. (Lt. Col. USAF, 35<sup>th</sup> Fighter Group), (1977), *Personal Communication*, March, Virginia, USA.
- Wilson, H. C., (Col. USAF, 35<sup>th</sup> Fighter Group), (1977), (1981), *Personal Communication*, California, USA.
- Young, S. P. & Goldman, E. A., (1946) *Habits of Felis Concolor (Puma)*, Dover Publications, New York, USA.