



Resort Round-up

No.17, Spring 2003

Feral Animals & Weeds

Feral Cat and Fox Control Program - Update

Last year a total of 30 feral cats were caught in the Perisher Range and a further 10 were trapped in the Thredbo Valley. This year a total of seven feral cats have been caught in the Perisher Range so far (end of August), and another two in the Thredbo Valley. Compared to last season, there have been less trap-nights and fewer traps set, however the number of feral cats caught this year for the traps set have been greater. Cat trapping was also undertaken after the fires to limit the impact of this predator on surviving native animals, but none were caught. The trapping



Resort Round-up No.17, Spring Edition 2003

program will be intensified for the remainder of winter 2003 and trapping will continue throughout the summer months, although a different trapping technique will be used.

As for fox baiting, Dr Ken Green and his assistants have been busily establishing fox-baiting stations in the snow throughout the Alpine area. This is the fifth season where fox baiting has been carried out in a systematic way to help reduce the impact of foxes on the threatened Mountain Pygmy-possum and vulnerable Broad-toothed Rat. By cross-referencing the monitoring

resultsthat include the number of baits taken, scats and tracks that are counted along established transects, approximately three-quarters of the fox population is known to be removed from the target area each year. Of course, this will be an ongoing program to decrease the impact of foxes on some of our very special fauna, until researchers find a more efficient control technique.

Weed Database for Resorts

By the end of October 2003, a database profiling weeds should be completed for resort areas. The aim of the database is to collate as much information as possible on all exotic species, particularly those threatening the more sensitive and significant alpine and sub-alpine ecosystems. By creating a profile on each of the species, NPWS will be in a better position to prioritise and manage key weeds, as well as monitor those species that may pose a problem in the future. Whilst the first part of this project is to establish the database, the information collated will help produce a weed management plan for resort areas in Kosciuszko National Park. The project will also be an important commitment towards the Perisher Range Resorts Environmental Management System. Both phases of the project will allow for stakeholder comment.

NSW
NATIONAL
PARKS AND
WILDLIFE
SERVICE

Lodge Talks by Ranger Dave



This winter season has seen another busy time for 'Ranger Dave' - the NPWS Resort Division's Environmental Liaison Officer. The past three seasons have seen 'Ranger Dave' venturing into the dark of night, slide projector and slide carousel in hand, to show and talk about the wonderful and significant plants, animals and history of Kosciuszko National Park. It has also been a great opportunity for lodge members and guests to ask questions about park management and major projects. In fact, there have been special talks on the bushfires which affected much of the park earlier in the year.

By the end of August, around 1,600 people across all the resort villages had experienced a Ranger Dave information night. Due to the popularity of the lodge talks over the past three seasons they will continue next winter as well.

(Over the past three years of talks and presentations, the most popular questions pertain to the mountain huts!)

If you would like to know more about feral cats and foxes, wish to pass on information about feral cat sightings, would like to know more about the weeds project or discuss aspects of it or would like a talk during the summer period, please contact the NPWS Environmental Liaison Officer - Dave Woods on (02) 6450 5616 or email: dave.woods@npws.nsw.gov.au

Perisher Range Resorts Environmental Management System (PRREMS)

2002-03 Report Sheets and Workbook Submission Statistics

Up until mid September 2003 almost 70% of club and commercial ski lodges had submitted their winter report sheets from last year. This is a remarkable effort for the first reporting year and all participating lodges are to be congratulated.

The information from the report sheets has been entered into a confidential NPWS database and is currently being analysed to provide a baseline of environmental data for ski lodges for the 2002-03 year.

This data will be incorporated into the first PRREMS annual report and be provided to each Perisher Range Resorts ski lodge.

Submitted Workbooks are progressively being reviewed to provide feedback and advice to individual lodge committees, managers and/or owners.

2002-03 Lodge Workbook Submission

Workbook item submitted	% of lodges
Both report sheets and Workbook	38
Winter report sheets and Workbook	1
Winter and Summer report sheets	16
Winter report sheets	14
Nil returned	31

A Special Thank You

A special thank you is extended to the following club and commercial ski lodges for submitting everything required under the PRREMS, namely both 2002-03 winter and summer report sheets and Workbook.

- Aurora Ski Club
- Australian Golf Ski Lodge
- Australian Ski Club
- Avalanche Alpine Club
- Caloola Ski Club
- Christina Lodge
- Cooma Ski Club
- Cowra Ski Club
- Dulmison Ski Club
- Edelweiss Ski Club
- Eiger Chalet
- Fellowship Ski Club
- Fjellheim Ski Club
- Geebung Ski Club
- Gunuma Lodge
- Illawong Ski Tourers
- Kandahar Ski Club
- Kiandra Pioneer Ski Club
- Lampada
- Lodge 39
- Mawabu Ski Club
- Merriment Alpine Club
- Mirrabooka Ski Club
- Muniong Ski Lodge
- Narraburra Ski Club
- Orana Ski Club
- Perisher Huette
- Port Kembla Ski Club
- Rock Creek
- Rugby Ski Club
- Salzburg Chalet
- Shortland Alpine Club
- Smiggins Chalet
- Smiggins Hotel
- Snow Revellers
- Snowy River Ski Club
- South Perisher Alpine Club
- Southern Alps Ski Club
- Southern Cross Ski Chalet
- Sundeck
- Sundowner
- Technology Ski Club
- Thirroul Ski Club
- Trissana Ski Club
- Turnak Ski Club
- Ullr Ski Lodge
- University Alpine Club
- Valhalla
- Wilde Spitze Ski Club
- Windarra Ski Club

Lodge Guest Survey

One of the PRREMS objectives relates to encouraging lodge visitors and guests to learn about the environment and to participate in education programs (see page 52 of the Lodge Workbook).

Specifically the target is to have more than 30% of visitors using some type of interpretation service and the Lodge Workbook suggests using a survey to gather this information from lodge guests.

After many requests from lodges for help in putting together a survey NPWS, SLOPES and KCoC have developed a standard survey. If you would like a copy of this survey please contact the NPWS Environmental Management Officer (EMS), Megan Bennett on (02) 6450 5607 or email: megan.bennett@npws.nsw.gov.au.

Please note, there is no requirement to submit completed survey sheets to NPWS. Survey answers should be collated to provide responses for the winter and summer report sheets, see pages 78 and 82 of the Lodge Workbook.

Fuel and Oil Tank Management

Lodge Workbook report sheets and responses have highlighted that the management of fuel and oil tanks is an issue of concern within the Perisher Range Resorts.

As a first step in addressing this issue, NPWS will be co-ordinating an investigation to identify which tanks are being managed appropriately and those that will be required to be decommissioned. Decommissioning involves the testing of soil around the tank by a qualified company to validate there is no contamination.

Lessees will be contacted by NPWS in writing to provide the details and timing of this investigation.

2003-04 Lodge Workbooks

The 2003-04 Lodge Workbooks have been distributed. Please complete and return the acknowledgment slip so that we know you have your Workbooks. If you have not yet received your copies please contact the NPWS Environmental Management Officer (EMS), Megan Bennett on (02) 6450 5607 or email megan.bennett@npws.nsw.gov.au.

Food Safety

Overview of Food Safety Seminar – Risks of Litigation

In June, a series of Food Safety Seminars were conducted by the Environmental Health Section of the Resorts Division at Mt Selwyn, Thredbo and Perisher. The seminars focussed on the recent changes to the Food Act 1989 and the Food Standards Code. The seminars also continued with the theme, as in previous years, of assisting lodge and food business operators find solutions to non-compliant observations noted by NPWS Environmental Health Officers in their annual food premises audits.

The Service was encouraged by the positive feedback from over 100 attendees and is committed to developing a working solution approach to food safety compliance in partnership with food business owners. All owners are encouraged to contact the NPWS Senior Environmental Health Officer, Robert Porter, on (02) 6450 5613 or email: robert.porter@npws.nsw.gov.au with any inquiries about the seminars or assistance they may require in implementing any aspects of the Food Act and Regulations.

Broad-Toothed Rat Rescue - David Milford Health, Safety & Environment Manager, Perisher Blue

Since commencing work with Perisher Blue as the Health, Safety & Environment Manager in May 2000 I have always been on the lookout for wildlife throughout the resort.

In summer it is not uncommon to come across the nests and grass 'passageways' left by Broad-toothed Rats (*Mastacomys fuscus*) and Bush rats (*Rattus fuscipes*). Life for these creatures in winter involves nesting and living under the snow in the subnivean space and it is unusual to sight an animal. In fact in the last three winters I have only seen a couple of Broad-toothed Rats.

This winter has been remarkable as I have seen more in a few weeks than the preceding years put together.

The first main sighting was of a Broad-toothed Rat feeding on the exposed grass underneath the metal bridge that crosses Perisher Creek from the Skitube building to the Front Valley slopes. This particular creature was seemingly unconcerned about people clumping past in ski boots, less than a metre away.

The next sighting involved a "rescue mission". On 13th August the region experienced a day of continuous heavy rain. Perisher Creek looked more like a spring thaw than mid winter. Mid afternoon I received a phone call to say that a group of ravens were attacking something on a snow island in the creek.

The "something" turned out to be a Broad-toothed Rat that was trying to avoid a number of snapping beaks. I was encouraged to try and catch the creature and relocate it somewhere safe. When I did catch it I found that it was bleeding and had in fact lost the tip of its tail to a hungry raven. Broad-toothed Rats are generally pretty docile but I was to find out that this one didn't follow the normal pattern and I sustained a good bite to a finger. I now know first hand as to how broad their teeth really are! According to Dave Woods from the NPWS, it is good luck to be bitten by a Broad-toothed Rat but I am not yet convinced about this.

Other sightings have been more fleeting and not nearly so personal. Broad-toothed Rats have been seen running through the Perisher Centre Ticket Arcade and across the snow near the base of the Ridge Chairlift.



Broad-toothed Rat at Perisher Creek (Photograph by David Milford - Perisher Blue)

It is pure conjecture on my part but I have to think that the good work by Ken Green in fox eradication and by Dave Woods with his cat trapping have helped contribute to the success of the creatures around the resort area that is leading to the increased sightings.

So keep your eyes open and if you see a small, nearly rotund, furry creature, chances are it is a Broad-toothed Rat.

Terrain Closure at Blue Cow - David Milford, Health, Safety & Environment Manager, Perisher Blue

In the winter of 2002 an area of terrain at Blue Cow was closed to public access. This area is known as "Rough Rider" and is to the left (looking uphill) of the Summit chairlift. The reason for the closure was to assist in the study of the Mountain Pygmy-possum (*Burramys parvus*). The terrain in this area is prime habitat for the possum and contains a colony that Linda Broome, Senior Threatened Species Officer from the NPWS has been researching and monitoring for a number of years.

The idea behind closing this terrain to skiers and snowboarders is to try and see if it does make any difference to the colony and possum numbers. Unfortunately, this area was burnt during the recent bushfires and this factor could have a major impact on the colony. Trapping post bushfires proved that some animals survived the fires and hopefully trapping this summer will show that some animals have survived the winter.

From a resort perspective we have found that we need to educate the public as to why this area is closed and why they need to respect this decision. For the winter of 2002 a fixed ropeline was installed around the area and signs were placed on each post. A large information sign was also installed at the top of the fenceline. In 2002 any "poachers" were warned that they could lose their pass and their details were recorded on a database. In addition, for this winter a large information sign was installed at the base of the Summit Chair, adjacent to the lift line.

Snowsports Instructors also play a major role in this education process by being able to explain to their students why this area has been closed.

Overall the fence and signage has been very successful at keeping people out of the area. However, for some, the temptation of fresh snow is just too much and they will duck under the ropes, past the signs that state "passes will be revoked" and leave their tracks in the snow.

These people are certainly in the minority and the resort, in order to make its stance clear, is removing passes. This action appears to be working in stopping both repeat offenders and new offenders.

Perisher Blue staff have been specifically warned about entering this area and have been told that anyone caught will lose their skiing/boarding privileges for two weeks. A repeat offender will have their employment terminated.

Whilst on this subject a number of people have raised the issue of there being snowmobile tracks underneath the Summit Chairlift. The resort is required to do daily line checks which means accessing each tower. The operators of these machines have set routes and do so with the proviso that access is limited. Linda Broome acknowledges the need for access as long as it is kept to a minimum.

It is a shame that we have to resort to revoking passes and it is certainly not something we enjoy doing. However, Perisher Blue is committed to the project and we feel that this tough action is justified.

Wombats In Winter - Ken Green, Alpine Ecologist, NPWS

Over the years I have wondered how wombats go about their life in a snow-covered landscape. Numbers crashed in the big winter of 1981 and in the areas I was studying at the time there wasn't much opportunity to take an interest in wombats – they just weren't there. The January-February 2003 fires brought the need to look at the mammals in the Snowy Mountains and how they were coping with their first winter post-fire. For small mammals such as the Mountain Pygmy-possum and the Broad-toothed Rat there are annual live-trapping programs to catch, mark, weigh and check on the animal's condition before its release. This was done before the winter and the work will be repeated in early December. For other animals such as feral foxes there has been regular monitoring of tracks on the snow to check on numbers in relation to the control program conducted each winter. Of the other large mammals that live above the snow I have been able to find plentiful evidence of Ringtail Possums in unburnt and burnt areas (they seem to have a preferred tree under which, possibly while grooming, they deposit their accumulated droppings for the night) and Swamp Wallabies half of which I have seen are carrying joeys in their pouches. Of them all, the mammal that seemed the easiest to follow was the wombat. It has a home range, burrows that it visits each night on its rounds, it leaves tracks on the snow in profusion and has well-used routes. So the past winter has seen me out after each snowfall for the ensuing two days, following five wombats on one day and a different four on another – until the tracks become too confused and I have to wait for the next snowfall. The aim of the study was to look at four wombats in totally burnt areas and compare their home range and feeding with wombats that had access to both burnt and unburnt areas.

One thought that I had was that although wombats may be good at surviving bushfires by using their burrow as a fire-proof bunker they may have trouble with the ensuing winter. However, one advantage for the wombat in these conditions is its ability to live on almost nothing. It has a stomach that's a third larger for its weight than other herbivores, it uses fermentation as a second step in digestion, and overall wombats are three times more efficient than kangaroos in the use of food according to Tim Flannery (palaeontologist).

The results of this study, especially the analysis of their food from droppings, will take some time to put together but the winter's work did reveal some interesting facts about wombats. How, I always wondered, does a wombat find its way in the snow? In a 'normal' wombat landscape there are well-worn paths, there are piles of dung deposited on high spots, and there may be scent at the bottom of a tree to mark the route but what happens when the tracks are covered and the bottoms of the trees are buried beneath the snow? The wombats were still able to find buried burrows, digging down through more than a metre and a half of snow to one burrow and hit the entrance on the nail. In another case, however the wombat missed the mark by about a metre and had to dig a trench downhill to the entrance. Following a wombat's track I noticed small brown marks in the snow. At first I thought they were meltwater drops out of the trees but there was one drop after every fourth step; the wombat was carefully marking its outward trail in deep fresh snow and at the end of the night the track came back and merged with itself for the run back to the burrow. Once I knew what I was looking for, I regularly found these drops on wombat trails in new snow.

For most of the time I was able to follow the wombat's nightly trip seeing where it had dug away the snow to reach grass, where it had gnawed bark off the base of a tree trunk, dug out roots, met another wombat way up on the Kerries where no right minded wombat would be found in a 'normal' year (and followed its tracks where it was chased by the other wombat from over Finns River way) but one wombat was able to keep some of its nocturnal wanderings a secret. As James Woodford says in his book *The Secret Life of Wombats*, "Wombats seem to suffer life above ground as a necessary evil." One wombat, in an unburnt patch in the Whites River area, took this to extremes. Its patch consisted of old thick Mountain Plum Pines and other shrubs. These held the snow off the ground and provided a large subnivean space, which is normally only occupied by the small mammals. But this subnivean space was big enough for the wombat to forage beneath while I could ski over the top. This by the way seems to be the record for the world's largest subnivean inhabitant! It must have foraged there for nearly two full nights seemingly only coming out from beneath the snow to cross an aqueduct trail and then it disappeared back under the snow.

So how did they survive the fire? While one wombat living and foraging in the burnt area on the walk into Rainbow Lake went up to the edge of the unburnt area, it never foraged there. Another wombat with two burrows above the main road between Smiggin Holes and Perisher Valley would regularly cross the road to the burnt area below the road. This had a number of advantages. Firstly, because wombats have a split lip they can feed on the shortest blades of grass. This was obviously handy with all the fresh green pick that came back after the fire. Additionally, the fresh green grass was on a north-facing slope and for most of the winter that was bare of snow making the grazing easier. For this wombat the biggest danger in the winter after surviving the fire was crossing the road!

Plan of Management - Update

Kosciuszko Plan Of Management Review Taking Shape

The visionary new Plan of Management for Kosciuszko National Park (KNP) is taking shape, with the draft plan to be placed on public exhibition in January 2004. Until then, the Kosciuszko planning team is continuing to prepare material in consultation with the Community Forum, the Aboriginal Working Group, NPWS staff and stakeholders.

Aboriginal Working Group and Community Forum guide development of visionary plan

The Aboriginal Working Group (AWG), which incorporates some of the Aboriginal communities who have connections with the mountains, has been involved in regular consultation with the NPWS throughout the planning process. Issues such as cooperative park management, heritage protection and interpretation, employment and training opportunities have been high on the agenda. Additionally, the AWG has been guiding the NPWS in an Aboriginal Heritage Study, which is investigating the values of the park to Aboriginal people.

Recently, the AWG reviewed the draft cultural heritage chapter for the KNP Plan of Management and gave positive feedback about the future direction proposed for cultural heritage management. Members of the group were particularly pleased to see that the draft reflected their request for greater recognition, understanding and respect for their on-going connection with the mountains.

The Community Forum has also been meeting regularly to review draft chapters of the KNP Plan of Management, with early material receiving a positive response from this group. There is an upcoming meeting scheduled for October 2003, where the forum will discuss the remaining chapters of the draft plan prior to the public exhibition period.

Public Exhibition – A way for you to get involved!

The draft Plan of Management for Kosciuszko National Park will be placed on public exhibition for a period of three months. While on public exhibition, there will be plenty of ways to get involved and learn more about the draft plan.

Interested members of the community will be able to contribute comments by post, e-mail or over the internet. The NPWS exciting new on-line submission facility, a first for Kosciuszko planning, will make the submission process easier than ever before. The NPWS encourages everyone to submit comments and contribute to the protection of a very special park!

If you require any further information about the Plan of Management review, the public exhibition process or the new on-line submission facility please phone the Kosciuszko planning team on 1800 200 208, email: kosciuszkopom@npws.nsw.gov.au or visit the internet at www.nationalparks.nsw.gov.au.

Changes to the Plan of Management Review Team

Exciting news from the Manager of the planning team, Penny Spoelder, with the arrival of baby Archer Mossfield. Ann Maree O'Callaghan will be the Acting Manager of the team while Penny is on leave. Other additions to the team include Laura Holbeck, who joins the team as a Technical Officer, and Amy Roberts, who will help the team with final document design and layout.

New Interpretation Planned for the Alpine Area

Over the past months, NPWS staff have been working on an alpine interpretation strategy for the Main Range area.

It is proposed to develop low impact signage along the Kosciuszko Walk (from the top of Thredbo chairlift), the Summit walk, the Blue Lake walk and the Snowgums boardwalk at Charlotte Pass.

The Snowgums boardwalk will be the focus of interpretation for this area. The theme for the new signs on this walk will be weather, there will be a kids trail, an audio interpretation and alpine animal sculptures.

To fit in with the alpine environment, the new sign design features subdued colours and a rounded shape.

NPWS is also looking at strategies for extending the range of safety information for both summer and winter visitors.

This Alpine Interpretation strategy forms part of a Park Wide Communications Plan, which addresses areas such as interpretation, education, information, marketing, public relations and media.

The purpose of the Communications Plan is to ensure that all park communications, activities, literature and facilities work together as a coordinated, focussed and quality program. We are looking at ways to more effectively communicate park messages, values and management goals to our visitors and stakeholders. If you would like to know more about the KNP Communication Plan contact: carolyn.parsons@npws.nsw.gov.au

Learning With Altitude

Summer 02/03 the first year of the *Learning with Altitude* program, a summer based education program for primary and secondary schools. The program was very much a success with 1200 students participating from schools in NSW and Canberra. These students took the opportunity to come to the Snowy Mountains and be part of education programs designed by the three *Learning with Altitude* partners, NPWS, Snowy Hydro and Kosciusko Thredbo.

The second year of *Learning with Altitude* is about to commence with an expanded program which now includes the Tumut side of the Snowy Mountains. A major marketing exercise in conjunction with Canberra excursion planners is about to commence which will reach over 11,000 schools throughout Australia.

If you would like to know more about *Learning with Altitude*, contact the Tourism & Business Manager, Steve Redden on phone (02) 6450 5522 or email steve.redden@npws.nsw.gov.au

Spotted-Tailed Quoll Research Project

In the southern section of Kosciuszko National Park, within the Byadbo Wilderness Area, NPWS have been conducting research on the distribution and ecology of the Spotted-tailed Quoll (*Dasyurus maculatus*), a threatened marsupial carnivore. A charismatic animal by virtue of its spunky demeanour, rufous red fur coat dotted with white spots and an arsenal of sharp teeth, the quoll prefers to occupy forest habitats with complex rocky outcrops. In these environments, quolls hunt possums, bandicoots and native rats. The rocky outcrops provide important den sites, as well as key places to advertise during the breeding season – with animals leaving faecal pellets (scats) on flat rocks – or so-called 'latrine sites'.

In the winter of 2002 radio transmitters were affixed to 15 quolls in Byadbo and their movement patterns subsequently followed. Over a period of three months some animals, particularly males, were found to move many kilometres in relatively short periods of time. Rather than being found in certain parts of the landscape these animals moved freely between riparian strips and drainage lines to the highest ridges, and everywhere in between. The area occupied by individual male animals was up to 3000 ha, whereas for females home range sizes tended to be in the order of around 200 ha.

During the bushfires of summer 2002-2003 much of the key habitat for the Spotted-tailed Quoll was severely burnt. Research activities post-fire have so far concentrated on identifying what proportion of the already marked population of animals survived. Findings to-date have indicated that even in areas subject to intense fire the quolls still remain and even breeding has occurred. Despite this encouraging news, continued long-term monitoring will be necessary to understand the timeframe over which the population fully recovers. If you would like to know more about the Spotted-Tailed Quoll Research Project contact Andrew Claridge, Fauna Ecologist or phone (02) 6124 9301