

TONGARIRO

the Annual

MARCH 2004 VOL 12



1904  2004
WAIHOTHONU HUT
CENTENNIAL
Tongariro National Park
World Heritage Area



Department of Conservation
Te Papa Atawhai



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Lake Taupo



ADVENTURE
Lake Taupo



LEISURELY
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Tongariro

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Cover photo: Waihohonu Hut, 100 years old in March 2004. (Photo: Albert Aanersen)
Above: Waihohonu Hut, the oldest extant building in Tongariro National Park, celebrates its centenary in March 2004. (Photo: Peter Blaxter)
Back Cover: As part of Conservation Week activities Eileen Byrne of McDonalds Family Restaurant Taupo helps a Taupo Intermediate School student plant out the banks of the Waikato River. (Photo: Dave Wakelin)

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History is our identity

History is about people and how they are affected by an event, be it natural, social, economic or cultural and what may have followed. One event in September 2001, through the power of graphic television and print media images and the Internet cemented its place in history. The global repercussions of 911 meant air travel security measures changed in every country. All of us reading this journal were affected by those early morning America events and our reactions, thoughts, attitudes and actions have in some way shaped history.

Each of us influences history. We voted in a referendum to change the way we elect our government. MMP was chosen and from that day onward the way our country has been governed changed.

Seemingly small events can change the way a country develops and the social directions it takes.

A small group gathered in 1898 on the lower slopes of Mt. Ruapehu and released a few buckets of Rainbow Trout into the headwaters of the Tongariro River. That simple act changed the economics, and the ecology of Lake Taupo and its tributaries with the Tongariro River in particular, world famous as a trout fishing destination.

A few years, in 1894, before a decision to develop the Desert Road as a link through the Central North Island opened the way for the Grand Tourist Route from Wanganui to Rotorua via Lake Taupo. Stage coaches trundled and bounced their way over pumice roads where today super coaches bring tourists to the splendour of the mountains and the lake.

Another momentous decision was made somewhere in the bureaucracy of Wellington. The Department of Tourism and Health Resorts, seeing a future in tourist ventures decided to build a modest hut near the northern end of the Desert Road. The hut, Waihohonu, became the tea stop for travellers while horses were changed. Later it was used as a base for climbers and briefly for the fledgling sport of skiing. The centennial of

Waihohonu Hut is being celebrated in March 2004.

Another event, tragic though it was, led to the creation of a society which has been a friend, helper and benefactor to the national park. From the tragedy of a helicopter crash on Ruapehu which claimed the lives of park staff, friends and the pilot grew a determination that their loss would not be in vain. The Tongariro Natural History Society celebrates 20 years as a major conservation organisation.

In 1887 Te Heuheu Tukino IV Horonuku make a courageous decision to gift the sacred peaks of his mountains for which he had fought hard through the courts to retain, to the people for a national park. The decision of an elderly chief 116 years ago has had a far reaching effect on the conservation of New Zealand. He could not have foretold that his great great grandson, Tumu te Heuheu, would in 2003 take a seat on the World Heritage Committee as New Zealand's delegate.

As Tumu said during the powhiri for the Kōichiro Matsuura, Director General of UNESCO, *"Our heritage is our legacy from the past. The value of what we have left with us today is what our tupuna (ancestors) have left us. Our cultural and natural heritage is our source of life and inspiration. It is our identity."*



Above: DOC staff and Tongariro Natural History Society volunteers refill the rebuilt wall of Waihohonu Historic Hut with the original pumice insulation removed during the restoration.
(Photo: John Newton)

Dave Wakelin
Editor

Conservator comment

In many regards it has been a year of consolidation with continued progress on key biodiversity projects and clear evidence of improvements starting to be seen resulting from the governments increase in visitor facility spending.

During the year Paddy Gordon our long time Community Relations and Technical Support Manager decided to take an opportunity to follow his heart and return to the field as Taupo Field Centre Supervisor when Ralph Turner retired from that position. We will miss Ralph's fire expertise in particular but Paddy's enthusiasm and experience will be welcomed. Greg Carlyon has left to take up a new position with Horizons and will be sorely missed after 10 years as Conservancy Planner. Greg's contribution was immense and included excellent resource management outcomes, completion of the Conservation Management Strategy and a new draft of the Tongariro National Park Management Plan. Another significant departure has been Anthony Birks heading overseas to live after a number of years overseeing our concession management.

A milestone has been reached with work starting in November on the \$4M Whakapapa Village and Skifield Sewage Scheme. The need for sewage removal from the skifield has been discussed for 40 years and there was also a requirement to ensure there was no direct discharge into a waterway from the Whakapapa Village treatment plant. It is planned that the new scheme will be operational next winter.

The Prime Minister opened the 'River Walk' the new Visitor Centre at the National Trout Centre. This project has been achieved by the Tongariro National Trout Centre Society and is a world class facility. Volunteers are present daily to ensure the facility is open to the public and it is hoped that a resident teacher will be provided to assist school visits. Genesis have agreed to a sponsorship agreement with the Society and the Department to help ensure education at the centre.

Increased visitor facility allocations have seen significant board walking installed in the Mangatepopo Valley and new toilets installed at the Ketetahi and Mangatepopo Roadends. Waste from these toilets will be removed from the Park. New toilets have also been installed in the head of the Mangatepopo Valley. These new facilities will help ensure the environmental protection of this heavily used part of the National Park.

A review of recreation facilities is occurring. This results from the new funding allocations and the need to ensure existing facilities provide an appropriate range of recreational opportunities. Visitor facilities to be maintained will need to be fully costed. I expect there to be minor changes only to the facilities we currently manage.

A new draft of the Tongariro National Park Management Plan has been prepared following extensive public consultation. The draft has now been handed over to the Conservation Board who have the task of reviewing it before sending it to the New Zealand Conservation Authority for approval.

The Conservancy has reviewed its Strategic Directions for the next three to five years. This helps guide our annual business plan work. A key element is reinforcement of the need for integrated conservation at key ecological sites such as Pihanga Rotopounamu. We are thankful for the support of the Tongariro Natural History



Above: Tongariro Taupo Conservator, Paul Green.
(Photo: Herwi Scheltus)

Above: Conservancy staff chat with Prime Minister Helen Clark on the office deck before she visited the Tongariro National Trout Centre to open the new River Walk Display Centre.
(Photo: Dave Wakelin)



Society, volunteers and other funding agencies for their contribution to this particular project. Another focus from our Strategic Directions is acknowledgement of working with communities to achieve conservation. There are examples of this throughout the Conservancy but one effort that has grown significantly throughout the year is the volunteer group working on pest removal at Omori-Kuratau and Pukawa. The Department has been able to provide technical advice and limited resources but these community groups have ensured the work continues.

In September I was fortunate to attend the World Heritage Park Congress in Durban, South Africa. This congress is held every ten years and was attended by 3000 delegates. The theme was 'benefits beyond boundaries' and it was a chance for the world to examine where it is at with its goal of protecting the worlds biodiversity. The congress was opened with inspirational speeches from Nelson Mandela and Queen Noor from Jordan. An audit showed that the world had made significant progress in the last decade towards a target of having 15% of the world protected but that there were significant gaps in areas like wetland, rainforest or marine protection. Congress deliberations also indicated that the focus had been on quantity rather than quality in the sense that many parks were not really achieving their conservation goals. The relationship with poverty is immense and parks are often under significant pressure from local communities.

In October New Zealand gained a seat on the World Heritage Committee and New Zealand's delegate is Tumu Te Heuheu. It's a highly sought membership and the first such position held by New Zealand. It was significant that New Zealand received the highest number of votes. Tumu is keen to ensure New Zealand provides leadership for World Heritage in the South Pacific and we should also see a stronger identification of World Heritage in New Zealand.

Paul Green
Conservator

Finally I would like to thank everyone who have contributed in a variety of ways to help with conservation in our Conservancy.

Norfolk Island

Having spent a week there and doing a little gentle walking in their National Park I thought a few notes could be of interest.

As we left New Zealand in the fiercest snow storm last winter it was lovely to have



The coastline of Norfolk Island is a mixture of rugged cliffs and offshore stack and sweeping beaches and bays.
(Photo: Evelyn Cooper)

warm weather on Norfolk Island. Mind you the locals thought our first night was cold and it did warm up considerably over the next week, to day time temperatures between 15 and 18 degrees Celsius.

The park is small by New Zealand standards, but the vegetation has many strong resemblances to the New Zealand bush. The Norfolk pine (*Araucaria heterophylla*) is the main difference, with it and the Norfolk Island Palm (*Rhopalostylis baueri*) both indigenous to the Island. The latter reminded me very much of the Nikau Palm, (*Rhopalostylis sapida*), although it is taller and much more slender. Even in mid winter a few plants were flowering and some had ripe berries, with the head being very open. Another startling and

recognizable plant was a Pepper tree (*Macropiper exelsum psittacorum*) which is considerably bigger than its NZ relative. Weeds are as big a headache there as here with cherry guava and lemon trees being very conspicuous! Blackberries were never introduced to the Island.

The highest peak Mt. Pitt (316 metres) was closed with road works contractors reconstructing a tar sealed road to the top. However there were good walking

tracks to Mt. Bates (2 metres higher) only a half kilometre away. Mt. Bates was used for an aircraft radar tracking station during the Second World War and some relics remain. Incidentally the airfield was established by the Americans at this time, and but for that I feel Norfolk Island would not be the tourist mecca it is today, as the total population is 1800 people. Large ships are unable to tie up at a wharf and everything has to be unloaded by crane onto a tender and brought ashore. These are big enough to transport a car but buses are brought ashore by lashing two boats together.

The big difference in the tracks is that horse riding is permitted although mountain biking is not. I spent three half days in the park, two walking and one riding. Good views were obtained from Mt. Bates and

Norfolk Island is not a venue for the night life seeking teenager, and it is not cheap despite being 'duty free' but is a great destination for a relaxing holiday, with plenty of walking, swimming, snorkelling, (in summer), diving and dozens of excursions run by three tourist companies. Accommodation is varied and good, but no backpackers, and with hire cars usually part of the accommodation package. Our petrol bill for the end of the week was \$34, the Island being roughly eight kilometres by five kilometres. Duty free comes into its own if you are in the market for Italian designer shoes, fine china, the latest model cameras etc. but not for every day items like food. There are two flights a week from Auckland with a week being a nice length of time there. The population is made up of one third Norfolk Islanders, one third Australians and a third New Zealanders, tourism is the name of the game and the currency is Australian dollars. The pace is not hurried and time is "Norfolk time"!



Evelyn Cooper in among the buttressed roots of a Fig tree.
(Photo: Evelyn Cooper)

Evelyn Cooper
Ohakune

the coastal scenery from the Captain Cook Monument was truly lovely.

Bird life was quite prolific with the grey fantail and silver eye being common, as well as the Norfolk Island silvereye. However it is the Crimson Rosella, or Red Parrot as they are called that screeched through the bush and are commonly seen all over the Island. The Green Parrot (*Cyanoramphus novaezeelandiae cooki*), which I would liken to a NZ Red Crowned Parakeet, is endangered, and harassed by the Red Parrot, and was being bred in captivity. Nesting boxes were also placed in the bush to try and save it. The Red Parrot was introduced to the Island from Australia!

A native owl, which must be related to the NZ morepork, decreased in numbers to a solitary female, and two NZ male moreporks were introduced a few years ago. Apparently one died but the other found life to its liking and the species is well on the way to recovery. One afternoon I saw a pair of kestrels perched on a dead tree but they flew off before I could study them. White terns (*Gygis alba*) are common and 'nest' there by laying one egg high up on a tree branch.

Norfolk Island is volcanic in origin as is Philip Island, seven kilometres off the coast. An island in

between Nepean Island is sedimentary and flat topped, but they all had the Norfolk Pine growing on them at one time.

Philip Island was first viewed from the aeroplane and gave me quite a surprise, with startling colours, mainly reds and browns with a few patches of green, reminding me of Mt. Tarawera. I spent a morning over there and learnt some of its history. In convict times, goats and pigs and rabbits were released for sport. The island is probably only a few hundred hectares so the devastation does not need to be described. Goats and pigs were easily eradicated but rabbits took a little longer with mixamatoxis poisoned arrows, being fired onto the inaccessible cliff faces. Soil was eroded away with growth limited to the gullies. Ash was not very apparent, the cover being more like sun dried clay in a small black, brown and red mosaic pattern a little like dried thermal pools. A lava dyke runs through the centre of the island and although I saw part of it from the boat and a little of it from a distance on the land, it really showed up on aerial photographs. Some volunteers are replanting vegetation but the Parks Department is doing very limited work over there.

Landing on the island is easy but the rope way up the cliff especially in wet weather would have OSH appalled! Bird life was a little quiet in July but I did see a couple of very early red-tailed tropic bird chicks (*Phaethon rubricauda*) one with an adult, and other adult birds flying about, and a few masked booby chicks (*Sula dactylatra*). By October the ground is covered by masked boobies and their nests. These birds are related to gannets.

Steamers, stage coaches and desert accommodation



Above: An early camp at Waihohonu. Waihohonu was a favoured stopping point and this etching is believed to be from 1862, before George Allen's summer camp of 1894. (Artist unknown)

They came to the jetty dressed in their Sunday best – the women in their frilly white blouses and large sun hats and long pleated skirts, the men wearing three piece suits and hats. They boarded one of the many Whanganui River boats and set out on an adventure that was to take them right through the heart of the North Island on what was known as the Grand Tourist Route. From Wanganui the river boat took them inland on the North Island's greatest water highway past towering cliffs and lush green forest to the tiny settlement of Pipiriki before venturing by stagecoach out of the river valley and into the central North Island Desert.

During the year 1894, a gang of nearly a hundred men were employed reforming

the road that wound across the high wind swept tussock plateau that lay between Waiouru and Tokaanu.

Forty five miles (72 kilometres) of road had been surveyed east of the old riding track to avoid the sandy stretches of the Onetapu Desert. In preparation for wheeled conveyances the road was made to wind by easy grades up and down the gullies instead of by more direct steep riding tracks.

The best description of the stage coach run between Waiouru and Tokaanu is given by Miss H M Fletcher in her "Tales of Early Taupo", published in Taupo 1980, a detailed history of the region.

With the opening of the road Mr. E Peters, who twenty years earlier had driven the first coach over the Taupo Napier Road, began a twice weekly coach run, the "Peters Royal Mail Coaches" between Waiouru and Tokaanu. This was the start of the first full connection north as passengers arriving at Tokaanu could travel across Lake Taupo on Captain Dan Ferney's 'S.S. Tauhara' to Taupo. From here they could connect with the coach route to Auckland via Rotorua. Waiouru was the centre from which coaches were scheduled to run to Pipiriki, to Ohingaiti and to Tokaanu.

Near the Waihohonui (sic) Bridge Mr. George Allen a surveyor, had a summer camp providing accommodation and horses and guides for mountaineering expeditions. He offered '*plain but comfortable*' accommodation. There's no record as to whether tourists stayed the night at Allen's camp or continued on to Tokaanu hotel.

Mr. Peters ran a Hotel at Waiouru for overnight passengers and stables for his large team of horses. Arriving travellers, stiff and cold from their long journey, were welcomed here by their kind hosts, and were soon thawing out in front of their cheery log fire.



Above right: Passengers stop for a cup of tea and a chance to stretch their legs at the Cook Shed at Waihohonu Hut while fresh horses are fitted to the coaches. Date of the photo is unknown.

(Photo: TNP Collection)

Below: Coaches at Waihohonu Hut where horses were changed and passengers were able to stretch their legs and have a cuppa. Note the closed stagecoach and the more open buggy.

Miss H M Fletcher tells of one stagecoach tipping over twice on the journey between Tokaanu and Waiouru.

(Photo: J Graham)



Miss Fletcher refers to, "... a halfway halt at a tin shed where grateful passengers stepped down from the coach and enjoyed a mug of hot tea. At one end of the building was a large open fire where old iron kettles and tin billies provided boiling water. Here too the tired horses were fed and stabled and a new team harnessed to the coach." From the description it would appear that she is describing Waihohonu Hut. Both Allen's camp and later Waihohonu were key points in the journey either way where passengers could stretch their legs, enjoy a cup of tea while fresh horses were fitted to the coach. Early passengers describe how, "Hour after hour they jogged up and down the bumpy road, slowing almost to a halt to splash through shallow streams, and making slow progress as the horses strained to pull through sandy patches."

For over twenty years this coach service was maintained across the Desert Road first by 'Peter's Royal Mail Coaches' and then by the firm of 'Crowther and McCauley'.

In 1904 Allen's camp at Waihohonu was replaced by a hut, built by the new Department of Tourism and Health Resorts. Another hut at Ketetahi was built soon after.

The Waihohonu Hut, which still stands today and remains the oldest building in the park, was the focal point for further trips into the mountains. It was probably the first park hut in New Zealand to be built with insulation - a 300mm layer of pumice that was sandwiched between the corrugated iron walls. The site chosen for the Waihohonu Hut was very close to George Allen's encampment. The hut is nestled in a small bay in a patch of Beech forest close to the Waihohonu River.

Within another seven years, however, a major development changed the face of tourism in Tongariro National Park: the main trunk railway was finally completed. The development of the



Above: The Waihohonu Hut in 1917, two years after C.H Barton visited the hut and wrote, "*The hut (Waihohonu Hut) is unpretentious, being built of a double thickness of corrugated iron with pumice packed between the walls to keep out the cold.*"

(Photo: TNP Collection)

Below: Tongariro Natural History Society members and DOC staff repaint the Waihohonu Hut in its original colour as part of the 1998 restoration project.

(Photo: John Newton)



main trunk railway meant that the railway became a relatively cheap and clean way to get to Tongariro National Park. As well, the siting of the railway to the west of the mountains changed the focus for tourism - to the benefit of the townships of Ohakune and Waimarino (which was renamed National Park)

However, while the focus of the relatively arduous stagecoach travel had been tourism another reason for visiting and staying at Waihohonu Hut developed. Two railway workers William Mead and Bernard Drake developed an interest in trying the European sport skiing. Some of early expeditions onto the snows covered slopes of Tongariro National Park were made using Waihohonu Hut as a base. Later Mead in particular was a prime mover in getting accommodation built at Whakapapa and Mangatepopo Valley closer to the slopes on the western side of the Ruapehu.

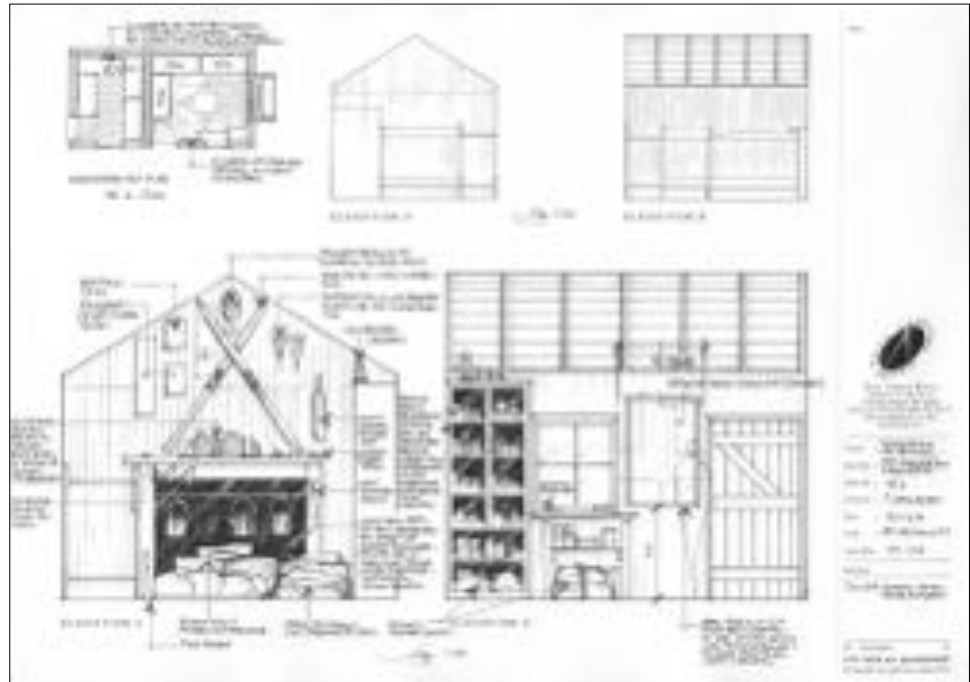
Waihohonu Hut though was ideally located for those who wanted to climb the northern peaks of Mt. Ruapehu. In 1915 young lawyer called Cranleigh Harper Barton and a friend spent Christmas and New Year in Tongariro National Park and basing themselves at Waihohonu Hut. They walked from Waiouru, a 30 kilometre trek, leaving Peter's Accommodation House at 6am. They "... walked steadily on at the rate of four miles an hour. At times the heavy soft sand made travelling difficult, especially through the bleak region known as the Onetapu Desert." The coach dropped off their gear at the 30 km mark and from there it was another seven kilometres to the Waihohonu Hut reaching its comfort at 5.30pm

Barton describes the hut as, "... *unpretentious, being built of a double thickness of corrugated iron with pumice packed between the walls to keep out the cold. The plain oblong but is divided into two compartments, the large for men and the smaller for ladies and at the end of the men's is a large open fireplace backed with blocks of pumice stone. Each room has a small window which does not open and the floor is mother earth. In our men's quarters is a small rough wooden table and five built-in wooden bunks. A number of kerosene tins for buckets and soap boxes for chairs complete the furniture.*"

Barton and his companion, Brodie, "... *soon had a cheerful fire blazing, unpacked our things, boiled our "billies" and had a nice hot meal. We retired for the night on our beds of dried fern and straw. At that altitude the nights are always cold, especially towards morning.*"

A day was spent exploring and on their return to the hut, "... *we found two travellers, Mr. Brockett, a Wairarapa schoolmaster, and his friend Mr. Graham of Wellington. They stay until Sunday and tomorrow we four are going to try the ascent of Mt. Ruapehu together. A cold night and huge fire. Here one feels so far from civilisation. The last night of memorable*

Right: Concept plans for the interior displays for the Waihohonu Historic Hut, part of the centenary celebrations (Sketch: Peter Langford Design)



sad 1915.”

Waihohonu Hut has survived remarkably well and has provided warmth and shelter and rest for hundreds of climbers and trapper’s in its hundred years. Names and messages scratched on the bunk rails and the walls record the passage of time.

In 1998 the Tongariro Natural History Society and Department of Conservation staff carried out a major restoration project on the hut relying on advice from a conservation architect as this hut is a historic building. An inspection revealed the need for major repairs to the back and end walls of the hut as the pumice fill (300 mm thick) had rotted the posts and rails causing the corrugated iron walls to start to collapse with the weight of pumice. A tent camp was set up on site for a week and once the major repairs had been undertaken the exterior was painted using some 22 litres of paint. The hut’s chimney was replaced with one built to match as near as possible the original as shown on old photos.

2004 marks the centennial of Waihohonu Hut. The Department of Conservation and the Tongariro Natural History Society have combined to celebrate the centennial. As part of the celebration a design company (Peter Langford design) has been engaged to design outdoor interpretive displays as well as create an impression of what the interior of the hut might have been like in earlier days. An unveiling of the outside an internal displays is planned for 27 Mar 2004 amid a picnic like atmosphere at Waihohonu.

Dave Wakelin
Senior Community
Relations Officer

In the scheme of things 100 years is not very long time when you consider the age of the mountains, the forests and the deserts of Tongariro National Park but in terms of the settlement, exploration, endeavour and development of the Central North Island the celebration is significant.

Pine clearing

Pinus Contorta was planted in the state forests adjacent to Tongariro National Park in the 1930s. By the early sixties the Park Board had become alarmed at its spread into the national park. Botanist Ian Atkinson recorded that, “Unless control measures are taken most of the upper slopes of the mountains between 4000 and 6000



Above: You have to admire the fortitude of clubs such as the Wanganui Tramping Club and many others who often have put up with miserable conditions on the eastern side of the mountain while setting about their *Pinus contorta* removal tasks. (Photo: DOC)

feet will be covered by pine forest or pine scrub by the end of the century.” Rapid spread is possible as some trees seeded as young as four years old, seed could be windblown up to 10 kilometres and trees can survive at high altitude. The Park Board utilised the labour of outdoor clubs by offering a contract to clear a specific area of pines in a given time. This usually involved two or three or more weekends depending on the area and the number of club members available. The first Wanganui Tramping Club’s trips under this scheme were east of Ruapehu in 1965 and the following year the western slopes of Tongariro. This latter block was particularly difficult because of scrub impeding progress, restricting vision and swallowing trampers (some thinking never to be seen again). On receiving the

cheque for the first contract the club donated fifty pounds back to the Park Board. “... as an acknowledgment of the enjoyment members had gained from the park.” In the early 1970s Bill Cooper, Senior Ranger Ohakune wrote a far-reaching report suggesting volunteers be concentrated above the Karioi State Forest an area of worst infestation. More sparsely affected areas within the park would be covered by staff working out of helicopters. Later the volunteer area would be split into three blocks and worked over on a three-year rotation but the trees were just too dense at this stage to contemplate this sort of progress. Under the new scheme we worked alongside park staff to ensure continuity. This proved a bonus as over the years Club members got to know many good park staff. Bill’s scheme also required the cooperation of the Forest Service and Army to remove the wilding pines from their land and also the plantation *contorta* from Karioi. Later Forestry would also crush and burn the massive thicket of pines on the easier ground immediately above the Karioi Forest. Later also, contract gangs were used in some areas. Recompense to clubs was by way of a transport subsidy. Our club chose to charge our pine pullers \$5 and after paying food and transport costs anything left went into Club funds. The new stove at Mangaturuturu was paid for in this way.

Our first trips of this era were based in a camp which came to be known as Coopers Ohu with a wonderful spring gushing from the foot of a bluff. The pines were so thick on that first trip that we were able to go back to camp for lunch as we had only made a couple of hundred metres progress. On later trips as we gradually got on top of things we tramped considerable distances and got to know this side of the mountain fairly well. We also stopped at the Fijian Camp, a lovely sheltered spot and in two or three different camps on the Eastern Block. To give an idea of progress made, one year we were working well up on the Eastern Block. We pulled out only sufficient wildings to make individual tent sites leaving the surrounding thickets of pines to provide ample shelter and

In 2002 Tom Luff was awarded a Conservation Award by the Conservancy for the thousands of hours over more than 30 years he has devoted to the eradication of the wilding pine, *Pinus contorta*. Tom also dedicated years to the removal of introduced heather from the Mangaturuturu Valley.



Above: The battle against Pinus contorta would have been lost years ago were it not for the efforts of thousands of volunteers from all over the North Island and beyond. Here William Keys gets to work on removing a well established contorta tree.
(Photo: Harry Keys)

a good camp on what would have otherwise been a very exposed site. We were back there about four months later and our last job before breaking camp was to remove the sheltering pines, every other pine in the area having been removed during the season. In the late seventies Athol Hughes kept a personal tally and counted 2600 plants destroyed. Given that there were nearly forty members on the trip plus those from other Clubs the total pines pulled, chopped or lopped over the weekend must have been astronomical. By contrast, over the last couple of years the tally for the entire Wanganui contingent didn't go anywhere near Athol's total even though the area covered would have been many many times larger.

Slashers were a favoured weapon even though the rocky ground ensured quite a few people had to go home on Sunday night and explain why the slasher had a broken handle. Then secateurs were added to the arsenal of weapons. Over the last year or two folding pruning saws have been issued along with the toppers. However, pulling the plants out roots and all is still the preferred method if they are small enough.

The club was also fighting contorta in the highest halls of power. In 1974 the club wrote to the Minister's for Defence and Environment pointing out the ecological disaster that was looming if efforts weren't made soon to clear pines on army land and in the Kaimanawas

From 1975 the club ran two pine trips a year and along with Rangitikei and Taumarunui were, as far I know, the only clubs to run two trips.

This has been a wonderful team effort with sometimes up to fifty members on the pine blocks. Some deserve a special mention. Derek Matthews, Darryl Greeks and Ridgway Lythgoe who drove the large buses that enabled us to get such large numbers attacking the pines. Another name that comes to mind is David Scoullar. In twenty years he missed only one or two pine trips. On those occasions members of his family attended so the Scoullar Family Flag has been thing on the pine blocks continuously since 1980. We honour this record by still flying the family flag up there

A good deal of the enjoyment of these trips was undoubtedly due to our cooks. Cooking on an open fire for over fifty people was a colossal task and not once was there any trouble or fuss. These days because of fire bans DOC provides gas cookers. Chris Howie is representative of our excellent chefs and has organised and cooked for every trip over the last five or six years. Sometimes she has only been able to come up for one day so she has spent her time on the pines, returned to camp to cook tea, organised breakfast and then travelled back to town.

Along with Bill Cooper's foresight, later park staff and other clubs, the Wanganui Tramping Club has played its part in what has been an undoubted conservation success. More years on the pine blocks are still needed before this era in the Club's history is over but eventually the ever diminishing number of pines destroyed will reach the point where park staff will be able to control the last of them. On top of this the pine weekends have allowed hundreds of our members to get out onto the mountains and enjoy themselves.

Tom Luff
Wanganui

Early skifield days

Commercial skiing is a relatively modern phenomenon. Even though the first lodge was the Ruapehu Ski Club lodge built on Hut Flat in 1923 most of the ski lodges at Whakapapa were built in a flurry of activity after World War II. Six lodges were opened in 1950 alone. The original, single chairlift up the Rock Garden was opened in 1954 and at that time club members comprised the majority of skiers



Right: The Serac Ski Club on the Whakapapa Ski Field. (Photo: Bob Stothart)

at Whakapapa. They were the regulars, the enthusiasts and in a sense, the modern pioneers of skiing in the North Island.

Some new clubs and lodges grew out of existing tramping clubs (such as Tararua, Wellington Tramping and Mountaineering, Catholic and Hutt Valley) but many emerged as fresh entities to cater for the growing sport of skiing. New, more luxurious ski lodges were regarded for a while with mild scorn by members of the tramping clubs whose lodges were more basic, rustic even - basically bush huts with a trifle more insulation. For example, until the early 1970s the Wellington Tramping and Mountaineering Club sported outside lavatories (long drops). Over the years, these pioneering constructions have been modified to provide a higher level of comfort, privacy and warmth. The various lodges however, represent all that is good about New Zealanders' involvement in clubs: pragmatism, getting the job done and endless enthusiasm, laced with a good dollop of 'do-it-yourself' initiative and problem solving.

Serac Ski Club: early beginnings

The Serac Ski Club typifies the efforts of North Island skiing devotees to achieve low cost skiing for themselves and their families. Serac Ski Club was formed in 1967 and a lodge was built in 1968 when a group of older students and graduates, members of Victoria University Ski Club decided they could build their own lodge to cater for future partners and families. They each put \$100 into a building fund, estimating that it would cost about \$15,000 to build a lodge. A building site was secured, planning permission gained and a series of work parties followed. Membership was sought through friends, colleagues and Vic-



Above: The Serac Lodge in Ohakune, built in 1980 to provide accommodation for those members wishing to ski Turoa.
(Photo: Bob Stothart)

toria University staff and advertisements in Wellington papers. Schuss, Slalom, Mogul, Tasman, Glacier, Piste, Arete, Circe, Cornice, Tama were all considered as the new club's name but Serac (an ice mass associated with glaciers) was eventually chosen.

The founding members, no doubt recalling the wilder stories of their varsity skiing experiences, wanted to provide for families with a club that was functional, well run and comfortable without being too expensive. Club rules reflected these expectations: new members had to be nominated and seconded by existing members and each application was carefully assessed. Being graduates predominantly in arts, law, science and commerce there were not many trades people among the initial members so anyone who

could recruit a plumber, carpenter or electrician was encouraged to do so. The suggested maximum membership number of 200 was soon reached and a waiting list was a necessity. A twenty-four bunk, Lockwood lodge was gradually built at the Top of the Bruce road, adjacent to Graduates and the Wellington Tramping and Mountaineering Club lodges.

Members did everything. They dug holes, blasted rock, built block walls and assembled the Lockwood kitset. Skills such as vinyl laying and painting were quickly learned. Getting the water tanks to stop leaking through the concrete block construction became an epic of ingenuity as many schemes were tried and the leaks persisted for years until a large, thick butanol liner was inserted into each tank.

In line with a growing New Zealand interest in wine, a wine cellar was established in the lodge and members were able to purchase wine and make tasting notes in the log book. Eventually, concerns about insurance cover saw this little pleasure dispensed with and members reverted to bringing their own libations.

Catastrophe

The lodge was 'finished' in 1971 and served members well until part of the roof was ripped off during a horrendous storm in 1975, exposing the lounge and bunkrooms to an inundation of snow and rain. Pieces of twisted, corrugated iron and debris from the severely damaged lodge were found outside Manawatu Lodge about fifteen minutes walk away. Parts of the front wall were blown in, the roof stripped and the carpets ruined. Two student members were in the lodge at the time and for them it was a frightening experience. Their sensible actions are graphically recorded in the club log book. They shut down the water system, turned off the power and battled their way against the tempest to safety in Auckland University lodge to watch as Serac was torn apart.

It was heartbreaking news for members but they rallied and secured what remained of the lodge and worked through the process of making an insurance claim. A very good settlement was reached but the insurance company declined to enter into any cover for ski lodges at Ruapehu thereafter. Redesign involved input from the Ministry of Works as the structure was reviewed to cater more effectively for the extreme conditions sometimes experienced on the mountain.

The previous Lockwood construction, while attractive, required high levels of maintenance and did not retain warmth. Following the lead of neighbouring clubs, it was decided to clad the lodge with rough-cut treated timber which required no regular maintenance and which made the lodge secure and snug. A big saving in

electricity was noted too.

As it is frequently the same members who turn up for summer working bees members are now balloted for work parties on a four to five year cycle. Like all voluntary organisations the club has relied on willing members for the roles such as secretary, treasurer, booking officer, maintenance officers. President and committee members are crucial to the success and vitality of the club. Membership was originally Wellington-based but it is now spread throughout the North Island with some members overseas and a few located in the South Island.

New Directions

In 1980, the club decided to take advantage of developments on the Turoa slopes and a lodge of eighteen bunks was built in the original Alex Harvey area in Ohakune. When the club was founded, the constitution was written to reflect the interest of members in family skiing. Children, for example, would become adult members at age eighteen without having to pay the normal joining fee. Changes in society and in the structure of New Zealand families resulted in many debates at annual meetings, and frequent changes to the constitution, to adjust to reformed family memberships.

Within the wider community there were noticeable changes in commitment to clubs and organisations and the reluctance of people to voluntarily donate time or take on positions on committees, was evident. To cater for these changes the club decided to employ a part-time executive officer who does the bookings, banking, correspondence and weekly catering. Additional changes also included the introduction of 'sleeping' members and 'veteran' members. A more recent move will result in members being individually registered rather than as a family. While the two lodges were built to provide warm, safe accommodation for skiing, both buildings are

heavily used over summer for family holidays, tramping, golfing, fishing and gentle rest and recreation. Some members celebrated the millennium at Ohakune and the lodges have been venues for large family gatherings.

Members have participated in club races, more social than competitive, but a few members were serious racers and some reached the top echelons of New Zealand skiing. A few families immersed themselves fully in the culture of skiing and travelled to the mountain every weekend to allow the children to participate in the Whakapapa junior ski programme. Some became ski instructors at Ruapehu and elsewhere, others were volunteer members of Mt. Ruapehu Ski Patrol. The club is active in the Ruapehu Mountain Clubs Association, maintains a close liaison with the Department of Conservation and regularly participates in mountain clean ups. One member is a Director of Ruapehu Alpine Lifts. The connection with Victoria University Ski Club has almost vanished although several university staff are Serac members and annual general meetings are still held at the university. Some families in the club are comprised of three generations of skiers who continue to enjoy the advantages of membership and the on-going delight of skiing from a lodge on the mountain.

Below: In recent times new directions in snow recreation such as snowboarding and new technologies in skifield management have ensured the sport has become increasingly popular at both the Whakapapa and Turoa Ski fields.
(Photo: Ruapehu Alpine Lifts)



Bob Stothart
(with help from
John Andrews)

Roy Lynch - 25 April 1929 - 18 July 2002



Above: Roy Lynch explained to a young Chief Ranger Bruce Jefferies (pictured above) that the art of management was, "... Good managers do nothing but do everything."
(Photo: TNP)

Roy was a quite unassuming guy and a very special person whose contribution to conservation was much underrated.

I first met Roy in the late 1970's just after I returned to New Zealand from an assignment in Nepal to the position of Chief Ranger in Tongariro National Park. Roy was the President of Aorangi Ski Club and the ski club was considering some major alterations to their Iwikau lodge. Over the next few months I met with him on several occasions over the club's application for approval. After one of these meetings we were enjoying a beer and started chatting about some ideas I was considering for restyling the park's management structure. Roy listened to my disorganized ramblings. After a few minutes quietly commented that "We may be able to help you". That was the start of a relationship between Tongariro and Roy's business, Human Synergistics, that certainly influenced me and I think many of the ranger and other staff members that I worked with. Some years later, and probably in the same Wellington bar I recall expressing some frustration to Roy. I felt that we had made considerable progress, with our management systems and staff development but from a personal point of view I somehow had the feeling I was contributing less than my fair share. I can still see Roy's wily smile as he exclaimed "*Ab the art of management. Good managers do nothing but do everything*". It took me a few more years to fully understand what he really meant - but the philosophy behind his expression is something I have always carried with me.

In December 1982 a helicopter accident tore the heart out of the park's management team when four staff members and the helicopter pilot were killed while testing rescue equipment. Roy, who had worked with all of the staff members that had been killed, moved quietly alongside the team and helped us through a very difficult period. With his support, the idea, which several of the staff had been developing, of forming a natural history society evolved to include the establishment of a Memorial Fund for the accident victims. In 1984 Roy willingly agreed to act as the Tongariro Natural History Society's first president and in his own quiet but effective way guided us through the important formative years. In early July I received an email from Roy, that indicated he was starting a new chapter in his life. The time since Jill's accidental death had been dreadfully hard on him. It was great to hear that he had teamed up with Bea and had moved to the Hawkes Bay. A few short days later we heard that Roy has passed away.

Here was a guy that loved the park and went about helping to maintain it's values by working with the people that were charged with its management. We hear a lot about capacity building as a key element for effective conservation management. Roy was a person that not only talked effective management but was also actively involved and did something about it. He helped all of us to understand ourselves better and how we were seen by others and from here how we were better placed to interact as a management team. I could write more about the way this guy influenced me both personally and professionally. Suffice to say that Roy was a true friend and mentor and we are all better for being able to have shared and benefited from his influence.

Bruce Jefferies
Taupo

Heather beetles have bad year.

For the first year since establishment was confirmed in 1999, the heather beetle (*Lochmaea suturalis*) colony at Te Piripiri in Tongariro National Park appears to have gone backwards. Initially the population looked to be doing well, but by mid- December it became obvious numbers were down. Sampling during this period suggested numbers had dropped back below December 2000 levels (Figure 1). In Europe, heather beetle populations are notorious for outbreaking sporadically and then collapsing again fairly quickly – a combination of parasitism and disease are thought to be responsible for this phenomenon. Obviously, if heather



Right: The Heather Beetle (*Lochmaea suturalis*) was introduced onto Heather after careful trials to ensure the beetle would not prefer native species to the introduced heather. (Photo: DOC)

beetles were freed from these limiting factors here in New Zealand, then outbreaks would be larger, more prolonged and even more devastating than they are in Europe. Consequently, Landcare Research has been keeping a careful eye out for any parasitism, disease or predation. So what then appears to have gone wrong? To date some evidence for general predation has been found. Sampling in the area

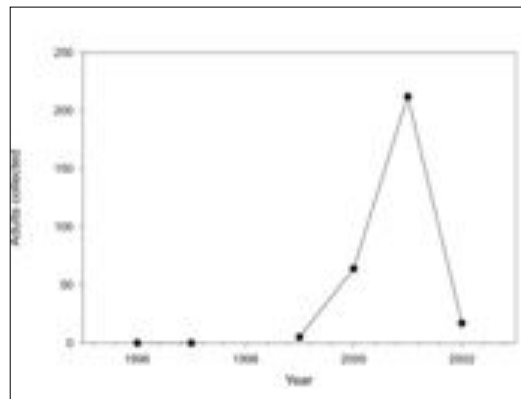


FIGURE 1: NUMBER OF HEATHER BEETLES COLLECTED FROM TE PIRIPIRI, DECEMBER 1996–2002

suggests carabid beetles have been increasing in number, but it is very unlikely this increase alone has caused heather beetle numbers to crash. Other potentially important predators like bugs and spiders do not appear to have increased in abundance. Small numbers of a native bug (*Cermatulus nasalis*) appear to be feeding on the heather beetle larvae but this is also unlikely to be significant. Fortunately no evidence has been found for the most devastating causes of population decline overseas, parasitism or disease.

Given that predation, parasitism and disease are unlikely to have been responsible for the population crash, meteorological records were checked to see if there was anything unusual about the weather during spring and early summer. Data from NIWA's meteorological station at Whakapapa (17 km NW of Te Piripiri and at a similar altitude) revealed 2002 had in fact been an exceptionally cold year.

This study was funded by the Foundation for Science, Research and Technology.

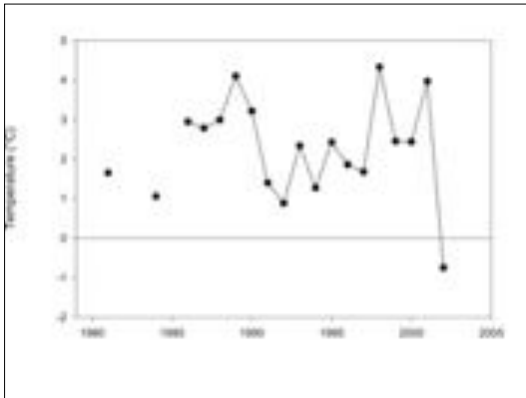


FIGURE 2: MEAN MINIMUM TEMPERATURE AT WHAKAPAPA FOR OCTOBER 1981–2002

Paul Paterson
 Manaaki Whenua
 Landcare

Both October and November had the coldest mean minimum temperatures on record. In fact 2002 was the only year during the past 2 decades when the mean minimum temperature for October has dived below zero (Figure 2). However, given that the crash in beetle numbers did not become obvious until mid-December, late snowfalls in November are likely to have been important too. Snow this late in the beetles' native range is virtually unheard of and may be something they are simply not adapted to cope with, especially if already stressed by the previous months' conditions. Eggs and particularly larvae would be vulnerable to freezing. Heather beetles collected towards the end of October had already begun to lay eggs, so the most fragile life stages would have been exposed to the unseasonably cold conditions. Given evidence to date, it is likely the unusual weather last spring was to blame for the beetles' setback. Fortunately the news is not all bad. Beetles have just recently also established at two sites in the Bay of Plenty, and despite the adverse conditions possibly at two more sites in Tongariro National Park.

A virtual Tongariro Crossing

Every year tens of thousands walk the Tongariro Crossing. There is no doubt that the 6-8 hours trek over the stark volcanic landscape is a stunning experience. Volcanoes have shaped the Central North Island landscape and understanding what is around you and under your feet can add immensely to the walk. This CD-ROM allows the user to explore and learn about the volcanology of one of New Zealand's most spectacular landscapes. It is suitable for secondary and tertiary students, plus the general public. The virtual field trip of 360 degree panoramic images is supported by explanatory hotspots, background information, maps, diagrams, an indexed slide show, animations, eruption movies, and a glossary. Development of the CD-ROM was based on research and teaching carried out by volcanologists in the Department of Earth Sciences.

(www.earth.waikato.ac.nz)

at The University of Waikato.

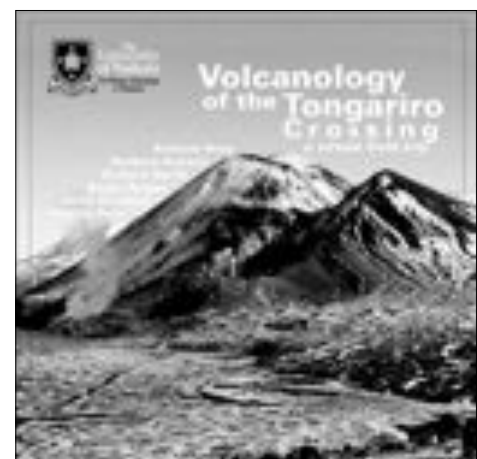
The CD-ROM has been produced by the Waikato Innovation Centre for electronic Education (WICeD'm) at The University of Waikato.

The CD-ROM is available for \$15 from:
 The School of Science & Technology
 The University of Waikato
 Private Bag 3105

Hamilton, New Zealand

email: science@waikato.ac.nz

or from the Whakapapa Visitor Centre.



Right: The cover of the innovative multimedia Tongariro Crossing CDROM. (Photo: Candice Bardsley)

Volcano watch

Ruapehu

Small steam bursts occurred at Crater Lake in January and February and plumes of steam were seen into June. This activity was due to enhanced hydrothermal activity in the Lake with temperatures rising up to 42°C in January. The Lake stayed warm until late June, longer than average, and in early November was down to 18.2°C.



Above: Mt. Ruapehu's Crater Lake in July 2003. Photo is taken from on top of the seven metre tephra dam formed from erupted material in 1995-1996. (Photo: Dave Wakelin)

The warm temperatures resulted in enhanced evaporation during summer and autumn. The dry summer and autumn and several snowfalls which periodically stopped the summer melt meant the lake rose little.

A significant volcanic earthquake (Magnitude 2.6, possibly shallow) occurred on 3 December 2002. It was not clear whether it was accompanied by surface activity as possible evidence of surging at the lake shore could also have been due to erosion from wind waves on the rising lake. No mud was thrown out and the Lake was already battleship grey so no change in the Lake status was apparent.

Otherwise the volcano has been relatively quiet in 2003. Weakly elevated seismic tremor was detected by the seismometers of the Eruption Detection System in April, May and July with

sporadic volcanic earthquakes occurring on average 1-2 times per week (Brad Scott GNS, personal communication).

The vibration of the volcanic earthquake on 3 December 2002 exceeded the alarm thresholds of the three geophones at the crater site of the new Eastern Ruapehu Lahar Alarm and Warning System which created the first test of the Genesis Control and GNS duty scientist procedures. Some (not all) of the geophones at sites 1 and 3 (Tukino) similarly triggered alarms following regional earthquakes on 7 March (30 km SE of site 3, M 3.7, 12 km deep) and 14 March (35 km W of site 1, M 3.4, 26 km deep). ERLAWS site 1 has also been triggered during two periods of strong northwest winds in a warming spring snow pack. All these vibration signals are of short duration and will be distinguishable from the vibration expected during lahars which are likely to be drawn out.

Variation in seismic velocity characteristics under Ruapehu was the subject of an interesting science degree completed during the year by Alexander Gerst, a German exchange student at Victoria University. This follows work by his supervisor Dr. Martha Savage and colleagues at Ruapehu before and after the 1995-1996 eruption. DOC provided limited logistic support which was generously acknowledged along with a heartfelt acknowledgment to a friend who helped him dig out a data disk from under a metre of rime and snow in a winter blizzard at -10°C!. The work documents a change in seismic velocity trend pattern from NW-SE (approximately perpendicular to the main regional tectonic stress direction) prior to the eruption, to parallel the regional stress direction after the eruption in 1998. In 2002 further change was detected with deep events remaining oriented NE-SW whereas shallow events were found to have realigned towards the pre-eruption direction. The interpretation is that prior to the eruption a pressurised magma system overprinted the regional stress field generating a local field with a preferred crack alignment.



The north side of Ngauruhoe from the summit of Tongariro (with Jamie Keys in foreground). Lines and dates summarise recent evolution of snow-free ground observed during recent winters.
(Photo: Harry Keys)

Harry Keys
Conservancy Advisory
Scientist

During the eruption stress decreased sufficient to change the local stress direction back to the regional trend. Refilling and pressurising of the shallow parts of the magma dike system is believed to be responsible for the newly observed realignment. This effect could provide a new method for volcano monitoring. (A. Gerst: Temporal changes in seismic anisotropy as a new eruption forecasting tool?. Unpublished MSc thesis Victoria University, 2003, 187 pages).

Ngauruhoe

The bare ground reported last year around the pre-1954 crater rim continues to expand and change (see photo). This year it appeared to extend west early in the winter and in early August bare ground could be seen from the BP petrol station in National Park. Extension further west than that would mean heat has to penetrate the 1954 lava flows which cover this part of the old rim. In the spring the western extension was not so apparent, perhaps because of increasing snow depth. Bare ground thereafter became very prominent on the eastern side south of the old fumaroles and could be seen from near Waiouru. Seismicity remains quiet and GNS have not yet been able to detect any elevated levels

of carbon dioxide or increase in surface temperatures in the bare area.

Tongariro

The distinctive unusually low-frequency earthquakes (tornillos) at Te Maari crater reported last year have continued. GNS scientists have set up filter processes so that records of these tornillos can be studied separately from other seismic records. They are highly variable with bursts of several per day followed by days or weeks of no activity. GNS believes that these shallow events are probably caused by periodic movement of high pressure geothermal gases and hot fluids under Te Maari. Their appearance seems to signal a change in volcanic behaviour at Tongariro but their long term significance remains unclear (GNS Annual Report 2003).

Other volcanoes with ski areas

Mt. Etna continues to disrupt skiing and other activities on Sicily. In December during the major flank eruption reported last year a lava flow covered a building in a tourist ski area. Vapourisation of oil or water in the area led to a major explosion that injured 32 people. Activity and strong gas emission declined afterwards but volcanic earthquakes and occasional ash have continued with ash falling on eastern villages in April.

In Japan Asama Volcano on Honshu deposited small amounts of ash on snow in February and March. The popular tourist volcano Aso on Kyushu had five small phreatic eruptions in July followed by continuous tremor and other seismicity. Tokachi on Hokkaido has been seismically active.

Tongariro National Trout Centre



Right: Bill Condon, Hatchery Manager in the 1930s strips a fish from the Waihukahuka Stream to obtain eggs for the hatchery under the watchful eye of a young visitor to the hatchery.
(Photo: courtesy of PR & AB Warnock)

The Tongariro National Trout Centre is situated on State Highway 1, just south of Turangi. Although only a short distance from the main road, the site is peaceful and relaxing, set amongst native bush and nestled beside the Tongariro River. The centre provides a “window” to the Taupo trout fishery, and an opportunity for the public to not only view trout in their natural environment, but also gain an insight into what the Department of Conservation does to manage the trout resource. It also holds within its grounds a tremendous amount of history about the Taupo fishery.

The site was originally used as an angler’s camping ground and hatchery facility. In 1926, the Department of Internal Affairs, who were then responsible for the Taupo fishery, organised for the hatchery to be built. It began operation in June of that year, with the first eggs totalling 20,000, taken from rainbow trout in the Waihukahuka Stream, which runs through the trout centre grounds. In 1928, the Chief Inspector of Fisheries, A E Hefford, visited the new hatchery and wrote a report about his visit. Over the next few years improvements were made to the aeration of the water supply, and windows were added to the building and additional space was built. The early 1960’s saw electricity connected to the facility and more improvements made to the grounds including new staff accommodation and an office building. In 1974 the hatchery was upgraded and raceways installed which enabled up to 120,000 fingerling trout to be raised for distribution.

The hatchery still plays an important role for the fishery team. Although in the early days it was used to rear fish for stocking of lakes and rivers in other areas, and even to be sent overseas, today it is simply used to raise approximately 5,000 fish each year. These fish stock the children’s fishing pond at the centre. Keeping the facility as a working hatchery however, ensures that each person in the fishery team

learns the variety of skills needed for running the hatchery successfully, from stripping the rainbow hen for her eggs, fertilising the eggs, incubating the ova, ensuring survival of the fry, and specialised feeding of the fish at each stage of their development. This keeps the ‘art alive’. There is a possibility that at some stage in the future the wild stocks of Taupo trout could be put in jeopardy through a natural occurrence, such as another major eruption. While with time the fishery would inevitably recover, the importance of trout to the local community and economy would demand that we “kick started” it again. Should this ever happen, the hatchery would be used to produce fish to assist the fishery to recover. It is therefore seen as a very valuable safeguard for us.

A fish trap was installed in the Waihukahuka Stream within the grounds in 1963 and operated until

1995. It was used primarily to obtain eggs from selected fish for the hatchery facility, but also to determine the numbers of spawning fish using the stream. For a period the run of fish through the Waihukahuka Stream was used as an indication of the Tongariro River trout run, although in later years more effective methods of estimating the Tongariro run were implemented. The trap is still on display



Right: Two wildlife rangers netting fish for hatchery purposes from the Waihukahuka Stream within the trout centre grounds, approximately 1939.

(Photo: courtesy of PR & AB Warnock)

Below: Prime Minister Helen Clark and Tongariro National Trout Centre Society Chairperson John Milner look at the display of rods and reels in the new River Walk Display Centre after the opening on 28 August 2003.

(Photo: Dave Wakelin)



within the centre today and a plan is currently underway to improve the display so that visitors can learn about how this and other traps in the fishery operate.

In the 1980s management focus for the trout centre moved direction. Rather than viewing the centre as purely a hatchery facility, focus shifted to developing the site as a visitor attraction and educational tool to increase people’s understanding of the fishery. The centre began to take on an advocacy role promoting trout, trout fishing and freshwater ecology in general. In order to achieve this new objective, other aspects of the Tongariro National Trout Centre were improved and developed, and the name changed to reflect the new role.

A large pond, originally built as a settling pond for water used for the hatchery build-

Right: The wonderful displays in the new building which show the work the fishery team does in managing the Taupo fishery today
(Photo: Dave Wakelin)



ing before being recirculated back into the Waihukahuka Stream, was developed into a kid's fishing pond in 1983 and stocked with hatchery reared trout. Over the years many children have now caught a fish from this pond on the popular public fishing days held during the year. These fishing days were initially organised and run by members of the Tongariro and Lake Taupo Angler's Club (TALTAC) assisted by DOC staff. Today, the Tongariro National Trout Centre Society organises a band of volunteers to run the kids fishing days from April to October each year. Over 1500 children participated this last year, each catching a fish from the pond.

One of the main attractions at the centre is the underwater viewing chamber, where visitors can observe trout in the clear spring fed waters of the Waihukahuka Stream. Through the 'looking glass' visitors can watch both brown and rainbow trout moving in the current of the stream feeding and spawning in their natural habitat. The chamber was erected by the Lions Club of Turangi in 1983 and opened to coincide with the centennial of the introduction of rainbow trout to New Zealand. Although a great attraction from the start, the chamber was unfortunately prone to flooding. The original design was difficult to dry out following flooding and architectural improvements were made in 2000. The building that was once above the viewing chamber, was dismantled and re-erected as a kiosk by the children's fishing pond. This provided an undercover space for children to gather on fishing days, a pleasant place for volunteers to use when assisting with the kid's fishing, and also a place for our duty ranger to be based during opening hours. Although the on-duty ranger was responsible for the daily tasks of maintenance and running the trout centre, their responsibilities were slowly but surely metamorphosing into a public relations role as they interacted with the public, answered questions and helped to educate visitors about the fishery.

In the late 1980s DOC developed a new public carpark and entrance for the centre. In 1990 the Rotary Club of Turangi built an impressive rock retaining wall on the path that leads down into the centre, providing an aesthetic link to the adjacent Tongariro River. In 1992 new signs and graphics were installed around the paths

Right: Before opening the River Walk Display Centre Prime Minister Helen Clark had a chance to chat with school students about their day's catch from the Children's Fishing Pond at the Tongariro National Trout Centre. (Photo: Dave Wakelin)

of the trout centre to explain the rearing ponds and hatchery, and a welcome sign and map of the site was placed in the main car park. By 1994 six more interpretive panels had been installed alongside the Tongariro River walk to explain the history of the area, origins of the names of the pools, fishing techniques and angler etiquette on the river. The trout centre was steadily becoming a communication tool for the fishery team.



In 1999, a plan was made for a dry display area to be built on the site of an old workshop and which would house a museum,

auditorium and teaching facility. This was to be a joint venture project between DOC and the National Trout Centre Trust (later to become the Tongariro National Trout Centre Society).

In September of 2000, the Tongariro National Trout Centre Society was established and incorporated. The objective of the Society, according to the Society rules of June 2000 was "...to promote and develop the Tongariro National Trout Centre as a centre of information, resources and learning in respect of trout, and the trout fishery..... and to foster the education of New Zealanders and visitors to New Zealand in matters relating to trout, trout fishing and other fresh water fisheries in New Zealand." The Department of Conservation and the Society began to work together in partnership to achieve the common objective of development of the centre. In 2003, the exciting plan for a dry display area finally came to fruition, and the fishery team saw the opening of a new interpretive building within the trout centre called "The River Walk". Over \$500,000 was raised by the Society for the development and on 28th August 2003, the Prime Minister, Helen Clark, officially opened The River Walk to the public, realising the dream and vision of the Society, the Department of Conservation and many dedicated sponsors and volunteers.

The new building is a fantastic addition to the trout centre complex. Beautiful quality displays illustrate the history of fishing in the Taupo District, the angling opportunities available, trout ecology, and the work the fishery team does to manage the Taupo fishery. Designed to appeal to both young and old, the displays are interactive, colourful and informative and a wonderful way of creating even greater public awareness of the trout fishery resource and the importance of looking after the environment. Plans are underway to develop an educational programme for school children based around activities at the centre so that children gain a valuable learning experience from their visit.

As management of the Taupo fishery takes on more and more of an advocacy focus, and we concentrate even more on involving the community in what we do, there are plenty of other plans ahead to develop different aspects of the centre. It is exciting to look back over the years at the progress that has been made, and to think of the hard work, dedication and focus of the people that have been involved. It will be just as interesting in another 10 years to see what role the centre is playing in the management of the fishery and what new developments have been progressed.

Petrina Francis
Programme Manager
Community Relations

Ralph sets a record!

Ralph Turner retired last year after an incredible 50 years employment with the Government, a length of service that must qualify for a longevity record!

He started his Forestry career as a woodsman at Golden Downs in 1953. He progressed through the Woodsmen ranks to Leading Woodsman in 1958 and Forest Foreman in 1960. During this time he worked at Ngamu, Balmoral and Ashley Forests and came back to Ngamu as Officer in Charge.

Ralph came to the Central Plateau area in 1983 as Officer in Charge Lake Taupo Forest which at that time was the third largest exotic forest in the country.

After the restructuring of the Forest Service in 1987 he became Forestry Manager of the Turangi District of NZ Timberlands until 1989 when Timberlands closed down.

In 1990 Ralph chose a new career path and was appointed Field Centre Manager for the Taupo Field Centre. With his existing background in asset and people management Ralph quickly demonstrated his skills and organised relocation of the Taupo Field Centre Office from Taupo township to its new location adjacent to the Taupo Native Plant Nursery.

In addition to his job as Field Centre Manager and more recently Field Centre Supervisor, Ralph held two key positions for the Conservancy for which his background

made him eminently suited. These were Conservancy Fire Co-ordinator and co-ordination of logging of exotic forest blocks within the Conservancy. Ralph has played a key role in Conservancy fire training and attendance at local wild fires during the past few years.

His community relations skills have done much to elevate the profile the department within the Taupo community. Reading from Ralph's personal file "... prepared to control all project expenditure, staff, public and individual relations ..."

One notable thing about Ralph was the promptness. Always on time and it would be very unlikely for Ralph to be late for a meeting.

In more recent years Ralph was a tremendous asset to Conservation Week with the tree-planting programmes around the district schools, Tu Kakariki planting at Five Mile Bay and Waikato River and Whakaipo Bay. These long-term projects relied very much on Ralph's organisation and certainly his community spirit in ensuring that the programmes were a lot of fun.

Ralph wasn't allowed to retire that easily! He was brought back under contract to organise the department's fire fitness training and tests. This summer he led the Boyd/Oamaru summer programme trip and received a spontaneous ovation at the end of a great day's walking.



Ralph Turner doing what he does so well, relating to students in this case pupils from Taupo Intermediate School. (Photo: Dave Wakelin)

Dave Lumley
Turangi Taupo Area
Manager

The war of the weeds

In 1887 Paramount Chief Horonuku Te Heuheu Tukino IV gifted the sacred peaks of the Central North Island to the Crown creating our first national park. Since that time settlement, access, logging, farming and tourism has opened the doors for invaders of the botanical kind.

There is no doubt that if left uncontrolled the invading weeds could present a totally different Central North Island landscape.



Above: Heather was deliberately planted in Tongariro National Park in the early 1900s in an attempt to establish suitable habitat for Grouse. (Photo: TNP)

Heather is a hardy exotic species that has long been established within the Park. Large scale planting began within the Park as early as 1913 (See the article on John Cullen in the *Tongariro Journal*, Vol 8 December 1999). By 1918 6000 bell heather and 5000 common heather seedlings had been strip planted by prisoners on 1200ha of burnt tussock land. Seed imported from France was spread over freshly burnt ground to ensure maximum strike. The heather established itself in the park but the grouse that were released failed to survive. Within the harsh landscape beneath the mountains heather creates a sub-

soil and sheltered environment for native seedlings. It also acts as an effective weed mat against exotic, wind blown grass seed.

In 1927 the New Zealand Forestry Service planted Lodge Pole Pine (*Pinus contorta*), a similar looking pine to the much slow growing and more profitable *Pinus radiata*, on lands adjacent to the park. In the 1950s it was officially acknowledged that *Pinus contorta* was a real threat to the park and action had to be taken. Work eventually started on eradicating the pest tree in 1960 but it is still a major enemy in the war against weeds. Helicopters are used to ferry people with a sharp axe or chainsaw to trees that were not otherwise practical to get to. It was a dangerous operation that took a lot of skilled labour. This stretched budgets to the limit so it was hastily upgraded to a Class B noxious plant, ensuring subsidies for the plants eventual eradication.

When native timbers were no longer viable to log *Pinus radiata* forests were planted. On the wheels of logging trucks, and other heavy machinery, broom seed was dispersed along miles of forestry and road verge. This seed soon spread along main highways and into the Park. Gorse, the ultimate hedge plant and every shorts wearer's nightmare, had also been spreading unchecked toward the Park, on the hooves of live stock and horses. Lupin seed was spread in the same way. This legume likes streams and it hides unassumingly amongst the natives embedding its plentiful seed in the soil to ensure its survival.

The 1952 National Parks Act charged park staff with a responsibility to eradicate, or at least control exotic weed species. By the 1980s the war against invasive weed species was at its worst. Lethal sprays were used including 245t to kill broom and gorse. Unfortunately, to this day only grass grows where that lethal spray was used.

The early nineties also saw large areas of broom flourishing on the sides of the



Above: Chilean Firebush, one of a number of exotic plants that has the potential to invade and smother native plants. (Photo: Nick Singers)

Lyall Crump
Whakapapa

main highways that run through the Park. It was a simple spray job along the road edge but it was proving to be a big task to eradicate the ever-growing patches within the park. Botanists and scientists put on their thinking caps and came up with a good idea - beetles. The twig miner was introduced as a long-term solution to heather, broom and gorse. Different areas of the park were studied and it was found that in some areas the manuka would eventually outgrow broom and gorse.

Climbing varieties like Old Mans Beard, Blackberry and Chilean flame creeper began to appear on the fringes of the Tongariro forest. These plants have the potential to smother and kill acres of bush where kiwi, whiowhio, and kereru like to forage.

Cotoneaster (*Cotoneaster glaucophyllum*) is a recent invader into the park. It has several woody strong trunks that make it well suited to the harsh environment. Other plant species suffer from its deep spreading roots and light-robbing branches. Its seed is spread across the Park by birds making this plant the next generation of enemy.

Darwin's barberry (*Berberis darwinii*) is another new invader. This shrub has a four-metre spread and has infested the Rangataua forest. Its seed is bird dispersed and it tolerates the Park's harsh soil and climate conditions. A bulldozer is

the most practical method but in plant sensitive areas the seasonal worker had to endure the spiky branches to cut and spray the stump with organic herbicide.

As the decade came to an end a dedicated bunch of seasonal workers emerged. Led by farmer Keith Brown they recognized that they were the next generation in a battle against invasive plants. They began utilizing what was around them and finding better, more effective ways to kill the invaders.

They decided to upgrade the equipment in the war. Staff used Global Positioning System (GPS) units to track and record broom, gorse, cotoneaster and pine. Helicopters are employed to dangle the honed seasonal worker on the end of a strop to destroy otherwise impossible to get to pest plants. Quad bikes have also become a brilliant tool for scouring ridges and gullies. The keen 'Weed Eradicator' is usually armed with a set of lightweight pruning shears and a small spray bottle full of organic poison and blue dye. The dye is a signifier so that poison isn't wasted on the same plant.

New legume-specific poisons are being used on big patches of seedlings from pack spray units. A big spray unit is used where its long hose is practical but the foot soldier is still an effective weapon.

Development of new poisons is vital in a constant war against exotic invaders. Fires and eruptions may shape the land but people still have to fight the war of the ever encroaching pest plants, shrubs and grasses.

Eventually there may be more species like heather that make a permanent home within the national park. DOC has an obligation to look after the landscape for people to enjoy in its natural state and the current 'Weed Eradication' team has taken that seriously.

Conservation Awards 2002

The November 2002 publication date of the last Tongariro Journal meant that details of the Tongariro Taupo Conservation Awards 2002 could not be included.

The later publication of the 2003 Journal to coincide with the Waihohonu centenary means we can bring you not only the 2003 winners but also those who received awards in 2002.



Above: The three Ohakune stalwarts, Gerard Bach, Jon King (partly obscured) and Deryck Brown who have driven the restoration of the Ohakune's Mangawhero Stream and establishment of the river walkway plant the first of many hundreds of trees on the second stage of the walkway.
(Photo: Dave Wakelin)

Dave Wakelin
Senior Community
Relations Officer

Tom Luff from Wanganui, has devoted thousands of hours over more than 30 years to the eradication of the wilding pine, *Pinus contorta*. But for people like Tom and the late Ohakune Senior Ranger, Bill Cooper, the eastern side of Tongariro National Park would be a forest of pine to high altitude with much of the special sub-alpine vegetation destroyed. Tom also dedicated years to the removal of introduced heather from the Mangaturuturu Valley.

Ohakune 2000 Inc., a community group has been doing great things in the Ohakune township. Deryck Brown, Jon King and Gerard Bach, decided several years ago to do something about the state of the Mangawhero River that flows along the northern side of the town. Through a good deal of coercion, persuasion and drive they rallied many sectors of the township into clearing masses of blackberry and other weeds, and with the Department's financial assistance planted thousands of native trees. The result is a river walking track that is well used by the community. The walkway is a credit to the town and an example to other small communities faced with similar overgrown rivers and streams.

Darryl Cash Darryl Cash, owner of Shirley's Shoes in Taupo, made a decision about seven years ago to help with protected species work in the region. Darryl came up with a novel means of support. He decided not only to print a conservation message on his recycled paper shop bags but also to donate the equivalent cost of producing the bags to conservation work carried out by the conservancy. Some of the funding has also been used to further our work with the Blue Duck and Operation Nest Egg, part of the BNZ sponsored Kiwi Recovery Programme. Darryl probably has the only shoe shop website in the world with such strong links to conservation.

John Davis of Taupo has devoted the last 20 years towards the protection of Lake Taupo and especially its trout fishery. His work over the years is an outstanding and a great example to others in the community. John started as a keen trout fisher and member of the Taupo Fishing Club executive. He was appointed by the Minister of Conservation as the inaugural chairperson of the Taupo Fishery Advisory Committee in 1990 and has been a member until late this year. He has been a member of Environment Waikato's regional environment committee, chair of the Lake Taupo Users' Forum and is currently chairperson of the Lakes and Waterways Action Group.

Sofia Lund Sofia Lund from Sweden first came out to Turangi to be an international volunteer working on forest health monitoring. Later she undertook an ambitious project, surveying, recording and writing a plant field guide for the Kaimanawa Ranges. In addition she also undertook some threatened plant survey work in the Kaimanawas. This has all been voluntary and shows a tremendous commitment on her part to conservation. She circumnavigated the world five times in the last three years to work in the conservancy.

Lake Taupo - historic tourist hub of the North Island



Right: The mountains of Tongariro National Park form a magnificent backdrop to Lake Taupo. The Taupo region relies for much of its economic growth on the scenic and recreation values of the national park and the lake.
(Photo: Destination Lake Taupo)

Taupo's history began with a bang!

About 1800 years ago, 186AD the face of the North Island changed forever. A series of major ash eruptions that blanketed huge areas especially to the east. A cataclysmic explosion followed which ripped the centre out of the island creating a massive caldera or crater, which in time filled with water to become Lake Taupo. In all directions for 80 or more kilometres hot pumice and ash from the collapsing volcanic plume buried forests and in its path .

Mute witness to these events were the central North Island mountains, Ruapehu, Ngauruhoe and Tongariro, Kakaramea, Tihia and Pihanga. They form the southern end of the Taupo Volcanic Zone, which stretches north eastwards through Taupo and the Rotorua volcanic area into the Bay of Plenty and beyond. With eruptive histories reaching back as far as 300000 years in the case of Ruapehu the volcanoes are now part of Tongariro National Park a dual World Heritage Area.

To the east lies another range of mountains, the Kaimanawas. Formed originally from the upthrust of ancient seafloor the Kaimanawa forests were buried during the Taupo eruption. However, little pockets of vegetation that were sheltered from the blast gave rise to the magnificent present day beech forest with impressive stands of podocarps here and there.

The elements that make up one of New Zealand's most exciting and dynamic tourist attractions were in place.

To the early Maori who settled around the shores of Lake Taupo the lake and forests were a source of food, the thermal springs a source of heat and fuel for cooking and the mountains sacred homes of their gods.

Ngati Tuwharetoa and Ngai Tahu are the tangata whenua around Lake Taupo and the mountains with Ngati Rangī around the southern slopes of Ruapehu. Ngatoroirangi the navigator and tohunga from the Te Arawa canoe journeyed inland and came to the great lake. Clearly taken by the beauty of the Lake Taupo region he journeyed around the lake and climbed the slopes of Ngauruhoe the lay claim from the highest point. A severe storm assailed him and in danger of losing his life he cried out in prayer to his sisters in Hawaiiki to send fire. This they did and after breaching the surface at places such as White island and Rotorua it burst forth from the mountain and gave him warmth. Today the occasional eruptions of the volcanoes bring excitement and sometimes disruption to the area.

A few Taupo facts:
Lake Taupo is 359 metres above sea level, 40km long and 30km wide with an area of 616 sq. km.
Yearly sunshine hours: 2002
Yearly ave. rainfall: 1045mm
Average temperatures
Summer: 22.8°C
Winter: 11.7°C



Above: The early European tourists reached the delights of the Central North Island through an interesting mixture of transport over what was known as the Grand Tourist Route. The journey began in Wanganui with a river journey up the Whanganui River to Pipiriki. From here a stage coach trip took the passengers to Waiouru and then on to Tokaanu with a rest stop and change of horses at Waihoehonu Hut. Lake steamers such as the *Taubara* and *Tongariro* completed the journey with a cruise northwards up Lake Taupo to the small township of Taupo. (Artwork: Ruth Paul from *The Restless Land, Stories of Tongariro National Park*)

Another great explorer, Tamatea-arikinui (Tia) was responsible for many of the place-names around the lake. The step-like nature of rapids on the Waikato River were named Aratiatia (the stairway of Tia). The drumming seemingly hollow sound at Lake Taupo's edge gave rise to Tapuaeharuru Bay - resounding footsteps. Water squelching up under his feet at Waipahihi a Tia - the squelching water of Tia.

Tia is said to have noticed a high rocky cliff facing the lake that had some resemblance to the cloak (or Taupo) he wore around his shoulders. The lake's name became Taupounei a Tia (the great cloak of Tia). Another version speaks of the supernatural powers of Ngatoroirangi enveloping Tia in a cloak of darkness and another interpretation of Taupounei a Tia -the great envelopment of Tia by darkness.

Taupo - prime tourist destination.

Tourists look for top scenic and recreation attractions and activities, ease of access, inclusive tours, full range of souvenirs, good accommodation and dining and efficient informative friendly information centres. Taupo has all of this and more.

The volcanic influences on the landscape clearly stand out – so much so that in 1990 Tongariro National Park was inscribed on the World Heritage Listing for its natural

landscape values and only three years later for its associative cultural values, recognizing the unique spiritual and cultural associations the iwi of the area have for the sacred mountains.

This area must have been well appreciated by early travellers if they were prepared to travel by river and stage coach in often less than ideal conditions to reach the delights of the Tokaanu thermal pools and hotel. From

Ask a skier and his mind turns to the two largest commercial ski fields in the North Island. Lake Taupo and its tributaries are world famous for rainbow trout fishing.

Our forests, rivers and mountains provide some of the most exhilarating outdoor activity to be found anywhere in the world. Where else can you ski a live volcano, catch a trout, raft a wild river, sit amid tall green trees and finish off with a tandem sky dive or a death defying bungee jump and all in one day?

The prime reason tourists come to this area is for the breathtaking spread of nature that is laid out before you when you arrive on Taupo's shore. The natural attractions of the central North Island are impressive. The area benefits from the protection afforded many of the natural features. Tongariro National Park, Kaimanawa Forest Park, Tongariro and Erua Forests, parts of Wairakei Tourist Park, lakeshore and other reserves come under the administration and management of the Department of Conservation. The Lake Taupo fishery is also managed by the department with extensive monitoring and research ensuring this valuable sporting asset is always in prime condition. To ensure that areas that attract the visitor



Above: Modern quad chairlifts and improvements in facilities from beginner to advanced at the Whakapapa Skifield mean queues like this one in 1984 are a thing of the past.

(Photo: TNP Collection)

Right: The Wairakei Terraces are recreating some of the majesty and wonder that tourists once saw during a visit to the geysers and silica terraces of the Wairakei Thermal Valley.

(Photo: NETCOR)

Below: Destination Lake Taupo's website www.laketauponz.com is probably the most comprehensive tourism website in New Zealand. Whether it's information on scenic attractions, accommodation, dining out, social services, tourist services or forthcoming events you are likely to find it on this site. There are links to just about every tourism operator and accommodation provider in the area. Check it out.

are not spoiled DOC carefully manages the assets and issues concessions to operate businesses in these natural areas after careful vetting of the operators. Taupo's attractions are world renowned.

Geothermal delights

From the first Maori settlers to the first European explorers to the modern day tourists all express a fascination with geysers, mud-pools, mineral pools, steaming ground and vibrant colour where soil and rock are cooked. A 45-minute walk through the Craters of the Moon in Wairakei Tourist Park amid a steam-shrouded landscape is a good introduction to geothermal wonders. For much of the way Department of Conservation staff have laid wooden boardwalk to protect visitors from the hot ground and to reduce the amount of environmental damage that would be caused by thousands of feet trampling through the area. The Craters of the Moon Trust volunteers have for many years done a superb job in providing information as well as keeping a watchful eye over the carpark.



The underground heat has been tapped at a number of hot pool complexes, including one in Tokaanu at the southern end of the lake and another on the Napier/Taupo highway. Here you can soak in hot mineral waters straight out of the ground or heated swimming pools, which use heat exchangers. Although the magnificent geysers of Wairakei disappeared with the development of the Geothermal power station in the 1950s, a new venture located in the Waiora Valley, Wairakei, is recreating some of the spectacles that once existed here including the 'silica terraces'. Posted throughout a one hour guided or self governed walk, are carvings that depict the stories





and history of Ngatoroirangi and Ngati Tuwharetoa, the Te Kiri o Hinekai stream and pool known world-wide as the Honeymoon Pool and valued for its therapeutic powers.

Adventure Heaven

Soak in the scenery leisurely quietly if you wish. But if pumping adrenalin is your thing then Taupo has an abundance! Bungy off a Waikato cliff to within millimetres of the river (or head and shoulders into the river if you wish); fly like a bird for a minute or two from on high above Taupo on a tandem skydive; test your nerves on a high level ropes course (we have two in the region); cruise quietly through New Zealand's largest river delta (Tongariro) where if you are quiet you could see up to 40 of our bird species; get wet pounding down a river in a raft or a kayak, or spin 360° on a thrilling jet boat ride to the Huka Falls, or put on hiking boots to make the Tongariro Crossing over a spectacular volcanic landscape. Try mountain biking along the new Rotary Ride from Spa Park to Huka Falls. Finish the day with a soak in a hot mineral pool - conveniently located at either end of the lake! If cycling is your thing then get into practice for the Great Lake Cycle Challenge. If you prefer multisports try the Tongariro Mountain Classic, Crater to Lake, Lake's Express, or the big one, the Taupo International Ironman.

Below: The staggering fact is that Lake Taupo has not been stocked with trout for more than 40 years. The rivers and streams that feed into Lake Taupo are such fertile spawning grounds and the lake so rich in feed that there is no need.
(Artwork: Ruth Paul from The Restless Land, Stories of Tongariro National Park)



Fishing Paradise

Little did the small group who gathered off the Desert Road in 1898 to release rainbow trout into the headwaters of the Tongariro River realise the extent of their action and the multi-million dollar tourist industry that would develop. Taupo, New Zealand's largest lake, is full of trout, or so it would seem given the numbers caught each year. This is the place to fish - ask the 67,000 anglers who return year after year to fly cast into the lake and rivers, or troll or down-rigger fish the lake. Trout fishing is a major tourist industry for the region. Not only do the accommodation and service industries benefit from the fishing but numerous fishing guides and lake charter boats exist solely to provide local knowledge and skills for the visitor.

Even if you are not an angler, fishing can be a spectator sport too. There is something very relaxing and pleasurable involved in watching the art of



Above: The 2003 Great Lake Cycle Challenge saw 9741 cyclists involved in a variety of events right around the lake from enduros (two or three times around) to solos, relay riders, childrens' biking and a professionals' race. The event brings in about two support people for every entrant and is a huge boost to the local economy. An average of two events per weekend occur in Taupo and surrounding area.

The Great Lake Cycle Challenge is organised each year by the Taupo Moana Rotary Club and Taupo Nui a Tia College. (Photo: Dave Wakelin)

Dave Wakelin
Senior Community
Relations Officer

fly fishing. Fortunately there are plenty of places from which to engage in the noble art of angler watching! The Waitahanui Stream mouth "Picket Fence" must be one of the most photographed fishing scenes around, especially at sunset when the line of anglers is silhouetted against a red lake.

Sustaining Tourism

Tourism sustains the Taupo area, provides employment directly or indirectly for a large part of the population and is partly responsible for the healthy community we live in with its modern amenities. The interchange

between 'local' and incoming visitors is very healthy for the community.

That a large proportion of the attractions are on government land leads to regular dialogue and often shared management decision-making between local and regional authorities, community groups and iwi.

We enjoy a mix of tourists to the area. Internationals comprise 22% of all visitor nights. The value of international visitors to the area is estimated at \$44 million (those staying in commercial accommodation) plus another \$12 million for those staying in private accommodation, a total of \$114 million - we can no longer accurately split between commercial and private. Domestic and international tourism creates about 2,400 jobs and if the retail sector is added (and much of this is based on tourism) then this increases to 4,300 jobs. One in three in the district are in tourist related employment.

Total visitor nights in the region is 3.6 million, staying an average of 2 nights with direct spend of \$286 million, \$458 million with the downstream effect.

Taupo gets to you. There's a 'feel good' factor to the area where a balance of wonderful natural features, easy access, good local and government administration and management engender a willingness to recognise that the tourist is a key factor in the area's well-being. Destination Lake Taupo, the marketing wing of the Taupo District Council, works closely with the Department of Conservation to market and promote the attractions of the region while remaining sensitive to the need to protect the region's very special features and values.

Whichever way you look at it Taupo has a history of providing some of the best tourist experiences in New Zealand .

Looking for Information on the Taupo Area?

Destination Lake Taupo	Taupo Visitor Centre
Lake Taupo Convention Bureau	Tongariro Street, Taupo
66 Paora Hape Street	Telephone: +64 7 376 0027
Private Bag 2002	Fascimile: +64 7 378 9003
Taupo	email: taupovc@laketauponz.com
New Zealand	Turangi Visitor Centre
Telephone: +64 7 376 0400	Ngawaka Place, Turangi
Fascimile: +64 7 376 0410	Telephone: +64 7 386 8999
email: info@laketauponz.com	Fascimile: +64 7 386 0074
Internet: http://www.laketauponz.com	email: turangivc@laketauponz.com



The Taupo region is able to cater for almost every tourist and recreation interest.

Clockwise from top left: The Levene Half Marathon starts from Taupo's North Domain, focal point for so many events, (Photo: Dave Wakelin)

Kites fly over Ruapehu as part of the summer programme.

(Photo: Sarah Gibb)

More than 800,000 visit Huka Falls each year - New Zealand's most visited natural tourist attraction (Photo: Dave Wakelin)

Lake Taupo regularly puts on one of the most dynamic light shows in New Zealand.

(Photo: Dave Wakelin)


Taupo - the northern gateway for tourist activities in Tongariro National Park and on Lake Taupo.

(Photo: Dave Wakelin)





L A K E
T A U P O
T H I N K
F R E S H

1904  2004
WAIHONU HUT
CENTENNIAL
Tongariro National Park
World Heritage Area


Department of
Conservation
Te Papa Atawhai



Clockwise from top left:
 Tapeka Whareniui on the Waihi Marae where the Director General of UNESCO held discussions with iwi representatives and DOC about intangible cultural values. (Photo: Dave Wakelin)
 Prime Minister Helen Clark and Tongariro National Trout Centre Society Chairperson John Milner beside the children's fishing pond prior to the opening of the River Walk display centre. (Photo: Dave Wakelin)
 Enjoying the pleasant surroundings of the Waikato-iti Stream during the summer programme. (Photo: Harry Keys)
 Keith Brown checks an egg taken from a kiwi nest in the Tongariro Kiwi Sanctuary before transferring it to an incubator. (Photo: Katrina Knill)



Early days in Tongariro National Park



Above: Te Heuheu Tukino IV Horonuku, in 1881, at the Taupo Native Land Court, established his and his peoples' rights to the central North Island mountain. He stated to the court and in particular to Kepa Te Rangihiwini Taitoko who had laid claim to land on the south of Ruapehu, "*Behold my abi-ka, my mountain Tongariro. There burns my fire, kindled by my ancestor Ngatoroirangi. It was he who lit that fire and it has burned there ever since. That is my fire of occupation. Now you show me yours.*" (Artwork: Ruth Paul from *The Restless Land*, Department of Conservation/Tongariro Natural History Society, 1998)

National Park is a long and varied history of exploration and settlement. Volcanoes not only drew Maori to the area to settle around Lake Taupo and to the south of Ruapehu but attracted Europeans who, despite Maori protest climbed the peaks. Fascination for the mountains has continued unabated with hundreds of thousands having climbed, walked or photographed the peaks. The events of the past have been recorded and past Tongariro Journals have been a venue for a number of articles. Sections from several of those articles are the basis for this article.

Tongariro National Park - A timeline

- 0-1300AD Estimated arrival of first polynesian people to Aotearoa
- 1828 Ngati Maru attack Motuopuhi Pa, Lake Rotoaira
- 1839 John Bidwell climbs Ngauruhoe, the first white explorer to do so.
- 1843 Anglican Bishop Selwyn visits Mananui at Te Rapa
- 1846 Te Rapa landslide kills Mananui and 60 other Ngati Tuwharetoa; Iwikau succeeds Mananui
- 1853 Sir George Grey & Rev Richard Taylor ascend one of the ridges of Ruapehu and claim (unsubstantiated) to make a later ascent of Ruapehu
- 1862 Death of Iwikau; Horonuku becomes new chief
- 1875 Moorhouse brought sheep to the SE of Ruapehu.
- 1879 The Grace brothers bring in 4,000 sheep to the Tongariro Sheep Run. George Beetham & J.P. Maxwell are the first Europeans to reach Ruapehu peak and see the crater lake.
- 1880 A slab hut built as a shepherds cottage for the Tongariro Run near Tawhai falls. Wi Takarei is later found dead in the hut and it is burnt to the ground.
- 1882 John Grace builds a second hut just about a km from the first, many visitors to the hut claim to have seen the ghost of a young Maori girl and the hut becomes known as the Haunted Whare.
- 1886 Native Land Court upholds Horonuku's claim to the central North Island peaks
- 1887 Horonuku Te Heuheu Tukino IV gifts the peaks of the mountains that the Tuwharetoa people own to the crown and people of New Zealand.
- 1894 Tongariro National Park formally established (the first national park in NZ and the fourth in the world)
Desert Road constructed
- 1904 Waihohonu Hut built by Tourist and Health Department

- 1909/8 Main Trunk Railway completed.
- 1912 John Cullen, the park's first warden, commences spreading heather plants and seed around the western slopes of Tongariro.
- 1913 William Mead and Bernard Drake are the first to use Skis in the park. Their trip is so successful they paste a notice in Waihohonu hut to form the Ruapehu Ski Club.
- 1915 Prison camps are set up at Mahuia Rapids and Mangatepopo for labour to construct roads. The Waikune Prison was built in 1921.
- 1918 The first hut in Mangatepopo Valley is sledged into place
- 1920 The Whakapapa Cottage is built at the site of the present day Visitor Centre,
- 1922 The National Park Board is set up
- 1923 RSC build the first hut on Hut Flat - Glacier Hut.
Sir James Gunson, Mayor of Auckland, is the first to drive to Whakapapa on the new Bruce Road.
- 1929 The Chateau Tongariro is built for the Tongariro Park Tourist Company Ltd.
- 1931 Five acres at Whakapapa are set aside for a camp.
Salt Hut is built at Upper Scoria Flat
- 1931 500 persons are involved in a search to locate 14 University Students overdue from a trip to the crater. One student Warwick Stanton lost his life in the storm that had closed in around the party.
- 1934 The Bruce Road is complete up to Scoria Flat
- 1934 The first rope tow is installed on the mountain just above Salt Hut
- 1940 During the early stages of World War II the Chateau was closed down.
- 1942 The Chateau is used to house patients from the Porirua Mental Hospital after their building is damaged by an earthquake.
- 1943 The Haunted Whare is destroyed by fire.
- 1945 Ruapehu erupts forcing the evacuation of all the patients and staff from the Chateau.
- 1948 The Chateau reopens as a Hotel run by the Tourist Department. Lava flows from Ngauruhoe.
- 1954 Alex Bivy is built in Whakapapaiti Valley. Lava flows erupt from Ngauruhoe.
- 1956 Electric Power reaches the Iwikau Huts
- 1961 Tom Bates begins the "Whakapapa Cat" service with tracked vehicle trips from the top chair lift to the Crater Lake
- 1962 The Park Headquarters is built
- 1963 The first Summer Nature Programme.
- 1964 Skotel is built
- 1969 An eruption from Ruapehu destroys Dome Shelter and sends a lahar through the skifield
- 1972 The Outdoor Pursuits Centre starts operating adventure education programmes.
- 1974 The third (& still existing hut) is built at Mangatepopo Road end.
- 1975 A lahar passes through the ski field demolishing the drive station at the Waterfall Chairlift, undermining the drive station of the Staircase T Bar and irreparably damaging the Staircase Kiosk.
- 1979 Mangatepopo Road end is brought back away from the hut to try and stop vandalism.

- 1980 Alex Bivy is in a bad state of repair and is pulled down.
- 1981 The first audio visual installed at the visitor centre.
- 1982 Early warning system installed for Volcanic Hazard monitoring.
- 1984 The carving (which is now the inside pou at the entrance to the visitor centre) was completed by Maori Arts and Crafts Institute in Rotorua.
The Tongariro Natural History Society formed
- 1985 Glacier Shelter removed.
- 1987 The Department of Conservation takes over administration from Lands and Survey Dept. The Centennial of National Parks in New Zealand and the opening of stage one of the visitor centre redevelopments (the entrance).
Ngauruhoe Lodge burns down
- 1988 Cyclone Bola removes two thirds of Mangatepopo hut roof.
- 1989 Stage two of the visitor centre, the volcanics audiovisual and the human and natural history displays are opened. The re-alignment of the Bruce road is completed.
- 1990 World Heritage Status for its natural values is granted to Tongariro National Park
- 1992 The final stage of the visitor centre, the new auditorium and audiovisual and the ski history display are opened.
- 1993 World Heritage Status for its associative cultural values is granted to Tongariro National Park. The park becomes only the 20th site in the world to have dual status.
- 1995 Mt. Ruapehu erupts sending lahars down the eastern, southern and western slopes of Ruapehu and emptying Crater Lake.
- 1996 Mt. Ruapehu erupts again sending columns ash 10000 metres high and disrupting air traffic throughout the North Island.
- 1998 Centennial of the liberation of rainbow trout in the Central North Island.
Celebration events for TNP's world heritage status and 25th anniversary of the World Heritage Convention.

Huts in the Mangatepopo Valley

Each summer tens of thousands of Tongariro Crossing trampers make their way up the Mangatepopo Valley towards the imposing climb to the Mangatepopo Saddle. Some stop at the Mangatepopo Hut, sitting on an ancient lava flow, usually for a toilet stop or a quick bite to eat while most head on by little realising the history of accommodation in the valley. The present Lockwood construction hut, built

on site about 30 years ago, is not the first hut in the valley.

The Mangatepopo Valley has always offered explorers the easiest access to the peaks of Tongariro and Ngauruhoe. Although early European visitors to the mountains were struck with awe and wonder they did not share the same fear and respect for the mountains as did the Maori. In 1839, John Bidwell made the first recorded European ascent of Ngauruhoe and while he was rewarded with the knowledge that he had stood where no other European had been, his insensitive action greatly angered the Ngati Tuwharetoa chief at the time - Te Huehue Mananui.

Below: The first hut in the Mangatepopo Valley showing the extension to the hut on the right hand side. Photo taken in 1927. (Photo: Ian Powell)



In 1879, for the price of 300 pounds per year, Te Heuheu and his chiefs rented out the Mangatepopo Valley and surrounds for farming.

Stubbs Whare, a crude shelter that was recorded as being sited in the valley prior to 1897, was probably a home for shepherds farming the area. Farming in the valley was short-lived however, as keeping the sheep safe from the treacherous mountains and preying wild dogs coupled with its remoteness from the markets, proved it to be an impractical enterprise.

In 1904 the Waihohonu Hut was built on the eastern side of the mountains to serve the Grand Tourist route from Wanganui to Taupo and to act as a base for those climbing or skiing. However the completion of the Main Trunk railway line increased interest and visitation to the western side of Tongariro National Park. The only accommodation then available on the Whakapapa side of the mountain was the Haunted Whare, built in 1882, and too far from the snow. A tent camp had been established at Taranaki Falls in 1913 but something more permanent was needed.

The First Hut

In 1917 William Mead, who had pioneered skiing in Tongariro, began working for the Tourist and Health Department. Arrangements were made for the Tourist Department to buy a portable hut from the prison camp on the Mahuia Stream, and for the Ruapehu Ski Club to move it to a suitable site. A good ford over the Whakapapanui Stream to where Whakapapa Village is now could not be found and eventually a site in the Mangatepopo Valley was chosen close to Pukekaikiore.

Mead thought the southern side of the valley which was near a spring would be safer from Ngauruhoe eruptions. There was no firewood available, so cooking and heating would have to be done on kerosene stoves.

In late 1917 Mead and J.W. "Skipper" Gittos marked out a route to the chosen site, constructed a culvert over the one stream that was to be crossed but it wasn't until March 1918 that a bullock team was arranged and Bill Salt and T.W. "Captain" Downes arrived from Wanganui to help Mead move the hut.

On the first day they reached the Haunted Whare turn off, and improved the runners of their sled before camping for the night. The next day, they reached the



Right: The second Hut in the Mangatepopo Valley seems to have been built sometime prior to 1927, the date of this photograph. James Cowan author of the first park handbook notes the presence of not one but two huts in the valley.
(Photo: Ian Powell)

culvert which Mead and Gittos had built just north of Pukeonake. On the third day they finally got the hut to its chosen site.

An Extension

The small hut at Mangatepopo was soon inadequate and the Ruapehu Ski Club purchased another hut to add to the one already in the Valley.

Mead and Harry Wilcox used horses rather than bullocks to transport this hut. Despite having to rebuild the sled part way in Mead, Wilcox and the horse team driver, finally transported the hut on to the site in sections. A few weeks later Mead and Wilcox returned and added the second hut to the first, providing two rooms and a verandah.

The Second Hut

It wasn't long before the first Mangatepopo Hut was replaced. In his 1927 handbook on the Park, James Cowan notes that there were two huts in the valley. The two huts were very close together, the new one, sometimes called Long Hut, being on the northern side of the valley though, near Mangatepopo Stream. Several areas of uncertainty emerge here. Firstly, no one is sure of when Long Hut was built, but it did exist by 1927. Secondly, no one is sure when the first hut was demolished, it may have lasted right up until 1979 when the second hut was destroyed. Finally, there is some uncertainty as to how many huts have existed in the Mangatepopo. Generally there are said to have been three but some people believe there may have been a fourth.

Access

In 1920 William Mead was asked by the Department of Tourist and Health Resorts to take charge of the huts and tracks of the Park. He supervised the construction of a track from Whakapapa Hut to the Mangatepopo Hut. It was intended to turn this 12 kilometre track into a road. The route Mead chose went out past Taranaki Falls to Tama Saddle before heading towards Mangatepopo. It was superceded in 1948 by a direct, 9.6 kilometre route called Salmon's Track, which was built by Ranger Alex Salmon.

The Mangatepopo Huts could also be accessed by a 7.2 kilometre track from the Waimarino (National Park) to Tokaanu Road. This route had been used to sledge in the extension to the first hut in 1921. The Parks Board called for a survey in 1925, and little difficulty or expense was expected in building the road, compared with upgrading Mead's longer track from the Chateau. However, it wasn't until 1955 that the road construction finally began. This was completed in 1958. The road was carried right to the hut, something which led to vandalism and litter problems in later years.

North of the Mangatepopo Stream there existed a steep horse trail onto the moraine ridge bordering the Mangatepopo Valley. This gave access to an easy traverse to the Ketetahi area.

The Third Hut

This hut, of Lockwood construction, was built in 1974. It was located five minutes walk above the second hut, sheltered behind a small ridge and perched above the main stream.

In the late 1970's the second hut was demolished and a carpark built 15 minutes walk back down the valley. In a massive landscaping exercise the road between the second hut site and new carpark was vegetated and restored. There is now an easy twenty minute walk to the hut from the carpark.

The Ohakune Mountain Road

In the early 1900's the park board decided a road was needed on the southern flanks of Ruapehu. There were a number of possibilities, two of the possible routes explored were from Rangataua and Ohakune. Local residents of both communities were keen and worked hard to promote their proposed routes and to obtain funds for road development.

Guiding

CID Snow and Sons, foreseeing no prospect of obtaining assistance in opening the Rangataua route, an old Maori track, set to work and cut a good bridle path from Mangateitei Road to above the bush line on Ruapehu. Snow and his sons had a guiding business along this track for a number of successful years. They had a campsite in the area of old Blyth hut site.

Track Committee

About 1910, a Ruapehu Mountain track committee, which later became Rangataua Alpine Club, was formed. This committee promoted the route, were interested in converting Snow's track into a coach road, and establishing a hut above the bushline for summer tourists. They wished to make Rangataua a stopover for the 'Express train' that ran through their town.

From Ohakune similar promotional work was in motion for a route up the mountain from Ohakune. In 1908 a route was blazed from Ohakune, that was later known as Blyth's Track. In 1910 an Ohakune Alpine Club was formed to promote the blazed route from Ohakune, to erect a mountain hut, and press the Government for funds for a road. Members of the club worked hard and long hours to keep the track open and in good condition. After 11/2 years the club faded away

and became known as the initial developers of the road. 'Joe' Blyth, who was a notable member of the club, devoted himself to the promotion and maintenance of the track. Blyth was the Ohakune school master and took many school trips up the mountain. Later, he became a Park Board member.

In the meantime no money was given to either route from the Government or the Park Board.

In 1920 a hut was built at the popular campsite and called the Ohakune Mountain Cottage. The noteworthy characters W. Salt and

Below: The Ohakune Mountain Road offers one of the finest alpine drives in the North Island ascending through beech and podocarp forest to the sub-alpine meadows of the area around the base of the Turoa Skifield.
(Photo: Dave Wakelin)



Bill Mead were involved in building the hut and Joe Blyth was a casual worker. The hut was later named after Blyth in commemoration of his hard work and devotion to the park. The hut was later shifted from its original site, near the road, because of vandalism.

Old Tramway

In the 1930s, when the park boundary didn't come down to Ohakune, a farmer was given permission to use the old tramway as a road to his farm. This farm access became the beginning section of the Ohakune Mountain Road. With the onset of war, road development on both routes stopped.

It wasn't until 1953, when the Ohakune Mountain Road Association emerged, that road work started moving again. It was the establishment of this road association that finally sealed the deal for Ohakune. The association received money from memberships all over N.Z. Local volunteers, who were bushmen who loved the mountain, worked in their spare time and the road progressed a mile a year. With assistance from the Army at Reids creek and from MOW at the Mangawhero bridge, the road was finally finished to below Mangawhero Falls and officially opened in March 1963. A handful of keen members carried on pushing the road up to Makotuku Flat and beyond to its present terminus by the summer of 1966-67, a total length of 16 kilometres.

The road today is a tribute to the dedicated volunteers who gave their time and energy to the development of the road which led to the development of the ski field and Ohakune township. The road is a beautiful scenic drive, with spectacular views of Mt. Ruapehu and is the main access to Turoa Skifields.

Katrina Knill
Ranger Community
Relations

Right: Staff and students from Waseda University, Japan, walking back from Tama Lakes in Tongariro National Park. A group from Waseda University and members of the Fujisan Club spent 10 days in the conservancy in February 2004 as part of the first study exchange between Tongariro National Park and Mt. Fuji. Mark Davies, Ruapehu Area Manager and Bob Stothart, President of the Tongariro Natural History Society were invited to Japan in 2003 to meet with the Fujisan Club and whilst there signed a memorandum of understanding between the two areas. Mt. Ranier in the United States is also part of the sister mountains relationship.
(Photo: Dave Wakelin)



The Crater Lake issue

Readers will recall coverage of this issue in previous journals. Eight years after the tephra build up was recognised at the former outlet of Crater Lake it may be interesting to see a summary of some of the events associated with the issue since then.

26 Sept. 1995	Erosion of southeast crater rim noted as eruptions empty Crater Lake
Oct-Nov. 1995	Accumulation of generally sandy tephra at former Lake outlet noted by DOC and GNS scientists and sampled by GNS at former outlet. Crater Lake reforming
Feb. 1996	Inspection by H Keys (DOC) and P Otway (GNS volcanic surveyor) shows surface erosion starting to lower crest of tephra deposit. Discussions with Conservation Board
30 Apr. 1996	Issue publicised by DOC at Eruption Debriefing Workshop and three phase strategy to deal with it is outlined. Meetings with key associates continue.
17 Jun-Aug. 1996	Further eruptions and deposition of tephra. Erodability of 1996 tephra suspected to be less
Feb-Mar. 1997	Geological investigation carried out by G Hancox (GNS), P Otway, G Webby (Opus) and H Keys on stability of crater rim including tephra mantle at crater outlet and preliminary modelling of lahar from collapse of tephra dam. Little erosion of 1996 tephra
Apr. 1997	DOC annual monitoring of crater rim for large scale failure commences with surveyor P. Otway
May 1997	Consultation commences with iwi, Conservation Board, NGOs etc. continuing into 1998. First scientific report published
Jun. 1997	Minister of Conservation Dr. Nick Smith visits crater, releases GNS stability report (which notes tephra barrier will be unstable), asks DOC to prepare environmental and risk assessment
Oct. 1998	Draft report released by DOC on environmental assessment and risk mitigation of the hazard (AEE). Prepared by DOC plus engineers also using reports prepared by IGNS, NIWA, Opus
Nov. 1998	Bureau of World Heritage Committee commend NZ authorities on way the Crater Lake issue is being addressed
19 Feb. 1999	Last of 46 submissions on draft AEE received from public, NGOs agencies etc..
30 Jul. 1999	Final AEE (including summary of submissions) and briefing sent to Minister of Conservation Dr. Nick Smith
3 May 2000	Sandra Lee new Minister of Conservation releases Final AEE, approves its Recommendations including alarm system, but requests independent scientific review of public safety and other aspects

22 Jun. 2000	Independent review by Prof. Vince Neall supports conclusions of AEE, recommends bund
20 Nov. 2000	First of several official visits to proposed bund site with iwi and Conservation Board
27 Nov. 2000	Minister of Conservation agrees to timetable for installation of warning system and requests planning processes start for bund
27 Jun. - 13 Nov. 2001	Several meetings with councillors and management of councils and Minister of Conservation
27 Aug. 2001	Minister of Conservation establishes Scientific and Technical Advisory Panel on Crater Lake issue to advise on stability of outlet dam, dam failure mode and “worst-case” lahar hazard
7 Sept. 2001	Minister of Conservation approves amendment to TNP Management Plan change for the bund construction
Oct. 2001	Ministry of Civil Defence and Emergency Management (MCDEM) commences involvement in the issue regarding agency response planning and risks
30 Oct. 2001	Work starts on ERLAWS near Tukino skifield
14 Dec. 2001	Construction of bund by Doug Hood Contractors Ltd. starts
18 Dec. 2002	Minister of Conservation decides against engineering earthworks at crater rim
18 Feb. 2001	ERLAWs installation completed by Alcom, Enginuity and DOC
21 Mar. 2002	First interagency meeting (police, Genesis Power, DOC) on Tongariro River lahar response planning
Apr. 2002	Bureau of World Heritage Committee welcomed decisions made by Minister and hoped all parties would accept them
Apr. 2002	Risk management consultant from UK, Tony Taig, commissioned by MCDEM to assess residual risks from lahar
May 2002	ERLAWs website developed by DOC to improve monitoring capability and response
Late Jun. 2002	Lahar warning lights and signs installed by Transit on SH1
Late Jul. 2002	ERLAWs commissioned
Oct. 2002	Taig report released
2 Nov. 2002	First public test of ERLAWs alarm
21 Nov. 2002	02/03 season field work commences aiming to determine level of lava lip under tephra barrier, seepage characteristics and rate of erosion of barrier. Work finishes in April
3 Dec. 2002	Volcanic earthquake triggers ERLAWs Site 1 providing test for Genesis and GNS duty scientist
Dec. 2002	Ruapehu District Council staff lahar response plan not adopted by council
Dec. 2002	Transit’s gates for closing SH 49 installed at Tangiwai
Apr. 2003	Fujitsu start installing equipment to assure 24/7 operation of ERLAWs website. Water level sensor installed as part of ERLAWs.

21-22 May 2003	Heavy rain creates small flood peaks in Whangaehu (less than annual flood at Karioi gauge) providing useful test of ERLAWS vibration sensors but no ERLAWS alarm
late May 2003	Ministers of Conservation, Civil Defence/Police and Attorney-General agree there will be no engineering intervention at Crater Lake, no further assessment of lahar triggering mechanisms, and direct officials and Transit to investigate feasibility of improving public safety at Tangiwai SH49 road bridge and public awareness programme
4 Jul. 2003	Ruapehu District Council decide to continue with lahar response planning
14 Jul. 2003	Regional earthquake triggers geophones 2 and 3 at ERLAWS site 1 triggering "lahar possible" alarm
late Jul. 2003	Genesis and Vodaphone complete upgrade of Genesis-Tukino repeater including ERLAWS communication link for Sites 1 and 2
1 Oct. 2003	Lake level sensor cable broken by slumping and avalanche at barrier cliff. Overall system remains operating normally

The timeline also lists some of the happenings since the last journal was published. Following a busy summer's field work and an important technical workshop in March the Minister's reiterated the 2001 decision that there would be no intervention at the crater.

Eastern Ruapehu Lahar Alarm and Warning System (ERLAWS)

Meanwhile the new lahar warning system has continued to be debugged, noticeably improving with completion of work at the Tukino repeater by Genesis Power Ltd. Fifteen months after commissioning ERLAWS is proving very reliable. Over the past four months it has been operating very close to 100% of the time. Individual aspects such as the ability to detect lahars, base computer and paging system, and 24/7 website support are all fully operational. The site at the crater is operating at about 97% (greater than predicted) but planned lake level sensors are not in operation at present. Since commissioning in late July 2002 all eleven planned or unplanned tests where detectors reacted to vibrations leading to alarm paging have all been successful and in May this year a natural rain-induced flood showed that the detectors will be very sensitive to lahars in the Whangaehu Valley.

Long-term protection

Protecting infrastructure and other assets against future lahars is clearly a key to keeping communities and businesses resilient in the face of severe and ongoing lahar hazards. Lahars are recurring and severe natural hazards. There have been at least 15 eruption episodes in European times that have produced lahars on Ruapehu and heavy rain has also been known to cause further hazardous lahars after eruptions.

Recent scientific research by Massey University has shown that there have been

Right: Mt. Ruapehu's Crater Lake looking southwards from above Dome Shelter in July 2003. The pre-1995 Crater Lake outlet is situated approximately centre of the photo.
(Photo: Dave Wakelin)



several lahars 10 to 50 times larger than the 1953 event in the last 2000 years, the most recent of which occurred as recently as 350-400 years ago. The six largest volume lahars (2 to 10 times larger than the current predicted event) occurred at an average frequency of 1 every 315 years. Such large lahars were caused by collapses of the geologically young eastern to southern rim of Crater Lake and/or large eruption. Recurrence of this sized lahar would result in inundation of distant populated areas and destruction of infrastructure.

Such severe hazards and far-reaching consequences have been under-estimated by engineers and authorities who have based infrastructure design and land use zoning on the limited 150 year long written record at Ruapehu. A 1939 aerial photo suggests that construction of the rail embankment at Tangiwai halved the width of the lahar flood channel at the river crossing there which would have made the 1953 disaster more likely to occur.

Lahar hazards from Ruapehu, and the ephemeral nature of Crater Lake over the last 2000 years have become much clearer over the last eight years thanks to the current focus. To paraphrase a director of emergency management in a US county threatened by lahars from Mt. Ranier, we have entered a window of major lahar threat that is about 300 years long on average but the last lahar occurred at least 350 years ago. While monitoring and geological assessment of the crater rim do not indicate major problems are imminent, we need to use the predicted lahar risk with its short term, small residual risks to prepare for the far less predictable, larger lahars in the longer term which pose significantly greater residual risks.

Genesis Power and more recently Transit New Zealand have been most active in planning for the long term. Genesis has extended and upgraded its communication, control and lahar detection systems and are putting in place further safeguards for Wahianoa Aqueduct and the Rangipo Power Station. The bund that was built in 01/02 offers protection to State Highway 1 where it crosses the Waikato-iti Stream and its southern tributary, as well as protecting the Tongariro River.

Transit has determined that long term protection of bridges at State highways 49 and 1 are feasible. The Ministry of Civil Defence and Emergency Management has made it clear that residual risk to public safety will be reduced significantly when the highway crossing at Tangiwai is made safer. It has been agreed to carry out work before the predicted lahar but the best solution has not yet been confirmed.

Conclusion

In terms of natural hazard management the current situation at Carter Lake is unusual for two main reasons:

- It is predictable well in advance of the significant risks it raises;
- The 1953 disaster created sad memories and raises strong feelings some of which conflict with strongly held environmental and cultural values.

These reasons have been major drivers for decisions and management actions taken to date.

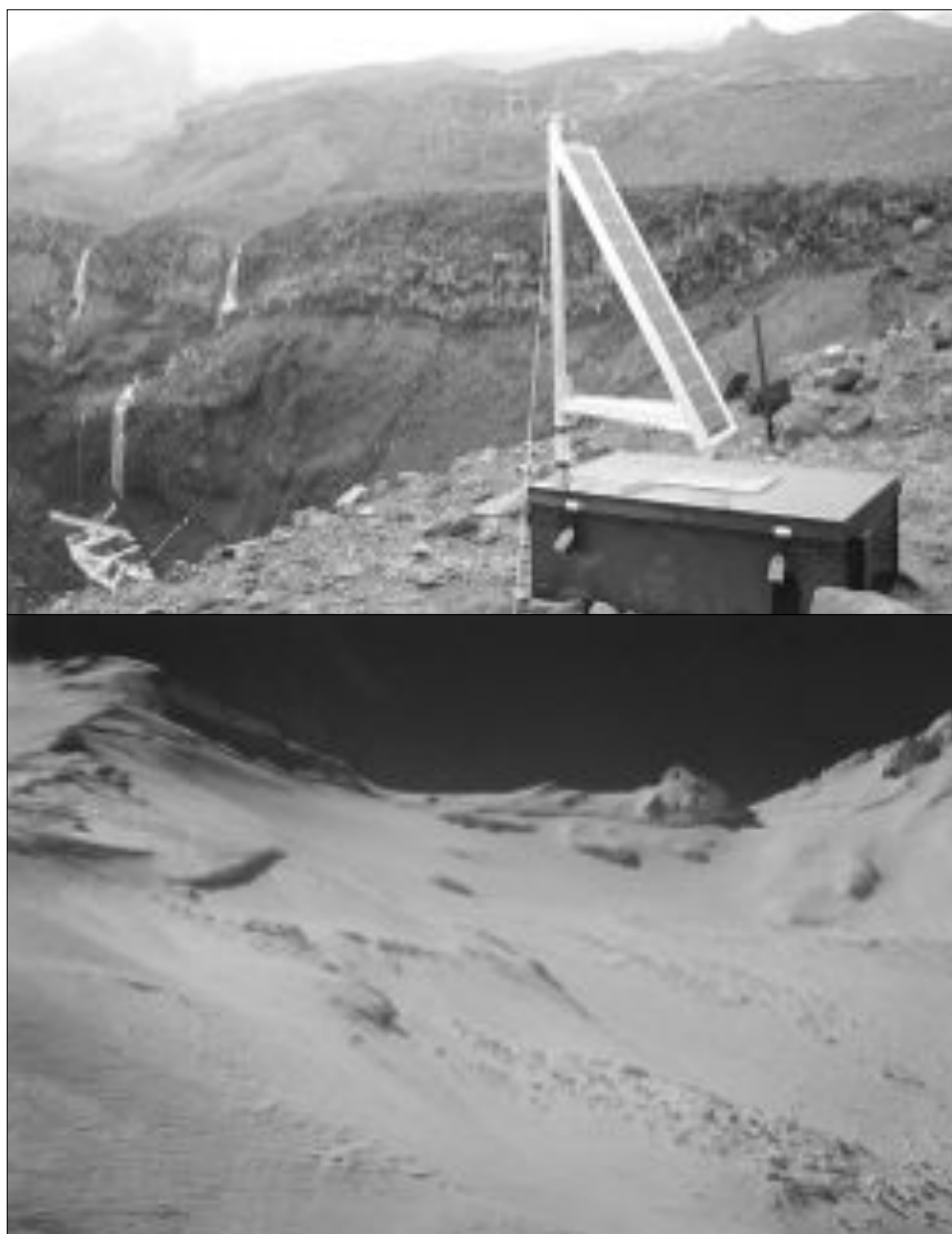
Harry Keys
Conservancy Advisory
Scientist

Above right: The Solar panel and battery/electronics box for the Tukino ERLAWS site perched above the Whangaehu Valley. Geophones buried in the ground close to the equipment detect vibrations which are relayed to monitoring equipment at the Tokaanu Power Station. The size of the noise patterns produced and the length of the disturbance determine whether a lahar has been detected or some other activity such as a rock fall.

(Photo: Dave Wakelin)

Right: The Mangaehuehu Glacier after a large (approximately size 5) avalanche was released on 6 September 2003 by bombing (from helicopter) under Tahurangi (upper left). The initial size 1 avalanche caused a 2-4 metre thick slab to release from the entire glacier failing on a weak layer created early in the winter then buried. Snow depths this season were below average to average but this avalanche (the largest of a series on the Turoa side) was the largest recorded on Ruapehu since 1982.

(Photo: Nic Etheridge)



Tongariro Forest Kiwi Sanctuary

Right: Bank of New Zealand staff from Taumarunui and Ohakune as well as iwi, school children and other members of the community have attended ONE kiwi releases in 2003 both in the Tongariro Forest and Karioi Rahui.

(Photo: Katrina Knill)



Kiwi have been given further protection in the Tongariro Forest Kiwi Sanctuary this year, with the gazettal of Tongariro Forest (as well as Erua & Rangataua Forests) as a Controlled Dog Area and the introduction of avian aversion training for hunting dogs run by local contractor Jim Pottinger.

Local iwi Ngati Hikairo, are taking on greater involvement with the kiwi sanctuary and some iwi members have stepped in to assist with kiwi call monitoring and predator tracking.

A number of staff changes have occurred within the Kiwi Sanctuary team this year. Cam Speedy who has been involved with kiwi in Tongariro Forest since 1990 has moved on to work for pest control company EPRO leaving Peter Morton to take his place as Conservancy Technical Support Supervisor, Biodiversity. Peter has worked as the Programme Manager for the Kiwi Sanctuary since 1996. During the year Jo Tilson has moved south to work with kiwi at Okarito while Ross Martin have left to work on stoat research at Waikato University.

New to the Tongariro Forest Kiwi Sanctuary team this year are Johnathan Miles and Robyn Whyman. Jonathon has stepped in as Programme Manager and brings with him many years of experience working with kiwi around the country, most recently at Waikaremoana. Robyn Whyman, as a Biodiversity Ranger is involved in catching, tracking and monitoring kiwi in the sanctuary. Robyn has been working on temporary contract in the kiwi sanctuary since 2002 and is now on permanent staff. Kyra – a two year old border collie, belonging to Biodiversity Ranger, Cindy Jenkins is in training to become a kiwi dog and will be a huge asset to the team once she has gained full certification.

Following a break in the Operation Nest Egg (ONE) programme in the 2001/02 breeding season, the focus in the Tongariro Forest Kiwi Sanctuary returned to ONE for this season. A 1080 drop in 2001 gave the local kiwi population a brief respite from stoats for the 2001/02 breeding season. However the Operation Nest Egg pro-



On Friday, 8th August 2003, Ohakune Bank of New Zealand staff - Gay McQuarry & Karlene Lee, named and then participated in the release of Kohine Peke - the 23rd Operation Nest Egg kiwi to be released into the Karioi Rahui as part of the Bank of New Zealand sponsored Kiwi Recovery's Operation Nest Egg programme.
(Photo: Katrina Knill)

gramme has been an effective tool used to prop up the local kiwi population in the Tongariro Forest since 1995.

The 2002/2003 breeding season has been a bumper year as far as chick productivity goes and saw 17 juvenile kiwi being placed back into the forest, all of which have come from nine breeding pairs.

This year, 12 adult male kiwi and their mates were monitored for breeding. Eleven of the males are birds that were caught in the wild and fitted with transmitters, one is an ONE bird released in 1995 that has mated with an ONE female released in 1996. Of the 12 pair monitored, 10 had nests, and laid a collective total of 42 eggs. Some eggs

were infertile, dead in the nest or died soon after hatching, resulting in only 17 out of the 42 eggs becoming healthy kiwi chicks hatched at Rainbow Springs that were released back into the Tongariro Forest.

The successfully hatched chicks were raised at Warrenheip, a predator free enclosure in the Waikato which is privately owned by David and Juliet Wallace. Using Warrenheip as a crèche site in which to raise our chicks prior to their return to the wild, has enabled the chicks to grow in a semi-natural environment. The kiwi chicks were transferred to Warrenheip from Rainbow Springs one-two weeks after hatching, once they are feeding well and thought to be healthy at a weight of approximately 300g. Most chicks took approximately five months at Warrenheip to grow to a release weight of 1200 grams – when they are believed to be big enough to defend themselves from stoats and possums and are released back into the forest.

One of the newly released kiwi, at only eight months old, made its way across the Whanganui River and was found two km north of the river. This is only the second time a bird has been recorded to have crossed the river from the Tongariro forest. Jack the kiwi has remained on that side of the river and at this stage has showed no sign of returning to the Kiwi Sanctuary.

The partnerships between DOC, Rainbow Springs, Bank of New Zealand Kiwi Recovery Trust and the wider community have continued to be a strong point of Operation Nest Egg. Rainbow Springs have maintained their success at incubating and hatching kiwi chicks and not enough thanks can be given for the dedication, expertise and advice the staff have given us over the years. Bank of New Zealand staff from Taumarunui and Ohakune as well as iwi, school children and other members of the community have attended ONE kiwi releases this year both in the Tongariro Forest and Karioi Rahui.

Predator trapping will start this year in July 2004, with the majority of the Tongariro Forest (including all the areas in which kiwi are currently monitored) being covered.

A decision has been made to cut the transmitters from this seasons chicks, once their weights have stabilised above 1200 grams in the forest. This means that more staff time and effort can be directed into catching new adult birds, getting more eggs from these new pairs and further boosting the juvenile kiwi population in the

forest. Transmitters have also been removed from six female ONE kiwi that have been monitored since as far back as 1997. These birds have proved that they are able to survive in the forest on their own, they show no sign of mating and are no longer providing useful information. Ceasing monitoring of these birds will free up resources to capture and track breeding males. The females that are to be liberated are all banded and their territories known should they need to be recaptured or identified hen rediscovered with a mate.

It is an exciting time in the Tongariro Forest Kiwi Sanctuary. A new pair of kiwi and two breeding-age males have been caught and fitted with transmitters already and kiwi staff are waiting anxiously for them to produce eggs. Staff have been camping in the forest to listen for and catch new birds, which, added to the existing pool of monitored breeding males, will increase the number of juvenile kiwi that can be added to the forest, ensuring the survival of North Island Brown Kiwi in the Tongariro Forest.

Katrina Knill
Ranger Community
Relations



Above right: A fine bunch of Rangers! The rangers of Tongariro National Park in dress uniform, April 1971 - (from left to right) Pat Sheridan, Herb Spannagl, Bruce Jefferies, John Mazey (Chief Ranger), Rex Mossman, John Blount, Bill Cooper, John Clay. Note the interesting variation in beret wearing style!
(Photo: J Scobie)



Right: Three ex Chief Rangers, Harold Jacobs (Fiordland National Park, Hauraki Gulf Maritime Park), Alan Cragg (Westland National Park) and John Mazey (Tongariro National Park, Supervisor of National Parks) share reminiscences of earlier days in national parks at a function held at the Whakapapa Visitor Centre (then Tongariro National Park Headquarters) to recognise John's retirement, March 1986.
(Photo: TNP Collection)

Conservation Awards 2003

Right: The Conservation Award recipients for 2003. From left to right: Gaye Viartianen (Wairakei Primary School), Alby Shaw (Pukawa Wildlife Management Group), Chas Hutton (New Zealand Forest Managers Ltd.), Elizabeth Mazey (the late John Mazey), John Milner (Tongariro National Trout Centre Society), Tracey Hickman (Genesis Power Ltd.)
(Photo: Paula Coubrough/Taupo Times)



School children, forestry specialists, electricity suppliers, angling enthusiasts, a community action group and an ex park ranger were honoured at a Conservation Award ceremony in Taupo in December 2003.

The awards, in their eleventh year, were presented by the Tongariro Taupo Conservancy and acknowledge the conservation efforts of a range of individuals and organisations.

The Pukawa Wildlife Management Group, located at the southern end of Lake Taupo, received an award for their initiative to take on pest control in their community.

DOC trained the group in predator control and gave them traps. Their success has been impressive. Since August 2002 the group has killed 88 possums, 413 rats, 17 hedgehogs, 1 ferret, 12 weasels and 13 stoats

Dave Lumley, Turangi Taupo Area Manager, praised their achievements. "We gave the small group predator control traps and training in their use. Since then they have run their own operations and supplied monthly kill figures to the department. This group is a model for other small community groups. There are many small lakeside and other communities around Taupo who could easily carry out similar operations."

John Gibbs, Manager of the Taupo Fishery Area, presented the Tongariro National Trout Centre Society with their award. The Society has fundraised more than \$500,000 to construct a new interpretation centre and auditorium building at the Tongariro National Trout Centre 5km south of Turangi.

"As a Trust this group was instrumental in providing funding and support for several projects at the site over the years, including upgrading of the underwater viewing chamber, construction of a public car park, and BBQ facilities," John said. "They also organised the immensely popular children's fishing days."

The Society's long term strategy is to continue to develop the Tongariro National Trout Centre site, and to facilitate research, study, advancement and understand-

ing of trout and other freshwater fisheries in New Zealand.

New Zealand Forest Managers Ltd. received their award from conservancy botanist, Nick Singers. Nick spoke of the close association with NZFM the conservancy had enjoyed. "To undertake a variety of conservation programmes our staff rely on access through the privately owned Lake Taupo and Rotoaira Forests to Kaimanawa Forest Park and Tongariro National Park."

DOC and NZ Forest Managers are also working together on protection of the endangered tree species *Pittosporum turnerii* near Lake Otamangakau and control of grey willow within the Lake Rotoaira basin.

He noted that by improving environmental practices with their forest management regime, Lake Taupo and Rotoaira Forests gained Forest Stewardship Council Accreditation. This accreditation is not easy to obtain for commercial exotic forests. The efforts of NZ Forest Managers in this regard are to be applauded.

Paul Green, Conservator noted that the goals of some organisations can appear to the community to be the exact opposite of conservation. Such an example is Genesis Power Ltd. who received an award in recognition of their willingness to consult, listen and make changes where possible

The quality of their application for resource consent approval is seen as a model to other organisations as is their willingness to go the extra distance and help with education at the National Trout Centre. Genesis has helped the DOC reach solutions in the application of the East Ruapehu Lahar Early Warning System and a trust set up and funded by Genesis is pivotal in assisting research into the endangered blue duck.

Wairakei Primary School north of Taupo received an award for their commitment to conservation projects throughout their school community.

"The school enthusiastically embraced the Conservancy's Native Trees in Schools project and continued it, doubling the original area planted, with schoolchildren actively seeking sponsorship and planting advice," said Dave Wakelin Senior Community Relations Officer. Lianne Fraser, Programme Manager Community Relations, has worked closely with the school, "Through their involvement in the Enviro School programme and Schools Environmental Education Awards, the school has embraced many successful conservation projects and has been recognised by the Bank of New Zealand Kiwi Recovery Trust for a kiwi website the children designed."

The evening's final award was an emotional one for many who either knew or had worked with the late John Mazey. Elizabeth Mazey received the final award on behalf of her late husband, John. John Mazey was Chief Ranger in Tongariro National Park in the 1960s in the days when there were few staff and even fewer facilities. Paul Green and Les Clark, an ex Lands and Survey staff member who worked with John at many levels, both spoke of the defining roles and standards John set for the national parks and reserves service.

John Mazey oversaw the training of overseas rangers, was responsible for improving staff numbers and resources in Tongariro National Park and helped start the Diploma in Parks and Recreation Administration at Lincoln College. John Mazey and other Chief Rangers of the era saw the creation of a world class parks and reserves systems and moulded the attitudes and behaviour of many who today hold senior positions in the Department of Conservation.

Lianne Fraser
Programme Manager
Community Relations

Tongariro Natural History Society - 20 years on



In 2004 the 20th anniversary of the establishment of the Tongariro Natural History Society, an active voluntary organisation, will be celebrated. This seemed a good opportunity to revisit some of the milestones over those twenty years.

How did it all begin?

The Tongariro Natural History Society (TNHS) was established in 1984 to promote a wider understanding of the natural processes, flora and fauna, geology, weather, natural and human history of Tongariro National Park

The members are volunteers who love Tongariro National Park with a deep and abiding affection.

But the impetus for forming such an organisation came from Bruce Jefferies, Chief Park Ranger at Tongariro during the 1980s. He knew about Natural History Societies in America and thought the formation of a similar group here would benefit Tongariro National Park. Bruce spent some time talking with individuals who shared his enthusiasm. About that time there was a fatal helicopter crash on the mountain (1982) which involved park staff and friends. They had been assessing the performance of a night light for search and rescue purposes when they flew into the mountain. A huge outpouring of grief followed as family and friends expressed their sorrow. Some money was contributed by families to commemorate those who lost their lives.

Bruce conceived the idea of the natural history society being a living memorial to those who had lost their lives and so it was born in 1984. Roy Lynch was the first president and John Mazey, who had also been a Chief Park Ranger at Tongariro was on the committee.

Below: Tongariro Natural History Society Members and DOC staff carrying out restoration planting on a disturbed area just off the Tukino Mountain Road.

(Photo: Sarah Gibb)



What happened then?

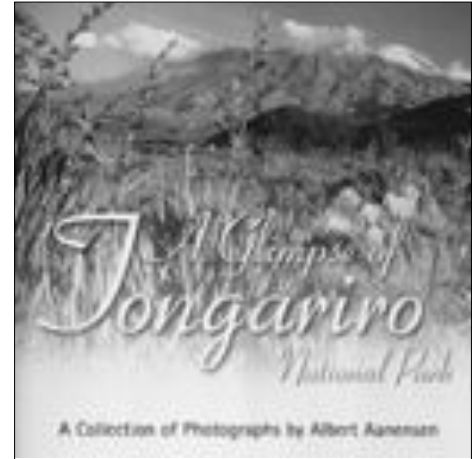
The new committee used the money to publish *Volcanoes of the South Wind*, written by Karen Williams and this book sold particularly well, and continues to be the society's bestseller. The income from sales was used to publish another book, *Roots of Fire* by Isobel Gabites and this too has sold well. Since those initial books, several other books have been published about aspects of Tongariro National Park. Of particular note is the joint publication by the society and DOC of *The Restless Land*, the official park handbook.

TNHS supports research in the park and an annual grant is available to students researching

Right: One of the latest ventures of the Tongariro Natural History Society has been the production of a series of stunning photographs of Tongariro National Park on CDROM by photographer, Albert Aanersen. (Photo: Albert Aanersen)

aspects of the park, where that research will then be of benefit to the Tongariro National Park. A comprehensive collection of research studies is lodged in the DOC library.

From the beginning of the organisation members wanted to know more about the place they enjoyed so much. Regular walks were organised, most often, off the 'beaten track' and in many cases, members tried out trips for later inclusion in the park's summer programme. Associated with these walks members were involved in a variety of conserva-



tion projects. The following list provides an indication of the range of activities:

- Provision of signage at Lake Rotopounamu
- \ Planting of the roadside when the Bruce Road was re-aligned
- Provision of signage at the Mounds Walk
- Regular weeding of the Alpine Garden
- Removal of *Pinus contorta*
- Contribution of funds toward Whakapapa Visitor Centre upgrade
- Funding of interpretive videos
- Provision of a major 'face lift' at the Ohakune Visitor Centre
- Involvement of volunteers as leaders on Summer Programme activities
- Volunteer assistance at Whakapapa Visitor Centre at Easter and January
- Involvement in organised mountain clean ups
- Planting and weeding at the Whanganui River Bridge
- Survey work on mistletoe and *dactylanthus*.

In recognition of the work of the society in contributing to Tongariro National Park, the Department of Conservation awarded the society a Conservation Award in 1995.

Were there some really big activities?

In 1998 members of TNHS (led by John Newton) and DOC staff carried out extensive restoration work on the Old Waihohonu Hut. This hut is the oldest government hut in New Zealand and the place where skiing on the mountain was first enjoyed. It is building highly valued by the New Zealand Historic Places Trust and TNHS has adopted it as an ongoing project and are currently working with DOC in putting in new and exciting interpretation material to the site.

The filming of *Lord of the Rings* in Tongariro National Park offered TNHS a great opportunity. We were asked to help restore an area beyond Happy Valley, and a happy band of volunteers worked to re-plant the area. Most of the work was carried out on a cold, windswept and snowy day and an uninformed observer may well have thought that they were witnessing a weird scene for the *Lord of the Rings* film. We were well reimbursed for these efforts and the funds contributed towards the cost of employing an Executive Officer on a part time basis to increase peoples' awareness of the society and to provide closer links with DOC and other bodies in the area.

For further information and membership applications, please contact

Sarah Gibb,
Executive Officer,
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Turangi
www.tongariro.org.nz



Above: Lets go fly a kite! A novel and fun activity organised by the Tongariro Natural History Society was part of the department's summer programme, held on the Whakapapa Golf Course. (Photo: Sarah Gibb)

Members seemed to enjoy each others' company and from time to time visits to other parks or places of interest have been organised. In particular we have been to White Island, Matiu Somes Island in Wellington Harbour, Karori Bird Sanctuary, Kapiti Island and Whangamata.

Has that made a difference?

Having an Executive Officer, located alongside DOC officers at Tongariro has enabled the Society to enjoy a very close professional relationship with DOC. It has also helped to promote the aims and objectives of the organisation and to increase membership. The Executive Officer has been particularly entrepreneurial in promoting involvement by children through the publication of attractive cards, made by the children themselves. She has also organised a delightful kite day on the golf course in front of the Chateau, arranged a festival of walks (carried out in a massive downpour); produced a CD of photographs of the park, developed a web site; contributed press handouts to local papers and responded to a vast variety of requests for information.

A couple of years ago, we co-funded a visit to the park of Greg Moore, CEO of the Golden Gate Natural History Society in Los Angeles. Greg employs a big staff, manages diverse locations and copes with tens of thousands of visitors on an annual basis and operates on a mind boggling budget. Despite the difference in magnitude in the scale of operation, it was pleasing to observe that our philosophy and the philosophy expounded by Greg was very similar. We regard Greg's visit as a useful benchmark for us to measure our progress.

The society's contribution to volunteer projects was recognised internationally when the President (Bob Stothart) was invited to attend an international seminar, hosted by the Fujisan Club, in Tokyo to discuss Mt. Fujiyama. One outcome of this trip is a visit to the park (in February 2004) of a group of Japanese students from Waseda University accompanied by members of the Fujisan Club.

What of the future?

Tongariro Natural History Society was the first such organisation set up in New Zealand and still is the only one. We believe that we are just scratching the surface of involvement in park activities. Our conservative estimation is that the Tongariro Natural History Society has contributed over \$500,000 to the park in cash and 'kind'. But this is only a beginning. We look forward to the next twenty years with enthusiasm. We plan to expand membership, become more involved in volunteer contributions to park projects, generate additional funding to support our activities, to continue to publish appropriate material about the park, to establish effective on-going relationships with Ngati Tuwharetoa and to promote the park in all its moods, all its weathers for the benefit of all New Zealanders.

Bob Stothart
Wellington

The Lake Taupo Reserves Scheme

This article is based on a series of interviews conducted by Ian McNab with retired Survey Technician Matt Wilson and Reserves Ranger Mel Scott.

As early as the mid 1950s there was a push by private interests to establish reserves around the shore of Lake Taupo. The Taupo County Council set wheels in motion in the 1960s by forming a committee to define the proposed reserves. Deemed to be too big a project for the local council central government was approached for assistance. The government set up an officials committee comprised of representatives of the local bodies, Ministry of Works, Wildlife Service, Lands and Survey, Forest Service and Maori landowners.

Using aerial photos that were first produced for this area in 1942 and maps, a “broad brush plan” of lakeshore reserves was produced which concluded that at least 18 000 hectares was required for protection as reserves for lake and scenic protection.

This is where Matt Wilson, a Survey Technician for the Department of Lands and Survey came into the picture.

One of Matt’s main roles was to open an accessible boundary between the proposed reserve and the land yet to be developed. Matt used the proposed plan and photographs on which the tentative boundaries were superimposed, a bulldozer and driver and cleared a strip through the vegetation. Once a boundary was agreed upon by the committee and the access established the boundary would be legally surveyed. Land clearing and all the other work of establishing a farm could then go ahead on the land bordering the lakeshore reserve.

This work and the physical defining of reserves could only take place on land already owned by the crown. Land ownership of the lakeshore was then and still is a mix of crown land (now all either recreation or scenic reserves), freehold private and Maori communal ownership. Only after the legal surveying of boundaries between reserves and the neighbouring crown development land, Maori land or private land could the reserves be gazetted by parliament. There were

only three scenic reserves on the lakeshore before this scheme got underway.

The purpose of the reserve scheme was many fold and included:

- the obvious aesthetic values of having the entire lake edge in natural forest cover
- not being able to see any developed land from the lake itself
- concern over future water quality and quantity,
- maintaining the fisheries by preserving spawning streams
- providing areas for recreation use.

In late 1973 or early 1974, the Lake Taupo Reserves Board (L.T.R.B.) was formed and Mel Scott was employed as the Lands and Survey’s



Above: Matt Wilson, long time survey technician responsible for establishing the boundaries of the areas of Crown Land around Lake Taupo to be designated as reserves.

(Photo: courtesy of Joy Wilson)

Below right: Mel Scott surveys another grand part of New Zealand, Milford Sound.

(Photo: Mel Scott)



Matt Wilson

Matt Wilson started with the Department of Lands and Survey before the start of World War II and remained working for the first part of the war on essential work such as mapping roads and access routes before being sent to overseas in 1943 to Italy. Drafted to Japan when the war ended, as part of the army of occupation, he returned to Wellington in November, 1946. To his surprise on the quay waiting to meet him was the late Surveyor General, Russell Dick offering him a position back with Lands and Survey. After his first post war work surveying baseline measurements in preparation for the Third Order Triangulation he went on to precise level surveys to measure the tilt and movement of the land, especially within the Wairakei geothermal draw-off area and the hydro lake dam abutment movements during filling. The underlying thermal activity and overlying pumice soil results in very flexible land forms. Matt had a lot of trouble finding any solid features around Taupo, even the seemingly solid rock forming Huka Falls is lying on top of a moving fluid base. He had to go off to find his solid rock for a bench mark down the Napier- Taupo road.

first Reserves Ranger based in Taupo.

The role of the Lake Taupo Reserves Board was later taken over by the Tongariro Taupo Conservation Board which was given a much greater brief than either the early committee or the Reserves Board. The Department of Conservation continued negotiations for more land for reservation protection.

Matt developed very good relationships with neighbouring Maori owners initially and was given free access across their land. He found a lot of support for the reserve scheme but often felt he would have had greater success in gaining lakeshore reserves if he had been given an open cheque book when dealing with adjacent landowners. Bureaucracy and the delays associated with it tended to erode the good relationships with some neighbours who gave up being interested in discussing any more such deals with Matt.

Ability to access all land easily

The bringing through of the bulldozer could often be a real bonus to landowners adjacent to reserve areas as not only did it open up the crown land but could also give the neighbours access at no cost to themselves to their own land. It must be remembered that this was a time when access even on the main roads was primitive and the vegetation in so much of this land was thick kamahi, manuka and other similar regrowth forest species.

Pumice Survey peg

Much of the land Matt was asked to survey had been surveyed before. Earlier surveys date back to as far as 1896 and Matt often needed to find these survey pegs. These pegs were often made from large blocks of pumice carved into regular box shapes and buried on the boundaryline with just their top exposed. Finding them was a job! The bulldozer would move off towards where the peg should be hopefully stopping a few yards short the pegs location. The pumice peg would then have to be found although some had been dislodged over the years by wild pig rooting.

Waikato Valley Authority extensions

The local catchment board, known as the Waikato Valley Authority thought it necessary to protect even more land and add this to the current reserves as conservation land. These conservation land extensions usually involved strips on both sides of streams and dry washes. The neighbouring farmers often ended up with long fingers of P.R.F.G. (permanently retired from grazing) land encroaching into their farms. These areas were fenced off to exclude stock. In some cases this resulted in farmers having long distances to move stock over between what had previously been neighbouring paddocks. If possible a compromise arrangement was made where the farmer could have access across the reserve at one specific point.

Fertiliser on the lakeshore

At one stage Mel had some information anonymously passed on to him about a large quantity of fertiliser that was located on the lakeshore around in Kawakawa Bay. This being a reserve area with no agricultural or forestry development at all he could only conclude the fertiliser, something like quarter of a ton (220 kg), was to be used for illegal growing of cannabis in the reserve or neighbouring Maori land. For a long



Above: Mel Scott beside the Whakaipo Bay Reserves sign in 1980.
(Photo: courtesy of Joy Wilson)

time after this the Taupo field staff had very healthy looking vegetable gardens!

Lakeside tracks

The walking track between Kinloch and Kawakawa Bay was put in by Mel, John Carter (as his first reserves job), Barry Cummings and special project workers. The best location for tracks is through areas with a closed canopy or where the canopy is closing over in an arch to stop light getting to the ground and thus impeding heavy regeneration along the sides of the track.

Doreen Abraham, a local who specialises in native orchids gave great encouragement to the staff who formed the Kawakawa track. Roger Holyoake gave open vehicle access through his farm for staff and this made logistics much easier and the working hours much longer. All bridge, step and sign material were carried from the Otakitaki by hand.

Reputation of Lands and Survey Development branch.

The Land Development branch of Lands and Survey didn't always have a good reputation with the lake users and those concerned for its shores. The wholesale crushing of native cover and development of grass virtually to the waters edge in Whakaipo Bay was very unpopular. However with the advent of the lakeshore reserves scheme the branch cooperated well during all phases, not only in areas at the time undeveloped but also in areas at that time already grassed and farmed. At Whakaipo, some 300 hectares of mainly pasture were gazetted as reserve with some of the gully systems since replanted. Other areas were also reserved and are now rapidly regenerating to scrub cover.

Original land development attempts post WW I

Matt not only came across old tree stumps that indicated some of the previous history of the area but he also found the remains of past farming attempts such as old totara posts and wire such as at Whakaipo. Existing photographs show wool bales being loaded from a jetty in the front of thatched whares about 150 metres west of the Waihora stream mouth. After WW I attempts were made to farm some of this country but the same soil mineral deficiencies that saw vast areas of neighbouring land planted in pine trees affected this land. The deficiency was diagnosed as cobalt before this area saw further development attempts.

Kuratau, Whareroa, Pukawa and Omori subdivisions

When these subdivisions were being planned and developed there were areas set aside for reserves, both on the lakeshore and up the streamsides. Some of this was subdivision requirements and some through foresight.

Encounters with landowners

During reserve investigations along the Waitahanui river and adjacent land Matt had many confrontations with a local Maori owner whose greeting invariably

was “What are you doing down here, Wilson? Get off my land!” while waving a stick menacingly, often thrashing the ground with it but never actually making physical contact.

On one occasion when Matt thought he had given him the slip, but lo and behold, he suddenly appeared, quoted a verse from the bible and then placed this huge bible on a post asking Matt to swear on it that he was not going to take his land compulsorily.

Grazing

The majority of adjoining farmers and managers respected the reserves and prevented their stock grazing them. On one occasion 400-500 cows got into Te Hapua Scenic Reserve, the gem of the lakes reserves. Severe damage was done to the bush area and the opening up of the permanently retired from grazing area allowed blackberry to thrive. Mel’s recommended that the manager be berated by the Commissioner and was backed up by the Commissioner of Crown Lands Ray Velvin who came down himself to check the damage.

Mel’s first Lake Taupo Reserve (LTR) development was the carpark at the north end of Awaroa Reserve. The long beach between Mahuta Road and the Mangakura Stream was inaccessible from State Highway 1 because of the swamp which at that time was home to ducks, pukeko and bitterns. The sand at the south end was very soft and it took a lot of compactable pumice to make a load bearing surface for a park and track to the beach. Over a period this was followed by other tracks and carparks.

The Omori-Pukawa is probably the most heavily used LTR track and passes through features unusual to Taupo, a patch of Kahikatea and supplejack.

While scrambling in front of Piripekapeka subdivision to fell a wilding pine, Mel fell into a hole which proved to be a trench which had been used in the making of the film ‘Heitiki’ in the early 1930s. Mel met an elderly Maori soon after at Waihi Village who when told about this laughed, “They employed lots of Maori who had a good time and a lot of food and fun, but who in the finish were not paid as promised!”

Early work on the Motuapa track was carried out each Saturday by Periodic Detention lads. Mel was educated quickly! At the end of the first day the boys reached the truck a minute or so before Mel, unlocked the vehicle and were inside when he reached it. He carried amylnitrate capsules in the glove box in case of accidental cyanide poisoning. The boys knew it gave good ‘highs’!

Head Office once guided an overseas VIP to Taupo to check the reserves scheme. He studied toilets in public parks and reserves as an interest during his travels and was intrigued by the one at ‘Chinaman’s’ Creek, Kawakawa Bay. Although not reserve, the stream mouth has for many years been a popular fishing-camping site though none was in residence at the time of his visit and he was able to leisurely take photographs of the toilet which was a mini car tyre nailed on its side to four stakes over a deep hole within a small clearing in the fern - no roof or walls. The visitor said this would be his New Zealand photo!

Forest types and ground cover

The south-west corner of the lake had podocarp bush to the lakeside. Remnants remain but the bulk was logged and most likely milled about the turn of the cen-



Above: An aerial view of the Western Bays Reserves. (Photo: DOC)

ture below the falls at Waihi Village. Heavy bush probably ran north to Pukawa as Mel found old sawn matai stumps near the kahikatea patch in the Omori reserve which still retains one or two big trees. Omori lakefront was and is kowhai dominant but the flat area below the houses had been farmed and in 1974 was mainly bracken with emerging scrub and quite a lot of blackberry. Patches of native trees were planted alongside the road.

The bulk of Rangitukua Scenic Reserve has been a reserve since 1906 and is becoming rewarewa dominant with kowhai along its frontage. The newly reserved north-east corner was acquired in exchange for the Piripekapeka subdivision beside Omori.

There are signs of old Maori habitation here and there including an overhang with ochre marks, totara slabs, a trench and obsidian. An old L & S folder showed mountain beech present in a listing of forest types but it cannot be seen there now. West and south of the bluff tops may well have been burnt not too long ago, as in 1974 it was almost pure bracken with some regenerating five-finger towards the south. Te Hapua Scenic Reserve was first gazetted in 1906 and in 1974 showed strong contrast between the bush area and the then recently added inland segment which had been farmed. South of the roadway which had been bulldozed to the lake during development, the area was divided roughly in half parallel to the lake with the inland half then heavy grass sward with an odd bracken and blackberry patch. Regeneration to bracken and scrub has been very slow through the thick mat of grass.

Waikino was first gazetted in 1906 and one of the only three scenic reserves on the lakefront prior to the LTR scheme. The reserve is best known for its black beech and recognised by Maori in the name of Te Tawai Point. This beech naturally spreads very slowly and this much localised patch is taken by scientists to help indicate where the main Taupo eruption was centred. To have survived eruption blast 1800 years ago, the area most probably was partially sheltered from the main eruptive blast by the Karangahape Peninsula. While occasionally found in small numbers elsewhere around the lake, there is quite a big patch of Akeake mostly on the northern face of 'Te Tiroa Point' and while most have been killed by possums, Pohutukawa grow high on the inner northern side of the Te Awaroa channel.

The reserve had tanekaha as an emerging species, especially upstream where the LTR scheme added tongues up the Waikino and Oruapuraho streams. The mainly stunted manuka and 'frost flat' area between these was set aside for exchange purposes by L & S but was allocated to DOC and then deemed worthy of reservation. The isolated pocket of reserve north of the eastern end of Putu Road was as probably the best area of mature kamahi near the lake, although wind and possums have damaged it since.

One time Mel chided hunters who had landed in the shelter of Whakatonga Point. Next trip passing in the patrol boat he noted unusual 'ochre' marks 'GET STUFFED SCOTT'! A few weeks later a quarter of wild pork was delivered to his front door! A peace offering!

Since DOC took over the Otupoto leg of the reserve, it has been extended by adding the permanently retired from grazing strip to State Highway 32 and the Piaranui to Hingarae Road. The head of the Piaranui Stream, south of Hingarae Road has the largest patches of niggerhead that Mel knows of in the district.

The Waihaha Reserve

The Waihaha Reserve excludes the beach, the valley, floor and the Tieke Falls. The falls and a few hectares around them had been taken by the Crown for electricity purposes some years ago. However the land taken was not used for that purpose, was gazetted a reserve. In the 1980s the previous Maori owners successfully laid claim for the return of the area. On settlement, a 20 metre strip from the roadend to the reserve and its carpark was retained and gazetted reserve to ensure legal access.

The Commissioner of Crown Lands instructed Mel to search out a track alignment out toward Whakatonga Point and to the end of the beach at Richwhites boundary that would be in reserve for its full length. The descent down to the beach through ignimbrite outcrops would have been difficult. Negotiation with the owners at that time allowed continued public use of the existing track.

Revisiting

Matt retired in 1981 after a career which began in 1939. Sadly he died in March 2002. Mel continued in his role as Reserves Ranger until 1987 when DOC was formed but was often called back as a consultant up until he retired in 1993. Mel, Matt and John (Carter) had the opportunity a few years back to tour around the lake. For Matt it was his first trip out on the lake since his retirement in 1981. Matt, Mel and John all made comments on how better looking the vegetation was now when compared to how it was when they started. In earlier times any observation from the lake showed a more open canopy, a bare forest floor with little or no understorey and large areas of bracken fern.

The improvement in vegetation canopy is attributed to good wild animal control, from organised hunting and trapping operations, private hunting as well as education of the neighbouring farmers on such things as releasing goats into the reserves. For some plants the hand poisoning and trapping was not sufficient, in particular were grazed and killed almost to extinction. Repeated airdrops of 1080 poison have given exceptional control and plants such as mistletoe, pohutukawa and mamaku tree fern are now recuperating.

Dave Wakelin
Senior Community
Relations Officer

Karioi Rahui ecological restoration project update



Above: Kohine Peke was the 23rd Operation Nest Egg kiwi to be released (on August 8th 2003) into the Karioi Rahui as part of the Bank of New Zealand sponsored Kiwi Recovery's Operation Nest Egg. (Photo: Katrina Knill)

The Karioi Rahui is a developing ecological restoration project by the Department of Conservation (DOC) who administer the land and by the Ngati Rangi iwi (tribe) who hold tangata whenua and mana whenua status over the land. The area covers about 5,300 hectares within the Rangataua Forest and Tongariro National Park. It comprises of vegetated terrain on the southern slopes of Mt. Ruapehu plus unvegetated terrain including snowfields and ridges higher up the mountain. In 1995, having identified an area in the Rangataua Forest east of Ohakune as a potential candidate for a 'mainland island' type restoration project, the Department of Conservation approached Ngati Rangi and found they were supportive of

the idea. Following several meetings and hui-a-iwi DOC and the Ngati Rangi Trust signed a Memorandum of Agreement (MOA) on 5 December 1996. The MOA was designed as a management framework for the implementation of the project and established a co-operative management committee consisting of three members from Ngati Rangi and three members from DOC.

Since 1996 this area, now referred to as the Karioi Rahui, has been developed into an ecological restoration project covering around 5300 hectares of vegetated terrain, on the southern slopes of Mount Ruapehu plus unvegetated terrain including snowfields and mountain ridges above.

The Karioi Rahui area contains important biodiversity values. Growing on the largest forested lava flow in New Zealand is an almost complete ecological/altitudinal forest sequence (700-1500m) with a largely intact vegetation sequence in the sub alpine - alpine zones (1200-2000+m) and a large intact red-silver beech podocarp forest. The Rahui area contains almost half of the priority threatened species in the Tongariro/Taupo Conservancy with the largest mistletoe population in the North Island and the largest studied short-tail bat population in New Zealand. A significant area for Ngati Rangi - this special area is also home to a remnant population of North Island Brown Kiwi.

The project's goals involve biodiversity protection including preventing the extinction of North Island Brown Kiwi, enhancing populations of other threatened species and ensuring the security of pekapeka (short-tailed bat). Through this biodiversity protection and ecological restoration, the mauri (life force) of the area will be restored. These goals will be achieved through co-operative management with tangata whenua (Ngati Rangi) and community involvement. An area to the west of the Rahui has been identified where no control (treatment) of pests is carried out in order to assist in outcome monitoring.

2003 has been a successful year in the Karioi Rahui with monitoring results giving figures that which indicate that the predator control and species management

Right: As a wrap up to their learning and predator control work in the Karioi Rahui, Ruapehu College students released Rangiwaea back into the forest as part of the Bank of New Zealand sponsored Kiwi Recovery's Operation Nest Egg programme.
(Photo: Katrina Knill)



work being done in the area is paying off.

Possum browsing browse palatable plants is a large threat to ecosystem functioning and the life of a forest. Destruction of plants important to Maori is a specific way in which possums affect cultural values. 10 Ten species of rongoa Maori were selected by Ngati Rangī from a list of 30 suggested by DoC. Of these often, five species showed significant differences in the amount of possum browse between treatment and non-treatment areas. Lesser browse by possums on these species in the treatment area can be regarded as an enhancement of mauri there.

There is significant evidence to show that the possum control that has occurred in the Karioi Rahui over the last three years has directly benefited the health of the red and scarlet mistletoes. Possum monitoring results from the 2002/03 season have shown that possum numbers in the rahui are at an all time low with only 14 possums caught over 1378 trap nights.

In July 2003, the release of the twentieth Operation Nest Egg (O.N.E) kiwi chick was celebrated. O.N.E. in the rahui has been a multi-agency and community project involving the Bank of New Zealand Kiwi Recovery Trust, Ngahere Development Trust, Tamahaki, Winstone Forestry and Whakamanu Wildlife sponsored by Ohakune New World. Of the twenty kiwi released, fourteen are still being monitored with five having now established territories and two have paired up and begun mating – another significant milestone. Three of the twenty kiwi released are known to have died and a further three have had transmitter failures. Numerous school children and members of the Ohakune community have had the opportunity to learn about, see and touch kiwi through attendance at kiwi releases.

Following a trial programme in 2002, a predator control programme has been established involving 450 tunnel boxes and traps in the core area (1800ha) of the Rahui. These are along existing bait station lines at 100m intervals with lines max 1km apart and will be baited with eggs primarily targeting stoats but will also catch rats, hedgehogs, weasels, ferrets and cats.

The newly installed predator traps will be set and monitored from February 2004,

on a weekly basis throughout the remaining summer, and then fortnightly through the autumn.

Ngati Rangi & DOC staff, have been working in conjunction with Ruapehu College since 1999 to set up an Ecological Restoration course that was trialled at the College and offered as a transition education course in 2003. Students on the course have the opportunity to learn about the cultural and scientific significance of the Karioi Rahui area, whilst gaining environmental monitoring and management skills such as learning to identify plants and animals, set predator traps, monitor foliage browse and measure bird populations.

The benefits that this course stands to provide are numerous. Students will gain an understanding and appreciation of Ngati Rangi conservation ethic and practices. The work of the students will assist and complement DOC's current work programmes in the area. It is also expected that in gaining relevant skills, this course may increase the possibility of young people from within the Ngati Rangi rohe gaining local employment with DOC and other agencies involved in conservation work. Through the course, Ruapehu College is able to offer a locally relevant career option and encourage students who may otherwise leave school, to gain their NCEA and possibly go on to tertiary study such as the Trainee Ranger programme at Nelson Polytechnic.

The trial year went well with students achieving some unit standards and credits toward their NCEA. Feedback from students and tutors has been positive and all parties have agreed to a second pilot year in which the programme will be improved and further developed as a result of learning from the first year's trial.

Looking ahead to 2004, we all hope to see the Karioi Rahui move closer and closer to our vision of a bustling forest full of native taonga. Biodiversity protection and ecological restoration work will continue as will management of mustelids and discussions about possible control of other pests such as deer, rodents & hare. Through the BNZ Kiwi Recovery Programme juvenile kiwi will continue to be released into the forest. It is an aim to be able to reintroduce the kokako by 2008.

In order for this project to succeed it is vital that the community continues to be supportive and involved through summer programme visits, volunteer programmes, the Ruapehu College conservation course and the ongoing management partnership with Ngati Rangi.

Katrina Knill
Ranger Community
Relations

Checked Out Our Website?

The Department of Conservation has one of the most comprehensive conservation websites, www.doc.govt.nz, in the world. With more than 4200 pages online and still growing every aspect of New Zealand conservation is covered. The home page has been redesigned to present a clean friendly face to the visitor and make navigation much easier. The site is divided into six main categories; About DOC, What's New?, Explore, Conservation, Community and Publications as well as a drop down guide to regional information. Subscribe to the What's Up Doc? newsletter - <http://www.doc.govt.nz/whats-new/newsletter.asp> and receive regular information on what's new on the site as well as general conservation news.



Our heritage is our legacy from the past

Right: Ngati Tuwharetoa Paramount Chief and New Zealand's delegate to the World Heritage Committee Tumu te Heuheu chats with the Director General of UNESCO Kōichiro Matsuura and Minister of Conservation Chris Carter outside the Tapeka Whareniui at Waihi Marae. (Photo: Dave Wakelin)



Kia mau ki tou whakapono
Kia mau ki tou iwi
Kia mau ki ou hiahia
Kei roto i te mahingatahi
Ka puawai ou tumanako.

Adhere to your faith
Adhere to your people
Adhere to your desire
For in partnerships with them
your aspirations will appear.

Tena koutou, tena koutou kia ora tatou katoa.

Ngati Tuwharetoa is greatly honoured by the presence here today of our many distinguished guests and friends.

It is with great pleasure, therefore, that we extend this welcome to you on your arrival to our ancestral lands, to the shores of our sacred Lake Taupo and to our ancestral Marae.

Ko Tongariro te Maunga
Ko Taupo te Moana
Ko Te Heuheu te Tangata
Ko Ngati Tuwharetoa te iwi.

Tongariro is our sacred and revered ancestral mountain

Taupo is our life sustaining Lake

Te Heuheu is the Man

Ngati Tuwharetoa are the people of these lands.

Our sacred mountains, lakes, rivers and this surrounding landscape are the visible geographic and ecological reference of our existence as tangata whenua (the indigenous people of these lands).

During the same period when the great astronomers of Constantinople were alive and the emperor and central government of Japan was being located to Heian (Kyoto), my ancestors were beginning their journeys through the Pacific Ocean to eventually arrive in Aotearoa.

We are now linked to this landscape by oral tradition and ritual developed through generations of intimate social, economic, cultural and spiritual interaction. This has now become our heritage. As my great, great, grandfather, Horonuku, stated in 1885:

"If our mountains of Tongariro are included in the blocks passed through the court in the ordinary way, what will become of them? They will

The World Heritage Committee is a committee of UNESCO. It is responsible for the selection of sites from around the world which meet its high standards of universal excellence in order to be inscribed on the World Heritage List for their natural and cultural values.

There are 21 places on the Committee. New Zealand has lobbied over the last few years for a place on the World Heritage Committee. In October 2003 New Zealand received 100 out of 163 votes, the highest number of votes ever recorded for any country.

Tumu te Heuheu, Paramount Chief of Ngati Tuwharetoa, is New Zealand's delegate to the Committee.

Tumu invited Kōichiro Matsuura, Director General of UNESCO to visit New Zealand to further understand the significance of intangible cultural values to the indigenous peoples of the Pacific.

On 1 February 2004 the Director General was formally welcomed onto the Waihi Marae with a powhiri in his honour. This is Tumu te Heuheu's mihi (speech) to Kōichiro Matsuura and those assembled.



Above: The Ngati Tuwharetoa haka party challenges the Director General of UNESCO Kōichiro Matsuura and the official party which included the Minister of Conservation Chris Carter, the Minister of Education Trevor Mallard, the Minister of Defence Mark Burton, UNESCO officials and Department of Conservation Kaupapa Atawhai Managers.
(Photo: Dave Wakelin)

become of no account, for the 'tapu' will be gone. Tongariro is my ancestor, my 'tupuna'; it is my head; my 'mana' centres around Tongariro. You know my name and history are associated with Tongariro. I cannot consent to the court passing these mountains through the ordinary way. After I am dead, what will be their fate?"

This was reiterated by my late father, Sir Hepi te Heuheu when he agreed to declare this Park as a World Heritage Site:

"The mountains are to be owned by no one and yet are for everyone. This land of Tongariro National Park is our mutual heritage. It is a gift given many times over"

"Our reverence for the mountains goes deeper in that in time, with the essence of our genealogies, all life forms originated from the same parents, Papa-Tu-A-Nuku, the Earth Mother and Rangi, the Sky Father, so that man and all other life forms are in harmony with one another in the bonds of kinship.

Conditioned then with these affinal ties we look upon these mountains as ancestors and this relationship evokes memories of our human ancestors who once roamed and settled within their shadows centuries ago, so that by these memories the past and the present mingle ensuring their continuity. We sing or chant today ancestral compositions paying them homage."

This reaffirms the indivisibility of our social, cultural and spiritual linkages to our ancestral lands.

Every ancestor, whether human or metaphysical, has a name, a personality and a vital life force or mauri;

Every place and every inanimate and animate thing has a name and a story, from these stories derive our history, our myths, superstitions and beliefs;

Our ancestors have passed these down through the generations through oral tradition, songs, carvings and various other art forms.

Our customs and protocols embody the knowledge and wisdom of these experiences. From this we derive our identity, self-respect, strength and determination to develop within a national and global context.



Above: Te Heuheu Tukino IV
Horonuku gifted the sacred
peaks of Ruapehu, Tongariro
and Ngauruhoe in 1887, declar-
ing, *"They shall be a sacred place
of the Crown, a gift forever from
me and my people."*
(Photo: Alexander Turnbull
Library)

It is important for us all to understand this context when we comprehend the significance of the world heritage status of Tongariro National Park.

In 1881, Te Heuheu Tukino IV (Horonuku), paramount chief of Ngati Tuwharetoa made this statement about the summits of mounts Tongariro, Ngauruhoe and Ruapehu:

"They shall be a sacred place of the Crown, a gift forever from me and my people."

The Deed was drawn up and signed by Te Heuheu in 1887. This led to the creation of the Tongariro National Park, the first National Park in New Zealand and followed closely the world's first National Park created at Yellowstone, Wyoming in 1872.

Te Heuheu Horonuku's purpose in gifting the peaks of our sacred maunga (mountains) was simply to protect and preserve the integrity of this natural and cultural heritage and to ensure that it was not compromised by private ownership. He considered that declaring these sacred mountains a public reserve was the best option available to him at a time when Maori land alienation was being accelerated by the recent establishment of

the Native Land Court.

In transferring this "gift", Horonuku established an extremely onerous obligation on the Crown to ensure the maintenance of the physical, cultural and spiritual integrity of these taonga tuku iho (heritage of great value protected and handed down from previous generations for the safeguarding by the next generations).

The establishment of the Tongariro National Park remains internationally unique because it is a gift to the nation by an indigenous people.

Prime Minister Helen Clark's signing of an arrangement with UNESCO early in 2003 to commit New Zealand to a more active role in the promotion of the World Heritage Convention, opened the way for New Zealand's representation on the World heritage Committee.

I want to acknowledge the support and work of the Ministers and staff of the Department of Conservation, the Ministry of Foreign Affairs and Trade and New Zealand's Permanent Delegation to UNESCO, and the Ministry of Maori Development during the campaign for my appointment to the World Heritage Committee.

I believe that New Zealand's representation was due in a great part to its international reputation as an expert in conservation management and its support for World Heritage in the Pacific.

Since my appointment to the World Heritage Committee in October 2003, I have appreciated even more the significant contribution that UNESCO is making in the global advancement of natural, cultural heritage. This is evident in the 2001 International Convention for the Safeguarding of Intangible Cultural Heritage. This convention paves the way for intangible heritage to be considered and developed on the same footing as tangible heritage.



Above: UNESCO Director General Koïchiro Matsuura talks to children from New Zealand schools which have subscribed to the ASP (Associated Schools Project). ASP is a worldwide UNESCO network of schools. Its primal goal is the promotion of peace and international co-operation through education. The New Zealand coordinator Lee Lilly is in the centre. (Photo: Dave Wakelin)

Importantly, it acknowledges the value of traditional knowledge, practices and innovations of indigenous communities. I believe that this will create positive opportunities for indigenous communities in associated areas of the knowledge society and tourism.

In this regard I want to acknowledge the work of UNESCO and express my deepest gratitude to the important work being carried out by Mr. Matsuura and UNESCO officials.

Before I conclude, I would like to speak about the obligation that Te Heuheu Horonuku referred to and what this means nationally and internationally. In

this regard I refer to the term kaitiakitanga.

In this instance kaitiakitanga refers to the protection and sustenance of the mauri (life force) of these mountain ecosystems. The tangata whenua are the ancestral kaitiaki (guardians) of the cultural and spiritual values of these mountains. This concept if applied universally to all natural landscapes, will ensure their validation nationally and internationally. Only when we achieve this benchmark can we say without fear of contradiction that they truly represent our cultural heritage.

Our heritage is our legacy from the past. The value of what we have left with us today is what our tupuna (ancestors) have left us. Our cultural and natural heritage is our source of life and inspiration. It is our identity.

It is this belief that strengthens my resolve to promote an active programme for the direct participation of indigenous peoples in the protection and nurturing of intangible cultural heritage at national and international level.

In this regard I am particularly pleased to welcome representatives from our Pacific Island nations in attendance here today and to acknowledge and thank you for your support for my nomination to the World Heritage Committee.

I believe that together we have the potential to develop a programme that will be hugely beneficial to us all and one that will fulfil the cultural heritage objectives established by UNESCO. We have the opportunity for intercultural dialogue about who we are, our relationship to the land and to each other.

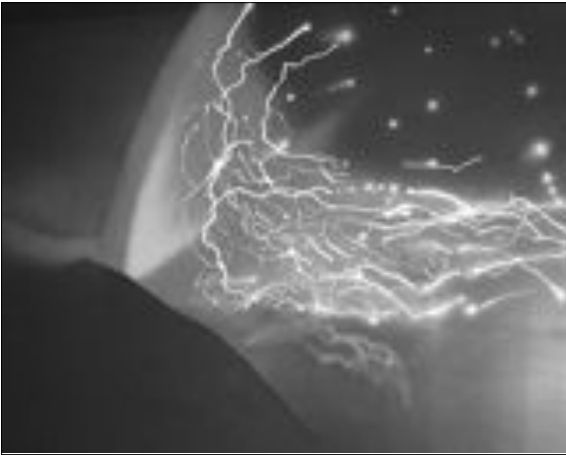
Finally, I want to remind us all that 2004 marks the end of the United Nation's International Decade on the World's Indigenous Peoples. While the sun is setting on this decade the dawn now heralds a new era of opportunity for indigenous peoples of the world to unite and to share our experiences and insights.

When people become visible their culture and history become visible and our heritage becomes sustainable.

No reira, tena koutou, tena koutou, kia ora tatou katoa....

Tumu te Heuheu
Paramount Chief
Ngati Tuwharetoa

Harry and Peter save the day



One of the great education 'tools' of recent times has been the use of the Internet as an information and learning resource. Heurisko, a Christchurch based educational resource provider has enjoyed a close association with New Zealand national parks, using teachers, the internet and phones to reach into schools with live broadcasts and daily updated diaries about real life park activities through the use of a programme called LEARNZ. LEARNZ has featured Tongariro twice, using Tongariro in 2003 when they visited Mt. Ruapehu's Crater Lake with Harry Keys and Peter Blaxter. The two poems below from Ashburton Borough School reflect the reaction of schoolchildren to Peter and Harry's efforts.

Tongariro volcanoes they blow up
the warning systems go and out comes a lahar flow
The people start screaming and later on they're dreaming
People start evacuating and the water is evaporating

Pete and Harry look around
to see if anyone has to be found
Then they start running
They didn't notice it coming
By the end of the day
All the people have moved away

Tongariro, Tongariro
is erupting now
all the people look at it
and then they say "Wow"
They soon notice that it's heading for the town
Then they started running
all the way down.

Audrie and Nicky are searching the town
To see if anyone is hurt
Ash covered the houses and got in the way
And Harry and Pete Come to save the day!

both poems by Charlotte, Matt and Callum, Ashburton Borough School



The Tongariro National Trout Centre

Nestled in a peaceful bush setting, just south of Turangi on State highway 1, the Tongariro National Trout Centre provides a peek into the world of trout at Taupo. Entry is free and the centre is open 10am - 4pm daily (except Christmas and New Years Day)

On visiting the site, there is plenty to see and do:

- See wild trout in their natural environment in the Waihukahuka Stream from an underwater viewing chamber
- Wander through the hatchery facility where trout are reared for the children's fishing pond
- Watch children catch a trout from the fishing pond on certain days of the year
- Learn all about the history of trout fishing in the Taupo District and what the Department of Conservation does to manage the fishery, through the interesting displays at The River Walk
- Watch a 15 minute audio visual about fly-fishing in the auditorium
- Take a short stroll alongside the world famous Tongariro River and watch anglers fly-fishing
- Enjoy a BBQ or picnic in the grounds



(Photo: Bill Crawford)

For further information, dates for the next special children's fishing days or arrangements for school groups, please contact Petrina Francis, Department of Conservation on (07) 386 9259.

As a prize fishery, Taupo is world renowned for the quality and size of the trout caught. Thousands of visitors come to the district each year to see and fish for rainbow and brown trout in our waters. The Tongariro National Trout centre is a place where visitors can learn all about how trout live, be inspired to learn the different ways to fish for them and gain an understanding of the need for management of this superb fishery, so future generations can also enjoy fishing at Taupo.

So come and visit the Tongariro National Trout Centre and learn all about Taupo trout! We would love to see you!



If you are planning some time in the Turangi area there's no better place to start from than the Turangi Visitor Centre, Ngawaka Place, Phone: 64 7 386 8999. Weather, trips, tours and attractions - the staff at the centre can give you all the answers.
email: turangivc@laketauponz.com



