



The Royal Society of New Zealand

## TOURISM AND THE ety ENVIRONMENT

# Tourism is booming in New Zealand



Sandra Francis

Wilkin River, Mount Aspiring National Park

Tourism makes a substantial contribution to our economy. A media release from the Tourism Industry Association (26 April 2001) cites key findings from the Statistics Department. These include that tourists spent \$11.5 billion in the year ending March 1997 and between August 1999 and August 2000 more than 1.7 million tourists visited New Zealand. This figure is growing at about 7% per year. Tourism is big business, 1 in 10 jobs are generated by tourism, and it contributes over 9% to our Growth Domestic Product (GDP).



Lake Matheson, West Coast

Wayne Blackburn

People come to enjoy the outdoors, get a taste of mild or wild adventures, and enjoy the wilderness and the unique environment that is Aotearoa, New Zealand.

They come to see mountain ranges, fiords, glaciers and lakes. They want to visit green farms, catch a fish, ride in a jet boat or go whale watching. They've heard about the attractions of the volcanic interior of the North Island - hot springs, mud pools and geysers - and the Waitomo Caves. They've seen pictures of our beautiful bush and coast line. And they know it's all enhanced by our temperate climate.

Many come to see our national icon the kiwi, and the kakapo – the largest flightless parrot in the world – or the tuatara, a survivor from the age of the dinosaurs.

The more adventurous come for extreme sports – leaping off bridges on bungies, barrelling down raging rivers in canoes and inflatable

rafts, paragliding down onto snowfields to snowboard or ski.

All this impacts on our small country, with its land area of only 248,021 sq km. An increase in visitor numbers can cause problems such as overcrowding, habitat destruction, wildlife disturbance and noise pollution.

Abel Tasman National Park at the top of the South Island -astunning stretch of golden beaches and coastal forest cut by limestone cliffs – is drawing more visitors every year.

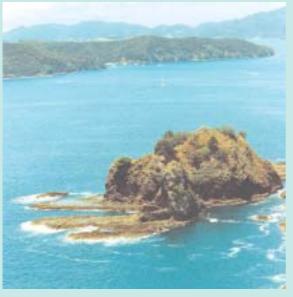


Milford Sound

Wayne Blackburn

Department of Conservation (DoC) area manager for Motueka Colin Wishart says increasing visitor numbers are causing problems with waste disposal. The last major upgrade of the toilet system was 10 years ago, and in some areas toilet waste has to be barged out by sea. The department is looking at spending \$950,000 on improving the toilet system.

The famous glow-worm-studded Waitomo Caves in the Northern King Country are another popular tourist destination. According to a 1997 Parliamentary Commissioner for the Environment report, nearly half a million people visit these fragile caves each year.



Offshore island

Wayne Blackburn

"Various estimates suggest that international tourism pumped almost \$5 billion into the economy in 1995 as against a total export income of almost \$21 billion. This represents more than 20 per cent of our overseas earnings."

New Zealand has a huge variety of landscapes, from the tidal mangrove inlets of Northland to the volcanoes of the central plateau and the jagged, snow-capped mountains of the South Island. Many plants and animals found here are not found anywhere else in the world.



Stillwell Bay, Abel Tasman National Park

Sarah Howison

Management of the caves is an ongoing challenge and the social and environmental pressures have to be carefully juggled as visitor numbers grow.

One person who is aware of the potential conflict between protection and use of the environment is DoC concession manager for Canterbury Andy Thompson. He says DoC's job is to both protect conservation areas and allow visitors to use them – and that's primarily where our potential conflict lies.

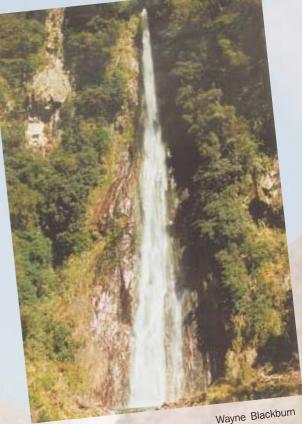
"We've got protection and use, and the protection comes first and foremost. So any use that we allow has to be along the lines that it doesn't wreck the place we are trying to protect, in broad simple terms." he says.

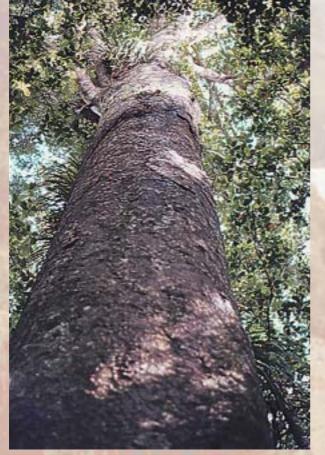
A 1997 report for the Ministry for the Environment (MfE), *The State of New Zealand's Environment*, says international tourism has become a major source of income for New Zealand, comparable in scale to such high-profile earners as meat, dairy and wool exports.



When this country parted from the pre-historic Gondwana supercontinent, about 80 million years ago, it was a mammalfree forested "ark" of birds, reptiles (including dinosaurs), frogs and invertebrates. Isolated from the rest of the world, through ice-ages and periods where the country was partially submerged by ocean, evolution took a strange course, producing unique species.

The landscape was full of a great variety of birds. Unique new forms evolved including a range of moa from turkey size to giants, the flightless kakapo and flightless, or near flightless, birds like pukeko, weka and takahe. Some filled the roles that small mammals filled elsewhere – living on the ground and foraging, burrowing and nesting in the ground. Predators were few. Poisonous insects and spiders were rare, and snakes were absent.





Kauri – Tane Mahuta

Colin Walker



Pukeko chick

Colin Walker

Restored cottage, Arrowtown

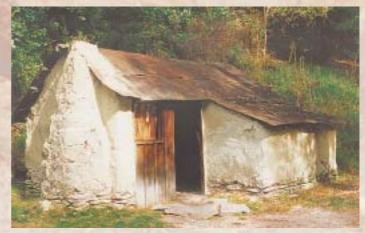
Waterfall, Fiordland

This land apart featured "living fossils" from the Jurassic age; many of them, such as the kauri and podocarp trees, the weta (a giant wingless cricket) and the tuatara lived on with little modification from their Jurassic ancestors.

Where the rest of the world was dominated by mammals, New Zealand was in an "Age of the Birds".

The MfE report also says the arrival of humans brought three main pressures on New Zealand's endemic species. Human predation through hunting, fishing or gathering; habitat destruction, through activities such as wetland drainage and deforestation; and the introduction of pests and weeds which prey on or compete with indigenous species or degrade their habitat. It says that by 1997 about 1,000 of our known plant and animal groups were considered threatened, and most of the transformed New Zealand landscape was ecologically hostile to many native species.

But people still come to visit our wilderness from across the globe, visiting the natural environment in increasing numbers.



Colin Walker

Andy Thompson maintains many physical effects on the environment can be managed, giving as an example the Milford Track in Fiordland, which has many thousands of visitors a year.

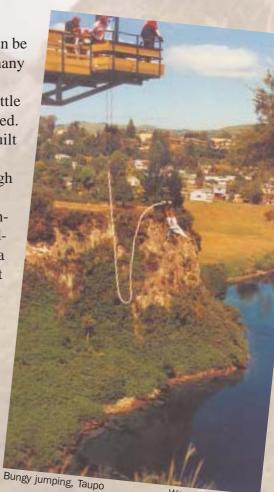
"Because the track is well constructed and well maintained there's little physical impact of the ground, so ... issues of trampling etc are removed. You put those sorts of numbers across an area that doesn't have a well-built track and you'll see a considerable impact on the environment."

Similarly there are serious issues where large numbers of people pass through areas where birds are breeding, causing nest trampling and disruption.

"Or it may be that they're walking across a track that is not well constructed and everyone's walking around a mud-hole and making that mudhole bigger and bigger and trampling all the vegetation. That starts off a chain reaction when the next rain comes along, washes that mud-hole out and sends all that silt down into a river. That silt then spoils the quality of the water and affects the food source of river breeding birds," says Thompson.

According to the MfE report there can be other problems, such as habitat destruction and wildlife disturbance by off-road vehicles, jet skis, horses, dogs, or increased risk of fires and new weed introductions. Vandalism and removal of souvenirs at historic sites were other problems.

Royal Forest and Bird Protection Society field officer Eugenie Sage says tourism development can lead to "site hardening", where natural areas are built up and upgraded to accommodate increasing numbers. She cites Punakaiki, the famous "Pancake Rocks" on the West Coast of the South Island, as an example. These rocks have an extensive tarsealed walkway that allows viewing of the coastal setting and the sculptural rock layers.



Wayne Blackburn

"It becomes a crass scenic attraction. The quality of nature is compromised."

She says upgrading tourist areas becomes a vicious circle, because it encourages more tourists, which in turn means DoC must make further investment in facilities. "All this reduces the



funding available for biodiversity protection."

Erosion of tracks, wildlife disturbance resulting in changing behaviour patterns of wildlife, and wood use around camp-sites are other impacts, she says. The disposal of human waste, both sewerage and grey water, can pose ecological problems if poor management leads to seepage into the environment, Sage adds.

But for Thompson the important environmental problems may be the ones people aren't detecting. "The biggest concern I have about the environmental effects of tourism on

conservation land is the cumulative effect. Because sometimes the cumulative effects are not very obvious, and unless you are paying attention to them, and you are out there doing a lot of research and a lot of monitoring...you're going to miss it."

Thompson says DoC needs to be more proactive in monitoring so it can be clear about "when enough is enough."

He also says social impacts created by people, through things such as overcrowding in natural areas, are becoming more prominent. He cites airline companies taking scenic flights over Mackinnon Pass along the Milford Track, disrupting the natural peace and quiet for the trampers below.

"It's the peak of the walk. It's when everyone gets a sense of achievement. They stand on Mackinnon Pass - if the weather's fine they're looking out over Milford getting fantastic views, and all they can hear is aircraft droning away right on top of them. That's a social impact," he says.



Maori Leap Cave, Kaikoura



Tarsealed path, Punakaiki

Sarah Howison

The Milford Track has a booking system, and people are permitted to walk the track in one direction only to ease traffic and other social impacts. Tracks and camping grounds around New Zealand are imposing similar measures to lessen social impacts on the wilderness experience, Thompson says.

Problems arise when a line must be drawn between protection and use. Thompson:

"When is the fifth helicopter too much after the fourth helicopter? When is the 50th walking guide over that track too much of an impact after the 49th?"

Many public conservation areas encompass areas special to Maori, and tourism can come into conflict with sacred sites (wahi tapu).

Mark Solomon, Kaiwhakahaere (Chairman) of Te Runanga o Ngai Tahu says freedom campers can pitch a tent on a wahi tapu without even knowing they are doing so.

Solomon says Aoraki/Mount Cook represents one of the most sacred of ancestors to Ngai Tahu, providing the iwi with its sense of communal identity, solidarity and purpose. For Ngai Tahu, standing on the very summit of the mountain denigrates its status.

"With Aoraki we don't say you're not allowed to climb to the top, because you can't enforce that. What we say here is Ngai Tahu seek to encourage respect for their association with Aoraki by providing educational material to climbers and guides, explaining that standing on the very top denigrates its tapu status."

Ngai Tahu are slowly educating people about the importance of these areas to their culture. "A lot of it is recognition and respect of Ngai Tahu's values."

Solomon says iwi are consulted by DoC during the concessions process, so wahi tapu sites can be protected. He says there are ongoing discussions about the management of these precious areas.

Thompson says DoC manages many of the tourist icons of New Zealand – such as Aoraki Mount Cook, the Milford Track, the Waitomo Caves and the giant Kauri tree Tane Mahuta – and has a significant role in the provision of tracks, huts and other facilities as a major provider of recreation and tourism opportunities.

As the tourism industry grows, more commercial operators are trying to establish businesses based on environmental tourism. Now DoC faces a conflict between protecting the environment and allowing people to use it, Thompson says. Commercial operators of tourism ventures need official authorisation in the form of a concession from DoC before they can establish a business.



Punakaiki rocks, Punakaiki

Sarah Howison

"That's a process that looks at new proposals from an effects-based impact perspective and says, OK, what's this activity, what is the effect of this activity, and is it going to adversely impact on the conservation values we're trying to protect?

"If it's going to impact in a significant way, and we can't avoid, remedy or mitigate those impacts then we cannot approve that activity and it's declined. If we're unsure what the impacts are going to be then the activity will be declined. If we know roughly what the impacts are going to be and we believe they will not be significant, then we approve the activity."



Wilderness Lodge, Arthur's Pass

#### Sarah Howison

## **Conservation covenants**

There are a range of ways to protect and restore natural ecosystems outside of national parks.

Many important natural areas are found on private land, and some landowners volunteer to protect their land under agreements such as conservation covenants.

A covenant is a legally binding agreement between two or more parties to protect an area, such as a waterway, wetland or forest. These parties agree on what is going to be protected and how the area will be managed.

DOC community relations supervisor Dave Forrester says covenants are an important mechanism for conservation.

People who want to keep ownership of the land but also want to conserve their natural values, such as farmers, often choose conservation covenants, he says.

Because the covenant is legally binding on the title of the land, it will stand even after the land is sold to a new owner.

Several organizations can establish covenants, including local authorities, DOC and the Queen Elizabeth the Second National Trust.

The QEII Trust has facilitated between 1200 and 1300 conservation covenants nationally, covering an area of 47,500 ha as of July 1999.

QEII Trust representative for Canterbury, David Webster, says management of areas varies with the natural values being protected, and public access for activities such as eco-tourism is encouraged as long as it does not conflict with the objective for which the covenant was set up.

Mr Forrester says there are several other forms of environmental protection including esplanade strips and esplanade reserves, which protect waterways and wetlands.

He says there are seven different classes of reserves ranging from nature reserves to local purpose reserves. "They've all got a valuable purpose in their own right."



Alpine environment

Wayne Blackburn

However, Sage says concessions are "virtually a rubber stamp" and DoC rarely declines concessions. Sage believes DoC is losing sight of its responsibilities of preserving and protecting the environment, failing to do adequate monitoring or address tourism's cumulative impacts.

Tourism Industry Association New Zealand manager, resource planning and development, Malcolm Anderson, says many tourism operators are aware of the environmental impacts of their trade.

"Almost all of those people will require a concession or consent. As part of that process they need to go through an environmental impact assessment process. I think you'll find most operators that work in those sorts of places are really keen. Most of them recognise the fact that if they don't look after it it's the environment that's going to be down the tubes."

The New Zealand Tourism Industry Strategy includes investigating a range of issues to ensure environmental sustainability of our many and varied features. To manage tourism and its ongoing impact/s requires: resources, planning, monitoring, establishment of standards, outcome identifaction, consultation and communication. These and other factors will be considered responsibly by the industry.

Thompson says commercial operations have several benefits to the environment. Concession holders are required to pay fees to the department, the revenue from which can be used in conservation.



Some operators are environmental advocates and educate their clients about environmental values. Thompson cites Dr Gerry McSweeny, who runs two top-of-the-market commercial wilderness lodges.

"Gerry is an excellent advocate for us, and his activities have next to nil impact. He manages it wisely, he keeps his party sizes reasonably small, his guides are well qualified and able to interpret the natural environment, flora, fauna and cultural issues."

McSweeny runs two 20–room upmarket lodges on freehold land close to important natural areas. One is nestled in West Coast bush near Lake Moeraki, the other in the South Island high country of Arthurs Pass.

He says he is "introducing visitors to the natural world" and holds activity programmes such as guided nature walks. "We remain the only wilderness lodges and really the only places who combine nature discovery with hospitality," says McSweeny.

Thompson says commercial operators also provide a safe service, minimising the risks associated with the outdoors. He says environmental awareness in the tourism industry is increasing, and there is room for protection and use.

"My only concern is, is it increasing fast enough, and are we getting the systems and processes in place to address the issues?"

### Acknowledgements

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