



ALMOST AN ISLAND

Valuing Otago Peninsula

20th Anniversary Conference
12-13 OCTOBER 2007



Speaker Biographies & Conference Proceedings



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Message from the Mayor of Dunedin

Welcome to Dunedin, the 'Wildlife Capital of New Zealand', and the Yellow-eyed Penguin Trust's 20th Anniversary Conference.

Dunedin is proud of its unique wildlife on the Otago Peninsula, including the iconic yellow-eyed penguin. We are equally proud of the Yellow-eyed Penguin Trust and the outstanding contribution to coastal conservation work this voluntary group has made over the past 20 years. The Trust has played an integral part in highlighting these natural values and their national advertising campaigns in the early 1990s displayed Dunedin City and its wildlife to the benefit of all, in particular the eco-tour operators of the Otago Peninsula.

I hope you enjoy these two days of talks and discussions. Your contributions, no matter how big or small, will help us consider what we have to do to protect and value the natural biodiversity of the Otago Peninsula whilst working with other users of this land.

Peter Chin

Message from the Patron Yellow-eyed Penguin Trust

Welcome to 'Almost an Island: Valuing the Otago Peninsula'. Your interest in the past, present and future of the peninsula, its lands and its species mirrors that of the Yellow-eyed Penguin Trust.

For twenty years, the Trust has worked to save the yellow-eyed penguin and restore its natural habitats. This conference celebrates their conservation achievements. It also brings us all together to align our individual values ensuring the peninsula and its natural environment will continue to be protected.

As Patron of the Yellow-eyed Penguin Trust, I am delighted to welcome you all to this event. I hope you enjoy these two days and leave with ideas and optimism for the future.

Anton Oliver

Message from Mainland

Mainland is proud to be continually associated with the Yellow-eyed Penguin Trust. We are also delighted to be a sponsor of this conference in celebration of the Trust's 20th Anniversary.

Since 1989, Mainland has been a major sponsor of the Yellow-eyed Penguin Trust. However, the association between Mainland and the trust has become much more than just another sponsorship arrangement; it has become a very special relationship. Mainland's continuing support of the yellow-eyed penguins is thought to be one of the longest standing relationships between a corporate and a wildlife organisation anywhere in the world, making it very unique indeed.

Through the barcode redemption scheme, Mainland has been able to help contribute over \$1 million to the Yellow-eyed Penguin Trust. For every cheese wrapper received, Mainland donates \$1 to the trust, up to the value of \$50,000 per year. In addition to these huge financial contributions, Mainland has invested a substantial amount of resource into raising the profile of the Trust and the plight of the yellow-eyed penguin. Mainland has made numerous television commercials, school programmes and resources, and multiple consumer promotions. These initiatives help not only to raise additional funds, but educate and raise awareness of the Trust, creating a sense of community and empowering people who want to contribute to the Trust's initiatives.

Mainland would like to extend its congratulations to the Yellow-eyed Penguin Trust on 20 years of outstanding work.

Stephen Buckingham
Brand Manager, Mainland

Message from the Minister of Conservation

I am very sorry that I can not be present at the Trust's celebration conference. It is indeed a significant achievement for a voluntary organisation to reach the 20-year milestone. Even more significant is the growth of the Trust's work and influence over the past 20 years; the increasing number of locations in which the Trust is active, the raising of a multitude of plants for penguin habitat enhancement, and the Trust's being a major contributor to health and wellbeing of penguin populations throughout New Zealand. I salute the work of your volunteers, many of whom have taken part in the hard graft of conservation work over the last two decades.

I wish you well for the conference and look forward to learning of any conclusions or recommendations you might reach regarding Otago Peninsula – truly, a spectacular place with truly special inhabitants.

Hon Chris Carter MP
Minister of Conservation

Speaker Biographies

Anne Cheng

Anne is the Planning Policy Manager at the Dunedin City Council. She comes with a wide range of experience gained both in New Zealand and overseas. She is an Otago Peninsula resident.

Peter Chin

Peter (Wing Ho) Chin is a lawyer and former Dunedin city councillor. In 2004, he was elected mayor of Dunedin and recently won his second term in that position. He is a descendant of one of New Zealand's earliest Chinese families, and a founding member of the national Chinese Poll Tax Trust set up in 2004.

Jeff Connell

Jeff graduated LLB(Hons) from Victoria University Wellington 1971. After a period in private practice, he held legal positions in the State Services Commission and Ministry of Transport before moving across to a management role in 1985. Jeff joined the Department of Conservation on its formation in 1987 as Regional Manager Wanganui. He has held the position of Otago Conservator since transferring to Dunedin in 1989.

Dr Peter Dann

Peter has worked as a wildlife ecologist for 25 years and has published extensively on seabirds and shorebirds in Australasia. He is currently Research Manager for Phillip Island Nature Park on Phillip Island in southern Victoria, specialising in seabird and wader ecology. In 1990-91, he spent six months working in Dunedin with the Department of Conservation and Otago University on Little Blue Penguins. He was involved with the establishment of penguin viewing at Oamaru and monitoring programmes at Oamaru and Tairoa Head.

Phillip Island Nature Park is an award winning, not for profit organization dedicated to international excellence in nature conservation and eco tourism. The park is famous for its "Penguin Parade", where 500,000 visitors come each year to see the arrival of Little Penguins at Summerland Beach at sunset.

Geoff Ensor

Geoff is a Sector Manager for the Tourism Industry Association New Zealand (TIANZ). Geoff provides advocacy and support across a wide range of issues to operators in a number of industry sectors, including the Adventure and Outdoor sector. Prior to joining TIANZ in 2005, Geoff was a commercial pilot for 20 years, during which time he flew for Air New Zealand and spent 10 years as chief pilot for Air Safaris and Services Ltd based at Lake Tekapo.

Dave Hawkey

Dave has been the Chief Executive of Real Journeys Ltd (formally Fiordland Travel Ltd) for the past five years. In 2007, Real Journeys was the winner of the *Conservation in Action* award at the TIANZ awards and Qualmark 'operator of the year'.

Born in Christchurch, Dave completed a BSc (Zoology) and an MBA from the University of Canterbury before embarking on a career in the tourism industry. He was involved in the establishment of the International Antarctic Centre in Christchurch, and then served as its inaugural General Manager for 5 years. He then joined Tourism New Zealand as Marketing Director (Americas) based in Los Angeles. Prior to moving south to joining Real Journeys Ltd he was the CEO of Lincoln Hospitality Ltd based at Lincoln University.

When he's not working he enjoys spending time with his family at Takamatua near Akaroa.

Jan Hindson

Jan has been the CEO of Tourism Dunedin since its inception in 2000. During that time she has been the driving force behind the positioning of Dunedin as an international nature and wildlife destination. Dunedin has constantly enjoyed some of the country's highest visitor night growth over the last 4 years and Tourism Dunedin's role in developing Trans-Tasman air links and careful targeting of key international markets has been a major part in this growth.

With a successful background as an award winning marketer in the financial services, banking and insurance industry, Jan is passionate about Dunedin, the environment, the Otago Peninsula, and the heritage and history of this great University City.

Debbie Hogan

Debbie is a policy planner with an interest in and enthusiasm for biodiversity and the natural environment within Dunedin. She was heavily involved in the development of the recently-released Biodiversity Strategy for Dunedin and is now working with landowners to protect Areas of Significant Conservation Value through the District Plan.

Professor Richard Holdaway

Richard is a private researcher, a Joint Adjunct Professor in the Department of Geological Sciences and School of Biological Sciences, and a fixed-term Professor in the School of Biological Sciences at the University of Canterbury. He currently leads a Marsden Fund project investigating the genetics, biology, and environment of four species of moa in North Canterbury before Polynesian settlement. In December 2003 he was awarded the prestigious D.L. Serventy Medal of the Royal Australasian Ornithologists' Union.

Professor John Jillett

John Jillett came to Otago in 1966 to a postdoctoral position at the Portobello Marine Laboratory to make use of a newly commissioned research vessel and has been based in Dunedin ever since. Over 30 years he served variously on the staff of the Marine Laboratory and departments of Zoology and Marine Science at the University of Otago. As a marine biologist John has worked on hydrological conditions and plankton ecology off the Otago coast, including long-term variations in sea temperatures, plankton life cycles, recruitment and retention of marine larvae and marine food chain dynamics.

John's time in Dunedin coincides almost exactly with the life of the Otago Peninsula Trust, although he did not become involved in the trust until 1998. He is currently Trust Chairperson.

Dr Peter Johnson

Peter is a Dunedin botanist and graduate of the University of Otago. He worked as a botanist and plant ecologist in Dunedin for the Botany Division, DSIR. He is now a research associate at Landcare Research. He has a particular interest in wetlands, coastal vegetation, and native and naturalised flora. He is the author of many botanical reports on Otago Peninsula, including an inventory on forest and scrub vegetation, and a full list of wild plants of the peninsula.

Euan Kennedy

Euan is a founding member of the Yellow-eyed Penguin Trust. He has 23 years of experience with endangered species recovery, including a position as Technical Support Officer (Biodiversity) for the Department of Conservation Canterbury. He is currently concluding his Masters degree studies in conservation ecology and human sociology at Lincoln University.

Glen Lauder

Glen moved to Dunedin in 1988 to work with the Department of Conservation on coastal/marine work. He then moved to Southland as an Advisory Scientist for the Department, then Hokitika and

then Wellington. During his time in Wellington he led the team that developed the New Zealand Biodiversity Strategy.

Since then he and partners in CommonGround have worked with central and local government, business and community to find common ground on things that matter for the long term.

Michael Lee MSc (Hons)

Mike has been Chairman of the Auckland Regional Council (ARC) and a member of Nature Heritage Fund since 2001. A former ships' officer, he is an active conservationist with a particular interest in the Hauraki Gulf Islands. He was founding chair of the Hauraki Gulf Islands Branch of the Royal Forest & Bird Protection Society.

First elected to the ARC in a by-election in 1992, he was re-elected later the same year and is now completing his fifth term. While chairman of the ARC Regional Parks Committee from 1993-95, he led the council in becoming the first local authority to engage in endangered species conservation work.

Dr William Lee

Bill was raised on a dairy farm in the Waikato, and came to the University of Otago in 1969, where he completed his PhD (Botany) on the plant ecology of serpentine soils. In 1976 he joined Botany Division, DSIR, as a regional botanist based in Dunedin.

Bill has broad interests in plant-animal interactions, ecology of plant invasions, and biodiversity assessment. He currently leads a research programme funded by the Foundation for Research, Science and Technology (FRST) focusing on reversing the decline in indigenous biodiversity.

Howard McGrouther

Howard has over 40 years experience in tourism, and was the first person to operate wildlife tours of any sort on Otago Peninsula. Has a good understanding of tourist expectations and has developed 'Penguin Place', a leading ecotourism attraction.

Bruce McKinlay

Bruce works for the Otago Conservancy of the Department of Conservation. Over the last 20 years his work areas have included yellow-eyed penguins, Cromwell chafer beetles, tenure review, grand and Otago skinks and Operation Ark. He is the leader of the Yellow-eyed Penguin Recovery Group for DoC.

Dr Colin Meurk

Colin is a landscape ecologist with a particular interest in and concern for the cultural landscape. He sees these urban and rural environments as a nexus between nature conservation and culture. Accordingly, he has been involved in long term community-based ecological restoration in urban or peri-urban places such as Travis Wetland, Quail Island/Otamahua and the Greening Waipara project.

These are at once an inspiration and a place to test our scientific knowledge concerning ecosystem pattern and process. The goal of this research and praxis is to integrate indigenous biodiversity and working landscapes so that sustainable lowland natural ecosystems and thereby the human experience of nature are mutually reinforcing.

Damien O'Connor

Originally from the West Coast, Damien O'Connor studied at St Bede's in Christchurch and Lincoln University before working a variety of jobs in both farming and tourism. He is a past president of the Buller Promotion Association, a member of the West Coast Tourism Development Group, and a founding director of the Buller Community Development Company.

Damien was elected to Parliament in 1993 as MP for the West Coast, and then became MP for West Coast-Tasman in 1996. He is currently Minister of Tourism and Minister for Rural Affairs.

Anton Oliver

Anton is a former All-Black captain and front-row forward, who has been involved with rugby in its transition from the amateur to professional game. He is also deeply committed to environmental causes and became the Patron of the Yellow-eyed Penguin Trust in 2006. He sees part of his role as helping to educate young people about their environment and its importance and promoting the yellow-eyed penguin as one of New Zealand's icon species.

Neville Peat

Neville is a Dunedin-born New Zealand nature writer and interpreter. He is the author of more than 30 books, most of which explore natural history or environmental/geographical themes. He is co-author of the award-winning *Wild Dunedin* (Otago University Press, 1995).

Neville recently completed his third term on the Otago Regional Council as Deputy Chair. He lives at Broad Bay on Otago Peninsula, a short drive from some of the world's most impressive coastal marine life.

Tahu Potiki

Tahu Potiki is the current Chairperson of the Otakou Runanga which is based on the Otago Peninsula at Otakou Marae. He has been involved in South Island Maori development for the past twenty years and has made a significant contribution to the revitalisation of Kai Tahu dialects and oral traditions.

Tahu was the CEO of Te Runanga o Ngai Tahu for over five years and as such he was responsible for the overall strategic leadership of the tribe's corporate operations. He has also worked as a fitter welder, a social worker, an academic executive and a business consultant.

He is a keen writer and is well published in journals, books and as an opinion leader in the media. Tahu is a serving board member of the Maori Television Service whilst also sitting on the Bioethics Council which advises the Minister on ethical and cultural issues that impact upon biotechnology developments.

Tahu Potiki lives on the Otago Peninsula with his partner and daughter where they currently run a small accommodation business just past Portobello.

Dr Keith Probert

Keith Probert is a Senior Lecturer and Head of the Department of Marine Science at the University of Otago. His main interests concern the biology and ecology of seabed organisms, effects of human impacts on marine systems, and marine conservation. His research in these areas extends from coastal to deep-sea environments and he has published widely, from scientific articles to popular books on marine natural history. He has been involved in numerous studies of the local marine environment.

Alan Saunders

Alan has worked in New Zealand conservation since 1971, initially with the Wildlife Service and then its successor the Department of Conservation. He was engaged in a variety of management and research roles, including coordination of the Threatened Species Unit. He supported national recovery programmes and then coordinated Mainland Island projects. He is now employed as the Director of the Pacific Invasives Initiative; a partnership programme focused on conserving island biodiversity in the tropical Pacific.

Professor Clem Tisdell

Clem Tisdell is Professor Emeritus in Economics at The University of Queensland and is a Fellow of

the Academy of Social Sciences in Australia. He has held visiting positions in many universities, including the University of Otago, where he was a William Evans Visiting Professor in 1988.

Clem was a pioneer in Ecological Economics and has made a substantial contribution to Tourism Economics. He has a special interest in the economics of conserving biodiversity, including endangered species. He serves on the editorial boards of many journals including *Ecological Economics* and *Endangered Species Research*.

He is also a prolific author. One of Clem's recent books, *Economics of Environmental Conservation*, published by Edward Elgar, was given the Choice Award of the American Libraries Association earlier this year.

Dr Ian Turnbull

Ian is a geologist with GNS Science (formerly DSIR, and then NZ Geological Survey), and specialises in making geological maps of the southern South Island including Fiordland. He has also worked in Antarctica and the Sub-Antarctic.

Ian has lived on Peninsula since 1973; he currently lives in a stone house above Sandymount lime quarry with his partner Jane. They have a conservation covenant over regenerating bush (supported by Save The Otago Peninsula and the Department of Conservation), their own solar power, wind turbine and firewood. When not in Fiordland, Ian enjoys tramping and cross-country skiing. He used to fly aerobatics but got carbon guilt.

Friday 12 October 2007

Conference Opening

Opening speakers were Tahu Potiki (Chairperson of Te Runanga O Otakou), the Hon Damien O'Connor (Minister of Tourism), Peter Chin (Mayor of Dunedin), Anton Oliver (Patron, Yellow-eyed Penguin Trust), and Euan Kennedy (Founding Trustee, Yellow-eyed Penguin Trust).

Damien O'Connor. Eco-tourism is at the heart of the New Zealand Tourism Industry. In 2006, for example, 1.6million domestic and international travellers passed through Dunedin, and for the majority of them the Otago Peninsula was the main reason for coming. The contribution of the Otago Peninsula to the economy of Dunedin can not be overlooked.

The unique biodiversity on the Peninsula is the main reason it has become such a tourist destination. Increasingly, we realise that the complex and delicate natural environment requires expertise to preserve and enhance biodiversity and manage the increasing impact of humans on the land, flora and fauna. This is where an organisation like the Yellow-eyed Penguin Trust can come in.

For many years, the presence of the penguins was, like so many things unique to New Zealand, taken for granted. Now we realise it can't be anymore, and we need cooperation between national and local government, community groups, research and commercial eco-tourism operators to preserve and enhance biodiversity.

Peter Chin. The Dunedin City Council very recently adopted a biodiversity strategy, which sets out its role as custodian of the local environment and how people, natural and built environment can coexist. There are, of course, competing demands of space, resources, and a range of interests on the Otago Peninsula, and it will require commitment from all those groups in order to ensure success of the strategy.

We shouldn't be preserving the wildlife on the Otago Peninsula because it is an accident of nature; we should inherently value it because it was here first. Anyone with a legitimate interest in preserving the uniqueness of the Peninsula, from whatever angle, should not be compelled by legislation to work with the indigenous flora, fauna and people. We should all be communicating with each other from the very beginning of the process.

Just as people make wills to pass on their assets to loved ones, and that is exactly what we should be doing with the Otago Peninsula. It needs to be protected so that the natural resources benefit us, our children, and for many generations to come.

Anton Oliver. The conservationist A Leopold said that "a thing is right when it preserves the integrity, beauty and sustainability of a biotic environment." This illustrates the values and aims of the Yellow-eyed Penguin Trust and its mission to preserve and enhance habitats on the Otago Peninsula.

Many people in Dunedin can be insulated from nature in their built-up environment, but the Otago Peninsula is a unique place. We need to start seeing the economy as being in place to serve the environment, not the other way around.

Euan Kennedy. In 1987, the Yellow-eyed Penguin Trust could have gone down a completely different road. The original interests of the founding trustees were more secular, involving plundering corporate largesse in order to build a big capital fund for penguin conservation. The stock market collapse changes all that, and we have in essence become one of the volunteer-driven community groups ourselves.

Because of the ongoing support of Dunedin and its people, and the sponsors and funders (particularly Mainland) who have stuck with us, we can return the favour with this conference. However, "there's not going to be another conference, because we'll hopefully have saved the penguins by the next twenty years."

Keynote Address – Emeritus Professor Clem Tisdell

Professor Tisdell did his first work on the Otago Peninsula 20 years ago, when he looked at the economic value of, and potential for, expanding wildlife tourism on the Otago Peninsula. He returned in 2007 to explore the massive expansion in wildlife tourism, and put some numbers on the economic benefits to Dunedin and New Zealand.

Economic importance of wildlife conservation can be measured in two ways: by measuring how much people are willing to pay to conserve wildlife, and how much people spend as a result of the prevalence of wildlife in a place. The second method, which gives an economic impact figure, is slightly easier and will be used here.

Professor Tisdell went and met all wildlife tourism operators on the Otago Peninsula to get an idea of visitor numbers, costs and accounts. He then calculated that visitors stopping to participate in organised ecotourism activities would stop one extra night in Dunedin. Using figures provided by wildlife operators, Dunedin City Council and Tourism Dunedin, he came up with the numbers presented here.

About 200,000 visitors participate in organised wildlife tourism on the Otago Peninsula each year. The royal albatross colony, for example, recorded 160,000 visitors in the last year. These visitors contribute \$6.5million per year in entrance and participation fees alone, and create about 70 full-time equivalent (FTE) jobs in the wildlife tourism industry.

However, the extra presence of people in Dunedin and on the Peninsula contributes directly to the city economy as well, by spending money in hotels, restaurants and shops. This is estimated at approximately \$60million annually, with creation of about 600 FTE jobs. Add on indirect impacts, in the form of expenditure by the tourism industry in terms of shopping, rent, extra employment, and the total economic impact of wildlife tourism is more like \$100million and 800-1000 FTE jobs.

Eco- or wildlife tourism has expanded enormously in the last twenty years. Very few people went to see Yellow-eyed Penguins at all in 1987, while over 100,000 people saw them in 2006. In addition, most of the operators began doing business in the early 1990's, almost all of whom included yellow-eyed penguin viewing as part of their tour.

Professor Tisdell thinks that the rate of expansion will slow down in the next couple of decades. Capacity constraints are a problem, especially at the albatross colony. Tourism operators may find themselves increasing fees as demand to see wildlife outstrips supply. Operators may also start going to public beaches as demand increases, which then increases the pressure and stresses on the wildlife. Finally, ecotourism is also going more upmarket. That means backpackers may get priced out of the market and resort to public free access rather than organised tours.

Of course, the value of wildlife exceeds that of economic impact from ecotourism. Social values are gained from the involvement of volunteers in conservation efforts. We'd like these creatures to be around for our children and their children – those are bequest values. And, we value the idea of the wildlife being there even if we don't go to see it.

The public must be regularly reminded of the value of conservation of wildlife, otherwise they forget and undervalue the resource. This is where groups such as the Yellow-eyed penguin Trust make such a huge contribution. Those groups therefore need ongoing support to both do the work and get the message out. There's a lot of value beyond the economic impact alone, but the economic impact and these other, harder to quantify values can work together.

Obviously, other costs relating to tourism, such as the environmental costs of flying to New Zealand, are not included in Professor Tisdell's calculations. He does point out, though, that wildlife tourism does have to be carefully managed, in order to strike the balance between increased human activity and cost to the environment. Professor Tisdell also points out that, although different wildlife tourism operators are doing different conservation efforts, those with private land will, by necessity, only really be interested in conserving their private land. Organisations like the Yellow-eyed Penguin Trust are needed to look after the rest.

Session One – Existence Values: What Was and What Is...

People invest values in environmental resources, even if they don't benefit from them directly. The values we place on these resources condition our response to investment initiatives. The Existence Values sessions explored the different values placed on the Otago Peninsula over time – what has been in the past, what is now, and what could be in the future.

Mike Lee – Chairman, Auckland Regional Council. Mike Lee spoke about how the Auckland Regional Council (ARC) has invested in regional parks and conservation. Conservation in the Auckland region is obviously tricky, as it has both the largest population and smallest land mass in New Zealand. However, within that area are 25 regional parks, 150km of coastal land, and many fragile and threatened species of flora and fauna.

Earlier attempts at species re-introductions within the Auckland area have not been successful, so this time a Parks Management Plan was carefully thought out. Emphasis was placed on expanding the network of parks, creating “wildlife corridor” links between them, and intensifying the management of protected park land. Pest management strategies are of primary importance to the habitat and species restoration programmes.

Mike spoke about four regional parks that have undergone intensive pest control, revegetation, weed control and species reintroduction plans. They included Wenderholm Regional Park, the Hunua Ranges, Tawharanui Peninsula, and the Waitakere Ranges. At all of these, the common theme that emerged was effective, ongoing pest control strategies. Various methods included trapping, a 2.5km long predator-proof fence on the Tawharanui Peninsula, and aerial poison drops. In all areas, they have been able to successfully reintroduce threatened bird species as a result of controlling mammalian pests and predators.

Robins have been reintroduced in Wenderholm Park; kaka, kokako and whiteheads in the Hunua Ranges; robin, whitehead and kiwi in the Tawharanui Peninsula; and hihi in the Waitakere Ranges. In addition, hundreds of bellbirds have self-colonised in the Tawharanui Peninsula since 2005.

Mike emphasized the amount of work done by volunteers, and also explained the importance of working in conjunction with other like-minded organisations, such as the Department of Conservation (DoC) and Forest & Bird (F&B). Future work will include the restoration of Rangitoto and neighboring Mototapu Islands, the largest project yet attempted in New Zealand.

By the year 2020, Mike would love to see railway corridors as green wildlife corridors, networks linking the ranges to the Hauraki Gulf islands, mainland sanctuaries, native birds in local parks and bellbird songs in the Auckland CBD!

The next section of talks focussed on the biodiversity of flora, fauna, and even geology, from the distant past through to the present. Therefore, the next section summarises the talks of Dr Richard Holdaway (an independent scientist and expert on paleontology), Dr Ian Turnbull (Geologist with GNS), Peter Johnson (Landcare Research and botanist with a special interest in Otago Peninsula plant species), and Dr Keith Probert (a marine scientist at the University of Otago).

14 million years ago, the Otago Peninsula didn't exist. It was actually a shallow sea, teeming with shellfish and other animals. Remains of this time can be seen in places like Sandymount Lime Quarry today. Then, sometime around 14 million years ago, all hell broke loose – a huge underwater volcano began erupting in the area where Portobello and Port Chalmers are today, and this continued off and on for about 10 million years until a volcano somewhere between 1000 and 1500 metres high was created. The 'volcano' was actually a series of peaks and edifices, with geological junk filling the spaces between peaks.

As soon as the volcano was created, wave action and wind began eroding it. The final shape of the Otago Peninsula was probably created by about 2 million years ago. At the time, though, it probably

was an island as sea levels were higher than they are today. There followed one or two more cycles of sea level rises and falls, which created the landscape visible today.

Today, the underlying structure of the land is based entirely on its geological history – landslides are common on the peninsula as a result of the rocks and rubbish that filled in between volcanic peaks. Geology creates the famous landscape, the natural resources, and affects the soils of the Otago Peninsula.

Of course, the rocks didn't sit around by themselves - all sorts of animals and plants began taking up residence on the Otago Peninsula. Moa were likely present, although with the amount of territory it's thought a breeding pair of moa needed, there probably weren't more than about half a dozen pairs on the peninsula. The climate, for most of the last few thousand years, was probably cooler and drier than today, leading to a mix of forest and open shrubland with lots of "edges". Up to 14 species of petrels probably lived and visited in the seas around the peninsula, and the massive Haast eagle may also have had a presence. Elephant and fur seals would have been common.

The arrival of Maori settlers about 800 years ago and Europeans a few hundred years after that changed everything. Moa would have disappeared very soon after the arrival of humans, and after rats began invading habitats the number of petrel species was reduced to four. In 1840, forests made up a substantial proportion of the natural habitat; today only 2.5% of the Otago Peninsula is covered by native forest. Humans very quickly changed the biodiversity of the peninsula, and it will now again be up to humans to manage its regeneration properly.

In terms of modern flora and fauna, the peninsula still has a rich abundance of on and offshore species. Marine biodiversity is mainly due to a unique convergence of ocean currents and marine floor geology which create several different habitats in a small geographical area. In fact, most of our marine biodiversity probably remains undescribed. Examples of marine life near the peninsula includes red krill, bull kelp, seagrass, Hector and Dusky dolphins, hermit crabs, and hundreds of species of fish.

On the peninsula itself, vertebrate biodiversity is represented through introduced mammals (i.e., sheep and cattle), pests and predators (i.e., stoats and possums), a few geckos, and about 62 species of bird (18 of which have been introduced and 14 of which are currently threatened). Rats and mice are particularly prolific. It is thought that Yellow-eyed penguin numbers have remained relatively constant since monitoring began about 22 years ago.

Many plant species flourish on the peninsula; unfortunately, many of them are introduced weeds which take over and squeeze out the native competition. Gorse is one good example of this. In addition, plants introduced into private gardens have sometimes spread beyond the boundaries. There are approximately 374 native and 331 introduced species of plants living on the peninsula today, of which 37 native species are threatened and 14 have disappeared completely. 36% of the native species are at one or two sites only, and 41% of introduced species – the difference is that while the native plants are on their way out, the introduced species tend to be on the way in.

All the speakers agree that something needs to be done, integrated between agencies in order to preserve marine, floral and faunal biodiversity, and generally long-term. The obvious problem lies in the integration and cohesion of different strategies.

Session 2: Existence Values – What Could Be...

Bill Lee – Landcare Research. What are conservation flagships? They are areas with high profile or iconic status, huge biodiversity, unique landscapes and easy access. If not managed properly, they can also hog the limelight, take up available resources and can become more threatened in their own right due to increased visitor numbers.

Bill succinctly outlined ten reasons that the Otago Peninsula should be considered a conservation flagship, in order to start creating a vision of the peninsula as as Wildlife Refuge. They are:

1. Many high profile species, including yellow-eyed penguin, albatross, and gecko;

2. A threatened biodiversity: at least 37 plant species with some sort of threatened status, and 24% of New Zealand's historically rare ecosystems;
3. Diverse ecosystems in a very small geographical area, including 12 beaches, a lagoon, and 39 streams;
4. Cultural significance, including Maori, stone walls, early settlers, quarries, and churches;
5. Representative indigenous biota;
6. Internationally renowned ecotourism operations;
7. Geographically identifiable with defined limits and boundaries;
8. Lots of residual biodiversity, or pockets of species and habitat remains;
9. Multi-scaled ecosystem linkages between flora and fauna; and
10. Educational centres to engage visitors to the Otago Peninsula.

Bill's main worry is that there is currently no coherent vision for enhancing the biodiversity of the Otago Peninsula, only localised conservation management and community groups. He thinks a coordinated effort by local and regional governments, NGO's, ecotourism operators and private landowners will be needed. He also thinks a full marine reserve around the peninsula will add to the effort and provide more effective predator proofing.

Alan Saunders – Pacific Invasives Initiative, University of Auckland. Alan used his experiences from other conservation areas to illustrate how a strategy for the Otago Peninsula can be developed with community buy-in and participation. He pointed out that the successful integration of socioeconomic and ecological factors is the key to conservation success, and that New Zealand already has an international reputation for island sanctuaries.

Island sanctuaries will continue to be important, but the focus is now shifting to mainland sanctuaries – a much more difficult problem. Mainland sanctuaries tend to involve people, rather than being remote offshore outposts, and the invasive species, both flora and fauna, need to be carefully managed.

Alan gave examples of successful projects he has been involved in, including several methods of pest eradication. These included everything from trapping to “a keen man and his dog” – one of the most effective mustelid hunters he had come across! Fences could be both a useful tool and a hindrance – they function as both a barrier to dispersal and as a challenge to invasive species.

An example of a successful mainland sanctuary involving coordination between NGO's, the city council, regional council and local residents is the Karori Sanctuary in Wellington. It was designed with two messages in mind: (1) this is what Wellington looked like 125 years ago, and (2) yes, we can do it! The two critical factors to get right are pest control and stakeholder support – once you get that, you can do just about anything.

Colin Meurk. Colin gave a talk entitled “Stepping stones to biodiversity futures: restoration at habitat to landscape scale”. In it, he outlined the reasons that the Otago Peninsula is unique, and how to create a vision for the future based on those unique selling points. Some of these overlapped well with what Bill Lee had already outlined:

- The geomorphology & topography – the landscape
- The biogeography – endemic creatures and flora
- The indigenous people and culture
- The colonial history, including whalers and settlers
- A New Zealand – Aotearoa synthesis
- A legible landscape, or being able to read the history of the land as we pass through it – what makes it “the Otago Peninsula” and not somewhere else.

Colin outlined the concept of *turangawaewae*, or our place that we are standing on. The peninsula is a cultural landscape where people live, work and play, and we have modified it to suit our purposes. Our nature is part of our daily experience. The visibility of nature is in our human memory banks, and dominated by “exotics” – we need to intervene and change the balance to “reintroduce” natives.

So, how do we go about doing this on the Otago Peninsula? The first priority must be to restore remnant indigenous habitats. An example of this in practice is rows of native hedges for birds to feed in.

As well as restoration of natives, we need to learn to make the most of what we've already got. Much of that is exotic, for example the willows and pines in plentiful supply on the peninsula. While the aim is to eradicate woody weeds in the long term, they are actually worth keeping in some places. They can feed native birds and provide timber while new natives are planted and grow. Exotic trees can make a good substrate for ferns and a nursery for regenerating native plants.

Once the remnant pieces of landscape are being restored at a local scale, the next step is to scale up, and look at how those "patches of native green" connect across the Otago Peninsula. Currently, they are scattered across it, but looking at the other side – Dunedin City and its town belt and urban woodlands – the landscape can be connected.

To do this, you need both receptive sites and seed sources. The optimal pattern for patches of forest involves having large patches of forest about 5km apart from each other. These are "connected" by smaller (1-2ha) patches every 1-2km, and small groves and stands of forest in between. This pattern fits in with the pattern of people who live and work in the landscape, but also means that forest is connected enough for seeds to disperse, birds to fly between, and people to walk from forest patch to patch.

The idea that Colin produced was his "non-scary vision of the future". We don't have to remove what's there now, rather start with what we have and initiate a step-wise process to restore land without people having to make drastic changes. An integrated, functional landscape would have one or two large sanctuaries, with linking habitats and corridors that are integrated with the everyday working landscape. This picture is not too dissimilar from the classical working English countryside and national park system, where up to 75% of national parks are privately owned and farmed in more or less harmony with the restored native landscape.

So, we do need a vision, but it has to be a realistic one. The cultural landscape is part of the appeal to many people, and therefore it too must be included in the overall conservation vision of the Otago Peninsula.

Saturday 13 October 2007

Session 3: Option Values I

Once resources are identified, people identify and quantify opportunities to exploit them. Whether this is direct or indirect exploitation, option values are the values associated with these opportunities. The Option Values session examined different ideas of “exploitation” of the resources of the Otago Peninsula, both in terms of what is currently happening and visions for the future.

Jeff Connell – Otago Conservator, Department of Conservation. Jeff started the day with his first impressions of the Otago Peninsula when he first arrived in 1989: “I knew this place from the *Pink Frost* video put out by the Chills!” He certainly didn’t expect to see silver tussock shining in the sun either, as this is only supposed to happen on the top of a mountain. His impressions then and now reemphasize the importance of the landscape and scenery as values in themselves.

Jeff went on to explain his role as Conservator. Unfortunately, it’s mainly about prioritisation; an ugly word, but that’s what he has to do in terms of resources allocated from head office. Jeff admits there is no way that DoC is adequately funded for all the conservation work that needs to be done on the Otago Peninsula. As illustrations, the government Land Environment New Zealand (LENZ) plan places a high priority on restoring land with less than 10% indigenous cover. However, there is no room on the peninsula to purchase more land, so much land restoration can not be driven by DoC. Additionally, the animals on the Otago Peninsula also don’t rate in terms of more money to avert extinction, as the species prioritisation system ranks 10 species in Otago higher than anything on the Otago Peninsula.

However, that doesn’t mean that conservation work can’t expand on the Otago Peninsula. It just means, in Jeff’s mind, that it will be driven by the community and private landowners. He doesn’t see the role of DoC expanding.

Key conservation management challenges for the future will include:

- Protecting marine systems around the peninsula in a meaningful way.
- Designing facilities to minimise conflict between people and wildlife, and create more positive interactions.
- Reduce the conflict between indigenous wildlife and pests/predators.
- Reduce conflicts between different interest groups and people on the Otago Peninsula
- Ongoing habitat restoration, more or less taken over from DoC by community groups.
- A coordinated Fire Protection strategy for the peninsula, which is currently lacking.

Turning to other ideas already brought up at the conference, Jeff thought that a fence / “island” strategy for the peninsula would not necessarily be practical, mainly because of the people already living there and the ability of predator mammals to swim across short distances. He supports the current mix of privately and publicly owned viewing opportunities on the peninsula, though admits strategies need to be put in place to better manage the behaviour of people at public wildlife viewing areas. Jeff also brought up the idea of a walk similar to the Banks Peninsula walk – a multi-day tramping track that cuts across both public and private land.

Whatever the vision, it needs to be coordinated, unifying and agreed with the entire community. It needs to include pest management as well as people management strategies. Perhaps the best ideas from this conference could go into a working party to put that vision together?

Euan Kennedy – Founding Trustee, Yellow-eyed Penguin Trust. Euan’s talk focussed on the next twenty years of the Yellow-eyed Penguin Trust (YEPT), and what the Trust would like to see as a potential vision for the future.

While there have been some wonderful achievements over last 20 years, the next twenty will bring new challenges and opportunities. The trust may have laid a foundation for penguin recovery, but they are still threatened. As Euan put it, “we have only arrived at the end of the beginning.”

So, how can the charitable trust platform established by YEPT work to further conservation efforts and recovery work in the future?

One thought is that, whatever the vision, it will have to be a coordinated effort rather than piecemeal unconnected efforts. Two obstacles to getting anything done are insufficient resources and widespread ambivalence. The trust can work to reduce both of these obstacles, and the second may well be the most productive. If we can bridge the gap between those already converted to the conservation cause, and those who don't know they're interested yet, the message will get out and awareness will be raised further. It is this awareness that can lead to overcoming the first obstacle.

Of course, the people involved in community conservation efforts are the people already converted. The main challenge is making conservation sexy to a whole new audience. We need to reach beyond our sympathetic audiences, to audiences who are more self-interested and who will expect a tangible reward for their "public good" effort. The YEPT relationship with Mainland and now with Vodafone start to address these new expectations – we now think we need to create more of those sorts of relationships.

Local and regional communities, as well as ecotourism operators, profit from the wildlife and biodiversity on the peninsula. We need to invest more of those profits directly back into conservation of the very asset that benefits. Here, the idea also goes back to getting the message out effectively and getting stakeholder buy-in to the idea of long-term investment for long term social, economic, cultural and conservation benefits.

Neville Peat – Naturalist & Author. As Neville puts it, "to appreciate what you've got, you must travel widely..." After going round the world and seeing many wonderful places, his vision is that the Otago Peninsula could be a World Heritage Area.

The Otago Peninsula is clearly the anchor for Dunedin tourism. It's a supermarket for marine life, because of the geology of the region. It has personable penguins, flora, & fauna. All the great things that the other speakers have been bringing up over the last two days lead to one point: the Otago Peninsula is rich in natural and cultural heritage that is worth preserving.

So, why a World Heritage site? First, it's a community effort – people need to be satisfied that they can still live and work in a world heritage area, and buy in to that vision. Then, more protective land-use rules can come into play with the agreement and cooperation of all users.

Secondly, the landscape must be protected with a variety of strategies that are, again, coordinated across all members of the community. That includes dog and cat owning rules, predator and pest trapping, replanting.

The worst thing that can happen is nothing. Neville is worried that, in New Zealand, we are happy to talk about things, but often seemed to be frightened to take the next step and actually do things. Perhaps a think-tank driven by local farmers, tourism operators and conservation groups, which then puts a plan together in consultation with the rest of the community, which then gets rolled out via the DCC and ORC?

Even if, ultimately, the Otago Peninsula is not selected as a World Heritage area, just taking the steps to work toward that goal will mean huge benefits in terms of conservation, biodiversity, culture and heritage.

Tahu Potiki – Chairperson, Otakou Runanga. Tahu Potiki came to give the Otakou Runanga vision for biodiversity management on the Otago Peninsula. This vision, he points out, has many aspects complementary with other speakers who have come already, but from a different angle.

The international perception of "Brand New Zealand" in terms of tourism is that New Zealanders have retained their sense of identity and unique cultures. New Zealand is second only to India in the minds of tourists in terms of "authenticity", and first in many categories including natural wildlife and scenery.

The authenticity has much to do with Maori culture. Local and, increasingly, international companies use Maori iconography to market products. However, there is currently very little recognition of the Maori story on the Otago Peninsula. Tahu sees that there is space to develop this, in concert with the environmental story.

The Maori story includes narratives: the creation of the harbour, Goat Island as the home to all the fishes and how the albatross came to be a marine bird. Otakou itself is the most recognised South Island settlement in Maori circles, and has produced many great leaders, sportmen, and artists. The story does not yet form part of the marketing of Otago Peninsula in the tourist literature, but it can and should.

Tahu then gave an example of this coherent, authentic story in action, using the Kaikoura community. There, all the businesses preach the same message, formed from the environmental story and involving the entire region. That story now informs the practices of the entire community: each business sets environmental targets, there are no plastic bags, ongoing research is encouraged, and fishing is restricted. The whole community is built around ecotourism and whale watching.

Here on Otago Peninsula, we've got the attractions, we've got the biodiversity, but what we don't have is the central, coherent story. Until we have that coherent story, we can't invest wisely. This is exactly what other speakers have referred to already. Tahu's view is that the Otago Peninsula is currently working at about 50% of its capacity, but that there is too much to be gained to keep working as separate operators. We first need a simple dedicated confluence of people, and then we can create the story.

Session 4: Option Values II

Howard McGrouther – Owner/Operator, Penguin Place. Penguin Place is, as Howard puts it, “an example for species and ecosystem conservation through ecotourism.”

From 1967, when people walked 1.5km over a hill to watch the penguins at Penguin Bay, to today, when 50,000 people go on supervised tours through hides in his restored land, Howard has developed and restored his land to provide the opportunities for people to watch penguins without disturbing them.

During this time, he has restored a 70 acre block of land, created a new wetland at the back of the beach, monitored the comings and goings of the resident penguins, and planted over 18,000 new trees and plants. A hospital has also been established, and some of those penguins are now reproducing. Penguin Place now employs 18 people, including a research scientist.

Howard's number one message for future ecotourism efforts is that quality, not quantity, must be the priority. Unlimited numbers of tourists will ruin the experience, both for the people and the wildlife. Supervised tours, mainly on private land, are the answer. They both limit the number of people and manage their behaviour.

Jan Hindson – CEO, Tourism Dunedin. Jan gave a talk about the history and marketing of the Otago Peninsula, and specifically eco-tourism, entitled *Eco-tourism: lies, damn lies and advertising agencies*.

In a visit to Dunedin, David Bellamy called the Otago Peninsula “the finest example of ecotourism in the world”. Tourism Dunedin have been using this statement ever since. The peninsula has a long history of tourism, from the first “cruise vessels” about 900 years ago full of Polynesian settlers to the gold rush of the 1860s. However, a traveller visiting the Otago Peninsula in the late 19th century would have seen mainly decay and crumbling, as industry abandoned it and it became a place for rest and relaxation.

The use of Otago Peninsula as a recreation area also encouraged animals and birds to start coming back, and then restoration of the cultural heritage began as well in the 1970s. The peninsula started to emerge as a significant tourism experience, and a new industry was born which has become the backbone of Dunedin tourism.

This growth really came about as result of volunteers, nature, inspiration, risk takers and a vision. Tourism is the largest growing industry in the world – it accounted for 11% of global GDP and 8% of world employment in 1999. There were 1.6 million visitors to Dunedin in 2006, the majority of whom come to see the peninsula. Ecotourism now accounts for about 20% of tourists worldwide, and is one of the fastest growing sectors in New Zealand industry.

But what is ecotourism? More and more marketers are using “ecotourism” in marketing literature, and words like “sustainable” and “carbon footprint” are thrown around the place. Has “ecotourism” been appropriated for mass market tourism? And does that destroy the very small-scale, close-to-home, high quality nature of Otago Peninsula ecotourism?

Tourism Dunedin’s answer is “sustainable tourism”. We should move away from the “ecotourism” label and focus on sustainable tourism and a community approach. We also need to work on the perception of sustainability from the outside – there is already plenty of anti-New Zealand literature in the European travel and food industry focussing on food miles and carbon footprints.

Sustainable tourism supports the integrity of the place, emphasizes local culture, food, architecture, and heritage. It benefits residents as businesses buy local and employ local people. It respects culture and tradition, as visitors learn about the place and adapt to it. Most importantly, it is quality not quantity.

Does the Otago Peninsula match up on all these categories? For the most part, yes. But we have to make sure that we live up to all these criteria all of the time, as it is tourism that can kill tourism if overdone.

Dave Hawkey - CEO, Real Journeys. Real Journeys has been in operation since 1954. It now runs 19 vessels, 20 coaches, 7 aircraft, and the Bluff-Stewart Island Ferry. 700,000 visitors per year go on Real Journeys tours, and the company employs 420 staff during peak season. The company is still privately owned and, importantly, received a national award for conservation in 2007.

Dave’s view is that the company has a major challenge to keep ecotourism products real and relevant to our markets, especially in this age of instant communications and globalisation. Sustainable, nature based tourism is the successful tourism of the future.

That success comes with a natural, unfabricated experience. One of the most successful aspects of the Doubtful Sound cruise comes when they simply shut down all the engines and have two minutes of complete silence – that’s what visitors remember. Dave also places a priority on the “relevance” – telling a good story, and having a good experience from buying a ticket through to stepping off the boat at the end of the journey.

In terms of the business itself, a huge emphasis is placed on its sustainability, including economic, social/community, and environmental. Real Journeys sponsor local events and infrastructure, as a way of giving back to the local community. As the community have to put up with increased sewerage, water use, and visitors during peak months, Real Journeys tries to even that out. Visitors pay for their use of community facilities through levies on ticket prices.

Environmentally, Real Journeys sponsor species restoration, and the Les Hutchins Conservation Foundation gets money from each Milford Sound cruise. Waste oil is recycled to heat the boat maintenance workshop, and the company actively traps predators.

Why do Real Journeys do this? To play their part in sustainability, because visitors are demanding it, and because staff are demanding an environmentally responsible company in a world heritage site.

Geoff Ensor – Tourism Industry Association of New Zealand. The Tourism Industry Association of New Zealand (TIANZ) is an NGO, not a marketing company or a government agency. Its main roles are advocacy and lobbying on behalf of the tourism industry. With 2000 members, TIANZ aim for good sustainable long-term tourism and for operators to be treated well. Geoff intended to look at different government strategies and how New Zealand is dealing with tourism.

The main take-home message from his talk was that tourism and conservation must go hand in hand in order for future progress to occur. We do want tourists to come (look at the way countries who close their borders are mistrusted by the rest of the world), so “tourism” is really about maximising both their experience and the sustainability of the place they are visiting.

Issues like climate change have begun to alter tourism in the last 18 months. Many tourists now demand “sustainable” trips, and real efforts must be put in by operators to ensure they are running sustainably. Communities see negatives in poorly run operations – such as increased rubbish and pollution, so tourism operators must work to ensure this doesn’t happen.

So, what strategies can tourism operators use to increase the sustainability of their operations? Geoff is in favour of quality standards and independent assessment, both for the good of the tourism business and the environment. If a structure is created for a company to achieve its “green status”, it can use that to its advantage. That then keeps New Zealand attractive to international visitors.

TIANZ also support the idea of limiting numbers to keep the quality. However, this needs to be backed up by good research and monitoring. We need to make sure that overcrowding is actually happening, not just a poorly managed operation. We need to learn how to successfully manage the free and independent travellers who aren’t in controlled groups. Freedom camping, for example, is a big problem already and growing every summer.

A Dunedin Visitor Strategy should concentrate on landscape, limit numbers for wildlife viewing, address the freedom camping issue, and address residential development on the Otago Peninsula. Almost nothing will succeed unless there is a shared vision for the values and direction of the place.

Session 5: Bequest Values – What are we leaving?

Humans safeguard assets and resources for future generations – the same applies to biodiversity on the Otago Peninsula. Bequest values are not concerned with how we use resources now, but what we value preserving for the future. The Bequest Value session looked at what is being done, here and overseas, to preserve biodiversity for future generations.

Dr Peter Dann – Phillip Island Nature Park. Peter came to talk about a successful example of combined tourism / conservation / research happening in Australia at the Phillip Island Nature Park. The Park is located near Melbourne on the western end of Phillip Island. As well as the tourist operation, there is a housing development (which is gradually being bought back by the government and turned over to conservation). Little Blue Penguins are the stars of the show.

The big “tourism event” is the Penguin Parade, which happens every night as the penguins come back in from feeding. A 3,700 capacity structure complete with floodlights has been built next to the beach, and a 90-minute show happens every night. About 470,000 people visit annually.

Visitor numbers, behaviour and lights are carefully managed to make sure that the penguins aren’t harmed by the experience, and monitoring has shown that there appear to be no adverse effects on the penguins in the tourism area compared those not in the tourism area. Penguin Parade has become a cultural icon in Victoria. It is, in fact, the second most visited natural attraction in Australia after the Great Barrier Reef.

The three main questions that visitors ask deal with fidelity, longevity and fecundity. They want to know if penguins mate for life (answer: the annual divorce rate is about 20%), how long they live (the oldest has been 26 years old), and how many chicks they have (usually one raised per season). To answer these questions and many more, a scientific research and monitoring group was started in 1968 by a volunteer group.

Today, the quality of that research is measured by peer-review publications and how the research is improving the lot of the penguins. Work has been done on predators, predator control and oil pollution. A successful example of the research in practice is a “morning after” pill developed for foxes to make them sterile. In addition, the research team are currently working on a magnetic cleaning system to remove oil from birds without damaging the feather structure.

Has the programme worked? Yes. Economically, recent estimates place the economic impact of Penguin Parade at over \$200AUS annually to the Victorian economy. In terms of conservation, penguin numbers have increased steadily since 1987, and other species have also benefited from the change to conservation land. In terms of education, seven educators (including 3 teachers) are employed, and the message is taken out to about 40,000 students per year.

John Jillett – Chair, Otago Peninsula Trust. John came to speak about conservation efforts happening closer to home that will preserve land and biodiversity for future generations. He started by pointing out that when he first arrived at the Otago Peninsula in the 1960's, access to wildlife was much more "informal" than it is now. People just expected the penguins to be there when they went to the beach, and organised tours as such didn't really exist.

The Otago Peninsula Trust was really the 'first cab off the rank' in terms of New Zealand wildlife trusts and conservation; it was the first in the country and led to formation of other trusts. The trust was formally registered in 1967, as locals recognised the special social and environmental characteristics of the Otago Peninsula. The initial aims were quite nebulous: raise public awareness of the Peninsula, stimulate interest in the peninsula, protect wildlife, plants and heritage of the peninsula, and improve the services while still retaining the unique characteristics.

The trust has always been bold about seeing opportunities and spending money which may involve taking risks. Glenfalloch was one of the first main purchases of the Otago Peninsula Trust, and it still owns the gardens. The Trust also owns the Royal Albatross Colony, where viewing commenced in 1972 under strictly controlled conditions. Those two ventures have dominated trust activities, and are probably top in people's minds when they think of the Otago Peninsula Trust.

In terms of future efforts, Fort Taioroa (at the Albatross Colony), which used to be seen as a sideshow, is increasingly used in education programmes and has heritage and cultural value which is only being recognised now. A schools programme has been developed in conjunction with the Marine Studies Centre at Portobello and with the support of Otakou Runanga. Its clear links to school curriculum are reviewed annually by the Ministry of Education, with favourable reviews thus far.

The model of the charitable trust as an effective fundraiser and space for volunteer efforts is one that John agrees with. He sees a shift in thinking towards valuing heritage (both environmental and social), and thinks more efforts will need to go into restoration and conservation. There is also a difference between social values and direct commercial values, which also need to be recognised.

Anne Cheng and Debbie Hogan – DCC Planning Department. Anne and Debbie spoke on the role of the Dunedin City Council (DCC) in terms of conservation, and the aims of the newly released Biodiversity Strategy.

In short, the current role of the DCC is similar to DoC in that funds are available to do work based on prioritisations. The DCC values the natural environment, biodiversity and landscapes, and the new Biodiversity Strategy gives them the mandate to do something about it. Funding allocated to this is "embarrassingly low", but will improve.

The DCC is also a provider in terms of the city reserves and water catchments, and a regulator of land use. It is a funder for monitoring projects, research into biodiversity, and incentives for conservation. Finally, a role that is becoming more important is that of promoter and facilitator; examples of this type of work include the Enviroschools programme and Okia Reserve Open Days.

The Biodiversity Strategy has been three years in the making. It provides a high-level vision for the city which will enable individual land owners and groups to work under its remit. It also provides a jumping point for new projects and ideas to come out of it. The strategy vision is in two parts: (1) the community working together to understand, enhance and celebrate the value of biodiversity for the benefit of current and future generations, and (2) the city maintains a viable network of habitat and ecosystems, extending from the alpine zone of the inland Rock and Pillar Ranges to the harbour coast and islands.

A main aim of the Biodiversity Strategy involves community participation. Community buy-in and involvement will be crucial to the success of this strategy, particularly as only small amounts of DCC budgets will be spent on the Biodiversity Strategy. Anne and Debbie felt that potential ways of implementing the strategy would involve action through field days, planting guides, ecological corridors, and continuation of volunteer conservation work.

The planners felt that the best way forward would be to establish a community-driven biodiversity forum, which could put together specific action plans for different areas of the city. The DCC would fit in with a supporting, rather than a lead, role. Both Anne and Debbie are committed to the idea that it doesn't matter what the plan is called, it will take action and co-operation across many local groups and individuals to make it happen.

Summary Panel Discussion: Where To Now?

Glen Lauder – Facilitator. What do the next twenty years look like? The ingredients for action probably are in this room or already have been mentioned. In fact, we know what the ingredients are, but maybe what we need now is the recipe. And an idea of how many chefs should there be in the kitchen...

Roger Belton (Southern Clams). This discussion wouldn't have been possible 20 years ago. My interests are commercial shellfish, and my concern is also to see that the environment we work in is sustained, as it determines our future success as well. All of us have been agents of modification in the last few hundred years, and we don't want to see that continued in a detrimental way.

Brian Templeton (Elm Wildlife). We have been operating on the Otago Peninsula for 17 years, and would love to see coherent branding and green standards across all tourism aspects of the Otago Peninsula.

Sam Neill (Otago Peninsula Farmer and Community Board Member). The Community Board may well be the organisation to pick up and run with the forum idea mentioned in the last talk. How the Otago Peninsula as a world heritage-type area would interact with landowners is obviously an issue and integral to the idea. Today there are only about three full-time farmers on the peninsula, everyone else doing something else. Landowners should be encouraged to join the system, but there has to be something in it for them.

Tahu Potiki (Otakou Runanga). The need for real collaboration is vital for progress to be made. It's fine to draw a line across the peninsula and make it an island, but the collaboration needs to reach across waste, energy use, regeneration, etc. The reality is that we'll have to look to ourselves to take action and make this work, as both the DCC and DoC are going to have limited value in terms of investment they can make.

Lala Fraser (Save The Otago Peninsula). STOP was originally formed 26 years ago to stop the aluminium smelter being built on Okia Flat, and then later helped to prevent an Australian gold mining company from digging up the Peninsula. Both times, Dunedin business argued strongly for those industries because we needed those jobs. If nothing else, this conference has shown that tourism has brought the money and the jobs. Now, the DCC are going against their own planning advice and approving new residential subdivisions on Highcliff Road on the peninsula. So, as much as we'd like to think that values have changed, it's obvious they have not in many DCC and business minds.

Glen Lauder. Is the future agency led or community led?

Aalbert Rebergen (Otago Regional Council). Definitely community led. That is the most effective as it is a mandate from the public. As the biodiversity officer for the ORC, I work with Otago Peninsula residents to make all these things happen – habitat restoration, coastal restoration, and species conservation. Many good things happening now are all based on volunteer work.

Marion van der Goes (Department of Conservation). Of course it's going to be community led. I would like to think that DoC will be sitting at table and working in same fashion it works with the Yellow-eyed Penguin Trust now; advising, providing resources, science, and support. I think the Community Board is the obvious vehicle to take this forward, to get support of local residents.

Jim Harland (CEO, Dunedin City Council). All my comments today are personal. The Otago Peninsula is a working landscape, with two major cultural influences: Maori and European. Many species historically directly used for survival, and now we use the habitats indirectly to protect and grow landscapes – this is where community and volunteers come in. Even if \$10m is allocated to the Otago Peninsula that won't do it, it's the people here who will do it. In 20 years I'd like to see habitats further enhanced from where they are today, roads only upgraded where absolutely necessary to conserve biodiversity, enhanced visitor experience including controlling where people can park and go, effective monitoring of those visitor issues, and a continuing emphasis on the power and action of volunteers.

Glen Lauder. This has been a conference of quotes “This is merely the end of the beginning” and “the journey is as important as the destination” both came from Neville Peat today. This has also been a conference of ideas: the peninsula as “almost a sanctuary”, a world heritage idea, and a walking track. What's your highlight of the weekend?

Alan Saunders. I can't think of another group that could have pulled together the experience, knowledge, and passion that has been here last two days. My one question: who's going to lead?

Glen Lauder. Everyone in the room is interested in taking this forward, but who has the commitment to take this forward – who is going to be there for the duration?

Jim Harland. The DCC Long-Term Council Community Plan (LTCCP) tries to pull in people who are opinion makers and get their opinion on how everything is going and what should happen. But, last year only 15 people went to the environmental meeting. The vehicle is there to monitor what's happening, but is there one potential person or group within that to take the lead on this?

Alan White (Biodiversity Fund). I work with private land owners to restore indigenous land. In terms of community led initiatives, I have been involved with many forums. They succeed when there is a groundswell from the community - like here. There is no magic answer as to who should lead it, but there are good mechanisms already in place in the Otago Peninsula. The last two days have been inspirational, and there are lots of linkages to be made. I'm impressed with how we got the right people out of the councils and universities and got them to focus on the topic at hand.

Fergus Sutherland. A handful of organisations have a strong part to play in this. In the Catlins we've got a Tourism Development Strategy, and we formed a trust to drive the strategy. The Otago Peninsula Trust may be a similar organisation and a key one to be involved in a plan for the Peninsula.

Anne Cheng. I'm very happy as an Otago Peninsula resident to be called on for my planning skills. A word of caution: let's not be in too much of a hurry to decide how we're going to package this. Let's develop the product first, then the content and process, and then think about the wrapping.

Peter Johnson. Which organisation should lead? The Otago Community Board for several reasons: it is a new organisation which had a fight to get started, it has farmer interest, and is a group that could perhaps draw in all interested parties. In addition, get some young people involved - people who will still be here for the 40th birthday of YEPT.

Jonathan West. The number of full-time farmers has dropped rapidly. As farming becomes more marginal, I have fears for their succession. Lots of land will go up for sale – do we want to see it go into 50 acre lifestyle blocks?

Sam Neill. That is a can of worms - the value of land is lowered as soon as restrictions are put on it, which means all that has to be worked through with farmers. Conservationists are great, but they also have to be realists and put their money where their mouth is.

Neville Peat. Who should lead? The Community Board is relatively new; could it run a project like this? Their ideas are in the right place and it would be a good way of coalescing energy in the room. Once you've got control of possum can start to work on other things. Mainland island philosophy works on ongoing solutions- so then start working on weeds, and then on restoration. Still need to think about these stepping stones, but possum control is a good first step.

Jim Harland. In terms of leadership, the Otago Community Board has been proactive and shown good leadership so far. Politically they have the capacity to lead, their mana within this group shows they have the leadership. For this to happen there has to be official support, so this is where the DCC staff and I can take this back and try to get the official support

John Jillett. I give wholehearted support that the Community Board is the appropriate vehicle to lead this effort. It has good landowner involvement, they're already thinking about possum control, it's relatively neutral, and also doesn't have the history (which makes it politically stable).

Glen Lauder. We need to pay attention to two roles: the structural role in terms of systems and processes, and the cultural role on the other. To have a confluence between nature and people, we need to have the confluence between people and people.

Tahu Potiki. From the Ngai Tahu perspective, as our tribal arms and fingers spread out further, we find ourselves playing a spiritual home role for our people. We see how different the world is now from 20 years ago, and there isn't a news report today without something about the environment and its long-term implications for us. We are swamped with these messages on a daily basis – this is indicative of where we are heading and what we need to focus on. A sense of place in a community like this is not perhaps something that exclusively belongs to Ngai Tahu in the way it used to. People are less and less involved in church and more involved in things they think about everyday. So this coming together of people shows that we as Ngai Tahu, well, perhaps need to get over ourselves a little bit. We have positioned ourselves as a people who can have opinions on what others can and can't do with the land, and we are looking forward to being part of the discussion about the future.