

Note from the Chair

Hi all! Our conference and four workshops have kept the Dune Restoration Trust very busy during the past few months. Our annual conference in March at Piha was an outstanding success thanks to a great team from Piha and Waitakere that organised it, great presenters, and to all those who attended. Thanks also to our sponsors - all listed in the conference wrap-up in this newsletter.

The Trust also ran two very successful workshops as part of our Sustainable Management Fund Project 'Dune Restoration and Climate Change' before the conference, one at Waitakere City and another for the Piha community. In April two further workshops were held in Wellington and at Otaki. These events are proving most popular and are giving those interested in dune care valuable information. Four more workshops are planned for the coming year so if one is held near where you live make sure you don't miss it. There is a progress report in this newsletter.

I would also like to take this opportunity to welcome Murray McAlonan as a new trustee. Murray has taken on the role of treasurer for the trust. Thanks Murray.

In other news - congratulations and best wishes to Ngaire and Steve Tyson on the recent arrival of twin daughters,

Emma and Fiona. Ngaire recently resigned as a trustee after a long involvement with the trust and formerly the CDVN. I am sure we will see more of Ngaire and the new twins at dune events in the future. Congratulations also to Justin Cope, one of our Trustees, for the arrival of their son Michael.

As with all voluntary organisations the Dune Restoration Trust needs funding to operate. Our operating funding is generated by membership fees and sponsorship. This past year we have had sponsorship from Borders Books, who set up a scheme where customers pay for plastic shopping bags and the trust benefits. While the idea did not generate as much as we had hoped, as customers didn't buy bags, the trust has benefited considerably and we thank Borders for this contribution.

Finally have you had a look at our web page recently? I would recommend that you all keep a regular watch on this address as there is much valuable information on it and the proceedings from our conference in March will be posted shortly.

Mark Dean, Chairperson

www.dunestrust.org.nz



Dunes Trust Trustees at the Piha Conference



Conference delegates enjoying Piha

Dunes Trust Conference 2010

March in Timaru
Put it in your diary now!



Welcome to New Trustee Murray McAlonan



Murray has taken on role as Treasurer for the Trust. Thanks to Greg Jenks for his work in this role in the past and Murray for stepping up to the challenge!

I have a background in commercial forestry, working for 30 years at NZ Forest Products then Carter Holt Harvey (CHH) and previously responsible for forests in Bay of Plenty, Northland and South Waikato where I was Regional Manager for Kinleith Forest. After a short stint with the wood products group of CHH I joined the Ministry of Forestry which subsequently became part of the Ministry of Agriculture and Forestry (MAF). Responsibilities in MAF included oversight of the Indigenous Forest Unit which administered

provisions in the Forest Act for the sustainable management of privately owned indigenous forests. Now retired, I maintain an interest in indigenous trees and plants through involvement with Tane's Tree Trust, the Kauri 2000 Trust and, now, the Dunes Restoration Trust. I am familiar with the dune forests at Matakana Island, Woodhill and Aupouri. A precious place for my wife and I is our beach house on the Coromandel Peninsular where I watch the dynamics of a small beach and modest dune system with more than a passing interest.

Dunes Trust Conference Wrap-up

The Dune Restoration Trust of New Zealand and Piha Coastcare would like to acknowledge and thank the following organisations who sponsored our 11th Dunes Trust Conference.


Waitakere City Council
Te Taiao o Waitakere
www.waitakere.govt.nz


Auckland Regional Council
TE RAUHĪTANGA TAIAO
www.arc.govt.nz


Rodney
DISTRICT COUNCIL
www.rodney.govt.nz


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PIHA DOMAIN
MOTOR CAMP
www.pihabeach.co.nz/Piha-Camp.htm

A Great Conference 2009

Pat La Roche, Piha Coastcare. Photos: Robyn Smith & Bobbie Carroll

I have just looked back to the last newsletter, where we here in Piha promised you a great conference. Thankfully, I can now report that we had a great conference here in mid March. The sun shone, the surf sparkled, the speakers were inspiring and the conference attendees were a great group of people who contributed fully to the success of the conference.

The topics covered related to the big picture: the huge Waitakere Volcano that formed the Waitakere Ranges and shaped the seabed far out to the West, the forces operating on the North Island West Coast that move sand from Taranaki to the Kaipara, and how this movement affects the Waitakere West Coast beaches. We had field trips to all of these beaches.

At Piha Beach we saw the dune restoration work carried out by Piha Coastcare, at Muriwai Beach we saw the dramatic results of human impacts combined with a major erosion phase and at Bethells Beach we saw the transformation of the back dunes that has grown out of the work done by Bethells

Beachcare. In some ways, we kept the best till last.

On the Saturday following Conference, a smaller group of people went on the customary post-conference field trip which was an exploration of the dune lakes and wetlands of Whatipu. This was a real eye-opener for some of the Trustees who had no idea that we had such a gorgeous wilderness treasure on Auckland's back doorstep.

Of course, we also played. An informal BBQ in a beautiful local native garden and the Conference dinner in the transformed Piha Bowling Club were the main events on the entertainment calendar. Morning and afternoon teas were also occasions for animated exchanges over delicious refreshments.

All-in all, according to the responses from participants and to the relief of the organizers, a great occasion. Photographic evidence is on the Dunes Trust website www.dunestrust.org.nz.



Panel discussion. There was plenty of time to discuss different ideas and learn from each others experiences.

Fieldtrips offered a chance to see local restoration work and talk through issues.



Pat La Roche, Waitakere City Council 'Unsung Hero'



Pat La Roche - Unsung Hero. Photo: Bobbie Carroll

Pat La Roche is to be awarded a Waitakere community Boards 'Unsung Heroes Award' for her long time involvement in Piha Coastcare. Pat has been the coordinator of the Piha Coastcare group for many years and has spent hours and organising projects and physically working at Piha Beach.

Pat was nominated for the award by Bobbie Carroll, also of Piha Coastcare. In her nomination article, Bobbie wrote that "It's hard to wander around Piha and not see an area that has been cleaned up, planted or improved in some way by CoastCare if not Pat herself".

The unsung hero awards are run by the Waitakere City Council Community Boards and acknowledge the essential contribution of community volunteers. Congratulations Pat!

2009 Dunes Trust Awards

Award for Best Community Group

Far North's Te Roopu Whakaoranga o te Taha Moana Trust for their outstanding contribution to coastal revegetation.



Members of Te Roopu Whakaoranga o te Taha Moana Trust were presented with the award for Best Coastal Community Group by Phillip Smith from Taupo Native Plant Nursery, sponsors of the award.

Betsy and the Te Roopu Whakaoranga O Te Taha Moana Trust wanted to share their knowledge and experience with the next generation, they have achieved this by publishing their book 'Nana's Kohu' the 'Pingao Putiputi'. With the assistance of their story teller, Gillian Taylor, members of the trust have visited over 15 schools in the Far North and Lone Star in Waitateke. The Trust has also extended their nursery to house ten thousand pingao plants.



Betsy Young (front right) told us, "I was over whelmed and speechless but proud that we were the best community group for outstanding contribution to coastal revegetation. Its great that you had an award like that which makes us feel special and worth while doing that kind of hard work. Thanks to Jane Allen for putting us forward."

Award for Best Coastal Dune Restoration Project

Waitohu Stream Care Group (Inc.) for outstanding restoration work.

The Waitohu Stream Care Group was formed in 1999. The initial focus of the group was the lower reaches of the Waitohu Stream and its estuary, but more recently their focus has widened to include the system that borders the estuary and adjoining surf beach. The estuary and beach margins had been severely degraded by pedestrian use, trail bikes, stream widening and a couple of major storm events. They have spent hours planting and managing newly planted areas.

One of the key elements of success has been keeping 'enemies' at bay – rabbits, kids, trail-bikers and quads - and they taped off areas to help do this. Planting is now continuing inland of the foredunes with the hope that one day the whole area will be a sea of spinifex and pingao-covered dunes.

The success of the re-building and revegetation programme is due in large part to the dedication and enthusiasm of the group members. It has also been due to the partnership between the group and the councils, both financial and liaison/ supervisory.



The Waitohu Streamcare Group were presented Best Coastal Dune Restoration Project by Mark Dean from Naturally Native, sponsors of the award.

Regional Round-up

Petone Beach, Wellington Region – Graeme Lyon & Rosie Doole

The Friends of Petone Beach was set up in 2006 as an offshoot of the Keep Petone Beautiful group. Restoration work by the Friends has concentrated on the central, most accessible and well-used part of the beach, about 1 km long. This beach is in Wellington Harbour and extends from the mouth of the Hutt River estuary west to State Highway 2. The Hutt River is the dominant source of sand, but the river mouth is also dredged for flood control. At the west end, the Korokoro Stream also brings down gravel sediment. Strong winds often sweep loose sand across the beach, sometimes on to the adjacent road, and into residential properties. Some storms also surge waves up to the wall that extends next to the road and parking areas the full length of this part of the beach. The initial pingao planting in

2004 near the public barbeque area has, with natural regeneration and additional spinifex, moved forward a measurable 5 metres across the beach from the wall. Other spinifex plantings near William St have produced a noticeable small dune in only 2 years growth. Further work by a keen mid-week group of helpers includes weeding and management of 20 yr old marram dunes that have been sprayed with Gallant, and some are now dense pingao. An adjacent area has an experimental selection of 12 different back dune plants, and a study on their survival is assisted by Dr David Bergin. The project has been funded by Hutt City Council and Ministry for the Environment with help from Greater Wellington Regional Council.

Regional Round-up

Current Projects Along the Timaru Coastline - Gary Foster

South Beach/Otipua Beach

These are gravel beaches to the east and south of Timaru and in recent years a series of joint use walkway/cycleways have been constructed to provide linkages between the two beaches and other walkways to the north and south. These beach areas are heavily covered with introduced plants such as Marram Grass, Lupin and other exotic grass and weed species. The prevalent native to be found is the Shore Bindweed, *Calystegia soldanella*, which occupies the fore-dune areas, and a few remnants of *Muehlenbeckia* and *Disphyma* growing on the cliffs at South Beach. We intend to progressively convert the exotic dominated areas into native plantings. Significant numbers of coastal native species have been planted along the walkways. These will be supplemented in the future with further plantings and, on South Beach, an earlier seeding trial using Silver Tussock, *Poa cita*, has met with some success and further trials with other species will follow. On Otipua beach we have established what we believe to be the southern most *Spinifex* population in New Zealand and, while a small area at this stage, work is currently underway to supplement this further.

Caroline Bay

Since the building of the first harbour breakwater in Timaru in 1878, fine sand being carried north by the coastal currents has been accreting at Caroline Bay resulting in an area today of approx 30 hectares (and still growing). In 2004 a three stage programme was initiated to redevelop Caroline Bay ensuring better utilization of this ever increasing area. The redevelopment has seen improved linkages onto and within the Bay area, improved recreational areas, significant new plantings and, currently as part of the third and final stage, a total redevelopment of the actual beach area itself. This has involved the shifting of up to 60,000m³ of sand to create new dunes and on which a raised boardwalk has been constructed across the full width of the Bay, linking new car parks and walking promenades. Approximately 35,000 native sand dune plants, including Pingao, *Spinifex*, Sand Tussock, Sand Spurge and Sand Coprosma have been planted. The new layout has been drawing lots of positive comment from locals and visitors and we look forward to seeing the new dune plantings establish over the next twelve months or so.

Castlecliff Coast Care - Ted Frost

In the last two summer droughts each month our Castlecliff site has suffered heavy losses of young plants because we did not have an adequate watering programme. This summer we had much better results. Late last winter we were given 200-plus New Zealand ngaios by Geoff Potts of Parnells Nursery. Although it was late in the planting season, we got them all in. Up to 20 were stolen within a few days of planting. Some are on a hillside previously covered with madeira vine. Thanks to energetic activity by our small group and helped by intermittent rain, the majority of the 2008 seedlings are surviving and some are thriving. On the fore dunes we planted several hundred spinifex and pingao, just below the dunes topped with Marram grass south of the parking areas. Along the rest of the reserves shoreline self-sown spinifex, with some pingao, is thriving and growing right down to the high tide mark. We would like to plant more on the bare sand outside the designated swimming area, but constant intrusion by recreational vehicles makes this a waste of time. Under our by-laws vehicles are prohibited from our reserves, but so far we have not been able to gain support for an affordable regime of inspection and prosecution.

We also help care for the Castlecliff childrens playground in the breach reserve. Last year we laid turf on bare areas and this autumn the Council has provided topsoil and grass seed which members are spreading on remaining bare patches on the edge of the skate park. We set up a stall on the playground at the recent Childrens Day to illustrate our work. We also carried out a survey of beach and playground activity which produced much interesting information. Members of the group actively supported DOC staff and other people with Sea Week, helping to ensure that our local children had the opportunity to learn about and enjoy the coastal environment.

This year we have more than 150 seedlings of native trees and shrubs ready for planting. We have excellent cooperation with the District Councils Parks and Reserves Department, which has supplied mulch and will assist with additional seedlings. Our activities attract increasing publicity, including articles in the Wanganui Chronicle and an interview reported on Newstalk 2ZB. We advertise the coming months activities in River City Press each month.

Bay of Plenty Coast Care - Pim de Monchy

Last spring we checked out the whole sandy coastline in the Bay of Plenty. From this inventory we found that Coast Care groups are actively managing 43.1% of the area. *Spinifex* grows along 64.1% of the coast, while pingao is at 12.7%. The length of foredune without native sand-binders that can be planted immediately is 17.7km. Coast Care BOP has spent the summer applying fertilizer to all sites planted in 2008, and to the foredune vegetation in places where storm damage last winter was severe. Ballance Agri-Nutrients kindly sponsor us with eight tonnes of urea per year. The extra growth of dune plants is incredible! It allows us to plant only two or three rows of foredune plants at 1m spacings which increases the area we can plant.

Weed control has also been a priority with high profile sites being cleared of all weeds both by hand and by knapsack. The difficulty is striking the right balance - we don't want to be intervening all

the time if that intervention is going to be unsustainable, but we have to do some weed control to allow the natives to dominate. Our war against rabbits is getting more complicated. Weka are returning to the Opotiki District and now occupy the dunes at three sites where rabbit numbers are too high. We can't hand-spread poison because of the risk to weka, so we are planning to release the rabbit calicivirus in mid-July instead.

We are finalizing our planting plans for 2009 with 80,000 plants currently in the care of the team at Naturally Native. We've gone for mostly foredune species this year, and we'll be trying to work on those areas identified in the inventory, as well as continuing to support the efforts of groups where work is ongoing.

Empoweringly popular

Climate change workshops being held by the Dune Restoration Trust are proving very popular. Four of these workshops, titled Empowering Coastal Communities to Adapt to Climate Change, have been held from Northland to Wellington, with plans to continue the programme to cover the country. The one-day workshops, comprising presentations by national coastal sand dune experts and associated fieldtrips, aim to empower coastal communities to better understand and live with their local coastline, and to raise awareness of the likely effects of climatic change along their coast. Practical methods are discussed that will enable communities to maintain and restore natural dunes and dune function to better adapt to the likely effects of climatic change. The aim is to provide local coastal communities, in collaboration with management agencies, with an adaptive approach to help mitigate the effects of sea level rise and increased storm activity resulting from predicted climatic change. The emphasis is empowering coastal communities to:

- assess the state of their beach and dune systems
- to understand the implications of climate change
- to restore natural dune form and function—therefore helping build resilient and sustainable coastal communities.

Dune restoration is required in nearly all regions of New Zealand, because natural dunes have been significantly modified or damaged by human activities. Once properly restored, most natural foredunes are self-maintaining. However, to date, only a small portion of New Zealand's coastal communities are actively involved in such work.

The success of community action groups to date suggests that community-based approaches have considerable potential in promoting increased awareness of coastal hazards and climate change and assisting in the development of more resilient coastal communities. An important aim of this project is an attitudinal change in the way coastal communities relate to their beach and dune systems and to provide them with the confidence and skills to work in partnership to restore natural form and function that mitigates the effects of climate change.

A key requirement is to discuss the issues on the beach and dunes, so most are held in surf club buildings and local community halls near the beach. Venues at Baylys Beach (Northland), Piha Beach (Auckland) and Otaki Beach (Kapiti Coast) have been packed out with 50-70 attending including



David Bergin presenting at the Otaki workshop.

coast care groups, iwi, local beach users, environmental consultants, local and regional councils and central government agencies.

The workshops and fieldtrips are only one part of the project. Other components include the production of workshop handouts free to all attendees, setting up a web-based national database of coast care groups and coastal managing agencies, and an interactive coastal reference database.

The flagship of the project is the production of the comprehensive Technical Handbook on Restoration Coastal Sand Dunes using Native Plants: A practical guide for coastal communities adapting to climate change. The handbook comprises a high-quality full-colour ring binder with over 20 sections, each of which will have several related peer-reviewed articles. The range of sections include:

- How do dunes work?
- Climate change and coastal sand dunes in New Zealand
- Major backdune plant species
- Weed control on coasts
- Fencing and access ways on sand dunes
- Native plant species fact sheets
- Establishment practices on coastal dunes.

To date the handbook has been designed and four articles have been completed to design and layout stage including the ecology and restoration of spinifex, effects of vehicles on beaches and sand dune morphology of the west coast North Island. The project is funded by the Ministry for the Environment's Sustainable Management Fund with additional funding from local councils and the Dune Restoration Trust.

Funding is being sought to continue the project over the next two years and already workshops are planned for several sites in the South Island. A further four technical articles will be produced each year for the handbook, with printing and distribution planned at the end of the three-year project.

For further information on this project, please contact the project manager David Bergin of the Dune Restoration Trust.

Dave receives Forester of the Year Award!

As this newsletter was being finalised, Dave Bergin was awarded joint Forester of the Year Award by the NZ Forestry Institute. Congratulations Dave, we are all really pleased for you!

Participants at the Otaki workshop walked and talked sharing ideas along the waterfront.



Members News and Views

Summer on the Beach - Beach Ranger Van Haresnape, ARC

Late last year, the ARC sought a park ranger to take up an education and dune protection role on Muriwai beach over summer. I saw it as a great opportunity to be a part of a campaign to improve beach safety and dune protection in my community and took up the challenge. My role is just part of a much wider campaign that involves the ARC, Rodney District Council, local iwi, NZ Police, the NZDF, DoC and Hancock Forest Management. The campaign has included a by-law review, an education campaign, an enforcement programme, infrastructure and dune protection and finally, monitoring and evaluation.

For me, a summers day on the beach meant talking to people about new speed limits, other beach users, how dunes work and why we have to look after them. By the end of the first week on the beach, I realised I had taken on a rather interesting job. There were varied reactions to my presence. Many people were surprised to see a ranger "we haven't had a ranger actively based on the beach before". Others questioned us on what the bylaw changes meant for them "was it still ok to drive or ride on the beach?" Then there were the recreational 4x4 vehicles, motorbikes and quads riders that just saw rangers like me, and the police, as an inconvenience to their racing and fun. What really surprises me is that people have such different perceptions of the beach and sand dunes. For some, the beach is a place to relax, yet for others it is a race track. Some see a sand dune as a fragile ecosystem needing protection, for others it is merely a great place to

drive a car or jump a motorbike.

After a few weeks of patrolling the beach and monitoring dune areas on a daily basis, I noticed that the level of unruly beach and dune activity decreased noticeably. It seems that many beach users began to see the value of our presence and the education role we perform. The vehicles on beaches campaign this year achieved a lot, but I believe its continuation is critical to cement its success. The momentum must be maintained to maximise education opportunities and meet the expectations of all beach users to create a safer beach environment in conjunction with necessary dune protection.

Read Van's full story at www.dunestrust.co.nz



From some, beaches are a race track.



Restoring a Back Dune Ecosystem

Mark Bellingham from Te Henga/Bethalls Beachcare presented at the DRTNZ Conference. He has written up a paper on the history of work at the site and the successes and failures they have encountered along the way, including helping people understand the natural pattern of coastal vegetation, dealing with collapsed marram sand dunes and plant loss. He suggests that one of the key factors of restoration work is long term planning, as well as recording progress so that others can work from it and learn from it. The group started with a 50 year vision. In the past 18 years they have come up with many challenges and worked through them - now they only have 32 years left to go!!

Read Marks full story at www.dunestrust.co.nz.

New Student Research

Two students at Victoria University are carrying out research directly related to sand dune ecology and restoration. Samantha Jamieson is measuring the biodiversity of recently restored dunes in comparison to marram-dominated dunes on the Kapiti Coast. Habteab Habtom is investigating the effects of the exotic Argentine ant, including rate of spread and effects of resident insects at Bayleys Beach and Piha.

Good luck with your studies, we look forward to hearing any results you have.

*Argentine ants
tending aphids.
Photo: Victoria
University*



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Keeping our Dunes ALIVE

