

Friends of Lord Howe Island

Newsletter No.43

Spring 2016



Friends Weeding Tours for 2017

The Friends of Lord Howe Island will be running three weeding ecotours to Lord Howe Island for 2017

May 13 to 20 - Staying at Somerset.

June 25 to July 2. staying at Somerset.

August 26 to September 2 - staying at Leanda Lei

see back page for details

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Members of the August 2016 Weeding Tour



Your support is needed for the Renewable Energy Program for Lord Howe Island - see page 6 for details on how to go online and comment.

Report on August 2016 Weeding Ecotour

This was another memorable weeding trip – number 81 since the first one run in 1995.

We had 18 people along, and included a mix of some of our veteran Friends of Lord Howe Island weeders – Rob and Nancy Pallin, Stephen and Jane Gye and Elizabeth Staraj, and some new faces - Patricia Ramsay, Judy Jeffery, Anne Gibbons, Wendy Travers, Clare Tindal, Kathy Cock, Maryanne Ofner and Roy Carter; Bill MacDonald was along to assist. This made a great dynamic with the veteran weeders and those new to Lord Howe Island and the Friends program.

The first job on the list was to revisit the Edie's Glen site and carry out removal of the secondary weeds such as Scotch thistle, Fleabane, *Solanum* and grasses. There were still a few Castor oil seedlings emerging, and they were quickly dealt with. Everyone was amazed at the rapid regeneration of the native forest in this area and it is a good example of how persistence will pay off, removing weeds and allowing native species to recover and shade out the weeds that tend to thrive only in open sun. We also planted out about 40 *Olea paniculata* seedlings.

Then the focus was to look at the site that had been prepared by the May weeding Ecotour – the area above the Ned's Beach shed. The May group had hand removed weeds, and also cleared kikuyu grass from around any emerging native seedlings, in preparation for a spray with herbicide. This spray was carried out prior to our August group arriving, and the Friends of Lord Howe Island had purchased 40 native plants from the newly revamped Island nursery now operating under the name Kentia Fresh. These seedlings were those species that are occurring adjacent to this site and should establish well. The plan is for Friends groups in the future to revisit this site and carry out weed maintenance and assist these natives to establish and grow to shade out any weedy species that may invade, and allow the native forest to regenerate.



The August 2016 Friends tour members



Working in the Edie's Glen site in August

The Lord Howe Island Board staff had identified another area that would be a useful area for the Friends groups to work on. This was an area of forest and paddock adjacent to the Power House. In the paddock there were many small Cherry guava plants that cattle browse and are hidden amongst the kikuyu grass, as well as a number of large-crowned Ground asparagus. The group spent a full morning treating the guava and removing the asparagus plants. Then we jumped the fence line and began work in removing Ground asparagus from the forest. Groups will continue this area in 2017.



The group also spent one morning on the Boat Harbour track removing Broad-leafed paspalum; a project that the Friend started in 2010 and is going well. A total of 1320 plants were removed. This was a pleasant day and we took lunch and boiled the billy at Boat Harbour and enjoyed the walk through this lovely part of the Island forest.



We took the ferry over to North Bay for our picnic day - four hardy souls braved the winter water for a snorkel. The low tide allowed an excursion around the rocks to the Herring Pools. This was the last day before the Sooty terns area on Mount Eliza is closed for the spring and summer breeding, so we were lucky to have the opportunity to climb to the top. It is always a great experience to be on the top of the hill and enjoy the view south over the Lagoon to the mountains, and here you really have the sense of being on a remote island with ocean all around to the horizon.



On our Little Island walk we learned about the Island's volcanic origins and marveled at the basalt cliffs, the olivine crystals in the rocks and the towering Banyan trees. But perhaps the highlight for many was the Providence petrels. At this time of the year the chicks are about half grown, and so we located a short burrow and very carefully extracted a chick for a quick look at the big world; a new experience for many to see a wild seabird chick at close quarters.

Bill led the walk up to Malabar and the day was perfect for photography.

On our last full day we had the morning planting trees above Ned's Beach with the ocean view, then enjoyed a sausage bbq on the grass below; then out onto the rock platform for a very enthusiastic reef walk. This was a new experience for many people and they were amazed to discover the great variety and abundance of marine creatures in this intertidal habitat.

Five of our new weeders set out at 7 am on Thursday with Jack Shick to scale Mount Gower – Judy Jeffery, Kathy Cock, Ann Gibbons, Maryanne Ofner and Roy Carter. Along the way Jack inquired of Judy just how old she was, and he was amazed to learn her age, and at the top announced that at 82 years and 9 months Judy had set a new record for the oldest female to climb Mount Gower. Well done Judy!!!

On the last night, Penny Holloway LHIB CEO and her partner Jean invited the weeders down to Government House for drinks and a big thankyou for the effort put in through the week by all trip members. Penny also expressed the wish to see people again on the island some time, either as a weeder on another Friends trip, or just enjoying a holiday on the Island.

All in all a very successful week with good weeding done, some good walking adventures and lots of fun. Many of our new weeders remarked on what a great experience the week had been, with thoughts of returning another year.



Myrtle Rust outbreak on Lord Howe Island

Myrtle Rust (*Puccinia psidii*) is an exotic fungus from South America that impacts on plants from the family Myrtaceae. This exotic fungus was first detected in Australia in mid 2010 around Gosford, and has spread in forests along the east coast of Australia causing widespread decline of susceptible plants.

Myrtle rust affects plants leaves, flower buds and fruits; affected leaves become twisted and can cause plant death. The fungus has a bright yellow fruiting stage. Previously staff from Sydney Royal Botanic Gardens had tested and confirmed that the Myrtaceae family plants on Lord Howe Island are susceptible to this rust fungus. (Mountain rose, Scalybark, Tea tree)

On 14 October Island resident Larry Wilson observed what he believed to be Myrtle Rust on a Rose apple tree (*Syzigium jambos*) in his garden. He took a sample to the LHI Board office where it was confirmed as Myrtle Rust.

Quick action by LHI Board staff put in place a rapid response plan, which involved visiting leases with known *Syzigium jambos* plants and checking for evidence of the fungus. Then all infected plants were treated with a fungicide sprayed on the tree. It is intended to cut down and burn all foliage, branches and trunks of these trees.

Then LHI Board staff carried out inspections of all leases on the Island to check for any evidence of the rust on any native or garden species of Myrtaceae family plants. Fortunately no evidence was found, apart from the three trees initially identified. There are several leases with *Syzigium jambos* growing with no signs of infection by the fungus, but the LHI Board will seek the owners consent to remove all of these plants from the Island, as they are known to be particularly susceptible to the fungus.

It is not known how this fungus reached Lord Howe Island, whether the spores floated in wind currents from mainland Australia, or were carried over on cargo or persons clothing.



Myrtle Rust (Puccinia psidii) on leaves of Syzigium jamba from Larry Wilson's lease.



Lord Howe Island's Mountain rose - one of our Myrtaceae plants that could be affected by Myrtle rust should it get established.

Hybrid Renewable Energy Update - Have Your Say

In 2009 the Lord Howe Island community and Board embarked on investigations to determine the best mix of renewable energy for the island. With electricity at that time produced by burning diesel fuel brought to the island with a heavy subsidy from the NSW government, this was seen to be essential for the future of the community. Following community consultation with specialist contactors in this field it was proposed that a mix of solar, wind, storage battery and backup diesel was the best mix for the island. Staff at the Lord Howe Island Board worked this into a proposal to the Federal and State governments. This resulted in a grant for \$4M from ARENA (Federal Government) and a \$5.9M loan from the NSW government to be paid off over a 20-year period with savings from diesel fuel needed to produce electricity.

The Technical Feasibility Study produced in December 2015 found that to maximise the reduction on diesel fuel consumption a combination of wind and solar is needed, supported by a battery. The following configuration would provide the greatest diesel fuel savings within the available budget.

- 450kW of solar panels (around 2,000 panels)
- 400kW/hr battery
- Two small to mid-sized 200kW wind turbines.

This preferred combination of renewable energy technology is expected to reduce the island's diesel consumption from 540,000 litres per year to around 180,000 litres per year, a 67% reduction. This exceeds the ambitious target set in the Energy Supply Road Map (2012), which aimed for 63% of the island's electricity to be generated from renewable sources by 2017.

Tenders from contractors for the solar, battery and control system contract closed in late August, and are being assessed at present. The Lord Howe Island Board has a short list that is being followed up and a contract is hoped to be signed in November. Construction is scheduled to commence around March 2017. A separate contract is being put in place for the construction of new sealed road from the powerhouse to allows access to the solar panel area, with expected construction to take place in February 2017.



Left: image of the model of wind turbines proposed to install at Lord Howe Island. These three have been operating at Coral Bay on the W.A. coast near Ningaloo Reef since 2007.

Below: solar panels on King Island - it is estimated about 2,000 would be required for the installation at Lord Howe Island.



The Development Application has been submitted for the wind turbines and the initial four-week public exhibition period has recently been advertised **and closes 28 October 2016 at 4.30pm**

This is a significant project for the future of Lord Howe Island's energy supply, and also a contribution to mitigating Climate Change from the small community. We would like to encourage all Friends of Lord Howe Island members to make a submission supporting this project.

A summary of the large environmental assessment documentation and a submission form is available on the Lord Howe Island Boards website, under Renewable Energy. Use this link.
<http://www.lhib.nsw.gov.au/infrastructure/renewable-energy/proposed-wind-turbines-development-application>

Australian Museum to run a major Lord Howe Island Expedition in 2017

Lord Howe Island is a World Heritage Site of global significance. The island is home to incredibly rare and diverse fauna and flora, many of which are not found anywhere else on earth.



Alan Musgrave expedition in 1926

The Australian Museum have had a connection with Lord Howe Island since 1869. Since that time there have been research expeditions by many of the Museum's scientists. In the 1970's it was scientists from the Australian Museum and Sydney Botanic Gardens who carried out major surveys towards the Environmental Survey of 1974. This document laid out the conservation recommendations for Lord Howe Island that we have seen rolled out over the past 40 years. These include the establishment of the Permanent Park Preserve, eradication of pigs, cats and goats; commencement of weed eradication programs; the establishment of a natural history museum and more.

As you know, the precious local fauna is under threat from an invasive species – the rat. Rats have a significant, detrimental impact on the indigenous biodiversity of Lord Howe Island. They have destroyed ecosystems and attacked native fauna, in some cases to the brink of extinction.

With your support, the Australian Museum Research Institute (AMRI) will send a team of 20 scientists on an expedition to survey the wildlife and further understand the unique ecosystems on the island.



1971 visit as part of the Environmental Survey of Lord Howe Island

There are plans to undertake a rodent eradication program in **mid** 2017, pending final approval from the NSW State Government. Prior to this program commencing, AMRI scientists will work alongside the Lord Howe Island Board, the Lord Howe Island Museum and other organisations to investigate the impact of rats on local fauna including birds, insects and snails. This research will help determine which species have been pushed to the brink of extinction and which are barely surviving. The scientists will then monitor the progress of the fauna following the rodent eradication.

A tax deductible donation to the Australian Museum Foundation will directly support this important expedition.

Please click link below:

<https://www.givenow.com.au/australianmuseumlordhowe>

For more information, please contact the Development team on +61 2 9320 6216 or email development@austrmus.gov.au

All donations are tax deductible. The Australian Museum Foundation (ABN 64 497 967 210) is a charitable trust, the purpose of which is to ensure a secure financial base for the Australian Museum and the Museum is its sole beneficiary.

Heli-lance Spray Program Stage 2 Funded by North Coast Local Land Services (NCLLS)

A second round of the helicopter - lance apparatus spray program was successfully completed in early August 2016 with funding through the NCLLS. Over 6.5km of cliff was searched, treating 747 Ground asparagus, 33 Bitou bush, 70 Box thorn and 4 Bridal creeper plants.

Transit Hill, once blanketed in dense Ground asparagus, has been transformed due to the concerted control effort. The challenge now is to deplete weeds from the vertical terrain as a priority. The Lord Howe Island Board will continue to seek funding for future heli-lance spray programs and complementary technical applications such as drones until the weeds are fully removed from cliff lines. The heli-spray pods have a 200L capacity, enabling a large extent of cliff line to be treated in a short time.

The NSW Environmental Trust is funding research and development into aerial methods to combat weeds in remote terrain (including detection, mapping and control platforms using Herbicide Ballistic Technology and drones). An expression of interest will be opened shortly to invite aero robotics experts to help solve the challenges with weeds in rugged terrain on the island.



Heli-lance in operation off Malabar cliffs Lord Howe Island

The Green Army on Lord Howe Island



The Green Army is a Federal Government initiative that provides valuable training and work experience for 17-24 year old participants as well as much needed on-ground assistance for host organisations. Each Green Army team comprises four to nine members, a qualified supervisor, tools and safety gear. The team also get the opportunity to complete accredited training modules to help improve career opportunities in the nature conservation industry.

There are five participants and one supervisor (John Trehy). Three of the participants are locals - Tyrin Thompson, Henry Payten and Teb Crisp and two from the mainland - Kathryn Bewicke and Jackson Roberts. The Team started on Lord Howe Island in July and finish up in December 2016. The team is assisting the LHIB with their project "Accelerating the demise of the worst five weeds on Lord Howe Island". This has seen the Team weeding Bridal Creeper and Ground Asparagus through the Northern Hills, Transit hill and Middle Beach cliffs before the arrival of the Sooty terns and the Shearwaters for summer breeding. They have then moved into blocks on Malabar targeting Bridal Creeper and Ground Asparagus. The Team is enthusiastic and dedicated to their work which is making for an enjoyable and productive 6 months.

Update on Rodent Eradication Program

The Lord Howe Island Rodent Eradication Program is still in phase 2 - the Planning and Approvals Stage. In April and May 2016 the LHI Rodent Eradication Plan was sent to two federal government bodies for approval. The bodies are the Australian Pesticides and Veterinary Medicine Authority (AVPMA) who are to consider the use of the pesticide Brodifacoum during the eradication to ensure it is safe for people and the environment; and the Department of the Environment who protect matters of national environmental significance such as threatened species and World Heritage values. A Public Environment Report for the Department will go on exhibition for public comment in late Oct for 20 business days. All submissions are welcome. NSW approvals applications will be submitted shortly. It is expected the decisions from these bodies would be received and presented to the Lord Howe Island Board by February 2017 as part of the decision on whether to proceed

As part of the rodent eradication the Lord Howe Island Board carried out an island clean up. It is known that various items of rubbish in sheds and around leases could be hiding places for rats and mice, so an offer was made to all residents to remove rubbish free of charge. Most islanders have taken up this offer, with 400 tonnes of rubbish to date removed, with still more to go. The island residents have welcomed this part of the project.

Other documents are being prepared for the project as part of the planning and approvals process, these include:

- An additional Human Health Risk Assessment overseen by the NSW Chief Scientist
- Tenders for helicopter operations, detector dogs and workforce accommodation
- DA for Captive Management of Woodhens and Currawongs on the island for the project duration
- Economic Impact assessment
- Island property management plans for each lease.

Scientists from OEH in Sydney have been carrying out pre-eradication monitoring of flora and fauna to assess current impacts of rodents and to be able to assess recover of biodiversity should the project go ahead. This includes seabirds, land birds, snails, other invertebrates, and various plant species.

Lord Howe Island's palm to receive conservation actions.

Australia's Threatened Species Strategy sets out the Australian Government's bold, action-based approach to protecting and recovering our threatened animals and plants. It includes commitments to improve trajectories of 30 threatened plants by 2020.

One of these 30 plant species chosen is the Little Mountain palm found only on the 27 hectare summit of Mount Gower on LHI.

EPBC Status: Critically endangered

Main threats:

- Predation of seed by introduced rats,
- invasive weeds.

Actions:

- Maintain the number and size of wild populations
- Control rats on Lord Howe Island to enable recruitment of the species
- Prevent the invasion of weeds into the species' habitat

<https://www.environment.gov.au/biodiversity/threatened/species/30-plants-by-2020/little-mountain-palm>



**Unusual bird sightings
August to October 2016**



October 16 a Silver gull turned up on the island and is seen being around several of the beaches. This is an unusual bird here, with one being seen only every few years.



On October 15 Jack Shick and myself recorded this Mottled petrel off Balls Pyramid while doing a tourist pelagic trip. This is quite a rare visitor to the waters around the island



Also on October 15 a birding group from Bird quest photographed a Soft-plumaged petrel off Balls Pyramid - and this is a new record for the island.

2017 WEED TRIP BOOKING FORM

May 13 to 20 - Staying at Somerset. Twin Share
Ex Sydney - \$2559 p/p. Ex Brisbane - \$2479 p/p

June 25 to July 2. staying at Somerset. Ex Sydney twin share
- \$2399 per person.

August 26 to September 2 - staying at Leanda Lei
Twin share Ex Sydney - \$2349 per person.

for booking post the form and deposit cheque \$200 to:
Lord Howe Island Nature Tours
PO Box 157 Lord Howe Island NSW 2898

OR Contact Shelly at Oxley Travel 1800 671 546

Please book me on the Lord Howe Island bush regeneration
tour (included is my \$200 deposit pp)

Name(s) Mr/Mrs/Ms/Miss _____

Address _____

Phone _____

Email _____

QANTAS Frequent Flyer number _____

My bush regeneration experience is _____ years

I prefer to go on dates :

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