

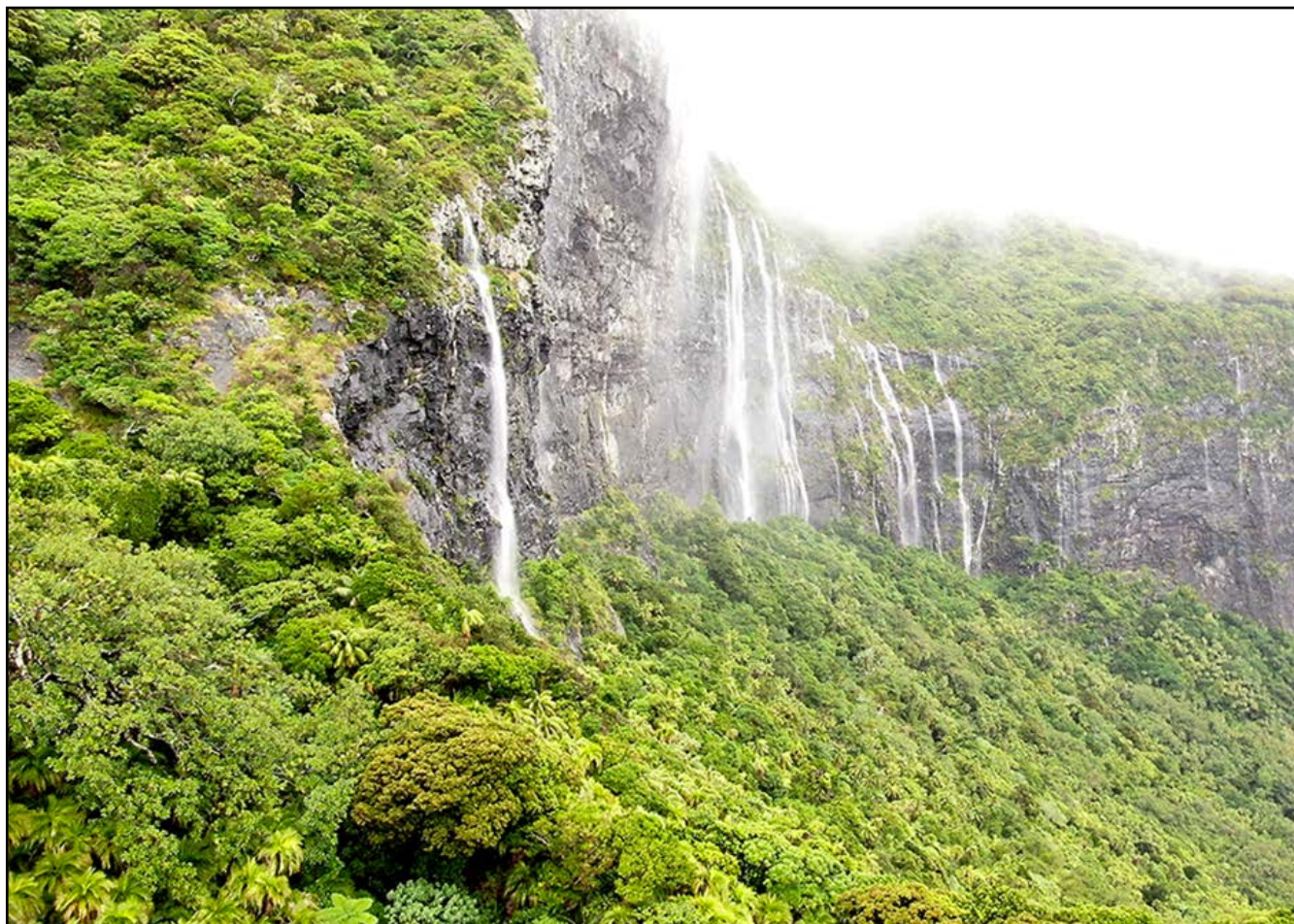
Friends of Lord Howe Island

Newsletter No.51
Autumn 2020



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27 May the Island receives 100mm rainfall in 6 hours.



On 27 May the island had substantial rainfall, with 10 mm until 9 am then a further 101 mm between 9 am and 3 pm. This is the biggest daily fall for many years, and all the major creeks and waterfalls were flowing. This will recharge the forest water supply in the soil, much needed after several drought years.

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Lord Howe Island in Lockdown

On March the 22nd the NSW government placed a Health Order on Lord Howe Island, which effectively put restrictions on people travelling to the island. Only residents and essential travellers are allowed onto the island, and there is a 14 day strict quarantine procedure to be adhered to for anyone travelling to the Island. As yet we have no COVID-19 here.

Qantas have just one flight a week from Sydney each Tuesday and the NSW government have underwritten the cost as essential for freight, medical transfers, essential workers and mail. The Eastern Air Service Port Macquarie freight plane comes each Friday.



The Island Trader has been keeping up its regular fortnightly schedule bringing freight from Port Macquarie, but that was only because of the large amount of freight to be brought to the island for the solar power installation. From June 6 it will drop down to once every 3 or 4 weeks. With just the local community to cater for, there is not enough freight to be a viable service each fortnight.

While no tourists are coming to the island, more than half the people are impacted by income loss. But a lot of locals in tourism here have worked seven

days a week for years on end many are sighing relief that maybe they can do the odd jobs they have been trying to do for 20 years ... paint the house, fix garden, build a shed etc. Locals are supporting the cafes and restaurants who have been allowed to do take away food and drinks, and can now open to the numbers as applying in NSW venues.

Australia is a very good country to live in any time, but is particularly so with this pandemic raging. Certainly, everyone living on Lord Howe Island appreciates how very lucky they are to live here with the ability to grow food and catch fish; and enjoy the island environment, while adhering to social distancing numbers as for the rest of NSW. There is a **Lord Howe in isolation** Facebook page if you are interested to see how people are occupying their time with the lockdown.

As the rest of Australia opens up cautiously, the administration and community on the Island are discussing how that may happen. The 90 day Health Order expires on June 18 and the Board is taking the community sentiments to the NSW Health Minister to see what will happen after that date. Because of limited medical facilities and resources on the island, and the remote nature of the island, any outbreak of COVID-19 could have serious consequences for the community.



Seabird Plastic research 2020

With travel restrictions since March, much research on Lord Howe Island has been put on hold for 2020. However, in May this year local volunteers Jack, Cindy and Anna Shick, Justin Gilligan and his partner Christina Venables; Emily Riddle with daughter Millie have helped with the Clear Place plastic quadrat studies. This project was commenced in 2011, and most years is carried out by the Friends of LHI weeding groups. Similar amounts of plastic are being recorded each year; and this is all adding up to substantial quantities of plastic debris the birds are dropping in the terrestrial habitats on Lord Howe Island; perhaps as much as 80 to 120 kgs per year.



Benefits already seen following removal of rodents from the Island

Talking with a lot of people on the island, it is evident that already we are seeing the benefits of having no rats or mice on the island. Many people are reporting how many more landbirds they have around their houses - particularly the White eyes and Emerald doves. There appears to be more abundant insects seen - the cicadas were noisier and continued longer into March this year; many people report seeing a lot more of the endemic green stag beetles and more butterflies. And of course, this increase in insects means more food for the land birds.



Above: White eyes; below: Emerald dove.



Pigface *Carpobrotus glaucescens*

For the first time probably for 100 years the native pigface plant is covered in fruits - whereas previously they were never seen, as rodents devoured them when small. On a recent three day stay on Mount Gower summit I was delighted to see an abundance of mature seed on both species of Mountain palms, and carpets of seedling of many plants coming up on the forest floor- particularly Island apple. And the endemic semi slug *Parmelops* is flourishing there - on previous trips one might see a few of these on a rainy night; but just on one small Pumpkin tree there were 42, and on one palm trunk there were fourteen.

We are going to see a lot more remarkable recovery surprises that no one expected. What is hoped for is that we will see the tiny White-bellied storm petrels and Kermadec petrels breeding back on the main island soon. These two seabirds were recorded breeding on the main island in 1914, but when rats got here, they disappeared, to be only found breeding on the offshore islets. However, occasionally dead Storm petrels and Kermadec petrels have been found on the Island - trying to establish back, but the rats or owls would get them. The Currawongs are back calling in the forest with chicks, and many households are reporting Woodhens with chicks in February, March and April.



Semi slug *Parmelops* sp.



Above: Big Mt palm; below: Little Mt palm



Renewable Energy update

Construction work has commenced on Lord Howe Island to transform the electricity grid from a fully diesel powered system to one complimented by solar photovoltaic (PV) cells and a battery storage system. The Hybrid Renewable Energy Project is the product of almost a decade worth of work by dedicated community members and the Lord Howe Island Board. The original proposal of solar and wind generation has been replaced by a solar and battery storage system that will meet the original goal of a 67% reduction in diesel use, and provides a low-impact solution for the World Heritage Listed Island. Over 1.3 megawatts of solar PV generation will feed in to a battery storage system with in excess of 3.7 megawatt-hours storage capacity. The battery system will be connected to the existing diesel generators so if solar penetration drops, the battery has the smarts to top up with diesel until the sun shines and the panels start feeding the system again.

The project was awarded \$4.5m in funding from the Australian Renewable Energy Agency (ARENA), and the Lord Howe Island Board has taken a loan from the NSW Government for \$5.9m, and is making up the balance of costs from its own reserves. The Board will repay the loan with the savings generated by reduced diesel use, with the target being a reduction of 392,000L per annum.

Materials have been arriving on the Island since February, and pile-driving for the racks commenced in March. The crew has hovered between 4 – 8 people as material deliveries have been impacted by shipping delays arising from COVID-19. A core crew of 5 people have effectively relocated to Lord Howe Island due to the strict travel restrictions, and are complemented by local labour. Quarantine restrictions for personnel add to the challenge of project delivery in such a remote location. Over coming weeks, the 3,240 panels will be mounted to the racks and cabling laid to start the complex electrical integration works.

In late 2019 idyllic Lord Howe Island was ranked the world's fifth best region to visit by global travel authority Lonely Planet, with special mention made of its sustainably managed tourism. The transition to a lower carbon and renewable source of energy boosts the environmental credentials of every business and household on the Island, and is another step on the sustainability journey for the Island community and its visitors. The project completion date has been reforecast due to the impacts of COVID-19, and is aiming for completion by the end of November 2020 – just in time for the summer sun.



Sallywood Swamp Forest Restoration

Pinetrees have started work on a Sallywood Swamp Forest Restoration Project. Sallywood Swamp Forests are a Critically Endangered Ecological Community in NSW only found on Lord Howe Island, and is dominated by the tree *Lagunaria patersonia* known on the Island as Sallywood. Over 95% of the original forest type was destroyed by grazing, and only a few remnant patches remain (Old Settlement, Cobby's Corner and Soldier's Creek).

In 2018, Pinetrees partnered with the Lord Howe Island Board to seek funding to restore a large patch of Sallywood Swamp Forest in the Pinetrees back paddock, and in 2019 received \$100,000 from the NSW Government through the NSW Environmental Trust, with Pinetrees to match that amount to the project.

The restoration project requires a fence around one hectare of floodplain (including corridors that link to existing forests), removal of weeds such as oleander, kikuyu and thistle, and the planting of over 6,000 trees and palms that are typical of the Sallywood Swamp Forest community.

Stage 2 of the project will commence in 2021 and restore another one hectare patch of Sallywood Swamp Forest to the south of the current project site. This forest will connect with the lowland forest in Edies Glen, which was lovingly restored by the Friends of Lord Howe Island over the last 20 years.

Edies' Glen in 2000 was full of Rice paper plant and Castor oil plant which the Friends removed by repeated cutting down and applying herbicide between 2001 and 2012; since then each year groups have planted native seeds, seedlings and carried out weed maintenance around these new natives that are establishing successfully.



drone view of the Sallywood Swamp forest restoration site with Oleander cut down.



Sallywood Lagunaria patersonia



remnant Sallywood Swamp forest at Cobby's Corner.

ABC series to feature Lord Howe Island.

The ABC are screening a three part series in June, beginning June 9th – titled Australia's Ocean Odyssey. **The second part to be screened June 16 features Lord Howe Island.**

Narrated by Marta Dusseldorp, the series is a journey down the East Australian Current, taking viewers all the way from the Great Barrier Reef down to Antarctica, revealing how ocean currents create life on our planet, and what we can all do to protect our planet's blue heart. Produced by Wild Pacific Media and a ginclearfilm Production, this has been given a Tuesday timeslot, not the traditional Sunday slot.

Nick Robinson, Director, Writer and Cinematographer said: *"My motivation for pursuing this series comes from a deep love of the ocean and her creatures. I feel incredibly fortunate to be given the opportunity to flow the full length of an ocean current in this way. I think it's fair to say the team has put our heart and souls into the series because we believe that if more people could see how wonderful these oceanic worlds are, then they would make better choices when it comes to looking after the sea."*



Hidden in our oceans and unknown to most humans are great rivers of seawater called ocean currents. These are the arteries and veins of planet Earth – a vital planetary life support system that has helped regulate the Earth's climate, atmosphere, weather and biological diversity for millions of years.

This is the story of one particularly fascinating flow – The East Australian Current – an oceanic river that stretches the length of Australia's east coast. It flows around 3000 kilometres, all the way from the Great Barrier Reef to Tasmania, bringing warm tropical waters to cold southern seas, and in doing so it transforms the lives of every living thing in the region.

The East Australian Current is responsible for the fish we eat, the rain that feeds our crops, even the air we breathe. It was made famous by the antics of a determined clownfish in the Pixar film 'Finding Nemo', but the true story of the East Australian Current is even more magical.

For a preview visit:

<https://iview.abc.net.au/show/australia-s-ocean-odyssey-a-journey-down-the-east-australian-current>



Masked boobies expanding breeding areas

During the August Friends weeding tour, members of the group were surprised and delighted to find a Masked booby with eggs on North Head. That bird did not raise chicks. However, on the cliff top above Hell's Gate this year Masked boobies have bred. This was most likely due to the fence being repaired and keeping cattle from the area.



However, we have noticed Masked boobies also sitting in areas of the island where they have not been seen before in living memory. On seabird cruises around the islands we have seen them sitting on ledges half way up the cliffs between Malabar and Kim's Lookout; and also on ledges beneath Mount Eliza. It may be the rats were hindering their breeding at those sites so they abandoned them, and are now returning. Exciting to see the Masked boobies expanding breeding areas possibly as a result of the REP.



Old Settlement *Calystegia affinis* restoration site

Calystegia affinis is listed as a threatened plant species, and is found at only a few locations on Lord Howe Island, and on Norfolk Island. From 2009 Friends of Lord Howe Island groups have worked at the site, to help in the restoration. The site is at the edge of a pasture lease, and invasive grasses Kikuyu and Buffalo were crowding the available habitat for this plant. Because of competition from the grasses for light and nutrients *Calystegia affinis* rarely flowers.



The Lord Howe Island plants show variation - the Old settlement plants have pink flowers (left) and broader, shorter leaves; the mountain populations have white flowers and longer, larger leaves, as in the Norfolk Island plants. The Old Settlement plants may be hybrid with *Calystegia soldanella* that grows on the beach dune. A study of the genetics is being undertaken to ascertain the status of the various populations of this species.

Numerous Friends LHI weeding groups have carried out extensive clearing of grasses and planting of shrubs in the area as part of the restoration of habitat project. In more recent years LHI Board staff have used palm thatching to cover the ground and prevent grasses and other weeds such as *Bidens*

pilosa and Thistle from taking over, but still allowing the *Calystegia* to grow. And it is growing very well as seen in these photos. The Board are investigating other similar habitat areas around the edge of the Old Settlement paddock to transplant some and establish it at these other sites.



Friends LHI Lee Courtwood, Terry and Kate Kershaw doing restoration work at the *Calystegia* site in August 2015.



Calystegia site in May 2020 with a mat of the *Calystegia creeper* in foreground.

Weed trees removed from Steven's Reserve.

In February the LHI Board had contractor Craig Wilson remove the large Camphor laurels and Silky Oaks from Stevens Reserve. These trees were over 100 years old, and although not seeding prolifically they were producing some seed and posing a threat to the native flora.



Arborist trimming high branches before felling



The logs will be auctioned off to locals and funds raised offset the cost of removing them.



Transit Hill looking good.

The original focus of the Friends LHI groups was removing Ground asparagus and then Climbing asparagus infestations on Transit Hill. After twenty years, successful restoration has been achieved – the goal of weeding is to restore the native forest.

The changes for the native forest have been astounding, as highlighted in these photos from a well-known spot on the site - the “morning tea log”. This had become the regular spot from 2009 where weeders on Transit Hill site gathered for the morning tea break. The log was first sited in 2009 when the walls of Climbing asparagus were removed and the log was revealed. Now the log has almost disintegrated into humus for the new forest.

Photographs at left: top is July 2009, middle August 2009 and bottom is May 2020.

Photographs at right: top just uncovering the log 2009; middle the first morning tea on the log 2009; bottom the August 2013 morning tea group.



This rare endemic LHI passionfruit Passiflora herbertiana ssp. howeana, found on the 2015 weeding trip is still growing well at the site.



Ex Tropical Cyclone Eusi hits LHI

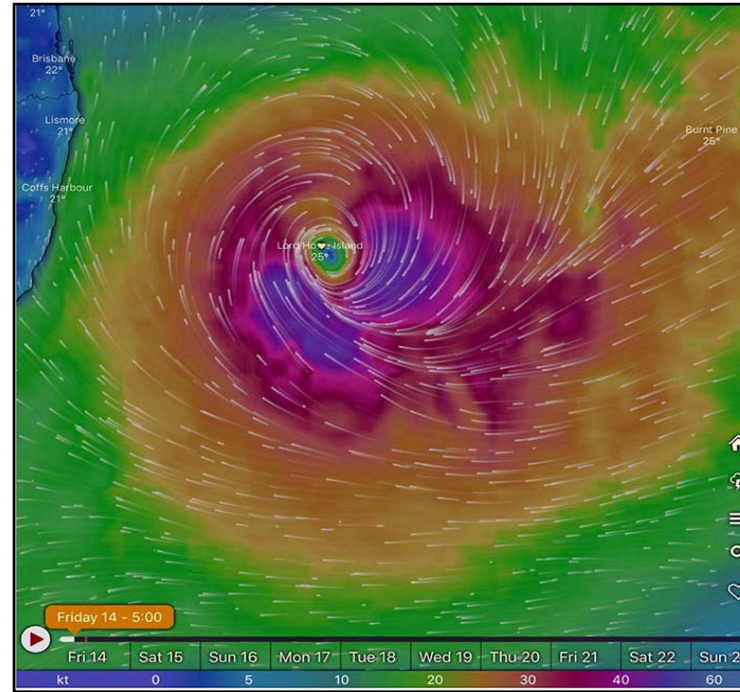
On February 10 tropical cyclone Eusi formed north west of Vanuatu and starting moving south. By the afternoon of Thursday 13th, Lord Howe Island began to feel its presence, with the wind freshening from the east. The system passed over the Island on Thursday night, with gale force winds and a maximum wind gust recorded of 83 knots (154 km/hr).

In the morning the eye of the storm was over the Island and all was calm. Islanders were out to check damage – and there was a lot – many of the trees on the island have a shallow root system and tall spreading crowns. If there is a small gap in the canopy the wind can get in and lift the canopy and uproot the tree. The island roads were blocked in a few places by such uprooted trees; but the island SES had teams out and these were cleared fairly quickly. There was some minor damage to a few houses, but no serious damage.

As the storm passed over the island winds again picked up from the west in the afternoon and gusts up to 100km/h uprooted more trees. By nightfall the wind had subsided and the system continued on to New Zealand.

On Saturday morning a crew of SES and Fire Crew flew in from Port Macquarie to assist in clearing and assessing for any hazards.

The system only brought 40 mm of rain to the Island.



Wind pattern on 14 February 2020



A huge Banyan behind the palm nursery toppled in winds.



Many trees with shallow root systems like this Blackbutt near Hideaway were uprooted.



Waves washed through Ned's Beach shed.



Trees on Mt Gower summit uprooted.

Update on the Rodent Eradication Project.

With the wrap up of the REP last November, some statistics have been collated on the program:

- 140 REP staff (63 local)
- 1,100 systematic dog searches of leases within the settlement area
- Over 305,000 bait stations were baited
- 2,200 cattle covers were made and placed
- 2,300 monitoring devices checked over 20,000 times
- Over 90,000 hours worked by the core REP team in 2019

The focus now is on Biosecurity and the LHI Board staff continue to refine the Biosecurity procedures for the Island.

Following the conclusion of REP baiting, a permanent rodent surveillance network was installed on the island. This network provides a permanent capacity to detect, and in some cases kill, any re-introduced rodents should they make their way to Lord Howe Island.

In addition to the surveillance network most lodges, large kitchens, and places that regularly receive direct bulk cargo deliveries have retained a number of permanent rodent bait stations.

All of these tools, traps, and bait stations provide Lord Howe Island with a permanent detection and defence network against possible rodent re-introductions that, should the worst happen, offer a good chance of detection and interception.

This permanent network is checked regularly and is comprised of: 101 bait stations, 135 kill traps, 48 tracking tunnels, 46 wax tags.



Top: a live rodent trap

Bottom: wax pellet and chew card devices to detect rodents



On Friday 8th May 2020 there was confirmed rodent sign detected on board the MV *Islander Trader* whilst she was unloading cargo. A rapid response was mounted with the cooperation of vessel crew, Lord Howe Island Birdon staff and Stevedores, and LHIB biosecurity staff.

The response saw the installation of over 120 additional non-toxic monitoring devices at 53 properties which received cargo. Following twenty days of monitoring, including additional checks of the permanent rodent surveillance network, and biosecurity dog checks, no rodent sign has been found.

The LHI community has been enlisted as part of the biosecurity with the **Rat on a Rodent** Campaign. This campaign was launched during the later stages of the 2019 REP to encourage community members to call in and report if they suspected they had seen or found a rodent or any rodent sign. Reports made through this process led directly to the removal of at least three of the final rodents during the REP. Each reported sighting of a rodent, or signs of rodent activity are meticulously examined and followed up, with an incursion response set in place if necessary.

As the island cargo ship is based at Port Macquarie, a local dog handler, Ryan Tate from Tate Animals, (with a long track-record of conservation and detection dog handling), has been engaged to ensure that Port Macquarie based biosecurity inspections take place. Ryan works to ensure that all freight and cargo destined for Lord Howe is thoroughly inspected and cleaned prior to it being shipped. Prevention is always better than cure. The same is true for biosecurity – the further back in the chain the risk of introduction is moved, the more effective and financially efficient intervention actions are. The Island based biosecurity dogs Sebi and Zuma continue to do checks on the cargo from ship and aircraft .



The M.V. Islander Trader at the island jetty.

Update from the LHI Board weed team

Between July and December 2019 the weed program reported 220 hectares of weed search effort. To help fill the labour gap whilst local weeders were busy on the rodent program, six contract weed teams (with prior LHI experience) were engaged on the ground.

For the last six months of 2019, 30 target weed species were detected with 5,859 seedlings, 10,087 juveniles and 2,542 mature weed plants removed. Some of the uncommon weeds removed include Lantana (x 6), Night Jasmine (x 22) and Small-leaved Privet (x 24). Ground Asparagus, Bridal Creeper and Cherry Guava remain big ticket weeds and to a lesser extent Ochna.

Between the 12th to the 18th of November the northern flanks of Mount Gower were saturated with 90-person days of weeding effort covering at least 20 hectares across rugged terrain. Weeds removed include one juvenile Ochna and Cherry Guava (806 seedlings, 1014 juveniles and 150 matures). The search effort was aided through winch access provided by Helitreck. Now with freedom from rodents, every weed detection is important as there is more chance for seed set and spread. The heli-winch project has been funded by the Saving Our Species program.

Following the completion of the heli-winch program search effort was focused on the summit of Mt Gower. 10 juvenile and four mature Tobacco Bush plants were removed. The absence of Cherry Guava and Ground Asparagus on the summit is a positive result. These weeds could readily colonise canopy gaps which are evident on the summit of Mt Gower. Keeping the Cloud Forest and the Little Mountain Palm safe from weeds is funded by the National Landcare Program administered through North Coast Local Land Services.

More photos from the May 27 rain event



Above :Old Settlement Ck; below Soldiers Ck.



Dinner Run waterfall.

Masked owl update

In the 1920's Masked owls and Barn owls were introduced to try and control the rats that arrived in 1918. The owls diet was mainly rats, but it didn't stop the rat population rising to an estimated 80,000 to 120,000. The owls were also eating many seabird species, and even Woodhens.

An essential part of the REP in 2019 was to also remove these introduced owls; as with no rats to eat the only food would be more seabirds. It was estimated that 40 to 50 owls were living on the island prior to the REP. During the REP, over 15 Masked owls, 1 Barn owl and 1 Tasmanian subspecies of Boobook owl were found to have succumbed to secondary poisoning from eating poisoned rodents.

Since then five Masked owls have been shot by contractor Pestlures, and locally employed shooters Scott Wilson, Erin Mayo and Hank Bower.

On the 8th May 2020, the local team dispatched an owl from Thornleigh farm after Robert Jeremy alerted the team of freshly killed rails. Then on the 26th May 2020 two residents from down south alerted the team of an owl calling at 5.50pm and by 6.00pm the team were on site stalking the owl. After some time the owl was found lurking in dense bushes and flying between patches of scrub. In time the owl was shot and the team were home by 8.00pm.

The Board are continuing to follow up reports of Masked owls with the aim to eradicate this introduced hybrid species from Lord Howe Island.

Unusual bird sightings January to May 2020



Swift parrot

In late May, an East Coast Low developed off NSW and the strong winds from this weather system brought a rare visitor to the island - a Swift parrot. These small parrots breed in Tasmania and in autumn migrate up the east coast of Australia, following food from blossoms in various Eucalypt species. There is only one other record of this bird on Lord Howe Island - in September 1968 Dean Retmook photographed one and it was confirmed as a Swift parrot. This one in May 2020 was given a qantas seat back to Taronga Zoo where staff looked after it and released it in the Hunter Valley with some Regent Honeyeaters.

Other rare visitors include :

A Nankeen night heron call was heard at night in the forest near Steven's Reserve 2 - 14 February.

several Black-faced cuckoo shrikes reported February to May.

two Plumed whistling ducks sighted 30 April and stayed a few days.

Leon Brice reported a Swamp harrier April and May.



Plumed whistling ducks

Friends 2020 Weeding Ecotour Dates

Due to the travel restrictions with the COVID 19 outbreak, the May 23 to 30 tour was cancelled, and people were offered to transfer to the same date in 2021. At this stage the August 29 to September 5 trip is still on the books, awaiting the government's decision on travel restrictions to Lord Howe Island being lifted.

It is hoped this trip can go ahead, and keep the weeding effort up at the sites being managed by the Friends groups. There are eight vacancies for this trip; if you do wish to put an expression of interest to be on this trip, should it go ahead, please email Ian Hutton ian@ianhuttontours.com. Oxley Travel are not taking bookings until restrictions lifted ... so please don't contact them yet. As soon as there is a decision on travel to the island, we can let you know if it is going ahead.

In the meantime, some residents are out keeping Sea spurge down by spending time removing plants. Cindy and Anna Shick (below) and Leon Brice are some of these locals.



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