

**Otago Natural History Trust**  
**Chair Report to Annual General Meeting**  
**For the period April 2019 to June 2020**  
**28 October 2020**

**A tough 15-month year**

This past year will always be remembered for the Covid epidemic which forced the sanctuary to close to the public from 23<sup>rd</sup> March to 30<sup>th</sup> May, and to cease operation of the café. Government subsidies allowed us to continue paying staff for many weeks but in the end some jobs had to be lost. This has surely been a very hard time for those affected, and for our General Manager, Amanda Symon. During this period, only conservation staff were allowed in the sanctuary and the visitor centre operated on a skeleton staff. Volunteers had to cease work inside the sanctuary, and education staff diverted their considerable energies to developing on-line resources for schools. It was a unique time that we hope never happens again.

The financial consequences of the closure were moderated by occurring in the winter months when visitor numbers are low, and by government subsidies, and by the substantial financial reserves that have been built up over many years thanks to the leadership of our retiring Treasurer, Ross Smith. The sanctuary is in no danger of permanent closure. Nonetheless the years ahead will be difficult. Twenty-five percent of our visitors come from offshore and it will be some time before these return to previous levels.

Coincidentally, the IRD has approved a change to end the financial year for all Orokonui Organisations from 31<sup>st</sup> March to 30<sup>th</sup> June. As a result, the past financial 'year' has been 15 months long, although revenues effectively ceased for the last three months. The new financial year, covering months July-June, will include all of the busy summer months for the past season, and allow budgeting and planning for the year ahead during the quieter winter months.

**Conservation**

Developing the ecology within the fence is one of Orokonui's founding objectives. This year our precious conservation staff (Elton, conservation manager; Kelly, biodiversity ranger; and Geoff, infrastructure ranger) have been supported by nearly 6,000 hours of volunteers' time – equivalent to the time (though perhaps not quite the expertise) of three more rangers. Two trainee rangers have also been working in the sanctuary on a scheme with MSD. During the Covid19 lockdown in March and April, only conservation staff were allowed to work in the sanctuary to protect the animals. Elton did a wonderful job of sharing his life in the sanctuary over this period with regular 'lockdown diary' updates on Facebook. What he could not share was the fatigue, and we must all be grateful to him and his colleagues for another year of caring for the most unique ecology of threatened species on the South Island.

There were two great highlights in the year. The first was the hatching of a tuatara egg – probably the first on the mainland in 500 years! The second was confirmation that successful breeding has occurred amongst the kohanga population of Haast Tokoeka Kiwi – indication that Orokonui’s wild population will strengthen prospects for recovery of this most threatened of kiwi species. The creche has also fed up and graduated nine juveniles for return to the west coast.

Another welcome arrival to the sanctuary is the falcons. In October a second nest was found and has since produced three chicks, all of which are now flying around the sanctuary. Our long-established Takahe, Paku and Quammen, are to retire and be replaced by a younger breeding pair, Waimarie and Bennet. They will now enjoy a quieter life at the bottom of the sanctuary. After delays in securing approval from DOC, a new breeding enclosure of jeweled gecko is now almost complete. This will be an important addition to the attractions at the top of the sanctuary.

The kaka population in the sanctuary was surveyed at 39 in January. Some 24 nest boxes have been installed over the last two years, but so far they have not been used for nesting. Kaka continue to disperse beyond the safety of the fence. There they face a number of threats from predation, inappropriate feeding, and more recently the methods used to reduce possum numbers across a large area to the north of the city. Over the year, pathology reports have concluded that two birds were poisoned by the toxin used in possum control. Predator Free Dunedin’s work to reduce predators to low levels will make a crucial contribution to the restoration of many native birds to Dunedin, and it is work that the Trust wishes to support. We are however seeking to work closely with PFD to ensure that the methods used for possum control pose the lowest risk possible to kaka.

A key first step in protecting kaka outside the fence is to know where they go. Two exciting new research projects have been launched this year to address this question. Scott Forrest, a Masters student at the University, is using VHS and GPS transmitters to track the routes and locations of individual birds. Second, a community-based project led by Taylor Davies-Colley will report kaka sightings from the communities surrounding the sanctuary and record them on a database designed for Orokonui.

Mice continue to sustain a population in the sanctuary, despite energetic attempts to reduce their number to low levels. Eighty-five percent of tracking tunnels recorded mice in April 2019 (but no other mammals). In July 2660 poisoned bait stations reduced the tracking percentage to 3% in September. Numbers have since recovered again (to 15% in December) and in future the objective will be to control mice numbers rather than eradication.

The control of unwanted flora continues. Over the year, 500 pine and eucalypt tress have been felled by Otago Polytechnic arboriculture students, and staff and volunteers continue to control eucalypt saplings, Darwin’s barberry, gorse, and remove lichen from the hood of the fence.

An assessment of possible causes of the loss of the tieke population in 2015 was completed. Written by Elton, it was then reviewed by three scientists, and gives us an authoritative analysis of the loss. It concludes that the most likely cause is a stoat incursion. The stoats responsible have been killed. A mustelid detection dog visiting the sanctuary in May 2020 did give indication of a mustelid in the Marie Block, but a subsequent check in August has found no trace. It is safe to conclude that the initial indication was in error.

## **Education**

With a mission to change public attitudes to conservation, the work of Tahu and Taylor and their volunteer supporters with students of school-age and above is one of Orokonui's most important programmes. During the year, 6,265 students participated in Orokonui programmes, both at the sanctuary and in-school. New secondary-level programmes have drawn students from Taieri College, Otago Boys, Kings High School, and also two colleges from Oamaru: St Kevin's and Waitaki Boys. University departments continue to make use of the sanctuary to deliver their programmes, including Zoology, Ecology, Geography, Entrepreneurship, the College of Education, and Science Communication, as do Communication Design students from Otago Polytechnic.

Education staff are also active promoters of the sanctuary in community events. This year these have included the Wild Dunedin Festival, the New Zealand International Science Festival, the DCC pop-up garden display, a short film #FIVEWAYS to Wellbeing, and regular displays at Mitre 10 and Meridian Mall. An exciting prospect for the future is a New Zealand version of the very successful BBC series, Wild Watch. NHNZ plans to film a New Zealand version of this series featuring Orokonui.

During lockdown, Education staff remained active, delivering sessions online, four days each week, via Zoom, Facebook, Google, and Skype. New materials for classroom use have also been developed in collaboration with Communications Design students at the Polytechnic, and Science Communication at the University. A highlight here was a colouring book for schools, 10,000 copies of which were distributed, sponsored by Ray White Real Estate.

Thanks to Tahu, Orokonui has also been visited this past year by Suzi Cato, Green MP Golriz Ghahraman, and the Minister for Conservation, Eugenie Sage.

## **Research**

The Orokonui Knowledge Group has been in operation since 2016, giving advice to the Trust Board on research projects undertaken in the sanctuary. The Group met five times over the past 15 months. Projects underway since the last AGM include: invertebrate diversity in the sanctuary; bryophytes; tuatara nesting behaviours; spider ecology; Tupeia antarctica mistletoe; Otago skinks; jewelled geckos; a census of our kohanga kiwi population; fernbirds; e-coli; fence movement; fungal diversity; forest ecosystem stressors; and kaka dispersal.

Dr George Pickerell completed an update of the sanctuary's Restoration Plan. This was first written as part of the founding documents of the sanctuary and had not been updated since. The new plan has had a thorough review by members of OKG and other scientists and has since been adopted by the Trust Board. It lists the species which we should seek to prioritise for introduction to Orokonui's developing ecology.

Marie and Rob Ballagh have developed a database to store information on all the research that has been done, and will be done, in the sanctuary. This is one of the objectives for Orokonui's Second Decade Strategy and is a great contribution to the sanctuary's profile for research. The database covers 33 projects that have been completed or are still underway since 2015 and gives information on the topic, the researchers, and any available publications and reports. It is intended that the sanctuary's website be used to give profile to this assembled record of research at Orokonui. Policy on access to the database has been developed and adopted by the Trust Board.

In September, the sanctuary hosted a second Research Workshop, giving papers on nine Orokonui research projects. Guest speaker was Nicola Toki, DOC's Threatened Species Ambassador and delegate for New Zealand to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) – the new international group that aims to do for biodiversity what the international convention of climate change is doing for the environment.

### **Our volunteers and members**

Orokonui has always been a community project. The 750 members of the Trust, drawn primarily from the Dunedin community, collectively own the sanctuary and are the ultimate arbiters of its governance and management, enacted each year in this annual general meeting. Alice Macklow, our volunteer and membership coordinator, has had success in growing memberships: 16% of members surveyed over the winter joined this year. Other headline results from the survey: people become members because they believe in the goals of the Orokonui project; 80% are over 50, only 3 under 30; and 94% live in Dunedin.

Over the past year 300 volunteers contributed 10,000 hours of labour (the equivalent of 6 additional staff), working on every aspect of the sanctuary's operations: weeding, track maintenance, pest management, feeding, species monitoring, fence monitoring, reception, education, accounting, and governance. The new building has given the voolies a welcome home base and gathering place. All volunteer activity had to cease in March following the Covid shutdown.

### **Infrastructure**

Two important reports on the sanctuary's infrastructure were completed, or nearing completion, during the past year. John Cocks completed a comprehensive assessment of

risks to the fence and perimeter road from extreme events – floods, wind, and earth movement. This was used to successfully bid for a \$100,000 grant from the Otago Regional Council. This will cover one third of the anticipated cost of proactive fence and culvert protection work. A number of culverts have already been upgraded as part of this project. The second report, currently nearing completion, is a Strategic Asset Management Plan prepared for us by the University's Murray Gray. This projects the costs required to maintain all of the sanctuary's current assets, totalling \$1.6 million over the next 20 years. To this would be added the cost of financing new assets such as a second building to support an expanded education programme. These are sobering sums, but we must also remember how much has been achieved in the 12 years since the sanctuary's foundation. Both reports have been offered to the sanctuary as free contributions by people who wish to support its work with their distinctive professional skill. So many people will enjoy the benefit of their gift, and it is my privilege and pleasure to thank them warmly on their behalf.

Led by our infrastructure ranger Geoff, considerable work has been done on sanctuary infrastructure over the past year: the worst sections of monitoring tracks have been upgraded (21km in May/June alone); gravel donated by Blackhead quarries was dropped by helicopter to the Valley and Pokaka tracks and the Pokaka and Robin Valley tracks have been resurfaced with gravel; in December the Highlanders team distributed 30 tons of this gravel covering 800m of the Valley Track in just one day! Blackhead Quarries has also made a generous donation of gravel to re-surface the exterior perimeter road. Work on this is being done as part of the upgrade of the perimeter fence. In June 2020 work began to construct the breeding enclosure for jewelled geckos.

Camera monitoring of water gates showed its value in October when a branch was seen jamming open a gate, allowing quick removal. Open gates are one of the most likely points of access into the sanctuary for predators. Over the year there was a small number of damage events to the fence due to branches breaking off in high winds. All were minor and none threatened a breach; but all required after-hours callouts by staff.

### **The Board of Trustees**

The greatest sadness of this past year has been the tragic passing of Jane Higham who has been minute secretary to the Board since its inception. Our sympathies have been expressed to Richard in several memorial events. She will always be remembered as one of the people who gave Orokonui its special character and purpose. Less painfully, I want to record the retirement of Professor Claire Freeman as an advisor to the Trust Board. From her many contributions, the sanctuary will continue to gain long-term benefit from her Research Strategy paper that has guided the work of the Knowledge Group since its formation five years ago.

Two long serving trustees retire at this AGM. Ross Smith has held the position of Treasurer for over a decade. In that time he has carefully husbanded the sanctuary's finances, building up reserves that now approach \$1 million, a fund that has protected the sanctuary through the extraordinary challenge of the Covid epidemic, and will continue to secure its future for

the difficult years ahead. Half of these reserves are held in the Orokonui Foundation, an independent body set up by Ross to accumulate a capital fund that will, in time, generate sufficient income to ensure the sanctuary can continue operation through any crisis. I am retiring from my various roles at this AGM. I have been chair of the Trust Board for five years and a trustee for eight. It has been a privilege to carry these responsibilities on behalf of members. I hope that some of my efforts will continue to serve the sanctuary well: the Orokonui Knowledge Group, the committee of scientists and conservationists that gives the Trust Board advice on the research done in the sanctuary; Orokonui's Second Decade Strategy to 2030, which I hope will return to give direction to the sanctuary's long-term development once the constraints of Covid are lifted; this past year's review of Orokonui's governance structure; and, most important, the trustees and directors of OEL that I have recruited to the two boards.

In that context, I take this opportunity to express my personal thanks, and that of the whole organisation, to two directors of OEL who have retired this year. Sharon van Turnhout is the Finance Director of the University who, despite these heavy responsibilities, has served as a director of OEL since 2016, guiding our decisions with deep experience and judgement. Emeritus Professor Brendan Gray also joined to the OEL Board in 2016 and has given Amanda much-valued advice on marketing and communications. The ability of the sanctuary to attract contributions from people of this calibre must give us all great hope for its long-term future.

During the year, the two boards reviewed the governance structure that gives direction to the Orokonui project. The result has been a clearer definition of the distinctive roles and responsibilities of the two boards. OEL has been given more complete responsibility for operating the sanctuary, specifically for maintaining assets (which remain in the ownership of the Trust). The Trust Board is thus freed to focus on the long-term development of the sanctuary and its core missions of conservation and education. Five new trustees are standing for election at this AGM who, together with returning trustees, create one of the best-qualified groupings of conservationists in the region. It is hoped that the new structure will improve accountability and articulation of effort between the two boards.

In other work, the Trust Board made a submission to the recently-completed New Zealand Biodiversity Strategy Review. Submissions were made to the annual plans of both City and Regional Councils. It will be more important to be recognised as part of the 10-year plans being created by both councils early next year. I continued to serve as Secretary to Sanctuaries of New Zealand Inc. the national body representing community sanctuaries. I hope that this important connection to the national sanctuaries movement is sustained. As ONHT Chair, I initiated meetings with other community conservation groups in the Dunedin area, feeling that groups like ours needed to have a concerted voice to match that of larger and much better financed organisations. This has gone quiet after Covid lockdowns, but I hope it will be revived. Particularly promising cooperations are possible once the Taking Orokonui Home project gets going; but that too has been put on a back burner for now.

This has been a uniquely challenging year. So many organisations have folded under the pressure of the Covid epidemic. The fact that Orokonui has survived these extraordinary challenges is testament to the careful financial planning of past years, but primarily to the dedication and courage of our General Manager, Amanda Symon, and her staff. It has surely been the hardest year in the life of the sanctuary and I express members' admiration and thanks for the resolution that all have brought to getting through this most demanding year. The years ahead will not be easy either, but there are grounds to hope that the worst is now behind us.

Orokonui has been a big part of my life for the past five years, and has been an important part of my life since before it even existed. It will always be one of the most powerful vehicles we have to help people realise the steady degradation of our environment, and the loss of the wondrous and unique species that exist nowhere else on earth. Again and again over these past years I have found people who are ready to offer their expertise and effort to help the sanctuary fulfil its mission. Orokonui has been a magnet for people who care for our precious taonga, and it always will be. The fight to make our country safe again for the creatures who were here before us will never be over. But I know that the Orokonui Ecosanctuary will always be our best recruiter for the generations of people who must continue the good fight. Kia Kaha!