Case Study

Combining construction with conservation: Isaac Construction

August 2021

Isaac Construction is unusual among quarry companies in having a conservation trust as its owner. The trust's partnership with the Canterbury contracting company ensures nationally significant conservation of some of New Zealand's rarest bird species.

Introduction

Isaac Construction Limited is an independent, South Island based, quarrying and civil contracting company founded in 1950 by Sir Neil and Lady Isaac. It is owned by <u>The Isaac Wildlife and Conservation Trust</u>, a registered charity and the focus of this case study.

The Trust's 1100 ha landholding is located at McLean's Island, a substantial and complex site that includes residential, rural, commercial, industrial and quarrying. These operations collectively provide the income that allows the Trust to be entirely self-funding. Here too is located Isaac Construction's head office and base of operations, which extend into greater Canterbury, the West Coast, Dunedin and Marlborough. Its activities include: quarrying, roading and other civil construction, transport, drainage, traffic management, services in contract management, engineering and fleet mechanical, and civil laboratories. The company employs around 350 FTEs, as well as a temporary workforce of 30-50 people.

Isaac Construction has as its motto: "Combining construction with conservation" and staff are motivated and inspired that their work also contributes towards the Trust's achievements in conservation. This is an integral part of the company's culture.



The Trust runs breeding programmes for several endangered endemic bird and other species. Under a memorandum of understanding with the Department of Conservation, the Trust currently has a captive breeding programme for five endangered bird species.

Native flora conservation is another vital role for the Trust. At present its efforts focus on native riparian plantings across the 1100 ha Isaac site. The Trust also assists other likeminded organisations with their planting programmes.



McLean's Island Quarry.

Ōtukaikino Stream

The Trust is committed to restoring the Canterbury waterways known as the Ōtukaikino, with a south branch and several north branches, originating on the Isaac site. The Ōtukaikino south branch runs through Isaac Construction's McLean's Island quarry to recreational areas, including The Groynes, Clearwater Resort, Roto Kohatu, and Waimakariri Recreational Reserve. The Morgan Foundation awarded to the river the Grand Award for "most improved river in the country" at the 2014 New Zealand River Awards.



Ōtukaikino Stream.



Replacing plant pest species with native riparian planting is ongoing exercise along the Ōtukaikino waterways. The Trust's work has included fencing off riparian margins from stock, with some 60,000 natives planted to date; and creating streamside walking tracks for public access along the eastern boundary adjacent to Clearwater Golf Resort. Land clearance along this corridor has occurred in partnership with Environment Canterbury, Christchurch City Council, the New Zealand Fish & Game Council, and the Department of Corrections.



Walkways provide public access to riparian conservation.

Supporting education, research and heritage

The Trust promotes the conservation and environment ethos through education and research, e.g. via postgraduate scholarships at both Lincoln and Canterbury Universities. The Sir Neil Scholarship is awarded annually at Timaru Boys' High School, which Sir Neil had attended.

Over the years the Trust's activities have further expanded to include the preservation and conservation of heritage buildings. The Isaac Heritage Village buildings date from c1860 to c1940 and were relocated to the Isaac site to preserve them, as otherwise they were threatened with demolition or decay.

The Trust won the Canterbury Conservation Week Award in 2019 in acknowledgement of its enduring partnership with DOC, and in recognition of its pivotal role in the protection and recovery of New Zealand's most threatened species.

In 2021 the Trust's wildlife manager, Anne Richardson, earned the New Zealand Order of Merit for 28 years of services to conservation. Isaac Construction was a finalist in the 2018 Minerals Sector Awards for environmental management, in recognition of its support of the Trust's work programme.

The 80 ha of conservation activities based within the Isaac site includes the captive breeding facilities, which operate largely within a rehabilitated quarry and focus presently on the following five bird species.

Orange-fronted parakeet / kākāriki karaka

Previously declared extinct twice, the Trust has bred and raised more than 800 kākāriki karaka during 18 years of working with this species, which now numbers only a few hundred in the wild. Captive-raised juveniles are provided to DOC staff who determine the release sites. They include predator-free islands, and its natural home in indigenous beech forest in the Canterbury high country near Arthurs Pass.

In the last three years the Trust has successfully raised for release 66 birds into Lake Sumner Forest Park, with the support of DOC, Ngāi Tahu for whom kākāriki karaka is a taonga species, and Christchurch Helicopters.



Orange-fronted parakeet / kākāriki karaka.





There is today also a stable kākāriki karaka population on Blumine Island/Oruawairua in the Marlborough Sounds.

Other bird species

The critically-endangered **black stilt/kakī** is another indigenous bird species the Trust has helped save from extinction. The black stilt is the world's rarest wading bird that in the 1970s numbered only 26 individuals in the wild. Purpose-built aviaries on the Isaac site, specifically for breeding this species, has allowed numbers to now climb to 40 pairs at the release area near Twizel.



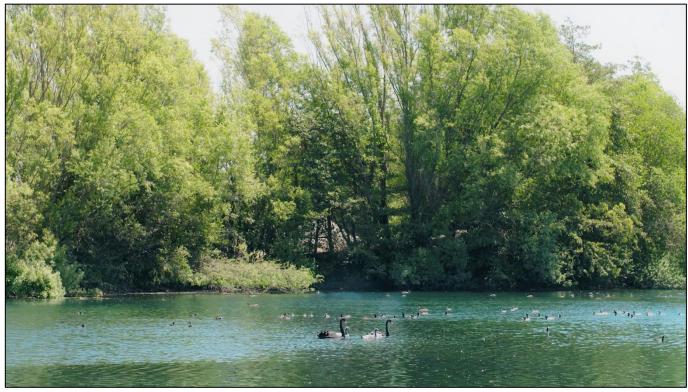
Black stilt/kakī.

Also critically endangered is the **New Zealand shore plover/tūturuatu**. Today the only wild population is restricted to one of the Chatham Islands and limited to around 150 birds due to the small island size. The Trust breeds this species also in a purpose-built aviary, for release on other suitable islands as backup populations, to insure against pest outbreaks or other stressors.

For 15 years the Trust has also been hatching and raising **blue duck/whio**, including from wild eggs delivered to the Trust for incubation and hand rearing. Numbers in the Nelson-Tasman region alone have increased from four males to 54 birds over the last five years.







A former quarry at McLean's Island, Christchurch, is today a haven for waterfowl.

All brown teal/pāteke in New Zealand released into the wild are first pre-conditioned at the Isaac site. The aviaries contain natural food, water weed, and invertebrates, to allow this small, native duck to learn to find food naturally, ahead of later release into the wild to boost populations of this threatened species. The trust presently holds seven breeding pairs, and has bred and released more than 1500 individual birds.

The Trust's vision, wide ranging and far reaching, continues the legacy of its founders, Sir Neil and Lady Isaac.



Brown teal/pāteke.

Case study sources: Isaac Wildlife and Conservation Trust, Isaac Construction Ltd