LPC leads New Zealand for biodiversity
» Page 02

Jetty piles get new lights
» Page 03

Dry Dock Safety Upgrade
» Page 04

Lyttelton Port Company

LPC Update

Issue 30 June 2024

Lyttelton Port Company Community Newsletter

OUR PEOPLE

LPC Joanne Farmer's pioneering pilot career

Joanne Farmer, a prominent face at the Lyttelton Port Company for over two decades, has recently retired from the bridge piloting vessels in and out of the harbour.

She was the first woman in New Zealand to obtain her Master Foreign-Going (MFG) Certificate, command a vessel and become a harbour pilot.

Her journey at sea was always in her blood. Her grandparents were in the shipping industry, and her father worked as a fisheries inspector.

Along with former LPC Pilots John Clarke and Finlay Laird, Joanne belonged to the Lyttelton Sea Venturers. They all applied to the Union Steam Ship Company for apprenticeships, were all accepted and all piloted in Lyttelton.

Joanne went through the Union Steam Ship Company fleet and earned her second mate's certificate. She then got a job as a third mate on the Aotea (P&O NZ) and worked with Roselyne Yeandle, another New Zealand female marine pioneer.

In 1990, Joanne gained her master's certificate, and after leaving Hong Kong, she joined Jardine Ship Management.

She spent 10 years with Jardine sailing around the Mediterranean, up the Amazon and around ports in Brazil, Japan, British Columbia, the United Kingdom and the United States.

Joanne says her greatest achievement as a pilot was her first solo pilotage – the Dong Wong 529 into Z berth in a howling southerly.

"There were no tugs, 8 metres clear ahead and 8 metres clear astern. She went in perfectly, never to be repeated," says Joanne.

She also recalls when she met her brother at the pilot ladder, was escorted to the bridge and dutifully handed a piping hot cup of tea.

"Lyttelton has always been home, and when I got a call that Lyttelton Port Company was hiring, well, the rest was history."

Joanne retired from piloting this year and now works as a marine project specialist.

She says she would highly recommend a career as a pilot to anyone.

"Piloting is extremely rewarding, and every day is a school day," she laughs.

▲ Joanne Farmer spent over two decades on the bridge piloting vessels in and out of the harbour.

ENVIRONMENT

Nature champion: LPC leads New Zealand for biodiversity

◀ LPC staff cleared the weeds at LPC Gollans Bay Covenant Site above the quarry.

LPC is the first New Zealand company to sign up as an early adopter of publicly reporting nature-related issues.

How does LPC intend to respond to nature-related financial risks and dependencies?
Like climate-related disclosures, companies are encouraged to understand their financial, social and environmental risks to nature loss and how they plan to respond.

LPC follows the frameworks Taskforce on Nature-related Financial Disclosures (TNFD) and the Science-based Targets for Nature (SBTN).

What is LPC doing?
LPC is the only New Zealand company to commit to disclosing our nature-related risks and dependencies this financial year. LPC is working with other organisations to assess impacts, develop targets and take action.

According to the World Economic Forum, global biodiversity decline is one of the top 10 risks to our future. The global economy depends on nature, yet habitats and biodiversity are in poor health.

New Zealand is one of the 200 governments worldwide to commit to urgent action for nature.

Our Environment and Sustainability team has been working through the steps needed to understand LPC's impacts on nature and how LPC depends on nature. Soon, we will be working with others at LPC to identify our most significant risks and opportunities relating to nature and where we will prioritise to take action.

How dependent is LPC on nature?
We rely on raw materials for our projects such as cement, timber, asphalt and rock to fuel our machinery. Our business depends on nature's health to support the trades that use fisheries, agriculture, timber, dairy, recreational vessels, etc.

We rely on the quality and quantity of freshwater to operate and the harbour's ability to dilute and buffer the run-off we discharge. Nature's storms and tides determine the state of the channel and the need for dredging.

How much impact do LPC's activities have on the surrounding environment?
Dredging, reclaiming the seabed and shoreline, discharging pollutants into the air, land and water and utilising land for our activities all impact nature. We have mapped the extent of our activities and the habitats they overlap with.

Compared to the time before the Port existed in Whakaraupō in 1860, we are calculating how our activities have changed the environment and impacted biodiversity.

ENVIRONMENT

Local companies turn bark waste into garden products

Local companies have found an innovative way to turn bark waste collected at the Lyttelton Port log yard into useful garden products such as potting mix, soil conditioner and garden chips.

The bark is mixed with recyclable sawmill waste and forest operations residue in the raw material mix.

This initiative is the result of a collaboration between Port operators, forest companies and Intelligro, a leading manufacturer of landscaping products.

Forestry management and consulting and harvest management company Laurie Forestry says that Intelligro and several other companies have been using the clean bark for a long time. The challenge is finding a way to use lower-quality material.

The system has been refined into a vast operation using raw materials from as far away as Picton.

The bark is screened and mixed with other materials, including clean bark from sawmills, and used to create highly sought-after nursery blends.

At the Lyttelton Port, bark falls off trucks as they are unloaded and swept into a storage area.

Intelligro then collects the accumulated bark and uses it as a byproduct in compost production.

Waste Management's sweeping programme sweeps up dust, collects the bark and adds it to the pile.

◀ Local companies turn bark waste into garden products.

Also, after each shipment, residue bark is swept into storage for Intelligro to collect and load between log loading operations.

"The bark has gone from being a problem residue to a sought-after commodity and helps to cover some of the costs of maintaining the yards," says a representative from the company.

"This is a fine example of what can happen when you get a team of people working together so that all parties benefit from the relationship."

PORT NEWS

Jetty piles get new lights

LPC has recently installed lights on steel piles to indicate the shallow-water zone created by removing Jetties 4 and 5.

The lights and markers will help Port users navigate the Port safely and efficiently, night and day.

LPC recently removed Jetties 4 and 5 as part of our ongoing Port redevelopment project. These jetties were old and no longer fit for purpose.

Their removal created a shallow-water area that could pose a hazard to Port users.

For safety, LPC has set up a demarcation zone with lights and markers to indicate the shallow-water area.

A line of eight steel piles with lights marks the eastern boundary, while five yellow buoys with lights mark the southern boundary. The western boundary is the existing Jetty 6.

Lyttelton Port Company reminds all Port users to stay clear of the demarcation zone and avoid entering the shallow-water area.

The lights and markers will help you navigate the Port safely and efficiently.

◀ Recently installed lights on steel piles indicate the shallow-water zone created by removing Jetties 4 and 5.

PORT NEWS

Coal yard shines with intelligent LED lights

Have you noticed how bright the coal yard is these days? Lyttelton Port Company has installed new lights on 10 poles covering the 9-hectare coal site.

These are not just ordinary lights but smart lights that can be controlled using an iPad in the Coal Supervisor's office.

"We can change the lighting set-up with just one tap on the control pad," says Project Manager David Jones.

"We can also switch on and off or dim individual lights to suit the working conditions in the yard."

David says the new system allows them to pre-set lighting configurations for different lighting situations.

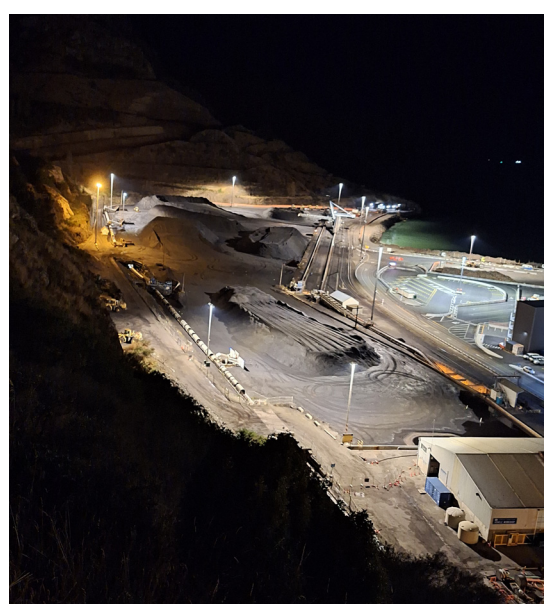
"The new LED lights are much better than the old sodium lights. They make the coal yard brighter and reduce the glare for the drivers," says David.

The poles vary in height from 12 to 30 metres, and the number of lights on each pole depends on the lighting needs for the coal yard and the road.

The poles also have to support a weight of more than 40 kilograms of lighting equipment.

The poles have two types of lights: smaller ones for the road and larger ones for the coal yard.

So next time you see the coal yard glowing, you'll know it's thanks to the new intelligent LPC lights.



12–30m

Poles vary in height from 12 to 30 metres

40kg

Poles support a weight of more than 40kgs of lighting equipment

10

10 new light poles cover the 9-hectare coal site

◀ Lyttelton Port Company has installed new lights on 10 poles covering the 9-hectare coal site.

COMMUNITY

LPC hosts learning opportunities for students

LPC hosted 16 young people as part of the Whakaraupō Moana Programme run by Untouched World.

The Whakaraupō Moana Programme aims to help youth explore and understand the complexity of issues within the natural environment.

The high school and university students took a Port tour and learned about our economic role, job opportunities and Port operations.

LPC's Environmental team members Charlotte Jones and Kirsty Brennan discussed environmental management while NIWA provided information on marine biosecurity surveillance.

COMMUNITY

Sponsorship applications are open

Applications for LPC's sponsorship programme are open until the end of July.

Through its sponsorship programme, LPC is committed to supporting the Te Whakaraupō Lyttelton Harbour Basin and Rolleston communities.

We provide financial or in-kind support for activities that will deliver ongoing benefits to the community.

LPC has a long history of supporting the local community through its sponsorship programme.

For over 20 years, LPC has supported the Quail Island Ecological Restoration Trust in transporting plants to the island for its annual planting programme and providing financial support throughout the year.

LPC is also the Banks Peninsula Conservation Trust's principal sponsor, supporting its work with the harbour and peninsula's biodiversity.

LPC also supports local sports clubs, including the Lyttelton Netball Club and Lyttelton Rugby Club.

Don't miss your opportunity to apply for LPC's sponsorship programme to support your organisation or initiative.

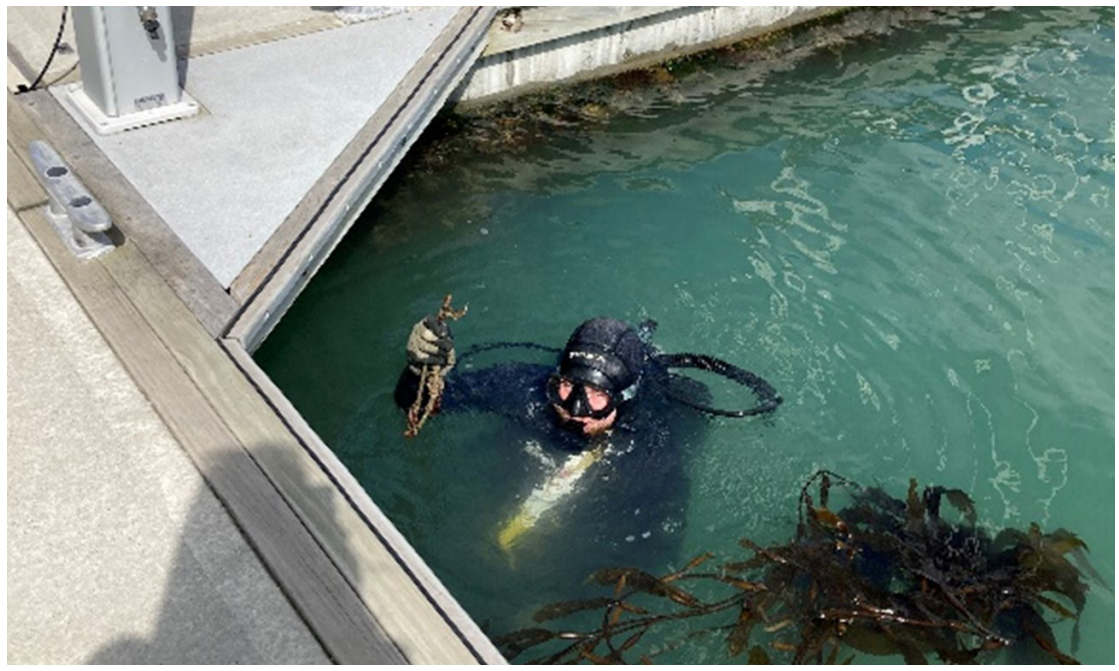
To apply, please go to www.lpc.co.nz/community/sponsorship.

Fill out the sponsorship application form and see the sponsorship policy for more information.

Applications close on 31 July 2024.

600 fanworms discovered at Te Ana Marina

A large, tube-dwelling worm lurks beneath the surface of the water in Lyttelton Harbour, attaching itself to vessels and structures.



◀ Diver holds fanworms found in the harbour that likely originated from a vessel travelling from overseas.

This Mediterranean fanworm (Sabella) was detected in Lyttelton Harbour in 2008, the first time it was found in New Zealand.

It likely originated from a vessel travelling from overseas. The fanworms grow in dense clumps and, with their fan-like appendages, block light and food to native species, starving them.

Over the years, Biosecurity NZ, the Canterbury Regional Council (Environment Canterbury) and Lyttelton Port Company have undertaken efforts to reduce the fanworm population within the inner harbour and stop the spread into the wider Lyttelton Harbour and beyond.

In 2021, LPC and contract divers removed 900 fanworms from the jetties and pontoons in the inner harbour. Six-monthly surveillance since this time has shown that the population is increasing again.

Jetties 4, 5 and 6 were removed to stop a potential source population of fanworms.

To date, 210 fanworms have been removed with the jetty piles. A recent dive survey of Lyttelton Harbour, jointly funded by Environment Canterbury and Biosecurity NZ, has shown that fanworms have not spread outside the inner harbour, which is encouraging.

Recreational vessels are the most significant source of spread. Environment Canterbury funded fanworm removal at Te Ana Marina.

Over two days, divers hand-picked 600 invasive fanworms from the pontoons, piles and vessels at the marina, one measuring 70 centimetres long.

LPC is working on a Te Ana Marina Biosecurity Plan, and the marina team are doing a great job screening new vessels that wish to visit. Vessels must prove they have a clean hull before entering the marina and maintain this during their stay.

Te Hapū Ngāti Wheke strongly advocates for a clean hull policy for Lyttelton Harbour.

By collaborating with other organisations, we hope to reduce the risk of fanworm within Lyttelton and stop its spread to other locations.

Dry Dock safety upgrade

Since the dock was opened in January 1883, workers and crew have been able to walk on the stone steps and concrete altars without handrails or barriers to protect them from a fall.

From August, dry dock customers, ship's crew, and workers who use the dry dock as a place of work will be able to access the dock floor and walk around the altars using new safety systems designed to prevent the risk of falling from heights.

Not since the electrification of the dry dock in 1926 has this historic place seen such a major shift in the way that work will be carried out. Continuing to invest in safer systems to protect workers from a fall from height, this year LPC are installing new stairs and fall protection lines.

However, as the oldest of two working dry docks in New Zealand, the Lyttelton Dry Dock has a category 1 heritage status. This means approvals are required from Heritage NZ Pouhere Taonga and Christchurch City Council before works can be undertaken, which could potentially damage or alter the stone and concrete structure that was originally installed in the 1880s.

Alongside in-depth discussions with those who use the dock daily, the project team looked to engineering and heritage specialists to design approaches that would meet the needs of the workforce, be structurally sound, and limit the impact on the historic fabric.

The innovative solution has been to install over 200 ground anchors, which, across the four top altars, will support over 1km of horizontal lines that workers can clip onto.

New stairs at the head and gate ends of the dock also utilise the ground anchors for structural support. The frames, treads, and landings slot into specially designed brackets fixed to the ground anchor, holding the bulk of the weight. All other fixtures and fittings rest lightly on the dock structure, meaning that if they are removed in the future, all that remains is the ground anchors.

The new stairs have been designed specifically to meet the bespoke requirements of the dry dock and can be adjusted depending on whether the dock is dry and vessels are under repair or when the dock is flooded and vessels are entering/exiting over the sill. These innovations include handrails that can be removed or folded out, stair flights that can be lowered or raised, and whole sections that can be removed.

◀ Artist impression of stairs in the Dry Dock

LPC Update emailed

Want to stay up to date with the latest port news? Sign up to our monthly Harbourwatch emails at www.lpc.co.nz. For more information about LPC, visit or follow us on: