The rise and fall of TACC

There is much noise about the state of the tarakihi fishery at the moment.

And that is to be expected, as *Fisheries New Zealand* says the stock has fallen below the soft limit of 20 percent and estimates it is depleted to around 17 percent.

The *Review of Sustainability Measures* paper proposes that on 1 October the Total Allowable Commercial Catch (TACC) for East Coast North Island and East Coast South Island tarakihi be reduced drastically. Three proposals of various severity have been put up. All of which will have an impact on livelihoods.

So how did we get here?

Most of New Zealand's commercial fisheries are in good shape. Other changes in the sustainability round recommend an increased TACC for eleven species which are showing signs of growing abundance while only three, including tarakihi, have fallen below the soft limit and will face cuts.

Fisheries New Zealand use scientific assessments to calculate the health of a fishery. Those assessments show that some 96.4 percent of fish of known status come from stocks where sustainability is not a concern.

Until late last year there was no concern about tarakihi; the fishery has been relatively stable for decades. However, after the first comprehensive assessment of tarakihi was carried out, the science indicated that stocks could have been below optimal levels since the 1970s and depleted, below 20 percent, since the early 2000s.

Clearly we need more science, however science is expensive. The commercial fishing industry pays around $30 million in levies to the government each year to cover a number of MPI services, including compliance, observers on vessels, and research. Of that $30 million, roughly a third goes to research which includes specific research projects and stock assessments, therefore the amount on stock assessments will vary depending on how much other research is being undertaken.

It is in both the government and industry's best interests that we operate on the best science available.

Some believe the government needs to adopt a more pragmatic approach. Less expensive monitoring and more frequent management form part of the answer. Others believe *Fisheries New Zealand* need to examine closely its priorities and most importantly its research funding model.

Whatever the answer, what should not be lost in the noise around tarakihi is that when we identify issues, we respond. Action will be taken promptly to rebuild this fishery, most other stocks are healthy and in some the abundance is so significant the TACC is being raised substantially.

This is the Quota Management System at work. When the science is applied and the assessments are made, our fisheries will remain in the best of health.

Increases in TACC are proposed for; Southern blue fin tuna (all of New Zealand), East coast South Island kingfish, East coast South Island elephant fish, East coast South Island red gurnard, East coast South Island scampi, Chatham Rise orange roughy, Chatham Rise oreo, West coast South Island john dory, West coast South Island rig, Southern ling, and Stewart Island pāua.

Decreases are proposed for; Northern North Island flatfish, Northern North Island John Dory and East coast North Island and South Island tarakihi. The Kaipara Harbour scallop fishery is facing closure.

NZ Seafood Industry Conference

Less than a week until conference

The New Zealand Seafood Industry Conference and Technical Day will be held on the 1st and 2nd of August at Te Papa.

The programme has been finalised and it is a packed agenda on both days, with an excellent line up of local and international speakers. View the full programme here.

This year we have a dedicated conference app '2018 NZ Seafood Conference' that is available to download from the Google or the Apple app store. This will be a great platform for accessing the latest updates and connecting with other delegates on the day. If you are

already registered for conference, you can download the app here.

Make sure you register online now.

Kākahi on the move

Lower North Island iwi and conservationists launched an ambitious project in Wellington this week, with the hope of reviving the at-risk kākahi freshwater mussel population.

Two hundred kākahi were relocated from Parangarahu Lakes and Wairarapa Moana to Zealandia eco-sanctuary – the first step in a ten year restoration plan.

Zealandia conservation project leader Pascale Michel said the endemic species are “ecological engineers”, with a single mussel filtering approximately one litre of water per hour.

Known as filter-feeders, kākahi have a crucial role in water quality – feeding on minute floating particles in the water, including bacteria phytoplankton, detritus and micro-zooplankton; as well as deposited organic material (e.g. silt).

"The two reasons why we’re bringing back the kākahi is to expand the range of the kākahi itself and give it a new habitat… but also the species is quite important for the ecosystem," Michel said.

Victoria University freshwater ecology scientist Amber McEwan said degrading water quality is one reason behind their decline. McEwan will study the relocation and whether a new location improves survival rates.

"We’re going to tag all the kākahi with external microchips… to work out what it is they need… and just how we can manage translocations in the future [because] hopefully we’ll be doing a lot more," she said.

The project is a collaboration between Zealandia and Taranaki Whānui, Rangitāne o Wairarapa and Ngāti Kahungunu.

Taranaki Whānui made flax kete to collect the mussels from Lake Kohangapiri before they were transported to their new home.

Te Āti Awa Taranaki Whānui trustee Holden Hohaia, said iwi want to rejuvenate the mauri (essence) of the Kaiwharawhara Stream, with Zealandia's waters forming part of the top catchment.

"It's awesome. One of the opportunities we're really keen to explore is whether we can re-establish this taonga so that it's so abundant that we can actually harvest it for kai," he said.

The kākahi will be released into the upper lake in Zealandia eco-sanctuary after 10 days in quarantine, where they will get to work cleaning their new home.

Parangarahu Lakes

Toothfish vessels bring work for Nelson

Port Nelson’s ship repair team have received a boost in work this winter, with the first arrival of three international toothfish longliner vessels.

The *Nordic Prince* – a 2004 tonne longline fishing vessel owned by Argos Froyanes Ltd – will be the first vessel to receive several months of repair work from Aimex Service Group and several other Nelson based contractors.

Chief engineers from Nelson will work in collaboration with the vessel’s Turkish manufacturer as part of its first-year warranty repairs.

"Because it's a new build, it's like a new house – sometimes you have to get the electrician back because maybe some pumps aren't working as well as they should," said Winsome Dormer of the ship's agent, Independent Provedoring.

The second vessel, the *Argos Georgia*, arrived on July 25 and the third vessel, *Argos Froyanes*, is expected by the end of August.

All three will remain docked in Nelson until November when they will make a pit-stop for provisions in Lyttelton harbour before heading out to fish in Antarctica's Ross Sea.

Both the *Nordic Prince* and *Argos Georgia* were built in Yalova, Turkey this year and sail under the British flag. Each ship measures 54 metres in length and has a 407-tonne carrying capacity. The vessels feature ice strengthening and an innovative hull that's combined with a next-generation drivetrain that delivers 30 percent fewer CO2 emissions.

A specifically designed moon pool will bring fish on board in the centre of the hull and will provide safer working conditions for the crew.

The vessels operate under quota for toothfish in the Southern Ocean and the southern Atlantic Ocean.

Longline vessel *Nordic Prince* in Port Nelson. Photo credit: Martin De Ruyter

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Canterbury salmon's North American roots

Members from the Winnemem Wintu tribe of northern California have returned to New Zealand searching for a genetic link to an extinct species of Californian salmon.

The salmon that spawn in Canterbury's Rakaia River are thought to be direct descendants of the chinook salmon that vanished from the McCloud River after the Shasta Dam was built in 1945.

Fish culturist Livingston Stone established a hatchery near Winnemem Wintu land nearly 120 years ago to revive the decimated stocks, eventually translocating McCloud salmon to 14 countries. Only those taken to New Zealand survived.

The tribe first visited the Rakaia and Waimakariri Rivers in May, to determine whether local fish were the same and whether they could be reintroduced into the tribe's land.

Testing began in June to ensure the fish were a "winter run" suitable for restocking the McCloud.

Fish and game, volunteers and the tribe helped to net 70 fish and collected 45 samples from the rivers and sent them for testing at the University of California. Relating the two species will be difficult, as the extinct salmon means there is no DNA for comparison.

"They've been going around seeing where we're sampling and how we're doing things now we're underway ... we expect some results back very soon." Fish & Game spokesman Richard Cosgrove said.

The chinook salmon is now critically endangered across California – a tragic loss for the Winnemem Wintu tribe who have a strong spiritual connection to the fish.

"Ultimately, if we can get that opportunity to repay the Winnemem people with the winter run genetics, it would be absolutely amazing," Dirk Barr from Fish and Game said.

If the tests indicate a genetic link, the salmon could be reintroduced back to tribal waters within a few years.

"It's very special for us, a fulfilling of a prophecy. We would have a food source back, a spiritual contact with the salmon. The ecosystem is crying out for the salmon to return, as well as the people." Tribe chief Caleen Sisk said.

Winnemem Wintu tribe chief Caleen Sisk.

Ocean Bounty - Inshore Innovation

This week, host Graeme Sinclair learns that innovation isn't just confined to trawl techniques - it embraces ongoing challenges such as seabird mitigation and safety. Darren Guard also joins the team to speak on safety at sea.
Watch episode 12, this Sunday, TV3 at 5pm.

News

Sealord has stated its new trawler vessel Tokatu has not been stranded due to repair costs, *Nelson Mail* reports. The $70 million dollar vessel arrived in Nelson Port last month after a 16 month build by Norwegian shipyard company Simek who went bankrupt in July. This mean the one-year guarantee for the new build is now void and Sealord will need to meet the costs of repairs and maintenance. The bankruptcy has not stopped the vessel from trialling its on-board factory and catching fish out at sea. Sealord communications manager Julie North said the 82-metre vessel had been out at sea for more than a week in the second part of its commissioning phase and is due to arrive back in Nelson on July 25. "The boat is out and performing really well and they're happy with how it is going," she said. According to North, it’s not possible to fully test a factory prior to its delivery to New Zealand as fish are needed to test it. There have been commissioning costs associated with the changes required to make the factory compliant with contractual specifications; however, there is no truth to rumours that Sealord has been landed with million dollar costs or that Sealord held back payments from Simek. Even with hoki season underway, North

said the commissioning phase for Tokatu has not caused strain on other vessels in the fleet or staff.

Hawke's Bay seafood company Esplanade No.3 and one of its skippers Stephen Harvey were sentenced in Napier District Court on Monday for failing to take steps to protect sea birds, *Stuff* reports. The company pleaded guilty to 37 charges and Harvey to 17. The company's vessels *Danielle* and *Stella B* were using long lines between East Cape and Cape Turnagain between May and June of 2016 and failed to deploy tori lines. Judge Lance Rowe said Harvey was aware of the unlawful practice and believed he "deliberately refused to deploy tori tines" after telling an observer he had no intention of using them. Harvey was issued a $13,500 fine. The company also had knowledge of Harvey's non-compliance. Although there were no seabirds mortalities, the company had been condoning unlawful practice. Rowe said the penalty imposed on the company must serve to deter others and should not be viewed as "merely a cost of doing business". Rowe noted that the company had undertaken tangible steps to put matters right since the offending and fined it $24,000.

Since its 2006 closure, Oamaru's historic Sumpter Wharf has become a breeding colony for Otago's only endemic seabird, the Otago shag. This year, the colony, which has stymied some development in Oamaru Harbour, is expected to become the species' largest colony and now the Waitaki District Council appears poised to embrace the seabird. A $35,000 recommendation from the Waitaki District Council's harbour area committee could help 'tidy up' the area, and allow the public access to a small portion of the historic wharf while maintaining a "respectful distance" from the rare birds and includes ideas such as a zipline and a dedicated viewing area to view the birds. Dr Nic Rawlence of University of Otago has expressed concern over the disturbance the noise could cause the birds during any renovations around the wharf. The proposal will go to the council meeting on July 31 for a decision, but is yet to be reviewed by a wildlife expert.

Tribal boundaries are a major issue of contention in a bid by Ngati Porou to obtain legal customary title of the East Coast foreshore and seabed. Ngati Porou are seeking to secure customary title and rights through the Nga Rohe Moana o Ngati Porou Bill (No 2), which had its first reading in Parliament in May. If the bill is passed, Ngati Porou will be the first iwi to secure a settlement over the foreshore and seabed, establishing customary title over specific areas of coastline along the East Coast and Gisborne. If the bill becomes an act, it will see protection of waahi tapu (sacred sites), customary fishing rights, as well as iwi consent required for resource consents.

Spotted shag. Photo credit: Jenny Atkins
