



THE UPDATE

Captain's Blog



Inaccuracies and conspiracy theories abound at fisheries lectures

If conspiracy theories could be personified, they would take the form of Dr Daniel Pauly.

Last week the eminent French-born fisheries scientist was on a lecture tour of this country, pontificating publicly in Auckland, Wellington and Dunedin.

Not content with predicting fishing will end in the world's oceans in just 25 years, he believes New Zealand's internationally lauded fisheries management system, which he once rated as the world's best, is now on the rocks.

In a confused hour-long Wellington lecture filled with generalisations and strange metaphors - "we eat dragons when we eat tuna and groupers; the lions of the sea" - he claimed fisheries were corrupt, governed by big fishing companies playing golf with fisheries ministers.

He deplored subsidies that encouraged overfishing but failed to acknowledge the absence of such incentives in this country.

He seemed unaware the fishery was managed by government officials, not the industry, or that there are observers on vessels.

On it went. Quotas had been given to political friends, control of the fishery had been lost, orange roughy were never sustainable.

"Now Wall Street has exclusive access to the fishing resources of your country."

So, Maori, who now own 40 percent of quota, have sold out too. That will be news to the tribes busy building their settlement portfolios and dispensing profits back to their people.

And to the hard working inshore owner-operators meeting at the Federation of Commercial Fishermen conference in Paihia today.

When challenged about this ludicrous claim, Pauly went on the offensive, alleging slave labour in our fishery. The fact that all vessels in our waters are New Zealand-flagged and their crews subject to New Zealand employment laws, was ignored.

The claims would be laughable if they were not so potentially damaging.

The most surprising aspect of Pauly's performance is how a prominent scientist can specialise in unsubstantiated claims, outright inaccuracies and sheer pig ignorance. Whatever happened to academic rigour?

University of British Columbia-based Pauly has found some fame as the architect of the Sea Around Us project that attempts to quantify the world's catches over 61 years from 1950 to 2011.

In this country, a coterie of Auckland University academics based its version on anecdotal, anonymous interviews with 100 or so disgruntled foreign crews and came up with a fanciful, unverified factor of a catch nearly three times that reported to the UN's Food and Agriculture Organisation.

The report, with its opaque data collection and methodology, was discredited by MPI, NIWA and international scientists.

When the Ombudsman intervened on Seafood NZ's behalf to seek the mysterious data, the university's response was that it had been lost due to computer failure.

On TV3's The Project Pauly was at it again, with a mixture of wild exaggeration and straight out fiction.

"The QMS has failed... the catch has been declining for 15 years... you have got it wrong...there's a deep crisis in the management system...it was privatised and the corporation that runs the fishing was supposed to do a good job of it but they didn't...the consequences are that lots of people cannot fish...the industrial fishing is out of control...everything goes to the industrial fishers who don't manage the stocks right."

What the audience made of it, expecting the usual fare of light entertainment and froth as they munched their Friday night fish 'n' chips, is anybody's guess.

The presenters were certainly lost for words, perhaps wondering what had got into the producer.

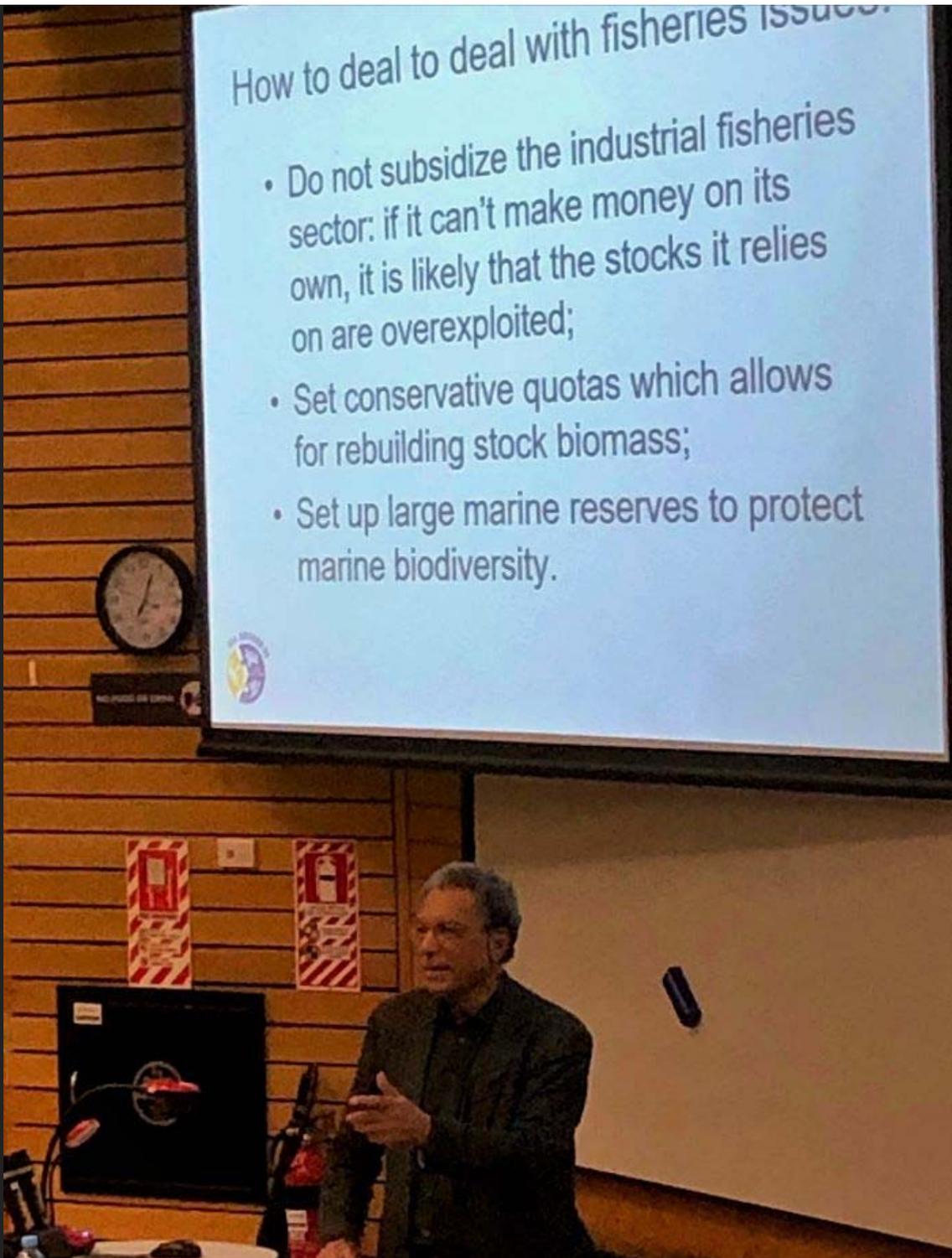
As for balance in the reporting, now that does raise a laugh.

Pauly has a right to his opinions, as biased and cockeyed as they are, but they need to be challenged.

He does not have a right to his own facts and needs to have more respect for them if he craves to be taken seriously.

How to deal to deal with fisheries issues.

- Do not subsidize the industrial fisheries sector: if it can't make money on its own, it is likely that the stocks it relies on are overexploited;
- Set conservative quotas which allows for rebuilding stock biomass;
- Set up large marine reserves to protect marine biodiversity.



Daniel Pauly lecturing in Wellington.

Lab-fish for your dinner plate

Sorrento Valley could soon be home to a new variety of fish, one that's grown in a lab.

American cellular seafood company [BlueNalu](#) are busy using the muscle and fat from fish cells to grow fish parts in an ambitious project aimed at creating cell-based seafood for its 10 million neighbouring consumers.

Scientists collect a sample of muscle stem cells from live fish and place those cells in a plant-based broth. The broth stews in a bioreactor while the cells grow and multiply. Each cell's functionality remains intact and continues to create tissue.

One sample produces billions of cells and unlike mammals, fish cells can grow at room temperature.

A 3D printer transforms a concoction of liquid "bio-ink" and fish cells into specific shapes – resulting in fillets and more – and all without animal nerves, lymph systems and blood vessels.

The plan is to start off small, producing scallop-sized pieces of fish, followed by more difficult to produce seafood like crustacea and molluscs.

The taste of the final product is still unknown, but BlueNalu chief executive Lou Cooperhouse is confident each fillet will have a taste and texture that will meet consumer's expectations.

"The only difference from a BlueNalu fillet and a regular fish fillet is that we don't have the bones," he said.

While still in the early stages of development, scientists hope the lab-grown fish will reduce product waste and allow for the creation of artisan fish products further down the line.

With consumers often rejecting something they perceive as unnatural, the challenge will be presenting the concept to the public, said BlueNalu chief technology officer Dammann.

"We are not any more 'lab-made' than ketchup or Oreos. They're all started in a lab."

The lab-fish will need to be FDA approved before it can go to market.

Warming oceans a threat to native marine life

New Zealand's iconic marine species, pāua and kina, could lose their habitats due to rising ocean temperatures, new research has found.

Changes in ocean chemistry and increased water temperatures are impacting coralline algae – an organism that cements reefs together and provides a breeding ground for marine species.

Victoria University researchers have said declines in coralline algae will have flow on effects for species who use the algae as a nursery.

"Declines in species of cultural significance like pāua and kina will have profound consequences," said research leader Chris Cornwall. "The loss of cementing algae will reduce reef growth already impacted by reoccurring mass coral bleaching events."

Ocean acidification was found to slow the calcification of coralline algae, a crucial development phase, compromising its capacity to build and cement reefs together.

Researchers also found the algae acclimatised poorly to the effects of climate change over one lifetime, but had some form of resilience to short-term ocean warming events, unlike corals.

“The temperate southern hemisphere has little to no data available on how ocean warming will specifically affect our coralline algae. We also do not know whether they can gain tolerance to warming or acidification over multiple lifetimes,” said Cornwall.

Cornwall and his colleagues are now planning to investigate the effects of ocean warming on southern hemisphere coralline algae, along with epigenetic or genetic changes that may help in resisting acidification.





New Zealand Seafood Industry Conference and Technical Day

2019 Conference programme confirmed

Registrations for the 2019 New Zealand Seafood Industry Conference and Technical Day are open and the [programme](#) has now been posted.

Seafood New Zealand has negotiated accommodation rates at the conference venue and neighbouring hotels. Please note, there are now a limited number of rooms available at the [Rydges hotel](#), so be in quick to secure remaining accommodation and flights. Bookings can be made through the [information](#) section on the conference webpage along with [links](#) to Air New Zealand for group flight bookings.

[Register now.](#)

Seafood Stars Awards

The 2019 Seafood Stars Awards are open for nominations. The awards are a wonderful opportunity to celebrate our industry people and their achievements. This year's award categories include:

- Future Development and Innovation Award
- Young Achiever Award
- Longstanding Service Award

For more information on each category [visit our website](#), or [download the form](#) to nominate someone today.

News

Burkhart Fisheries, a family owned crayfish business, has sold their factory and trucks to Fiordland Lobster Co. after more than 40 years in the industry, *Stuff* reported. The

company holds the largest family-owned rock lobster quota in New Zealand and have sold their processing assets in exchange for cash. The family already owned a 20 percent share in the company based in Te Anau. Founders Dennis and Trevor Burkhart will continue their daily crayfishing operation and Fiordland Lobster Co. will now handle processing and distribution. Twelve of Burkhart's employees will remain on the family's boats and six factory staff will be transferred to Fiordland. No redundancies occurred from the sale. The Burkhart brand will remain, with crayfish being sold under the umbrella brand Wild Legend.

The Department of Conservation's latest risk report indicated that five of New Zealand's marine mammals are no longer at threat of extinction, *One News* reported. The southern right whale was considered to be 'threatened' and 'vulnerable' but has now been downgraded to 'at risk' but 'recovering'. "It's amazing ... we're starting to see them in places where we historically would have but not in our lifetimes," Marine Mammal Biologist Dave Lundquist said. The risk status of New Zealand sea lions has also improved from "nationally critical" to "nationally vulnerable" and new data on Hector's dolphins improved its status from "endangered" to "vulnerable". However, the report noted there's not enough information to know the risk to the lives of more than half of New Zealand's marine mammals. "I don't think it's a question of whether we can do more research in this area or not, it will take a collective effort by a whole range of different organisations," said Lundquist. A plan for protecting Hector's and Maui dolphins will be released for consultation before the end of July.

Cabinet has approved a revised and fairer approach to funding Maritime NZ that better reflects how the sector should cover the cost of the agency's regulatory and compliance functions. The revised Maritime Levy will take effect from 1 July 2019 and will result in cost reductions for some vessel operators and increases for others. One hundred and ten submissions were received in response to the consultation document, with a fair degree of support for many of the proposals. Maritime NZ commissioned economic advisors Castalia to provide independent economic advice on a Maritime Levy allocation methodology that's simple, fair, and transparent. The key changes approved by Cabinet include:

- A revised allocation methodology for the Maritime Levy
- A single fee of \$368 for seafarer certificates and endorsements
- Not charging fees for routine audits and inspections but recovering the cost of these through the Maritime Levy
- A single hourly rate of \$245 for activities that are charged on actual time taken (and the basis for fixed fees)
- A reduction in most ship registration fees.

Some Maritime NZ functions such as the Rescue Coordination Centre NZ and Recreational boating will continue to be funded outside the Maritime Levy, via fuel excise duty and direct Crown funding.

Check out the latest Seafood Magazines

