

# PAUA INDUSTRY COUNCIL Ltd

MARCH 2007 NEWSLETTER

*First of all apologies for the delay in getting this newsletter out. There is so much happening at the moment that newsletter production slips as high priority issues are dealt with.*

## Update on Shared fisheries

MFish is currently collating and summarising the hundreds of submissions received on shared fisheries. We had hoped that given no sector was happy with the proposal it may have been buried back into the 'too hard' pile.

However, of real concern is the recent win the recreational sector has achieved in the courts on the kahawai allocation.

The Auckland High Court made declarations that the Minister of Fisheries decisions on entry of the kahawai species to the quota management system in 2004 and 2005 were unlawful as the Minister of Fisheries (Hon David Benson-Pope) had "set a TACC for kahawai without having proper regard to

*the social, economic and cultural wellbeing of the people – a mandatory consideration in the Fisheries Act 1996".*

Clearly, this sets a new legal precedent and Cabinet may now require that the shared fisheries issue is sorted once and for all. For paua stocks where no TAC has been set (PAU1, 2, 3, 4, 5A & 6) the Crown may make an allocation erring on the extreme side of caution. This may have detrimental consequences to the TACC in these fisheries. We will have to be vigilant.



## Virus update from the Western Zone of Victoria, Australia

The Herpes-like virus was first discovered in two on-shore abalone aquaculture facilities at Portland and Port Fairy in Late 2005 and early 2006. In late May 2006 it was discovered in the wild in Taylors Bay Port Fairy adjacent to one of the farms. Since that time it has spread some 10km to the West and about 30km to the East. The virus appears to be moving much like a bush fire with flare-ups ahead of the front which then develops into a major outbreak.

Three weeks ago we dived along the full length of the outbreak. The Crags which are at the extreme westerly end of the initial outbreak were showing good signs of reaggregation of stock with a range of year classes present. At Killarney the picture was much more grim, with an estimated 90-95% kill rate and the bottom already showing signs of a change to the ecosystem. There is doubt that this area will ever recover to its previous levels.

At Warrnambool which is at the extreme eastern end of the outbreak and is the border with the Central Zone the virus was found to be raging, particularly on the breakwater wall, Thunder Point and Stingray Bay. Very high mortality was evident with empty shell and rotting abs everywhere. The Marine Sanctuary had been totally wiped out of abs. This may also have something to do with the very high lobster population, which were witnessed dining on dying abs.

While we were carrying out our survey we received news that a Departmental diver had found the virus at Inside Nelson which is west of Portland. This is a jump of some 40km from the previous most Westerly outbreak. This outbreak was initially over about half a kilometre, but the weather has meant there has been no diving there for a fortnight, so who knows how far it may have spread. The disturbing aspect of this latest outbreak is that it has not been seen anywhere in between, which raises the suspicion that it may have been spread by human means such as an amateur diver, fisherman or whatever. We are anxiously awaiting our quota allocation for the season commencing 1 April 2007. Hopefully there will be some uninfected areas left by then.

## Reseeding Update

A PICL reseedling coordination meeting was held last month to allow PauaMacs the chance to hear what other PauaMacs were doing and what their successes / problems were.

Julie Hills from MFish also attended this meeting to discuss two projects that MFish are currently tendering relating to paua genetics (more on these projects below).

The minutes from this meeting are available from your regional PIC director.

## ACA Report

In February this year Jeremy Cooper attended a workshop in Port Lincoln, South Australia, organised by the Abalone Council of Australia. The purpose of the meeting was to hear from key scientists about research that is currently underway and to look at R&D projects for the next five years. The Australians are very supportive of us joining their collaborative approach and allowing us to piggyback their work. New Zealand brings a more 'hands on' industry approach where as in Australia most of the initiatives are led by Universities and Government agencies and their biggest problem is getting industry involvement.

## Next Paua Conference

We have decided that the next PICL conference will be held in April 2008. This will allow us to combine with the Rock Lobster industry. We share much of the same water space and similar issues so it makes sense to join together – many presentations will be relevant to both industries.

## PICL Budget

The directors have approved a draft budget which has been distributed to PauaMacs. For the 2007/08 year the budget has been increased by 10.4% to help account for inflation over the last two years, accommodate increased levels of work and the substantial increase in travel costs that we have seen over the last year (especially since the demise of Origin Pacific).

## New Catch Effort Landing Returns (CELR) proposed for other inshore fisheries

MFish are advocating the need for increased resolution of fishing catch effort data to support better stock assessments, fine scale management decisions and compliance. In the MFish Initial Position Paper (IPP) 'Review of regulatory measures for October 2007' (released February 2007) MFish are proposing:

1 – New CELR forms for Inshore Trawling, Lining and Danish Seine (all vessels over six metres). These will include the requirement to record the latitude and longitude during the fishing event and other information that is not presently recorded.

2 – Vessel Monitoring System (VMS) units to be installed on boats in the Southern Bluefin Tuna fleet. These are radio transmitting devices that communicate with satellites and report the boats whereabouts and infer the type of fishing they are doing.

While the above changes to CELR are not set in concrete (yet) they signal MFish intentions of getting better catch effort data, with location from our inshore fisheries.

## 2007/08 – 2009/10 Catch Sampling Tender

PIC has tendered for the MFish Catch Sampling project for the next three years. We think we have a superior system to the Shed Sampling procedure (better representation, higher degree of confidence of where the shells were caught and error free measurement recording / transferring). We are hopeful of winning this tender again as it gives PIC an income stream which reduces the levies quota owners pay PIC.

*Any powerful idea is absolutely fascinating and absolutely useless until we choose to use it.*

**– Anonymous 1908**

## Genetics Projects

PIC are tendering for two MFish projects concerned with increasing the effectiveness and efficiency of the paua stock enhancement initiatives happening around the country.

The first project is aimed at determining if black foot paua populations around New Zealand are significantly genetically distinct from one another across different areas. Understanding the genetic diversity and differentiation of *H. iris* throughout New Zealand will assist in minimising impacts of introduced animals on wild paua populations and maximising the success of the enhancement in terms of survivability, growth and reproductive fitness of both the introduced and recipient populations.

The second project is aimed at developing a successful marker that will enable identification of introduced (enhancement) paua from wild paua. This will allow the survivability of released animals to be measured through to harvest and allow the opportunity for ongoing research to investigate the interactions between wild and introduced

## Data Loggers

We now have 25 CPUE data loggers within the industry – these have been placed around NZ so that crews can gain experience using them. All we are trying to achieve this year is to get people used to them and using them as an every day tool. The data will be stored (securely and confidentially) for future use.

There is no doubt that recording higher resolution catch and effort data is the way of the future and as the CELR article at left shows – if we don't do it, MFish will force use to.

## Pau6 Amalgamation

There is a project underway to see if it is possible to amalgamate the southern half of PAU6 with PAU5A and the Northern half with PAU7. We had hoped that it would be possible to get the support from quota owners and the Crown and to get through the red tape in time to have the amalgamation taking effect by the start of the 2007/08 fishing year.

However it is clear to see that this won't happen – MFish have come back and said they need more time to consult with other stakeholders and to have a closer look at the Pau5A sustainability. All is not lost and MFish have stated that in the meantime they will not be putting the government's Pau6 shares up for tender.

If you are a PAU5A or PAU7 quota owner and have not returned your PAU6 amalgamation voting forms to FishServe please do so as soon as possible.

## Directors' Meeting

A PICL directors meeting was held on 3 May 2005. The minutes will be available in the next few weeks from your regional PICL director.

# 2006/07 Catch Sampling Project

PIC has developed a kit for this project and these have been distributed to all PauMacs. Crews that are allocated these are asked to randomly tag a number of bins for measurement of shell.

The system is working really well but we still need more samples. If you haven't been allocated any of these kits but would like to help in gathering this data please contact your regional PIC director and they will arrange kits for you.

If you do have kits please use them and if you have red sacks waiting to be measured please contact Jeremy Cooper at cooper@xtra.co.nz.

Also if you have been involved with this project but still have odd tags or hi-vis streamers left can you please get them to your regional PIC director as soon as possible – we need to recycle these.

## Pau5B Stock Assessment

Representatives of PICL and PauaMac5 attended the March 2007 Shellfish Working Group meeting where the Pau5B Stock Assessment was presented by NIWA. The news is good and the assessment indicates that the current biomass is well above minimum reference levels and is likely to remain so at current catch levels.

The several key indicators in the assessment showed the fishery is bouncing back.

The research diver survey index (RDSI) shows that per 10-minute swim they are counting about the same number of paua as they were in the 1995 survey.

The industry Catch per Unit Effort (CPUE) is now back to where it was in 1992 (around 175kg per diver per day). This is a great result and the stock should be further enhanced through the 130mm mls initiative and reseeded.

## Scientist talk

During the presentation of the Pau5B stock assessment at the ShellFish Working Group meeting the scientists were talking about “posterior distributions” – apparently the notion of a posterior distribution comes from Bayesian statistics.

Under the Bayesian approach, prior (or before) beliefs about parameters are combined with sample information to create updated, or posterior (after) beliefs about the parameters.

We all know that “posterior” is another word for “backside”. In the report was written a new word “callipygian” which when you look it up in the dictionary it means “shapely buttocks”. It is good to see there is a sense of humour woven into the complex minds of our scientific friends.

*The future belongs to those who see possibilities before they become obvious.*  
– Samuel Johnson

## Quota Trades

SeaFIC have supplied the table below which lists the Quota trading in paua stocks in the period 1986 to Sept 2006.

Notes:

- 1 Figures for shares traded are rounded – calculations had to be made for period 1986-2000 based on quantity traded.
- 2 PAU5 was split into three substocks in 1995-96. The figures for PAU5 are from 1986 until the split. The figures for PAU5A, 5B and 5D are from 1995-96 until Sept 2006.

Stock	Quantity traded 1986-Sept 2006 (tonnes)	Quantity traded by weight as % of current TACC	Shares Traded	% turnover by shares traded
PAU2	320.70	265	263,702,000	264
PAU3	170.36	185	185,800,000	186
PAU4	941.68	288	288,298,000	288
PAU5	1225.97	276	270,000,000	270
PAU5A	211.81	142	142,190,000	142
PAU5B	163.04	181	149,100,000	149
PAU5D	208.33	234	146,698,000	147
PAU7	904.09	482	340,211,000	340

# Imagining Climate Change

***There are two sides to every argument. Have a look at this article on climate change from former NZ Met Service chief meteorologist Professor Augie Auer.***

NZCPD Guest Forum – 18 Feb 2007

What a wonderfully powerful human trait is the imagination. No other form of animal life can think creatively as we humans... to dream up scenarios of passion... love, joy, hatred, anticipation. But distort our imaginative powers with a bit of fear and guilt instilled by mischievous science... and presto, you have the makings of the catastrophic global warming (oops, I'm sorry) I mean, climate change hysteria.

This hysteria was reinforced on 2 February when the UN's Intergovernmental Panel on Climate Change (IPCC) issued its 'Summary to Policymakers' (SPM); but the report on which the Summary is based, IPCC's 4th Assessment 2007, will not be published until May. The problem is that the SPM was produced not by the scientific writers and reviewers, but by a process of negotiation among unnamed bureaucratic delegates from sponsoring governments. Is it any wonder that this SPM attracted considerable media interest because of its alarmist dogma. The 'Man Bites Dog!' stories always do.

So what is going on? Are we are on a course of certain environmental Apocalypse? Of course we're not. Here's why.

Every one of the outcomes predicated on present and continued burning of fossil fuels by mankind are projections generated by computer simulations of future climatic patterns. They are not reality, not certainty, rather a kind of computer imagination. And even with all the mathematical manipulations, the climate models are only as good as the knowledge that is imputed to them. And as much as we would like to think that our knowledge of all atmospheric processes is substantial, the fact is it's grossly lacking in both scope and thoroughness – especially when it comes to looking decades into the future. This means that high levels of accuracy and certainty just can't be achieved. Sometimes computer models can't predict our local weather with useful certainty just 48 hours in advance.

Then there's the matter of CO<sub>2</sub>... that harmful gas Al Gore would have us believe is choking us all to death, that greenhouse gas which Jeanette Fitzsimmons claims "the planet is groaning under the weight of". Again, let's set the record straight. To start with, CO<sub>2</sub> is not a harmful, pollutant gas! It could best be described as an airborne fertiliser that humans exhale. Diesel exhaust, now that's a pollutant.

The Earth's constituent gases consist of 77% Nitrogen, 21% Oxygen with the 2% balance comprised of the so-called 'greenhouse gases'. These trace gases are water vapour (averaging about 1%), followed by carbon dioxide (CO<sub>2</sub>) at a whopping 0.038% (usually reported as 380ppm [parts per million]), methane at 0.00015% and even lesser concentrations of minor gases. So how can a gas that occupies a measly 0.038% of our atmosphere warrant so much attention? That's what needs to be challenged.

The greenhouse effect is a near miraculous process that carefully regulates the temperature of the planet. By absorbing

and re-radiating downward some of the heat energy that would escape to space from the Earth, greenhouse gases effectively keep the average temperature of the planet near 15°C rather than -18°C. So the greenhouse effect is required for life!

Water vapour is, by far and away, the most dominant and naturally produced of all greenhouse gases, contributing to a massive 95% of the beneficial warming process. Within the remaining 5%, there isn't much clout available for carbon dioxide; it only contributes a meagre 3.5% or so. And when this input is subdivided into naturally produced and anthropogenically sourced, just under 97% comes from Nature, just over 3% from mankind. This means that the human contribution of CO<sub>2</sub> to the Earth's greenhouse warming process is an inconsequential 0.12%. Even if CO<sub>2</sub> doubled in the atmosphere due to man's activity, its impact on greenhouse processes would remain miniscule.

Furthermore, the efficiency of CO<sub>2</sub> as a greenhouse gas does not increase with concentration, as the Al Gores of the world tell us. Its effectiveness obeys the law of diminishing returns. Only the first 150ppm or so is all that is needed for the planet's greenhouse effect to operate near maximum. Additional carbon dioxide only serves as a spent force.

Because of the dominance of a simple, Earth-unique gas – water vapour – we could say that mankind could not alter our climate if we wanted to! Since carbon dioxide is not the problem, there is no need for any mandatory reduction of planetary CO<sub>2</sub> or punitive taxations to prevent its use. Note that this not a proposal to abandon our responsibility of stewardship of the planet's atmosphere.

Scientists have an ethical responsibility to be truthful in their research, to avoid being arrogant, intimating and intolerant. This is not intended as a criticism of all those involved in climate research, but it is directed in some regard to politicians and policymakers who, in interpreting the 'science', tell us "You have a problem, we can solve it and no other opinion matters." They communicate through a seemingly biased media emphasising unsubstantiated fright and sensationalism: eg: a rise in sea levels that would inundate Pacific island nations. "We must act now!" the global warming zealots scream. Yet I recall my dad warning about high pressure salesmen with the 'it must be done now' pitch. Where's David Russell when you need him?

Recall the admonition of Robertson Davies, a 20th century journalist/novelist: "Every man is wise when attacked by a mad dog; fewer when pursued by a mad woman; only the wisest survive when attacked by a mad notion." Imagine that!

*A copy can be downloaded form The NZ Centre for Political Debate – [www.nzcpd.com](http://www.nzcpd.com).*

This newsletter was produced by the Paua Industry Council Ltd for the Paua Industry

**PIC Ltd**

That's all from us this month.

The Paua Industry Council Ltd.

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