

BIG FISH

NEW ZEALAND SEAFOOD INDUSTRY COUNCIL LTD
INDUSTRY PROFILE 2003



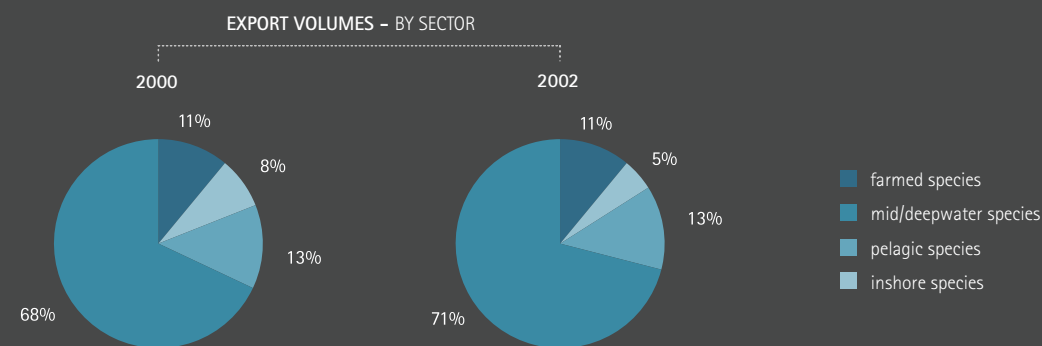
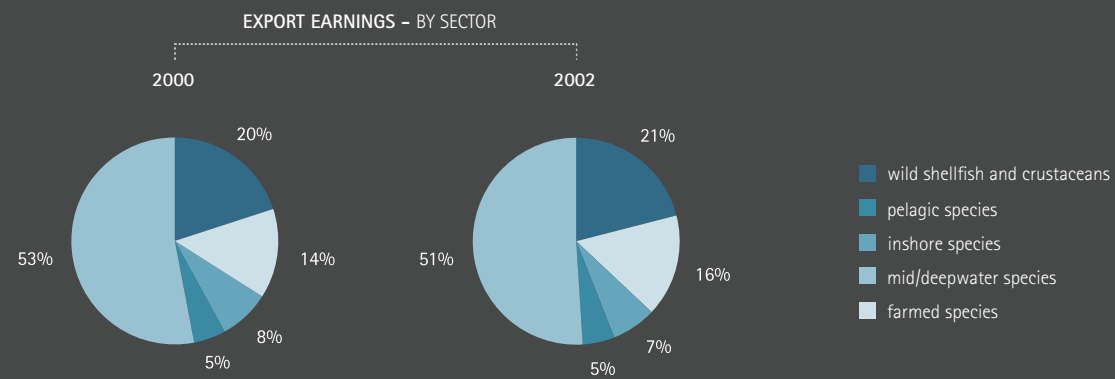
MAUI'S CATCH

FOR THE BIRDS

FEASTING FOR LIFE

A MISSIONARY ZEAL

of



Cover image photography David Read. Thank you to MAF Quarantine Wellington for the use of the x-ray equipment at Wellington Airport | Back cover image photography Paul Morris

Designed and produced by Airplane studio@airplane.co.nz

Seafoods from New Zealand's clean, clear waters carry an international reputation for quality. They are also harvested sustainably - a factor increasingly important in world markets.

While some European countries face a fisheries management crisis, our own fleet enjoys the long-term guarantees that New Zealand's Quota Management System brings - assured access to a sustainable resource and a property right that can be bought, sold or used as security. This world-leading formula has given our companies the confidence to invest in harvesting and processing equipment, and their staff and infrastructure.

The past decade has seen many New Zealand fishing companies make substantial investments in marine farming - an area that international commentators claim is the future of world seafood production. The potential is such that the NZ Aquaculture Council projects our own waters could be producing up to \$1 billion worth of aquaculture products annually by the year 2020.

Today, over \$1.5 billion worth of seafood leaves our shores each year; and as with other primary industries, seafood underpins many regional economies. Ours is a global industry, with some New Zealand companies now having expanded their fishing, farming and processing interests into Australia, the Central Pacific, Southern Africa, the Indian Ocean, Europe and the Americas.



To maintain our current international standing, New Zealand companies must strive to be the best and deliver to markets the levels of quality and environmental performance that are increasingly demanded

by seafood consumers world-wide. It is an exciting and innovative industry to be in and one that is a source of immense pride to the many people involved in it.

The following pages give a glimpse into the diversity that is New Zealand's seafood industry today, and some of its people and their stories. More detailed information and video clips are provided on the attached CD.

DAVE SHARP | Chairman, New Zealand Seafood Industry Council Ltd

SEAFOOD IS OUR FOURTH BIGGEST EXPORTED GOODS EARNER BEHIND DAIRY, MEAT AND FORESTRY. IN 2002, NEW ZEALAND COMPANIES EXPORTED \$1.51 BILLION OF SEAFOOD PRODUCTS TO 84 COUNTRIES.

KEY MARKETS - 2002

Australia	\$199m
Japan	\$257m
Hong Kong + China	\$265m
Europe	\$277m
United States	\$315m



contributors



CAROLE VAN GRONDELLE

Carole van Grondelle is a writer, editor and communications consultant. She has an MA (Hons) in History and a postgraduate Diploma in Journalism, from Canterbury University. She was a journalist on *The Press* and *The Dominion*, and has been published widely including in *The New York Times* and *The Los Angeles Times*. Her first book *Angel of the Anzacs: The Life of Nola Luxford* (VUP, 2000) was listed among The Listener's 5 Best Reviewed Books for 2001. She lives with her family in Wellington.



ELIZABETH LIGHT

Liz is an Auckland based writer, her work is in most issues of *NZ Business* magazine, *North & South* and *Destinations*, the travel magazine. Over the years she has won numerous writing awards. Liz enjoys going fishing with her partner - which means hanging out in the boat, reading a good book, dozing in the sun and enjoying the blue space, the scenery and the wide-open skies. She doesn't do the baiting, catching, killing, gutting and scaling parts of the fishing process but rallies to cook and enjoy eating a delicious fish meal at the end of the day.



BRYN SOMERVILLE

South Island reporter, Bryn Somerville, covered his first fishing story in the late 1970s and has kept a weather eye on the industry ever since. A former *Reuters* TV news editor, Somerville won the inaugural Seafood Industry Journalism Award, spending his prize money on a trip to Hong Kong in pursuit of a Kaikoura crayfish. "Today, so much of what the industry does is over the horizon, virtually out of sight," he says. "Joe Kiwi knows it's important to the country financially, but worries about whether it's being done well. The industry needs to keep working at telling its stories - the successes and the difficulties."

OTHER BIG FISH CONTRIBUTORS: BESS MANSON, PHIL BARCLAY, ROSE NORTHCOTT, DAVE CHOWDHURY, JENNY BORNHOLDT, JANE ARNOTT, LOUISE THOMAS, BRUCE FOSTER, PAUL MORRIS, MICHAEL JEANS, KIRK HARGREAVES, DAMIEN WILKINS, GRANT STIRLING

contents

FEATURES

FAMILY AFFAIR 08
Hoki's rise to export stardom is inextricably bound to the Vela family business. Elizabeth Light discovers the connection.

MAUI'S CATCH 18
Maori interests control or influence a huge chunk of New Zealand's seafood business. Carole van Grondelle finds out why, and asks some key paddlers where their seafood waka is heading.

CRAYFISH TALES 34
A \$470 Hong Kong meal begins its journey in towns like Motunau, Haast, Bluff, Akaroa, Picton and Kaikoura. Bryn Somerville follows a crayfish from the waters off Kaikoura to a table in the New Territories.

PORTRAITS

FOR THE BIRDS 12
Southern Seabird Solutions is dedicated to reducing seabird by-catch in Southern Hemisphere fisheries. Dave Chowdhury asks the questions.

FEASTING FOR LIFE 46

INSIGHTS

A MISSIONARY ZEAL 06
Mussel missionary, Bill Floyd, converts our writer, Phil Barclay.

DREAMING OF CYBERFISH 24

STEPPING OUT 28

A BOB EACH WAY | UNDER THE HAMMER 30

OFF THE SHELF 32

CHILLED OUT 39
Airfreighting seafood is like running an All Black try from a set move. Rose Northcott investigates.

SWEET AND SOUR 48



32

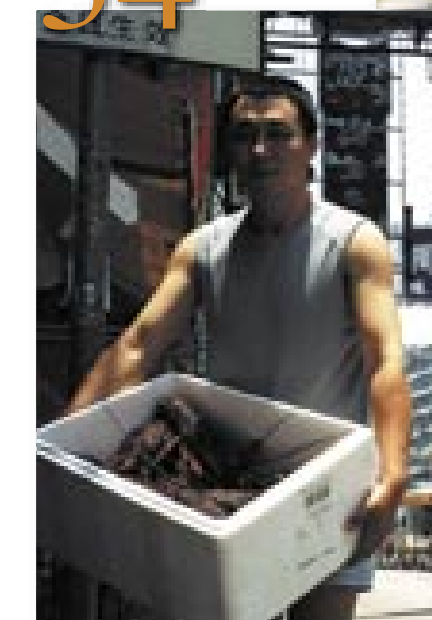


46

06



34





Photography PAUL MORRIS

BAIT

THIS IS A VERY EXPENSIVE MEAL, SAID OUR FATHER, AND I WON'T SEE IT GOING TO WASTE, AND YOU'RE NOT LEAVING THE TABLE UNTIL YOU EAT EVERYTHING ON YOUR PLATE. ETCETERA.

V

Oh, but we can't, we said, we just can't! Because of the eyes. You can't eat eyes, it's unnatural, said my older sister. It's barbaric, she said. Yes, I said, barbaric.

I'll give you barbaric, said our father, but he didn't. He was basically a gentle man, occasionally driven. He said, whitebait is one of the finest delicacies. Whitebait, do you know how it's caught? One man waiting all day. Sometimes for nothing.

My sister said, it's not a fish at all, is it? It's actually called bait.

Our mother said, wouldn't we just try them. Close your eyes, she said, and swallow them, you won't even know what you're eating. She had a queasiness herself about them, we sensed. She poured the batter without looking.

But we do know! we said, it's staring right at us! Those tiny eyes! On those wormy bodies!

Our father said, be quiet the pair of you. You are ruining a great pleasure. Then he squeezed some lemon juice on his own and began eating them. He ate slowly, his mouth rolled over them. He wanted us to imagine a mouthful of eyeballs, the batter dissolving on his tongue, the bodies of the whitebait separating from one another, preparing for that home-ward journey. It was disgusting. Soon he wasn't thinking about us at all. He was filled with the whitebait experience, truly a great thing for him.

He squeezed some more lemon juice, ate another fritter in slow motion.

Finally he smiled. He said to our mother, delicious! He was finished. Ah, he said. Then he looked across at our plates. Slide them over, he said.

Oh, but what can we have? I said. What's for our dinner?

This is your dinner, said our father, placing my whitebait fritter in his mouth.

Our mother got up from the table and went to the oven. She brought the tray back to the table.

Our favourite! we said. We love fish fingers! We love you! They were orange, perfect. They didn't have faces.

Our father glanced up. The thing is, he said, how can you eat fingers? I could never eat a finger.

You're very silly, said my sister.

Then our father snatched one of the fish fingers from my sister's plate and put it on his own hand, pretending it was one of his own fingers. He waved it at her and said, listen to me, young lady, eating fingers is wrong.

It could get to the stage of her chasing him round the table, trying to get it back. Gimme that!

This was how it was when our father ate whitebait. He went quite nuts.



A Missionary Zeal

Phil Barclay

Bill Floyd knows New Zealand is sitting on a green mine. Listening to him persuades you fast that Greenshell™ mussels – and the industry behind them – are New Zealand icons with the potential to earn millions.

“Greenshell™ mussels are the only truly Kiwi protein. Our other successes are imported – sheep, venison, whatever. New Zealand’s identity shouldn’t come from sheep and scrummage,” says Bill, “it should grow from seafood and sailing.”

Bill’s passion is helping spread the good word to make this happen. He and his wife Sandee are mussel missionaries – for six years the pair have worked predominantly in the United States market, converting American chefs to the delicacy.

Based in Blenheim, they spend three hours a day working in Manhattan. It’s a quirky way of doing business and no different to Americans working on the opposite coast three time zones away. Bill’s added advantages are his Kiwi accent and affable personality.

“This work has made me proud to be a New Zealander. Many Kiwis shape their identity through sport. The sports field was never going to be my arena, but when it comes to palate and plate, with New Zealand’s first class ingredients, I can foot it with the best in the world. It’s bloody marvellous!”

Bill has as much pride in the industry as the product. A world leader now,

the mussel industry showcases classic Kiwi ingenuity.

“Men from all walks of life became mussel farmers – it was virgin territory. There were no manuals, they created the industry. The world’s aquaculture industries watch our farmers and work out how to copy them. And our farmers have used true No 8 wire ingenuity.”

Bill likes a clever turn of phrase. And unlike the product he promotes, he’s not afraid to step out of his shell. The stories he serves up are entertaining and big with promise. First there is the thought-provoking entrée – the coincidences

Marlborough is best known for its sauvignon blanc and Greenshell™ mussels – one of the great food and wine pairings.

that underline mussels’ limitless marketing potential.

It’s a Bill whimsy that Abel Tasman might easily have named New Zealand because of mussels. He imagines the Dutchman, homesick for the famous Zealand mussel-producing region of Holland, belching fishily after a mussel meal, and declaring, “This must be the new Zealand.”

“I’m drawing a long bow, but there are some nice coincidences with mussels. We can use those. Marketing is about taking what you’ve got and working it up.”

Marlborough is best known for its sauvignon blanc and Greenshell™ mussels – one of the great food and wine pairings. “It’s like duck and pinot,

“Seafood is our greatest potential. There are no limits to what we could be doing.”

oysters and stout – perfection. It’s as if there were a grand plan.”

We may be sitting on a green mine but hitting the mother-lode means heavy marketing, and mussels are not an easy product to sell. One of the industry’s biggest difficulties is the product’s “suggestive anatomical structure.”

“People who’ve never eaten mussels find their first experience strangely...naughty. You’d be surprised how many think the dark brown foot is the “mojo centre” (penis)...I can see how that’s off-putting! We need a mind-set change – especially for the Americans.”

Breaking into the United States market is like taking the ugly sister to Cinderella’s ball – serious cosmetic surgery is required. Currently, mussels are often minced and blended with other flavours to sidestep American perceptions.

“It’s middle America we have to woo,” says Bill. Food fashion and a more international palate is helping. “Regional Italian and Belgian cuisine are helping mussels, and watch out for Spanish paella becoming the new world favourite.”

But challenges remain. A lack of marketing money and muscle create their own difficulties.

“We face a battle against commodity price cycles. New Zealand seafood has phenomenal values, but our price offshore is based 95 percent on tangible substance and five percent on spin. We need more spin, and as young brand marketers with little cash clout, creating consumer pull in massive consumer markets is hard work.”

Lack of money can be countered with the same ingenuity that built the industry, plus ‘a bit of mongrel’. “We have to develop marketing tactics that fit a pauper’s budget.

“It’s a universal truth that big money doesn’t guarantee a winner. There’s no relationship in marketing between the products that succeed or fail and the amount of money spent – it’s entirely chaotic.”

There’s the probability, too, that other countries will try to cash in and drive prices down, so though mussels can now hold their own against the world’s best shellfish, continued progress is essential.

“We have this wonderful product we’re pricing as a Holden,” says Bill. “We need to think BMW – and even that may be unambitious.”

All this means that the big prize – huge export earnings – are still in the distance. But, secondary industries, says Bill, have spectacular promise.

“The US buffet market is huge. We have to be what Nestle is to Switzerland – Nestle took Swiss milk and created one of the great value-added food companies. We have to do that with seafood. Shellfish should be leaving New Zealand ready to eat as boxed canapés, superb appetisers and entrées – Kiwi culinary magic at its world-beating best!”

“Mussels have phenomenal potential, and great quality, but that’s not enough. A six-foot basketballer can still be beaten by the short guy. A good product needs passion, aggression and focus behind it.” Ironically, the industry model of cooperating-to-compete can compromise focus. “When you’re working as a team there’s a danger of performing to an average.

“We’re the same land area as Italy, we’re bigger than England. When you consider our fishing zones we’re one of the largest and best endowed countries in the world. We have the size, but we’re not using it. Seafood is our greatest potential. There are no limits to what we could be doing.” **bf**

Family Affair

Elizabeth Light

Hoki was a one-chance seasonal wonder in the late eighties when Philip Vela became convinced it could be a profitable fishery all year round. Now it's the largest exported seafood by value and volume, and the hoki story is still entwined with that of Vela Fishing.

Philip Vela went to sea when he was 15. He was, by his own account, a wild and unruly youth, bored with the confines of schooling and wanting adventure.

His father, Filip, thought that hard yakka on a deep-sea trawler might settle him down and teach him a thing or two. There's nothing like days and nights on a cold deck, or in a frozen fish room, in rough seas, to sort out a lad. Besides, being at sea kept him out of trouble in Nelson.

Fishing is in the Vela blood; it has been with the family going way back. Vela is the word for 'sail' in Croatian, and generations of sons, fathers and grandfathers were sailors, sail-makers and fishermen. So fishing was perhaps inevitable for Philip, though he says he always enjoyed it. "It was a choice. I have done just about every part of the fishing business at some stage of my life."

Filip Vela senior, came to New Zealand in 1929 from Podgura, a fishing village in southern Croatia. He worked the Northland gum fields for a couple of years then moved to Thames and began fishing there. Later, he moved to Auckland and formed a cooperative with a large group of Croatian fishermen - the Auckland Seine Boat Association. Their building was located where Moana Pacific Fisheries currently have their offices, at the Viaduct Basin. Filip became

the chairman of that Association and, later, moved to Nelson with his wife Ailsa and three sons, Philip, Peter and Paul, where he worked for Nelson Fisheries.

Young Philip enjoyed his years at sea and quickly learnt first-hand about fishing, though he realised, as his father before him, that life is a lot easier if you work with your head rather than your hands. Philip joined Nelson Fisheries in the late sixties, working with Filip senior, and became general manager shortly after his father died in 1971.

Philip's daughter Anita, who has been working for Vela Fishing for four years and is Vela brand manger, says that her father's, and now Vela Fishing's, philosophy is: "if you are selling fish, the best thing you can do is go and learn how it's caught, processed and packed.

"Philip deeply understands what fishermen do and insists that the captains and crew are shown a great deal of respect. They are the backbone of the company and if they are not working well, and happily, then there is no fish to sell.

"As soon as the boats came in Dad would go down to the wharf and write the fishermen a cheque, so they could go home to their families; he was always generous with the food allowance so they could live as well as possible while they were at sea. They appreciated being treated well and were, in turn, loyal to him and Nelson Fisheries, which is one of the reasons why it became so successful."

The other reason for Nelson Fisheries success was that Philip was, and still is, an entrepreneur and an innovator. He is passionate about fishing and has always been brimming over with ideas about how fishing could be improved,



Photography MICHAEL JEANS



Anita explains that one should think of a factory-ship as a factory that just happens to be at sea.

“The process is highly automated, with a production flow similar to a normal factory. The fish travel on conveyors and are sorted, by-catch is separated out, and the hoki move to the heading machine. Then they are filleted and skinned and cut to the size and shape customers require.”

an appearance on the farm. Peter and Philip had a 50/50 partnership in both farm and seafood business and shared a passion for thoroughbred horse breeding and racing. Over time it evolved that Peter looked after the horse side of their businesses and Philip focused on the fishing. Both have been extremely successful.

“Hamilton is the most logical place for a fish-selling business because it has a decent-sized population and there’s not much sea around it,” Philip explains. “It’s best to own a fish market that is well away from the sea. In Auckland, too many people go fishing at the weekend, they catch more fish than they need and give it to their friends, so people get out of the habit of buying fish.”

In the ten years that Philip and Peter owned Vela Seafood, the company prospered and grew to include branches and processing plants in Tauranga, New Plymouth, Rotorua, Auckland and Hamilton. In 1987, the Vela brothers sold the business to Goodman Fielder Wattie and Philip stayed on as chief executive. It was during the next few years that Philip first became obsessed with hoki.

When they are alive and are first hauled out of the water in a big trawl bag, hoki are the colours of the sea – opalescent steely blue with tones of silvery grey and green. They are long and sleek, up to 1.8 metres, and one of their special features is their long whip tail, in contrast to the more usual forked fish tail. Hoki are built to swim and cover great distances in the oceans around the South Island of New Zealand.

Hoki eat small sea creatures, such as salps, and live amongst their own kind in shoals of thousands. When they congregate for spawning they end up aggregating in groups of millions. They are mainly caught deep in the ocean, between 400 and 700 metres, using mid-water or bottom trawls.

“Philip was utterly positive that hoki could be profitably fished for 12 months a year,” says Peter Talley. “In those days we only fished for hoki during the spawn season from June to August, and the only place where we knew they spawned was on the West Coast of the South Island. Since then we’ve discovered spawning grounds in Cook Strait and satellite spawns off the South Island’s east coast.

“Philip was convinced that hoki went somewhere for the rest of the year and that we could find out where and catch them commercially, and to do this we needed factory-ships. I wasn’t so confident, and if it hadn’t been for Philip’s tenaciousness, and his contacts in northern Europe, it would never have happened.

“During the late eighties Norwegian factory-ship owners faced severe cuts in their cod quotas so they weren’t working profitably. Through his contacts Philip persuaded some owners to come down and fish for hoki.

“I was involved in the discussions all the way along and we talked about it for a year or so. He and I set up a joint venture between Amatal Fishing and Wattie’s Fishing to bring these first Norwegian factory-ships down.

“Philip was right. We found hoki spread over a much wider area than we had imagined in our wildest dreams – in the sub-Antarctic waters and across the Chatham Rise. The venture became so successful that other fishing companies jumped in and got their own factory-ships.”

Until this time hoki was fished only seasonally and processed in land-based factories. It’s a complex fish to process because it’s delicate – bruising and breaking easily. When hoki is processed on land a number of days can elapse between catch and freezing which may further damage the product. Consequently, hoki was regarded as a low-value fish in the market.

The advent of factory-ships immediately gave hoki a significant market advantage. Because the catch is processed and frozen almost immediately the fish looks better and tastes fresher, and is thus able to command a higher price.

The first three Norwegian factory-ships – the Nororn, Tampen and Ottar Birting – arrived in March 1990. They were between 60 and 70 metres long. Two months later the first frozen-at-sea New Zealand hoki fillets were discharged and ready for export.

Soon after this, the Vela brothers had the opportunity to buy Goodman Fielder Wattie’s fishing interests (not their on-shore processing and marketing interests) and established Vela Fishing. In 1991 Vela Fishing brought three further factory-ships down to New Zealand and leased more quota from government and Maori fishing interests.

These were the heady hoki days, but as quota got harder to obtain and was concentrated in the hands of fewer companies, Vela Fishing reduced its number of factory-ships to two and bought interests in them. Now the 76-metre Sea Hunter 1 and the 68-metre Pacific Pride deep-sea fish New Zealand waters on a mixture of Vela Fishing-owned and leased quota. They each employ between 40 and 45 people, depending on the season. Vela Fishing also has a longline boat that fishes a variety of other species, and employs 30 people.

Sea Hunter 1 and Pacific Pride discharge their fish into Lyttelton because of its proximity to the deep-sea fishing grounds and because of the arrangements Vela Fishing has with Independent Fisheries, which has cold storage facilities right on the wharf.

Anita explains that one should think of a factory-ship as a factory that just happens to be at sea. “There are the fishers – the captain and the first mate who drive the boat and shoot the gear, and four deckhands down on the trawl deck. In the factory part of the ship there is a factory manager, quality controller and

Image below : Philip Vela and Peter Talley



foremen, who decide on what to do with the fish when it comes up, and two shifts of around ten people who work six-hours-on and six-hours-off so the processing plant is running 24 hours a day.

“The process is highly automated, with a production flow similar to a normal factory. The fish travel on conveyors and are sorted, by-catch is separated out, and the hoki move to the heading machine. Then they are filleted and skinned and cut to the size and shape customers require. Most of our machines are Baader brand and we have a Baader technician on each ship to keep the machines finely tuned and in good running order.

“The processed fish is packed in 6.8 kg or 7.48 kg shatterpacks, frozen immediately in trays then packaged in master cartons which go down a conveyor to the freezer hold. Those cartons go to the restaurants in the many European countries, United States, and to markets in Asia.”

That it’s processed and frozen when absolutely fresh has made a huge difference to hoki, and now, in the Northern Hemisphere, it’s being used as a substitute for cod which has traditionally been regarded as a high quality, high-cost fish.

Hoki is a moist, succulent and delicately flavoured white meat, with few bones, and it flakes nicely. Anita says she often enjoys hoki for lunch and it’s tasty enough to be delicious simply steamed or pan-fried. “It can be cooked just about any way white fish is cooked but I particularly enjoy it with soy and ginger or lemon and cracked pepper. Another favourite hoki dish is with udon noodles in a broth.”

Vela Fishing continues to lead in adding value to hoki. A major step has been portioning the end-product exactly to the size and shape customers want it. It has moved from producing hoki fillets with a wide tolerance in size and weight to cutting them into a varying sizes with only a 20 gram weight differential.

“We put our thinking-caps on to figure how we could cut a number of different sizes precisely and automatically. We worked closely with our Baader

This article is continued on page 42

Q + answers

High numbers of accidental albatross and petrel deaths in the world's longline and trawl fisheries are having a grave impact on populations of these incredible oceanic creatures. Some species are in decline and, without concerted global action, may become extinct.

New Zealand has joined the international Albatross and Petrel Agreement and is pursuing options for reducing seabird by-catch. An important step was the formation last year of Southern Seabird Solutions – a New Zealand alliance that includes industry representatives, government organisations, fisheries trainers and environmental groups (including Birdlife International and WWF). It is the first time that a group dedicated to resolving by-catch issues has been formed in any country.

BIG FISH discusses New Zealand's efforts to reduce seabird by-catch deaths with Southern Seabird Solutions coordinator, Janice Molloy (Department of Conservation); Malcolm McNeill, vessel manager for Sealord Group and instigator of the Ling Longline Code of Practice; John Bennett, skipper of Sanford vessel San Aotea II; and seabird ecologist, Jean-Claude Stahl, of Te Papa, a member of a research team funded by the Foundation for Research, Science and Technology (with support from DoC) which has been satellite-tracking Buller's albatross to learn more about their foraging behaviour and demography.



JANICE MOLLOY

Why is this issue important for New Zealand?

JM: Over half the world's albatross and petrel species breed in New Zealand, so we have a special responsibility to look after these species. Many of these birds migrate to other parts of the Southern Ocean, so our responsibility to these birds lies within our zone and throughout their feeding ranges. Fishing is the greatest threat to albatross and petrels worldwide, and this urgently needs to be addressed.

How are birds killed or injured?

MM: Most birds are caught chasing baited hooks during a line-set. Offal around a boat also attracts birds, and they risk being foul-hooked or taking a hook in the mouth.

How did Southern Seabird Solutions come about?

JM: The Ministry of Fisheries and DoC held a workshop in Nelson last year to see how much support there was for forming a group to start work on this issue internationally. We drew interest from a wide range of groups and individuals – fishers, managers from fishing companies, environmental groups, fisheries trainers, an eco-tourism operator. They each had different perspectives, but a common goal: to bring about widespread use of mitigation measures in the Southern Ocean fleets. As a result of the workshop we set up Southern Seabird Solutions. This is only one of a number of options for making progress on this issue.

What does the industry hope for Southern Seabird Solutions?

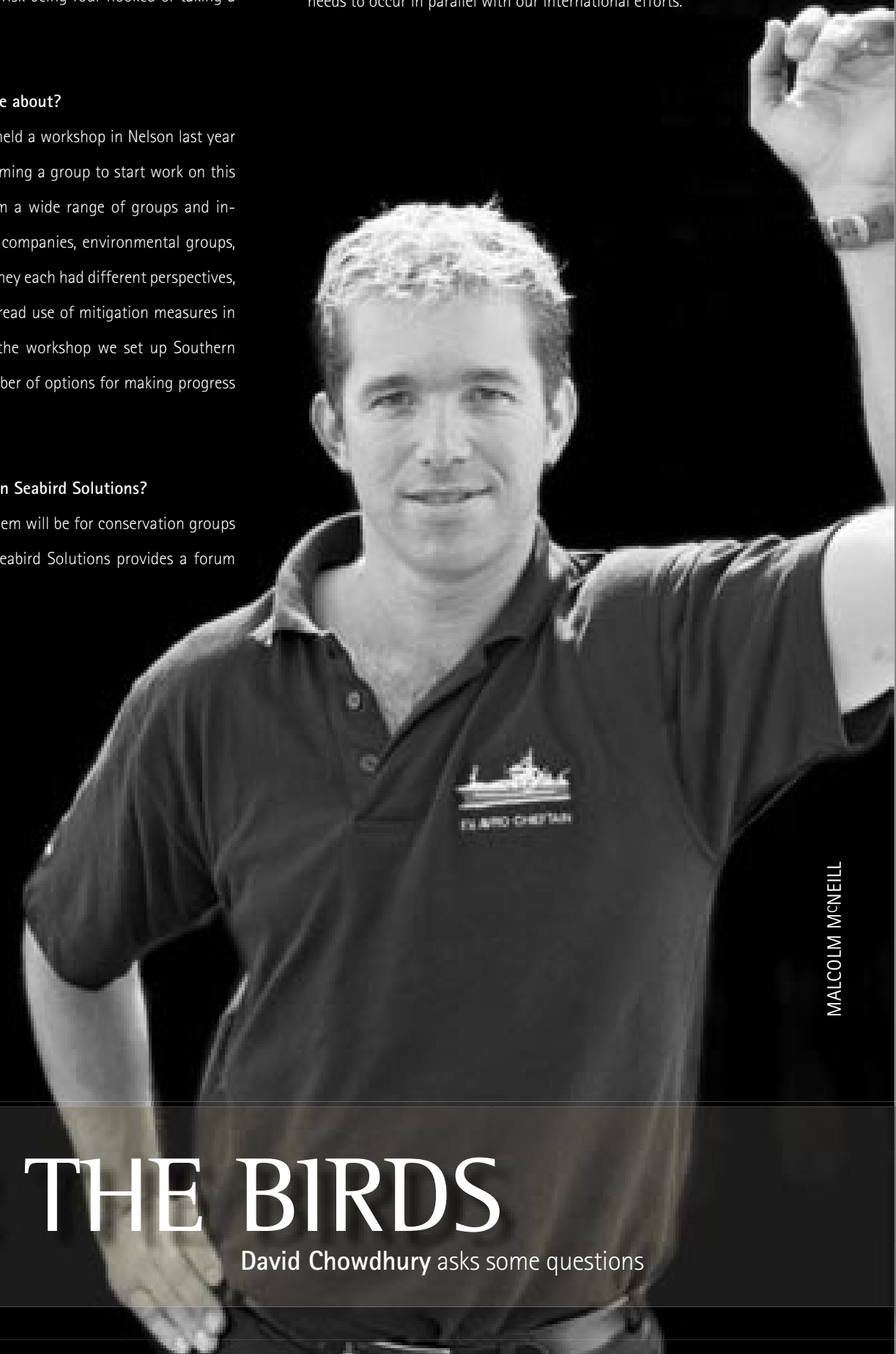
MM: The quickest solution to this problem will be for conservation groups and industry to work together. Southern Seabird Solutions provides a forum

that enables industry members to understand the size of the problem and allows conservationists and other groups to hear what the industry thinks, see what the industry is doing. If we work together as a group then we'll reach our goals quickly and cooperatively.

Is Southern Seabird Solutions looking beyond New Zealand waters?

MM: Definitely. New Zealand has to sort out its own backyard first. We're a long way down that road, but the wider goal is to get international fishers from South America, South Africa and other countries to join us.

JM: We have to make more progress in New Zealand and that progress needs to occur in parallel with our international efforts.



MALCOLM MCNEILL

FOR THE BIRDS

David Chowdhury asks some questions

Some initiations?

JM: Because we've got a wide range of groups involved we can liaise with other countries, government to government, industry to industry, NGO to NGO and so on. For instance we've been promoting the Albatross and Petrel Agreement with governments, and we're organising an exchange programme with skippers from Chile who'll spend time on a Sanford boat learning seabird by-catch mitigation measures.

Can seabird by-catch be reduced?

JM: Solutions do exist and are constantly being improved. The real challenge lies in changing fishers behaviour.

JB: Each vessel is different and there's no simple answer. Every vessel needs a number of methods for deterring birds and mammals, but needs, above all, a proactive attitude. Getting the crew interested and involved and coming up with ideas is the key.

What are the techniques?

MM: Firstly, we're improving knowledge and awareness. Secondly, are the mitigation methods. For bigger birds like albatross and other surface-feeding birds, methods are relatively easy – a good tori line will be quite effective, as will night setting, because these birds tend to feed at dusk and during the day. If you're fishing in areas with diving birds, the crew will need other mitigation methods effective for those species.

Wherever you fish, there are different kinds of birds, weather, different fishing scenarios, and in any given situation a skipper has to be able to apply the best mitigation method for that particular situation.

JB: On the San Aotea, we comply with the industry code of practice, which includes night setting where there's a high risk of catching birds, using weighted lines, and offal retention. We use any or all of our mitigation devices, including tori poles, a gas sound cannon, bird lines (a boom and bridle system), and line jiggers and shakers, which we've just developed.

Is the industry on board?

JB: It varies. Those who are not performing well on seabird mitigation are certainly hearing a lot lately about how successful we've been, and probably starting to realise there is something they can do.

How do you change attitudes?

JB: Leading by example. I've been 26 years in fishing and I think I can show that it's possible to fish, do well, and not catch birds. I don't believe it's going to be difficult to change attitudes. New Zealand fishers are already doing a lot of work. It's a challenge to change attitudes in other countries, but we've come a long way here in the last five years. There are some really smart operators out there, some really talented crew.

Has the deep-sea ling longlining code of practice helped?

MM: It's early days, but reported seabird catches have been a lot lower since the code of practice came into force. The code of practice includes a range of mitigation measures, including the continuous use of tori lines during a set, reduced lighting during night-time sets, and retaining offal during a set. These are minimum measures that can be achieved by everybody in the fleet.

How can research into albatross foraging behaviour and demography help?

JS: By allowing us to understand and simulate the ways that by-catch and mitigation measures affect seabird populations at risk.



JOHN BENNETT

Because there are dramatic foraging differences between seasons or populations, minor changes in distribution of fishing effort can translate into radically different effects. Our aim is to provide fisheries' managers with a biologically realistic modelling tool. We're currently developing this using Buller's albatrosses and the Southern Bluefin Tuna longline fishery as guinea pigs.

Can this model be widely applied?

JS: Yes. It's designed in principle to simulate the effect of any New Zealand fishery on any seabird or seal population, and explore the effects of alternative fishing scenarios – for example, various levels of by-catch mitigation, area or period closures, or changes in fishing effort. It will provide a framework to link and make optimal use of the various fisheries and seabird data collected with Conservation Services Levy funding.

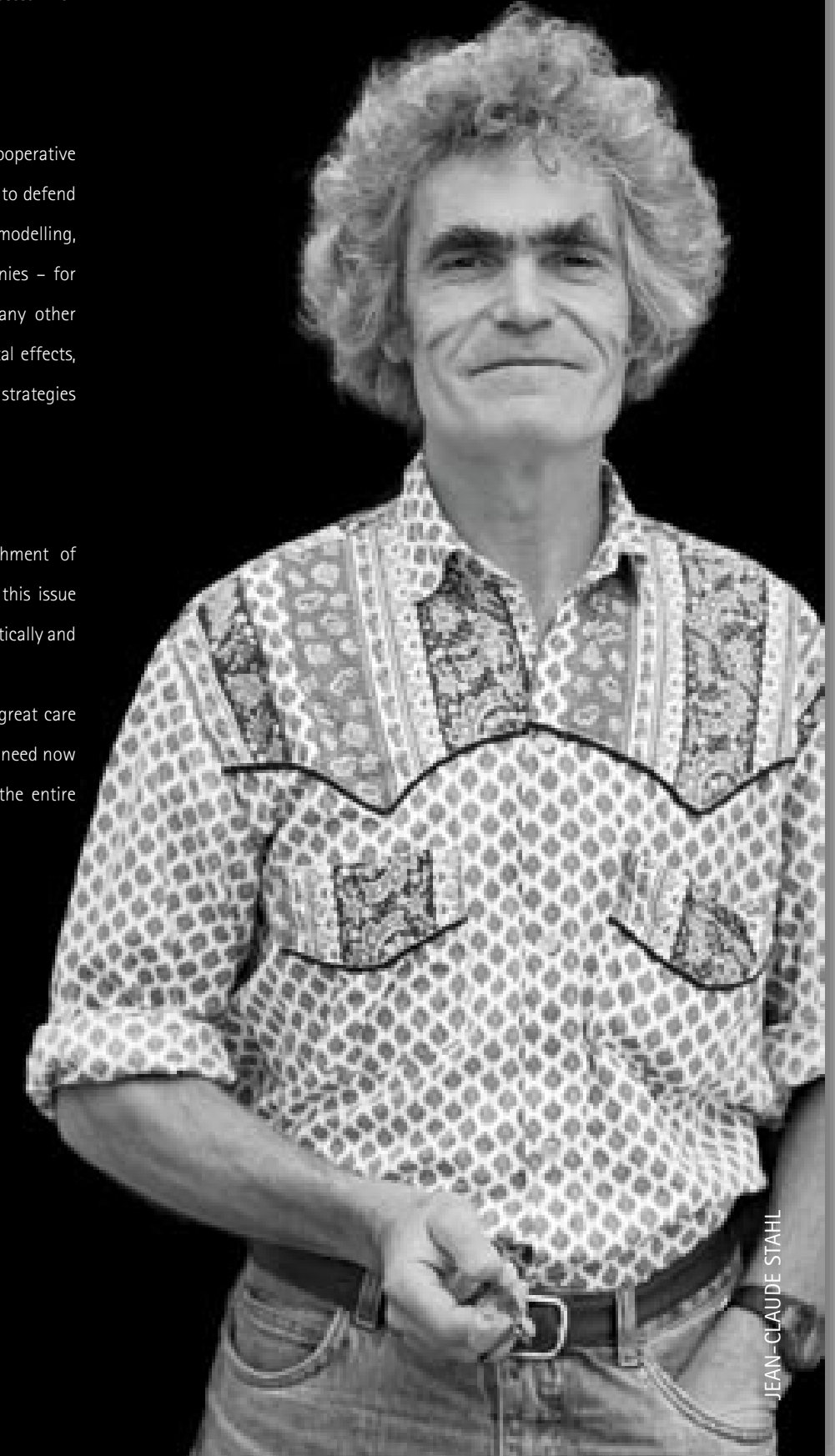
How does the industry benefit?

JS: Primarily, by the provision of sound information for cooperative management of the seabird by-catch issue. The industry will be able to defend itself, too, where alleged detrimental effects are not supported by modelling, especially when associated with recorded declines on seabird colonies – for example, declines resulting from fisheries by-catch elsewhere or any other cause. In specific cases where simulations would point to detrimental effects, the modelling tool would also provide the means to explore optimal strategies to alleviate those effects.

How can the industry show its commitment?

JM: By working constructively with government on establishment of standards. This provides a real opportunity to show they're taking this issue seriously and they accept that good standards are needed both domestically and for our international image.

We're seeing a number of highly committed skippers who take great care when they're fishing to minimise capture of seabirds. What we really need now is a groundswell of fishers joining them, and lifting the game of the entire industry. **bf**



JEAN-CLAUDE STAHL

Photography BRUCE FOSTER



NELSON IS THE BIGGEST FISHING PORT IN AUSTRALASIA. ALMOST ONE THIRD OF THE CITY'S GDP AND EMPLOYMENT IS ATTRIBUTABLE TO THE SEAFOOD INDUSTRY.

Maui's Catch

Carole van Grondelle

Dunedin-born Craig Ellison, 46, has the sea in his blood. For generations, his Maori forebears fished the seas around Otakou, at the head of the Otago Peninsula.

In 1948, his family established Otakou Fisheries Ltd, which concentrated on lobster, oysters and in-shore wet fish. His father was managing director and Craig, in turn, with a post-graduate degree in marine science, became company secretary and a director.

"Everybody in our extended family was involved—uncles, cousins, friends," recalls Craig. "As a kid, everything centred on the Fisheries. Life revolved around that.

"At one point, we had up to 50 vessels, and depots from the Chathams to Milford. My earliest memories are of helping after school and at the weekends, cutting, tailing crayfish, packing, being a general hand on boats."

While obviously a substantial business, this family company was just a minnow compared to the scale of operations Craig now helps to manage.

Thanks to the historic 1992 fisheries settlement made through the Treaty of Waitangi claims process, Maori are a rapidly growing force in New Zealand's \$1.5 billion fisheries industry.

Today, Maori have direct control over 33 percent of the industry, New Zealand's fourth largest export earner. They influence a further 10-20 percent of the industry through leverage of their asset base.

After getting intimately involved in the settlement process from the mid-1980s, Craig Ellison is now a key national player in Maori fisheries.

He retired from Otakou Fisheries six years ago, and moved his family to Wellington in 2000. Today he sits on a number of boards, and is directly, or indirectly, involved in well over \$1 billion in fisheries assets.

He is deputy chairman of Te Ohu Kai Moana (the Treaty of Waitangi Fisheries Commission). Craig proudly relates how Te Ohu Kai Moana has grown from \$150 million to \$700 million, the 1992 Crown settlement used to purchase 50 percent of Sealord Group Ltd (New Zealand's largest fisheries company), plus 10 percent of all quota.

"We've averaged 7-8 percent compound growth after tax for the past 10 years," he says.

He is also chairman of two fisheries companies: Moana Pacific, New Zealand's largest inshore fishing company with an annual turnover in excess of \$100 million; and Prepared Foods, New Zealand's largest paua processor, with \$40 million in annual turnover.

Thanks to the historic 1992 fisheries settlement made through the Treaty of Waitangi claims process, Maori are a rapidly growing force in New Zealand's \$1.5 billion fisheries industry.

Today, Maori have direct control over
33 percent of the industry...

They influence a further 10-20 percent
of the industry through leverage of
their asset base.



CRAIG ELLISON



DARRIN APANUI

Photography BRUCE FOSTER

While the Crown fisheries settlement has brought major financial benefits, it has also brought a number of challenges.

The first, of course, has been the effort involved over the past decade in trying to decide a rational basis for allocation of these assets to different tribal groups. This now appears to be largely resolved – allocation is due to begin on 1 October – but other challenges remain.

For a start, the fisheries industry is not a sexy one to young Maori, and it is not a career path of choice.

"It's seen as being a bunch of smelly old buggers fishing from the end of the wharf," admits Craig. "But those days . . . well, they still exist, but they're a lifestyle choice.

"The reason people see the rusty old fishing ships [that reinforce their prejudices] is because they're no good and they're tied up at the wharf. The ones that are out there are fishing, working hard. They're smart vessels. The industry is a very sophisticated one."

According to Darrin Apanui, manager of human resources development at Te Ohu Kai Moana, a lot of effort now goes into educating young Maori about the modern realities of the industry.

Throughout the year, for instance, Darrin gives careers talks in schools about the fisheries industry. Te Ohu Kai Moana also holds an annual student conference to showcase the best of the industry, and potential career paths young Maori might follow.

Preparing iwi to receive their fisheries entitlements has also been high on Te Ohu Kai Moana's agenda.

"We recognise 78 iwi groupings. Of these, we expect to work with 60 iwi fishing companies that are either individual iwi fishing companies or joint venture-type operations that involve a number of iwi," says Darrin.

"We believe that many of the future potential Maori leaders are already working in the industry, we just need to find them and invest in their development," says Darrin Apanui.

Darrin puts me in contact with Ian Ruru, a science graduate currently completing a PhD on the potential of farming rock lobster in Gisborne harbour. Ian also has a tertiary qualification in business management, and represents Te Ohu Kai Moana on a number of scientific stock assessment working groups.

He has been working closely with his iwi, Te Aitanga a Mahaki, to ensure it is ready to receive fisheries assets, on terms required by Te Ohu Kai Moana. Iwi must demonstrate that they have a skilled management structure in place, and that their processes are accountable, open and fair.

"These requirements are to ensure that each iwi organisation operates with a measure of accountability, transparency and fair representation to all beneficiaries. The allocation process has taken 10 long years, and it's now time for our iwi to truly get into the business and activity of fishing," says Ian.

"We're at the point where we need to meet and exceed any benchmarks required. Further delays will mean further lost economic opportunity. Our readiness project will prepare us to manage these assets prudently and for maximum economic benefit."

Customary (non-commercial) Maori fishing rights are also a sensitive issue.

Eels, an icon species for Maori, for instance, are soon to be incorporated into the Quota Management System. However, complex issues surround the management of the eel's habitat and migration needs.

Proposed new marine reserves legislation looks set to impact significantly on the Crown's fisheries settlement with Maori, eroding the value of the commercial settlement and extinguishing Maori customary rights by excluding Maori from their traditional fishing areas. Many complex ownership issues flow from this.

It is Tania McPherson's role at Te Ohu Kai Moana to try to integrate and promote the interface between customary and commercial fishing interests.

She argues that Maori traditional management practices are extensive, elaborate and sacred, and are largely based on the maramataka (the Maori fishing calendar) – known in western science as 'biological indicators'.

She applauds all moves to protect traditional Maori fishing grounds, and to promote traditional use and management practices within them.

"It means that inside these areas, Maori can express kaitiakitanga (guardianship) through bylaws that are consistent with Maori traditional management practices, such as rahui (seasonal closures), and restricting particular methods of harvesting," Tania says.

She speaks of the influence of maramataka that decrees, for instance, that the best time to harvest kina is when the kowhai tree is flowering. In other places, and at other times of season, it may not traditionally be appropriate to use metal implements to gather seafood.

"However, we're realistic about the need to be economically independent," Tania says.

"So what we try to do is get the people who represent each side of the customary/commercial argument to talk to each other, and to seek real and tangible benefits for both while ensuring the sustainability of the resource."

But it is the skills gap that is perhaps the most critical issue of all for Maori.

"We're playing catch up after 100 years out of the business – not totally out of the business, but mostly," Craig Ellison says.

"As a result, the capabilities throughout every part of the industry are not necessarily there.

"There are still some hugely skilled, experienced and successful Maori... but where we have concern is at the management level – particularly senior management – and in the knowledge and understanding of the science of the marine environment.

"We're playing catch up after 100 years out of the business – not totally out of the business, but mostly," Craig Ellison says.

"As a result, the capabilities throughout every part of the industry are not necessarily there."

"New Zealand's industry is based on sustainable utilisation. To understand that and to critique the setting of catch limits, you need to have an excellent knowledge of the biological processes that drive stocks, and the management and modelling that drive stock decisions, as well as the financial analysis that underpins it all.

"All those things we really need to catch up on.

"We can't expect to do it overnight, but we can put in a framework that – over time – means we'll be successful at it."

Education is seen as the portal to a new future.

Since 1995, Te Ohu Kai Moana has implemented an annual \$1 million charitable trust scholarship programme for Maori.

This article is continued on page 43

THE MODERN FACE OF MAORI FISHING

The modern face of Maori fishing is young, smart and extremely well educated.

Take Ian Ruru. Ian is a year away from completing a PhD from Waikato University on the potential for rock lobster aquaculture and enhancement in Gisborne harbour.

A local boy of Te Aitanga a Mahaki, Whakatohea and Ngai Tai descent, he has had financial support from Te Ohu Kai Moana's scholarship programme since 1997.

He looks set to pay back this investment many times over.

Ian is a Te Ohu Kai Moana representative on the rock lobster, shellfish, eel and inshore Ministry of Fisheries stock assessment and research planning groups. These groups provide valuable scientific advice for the sustainable management of these fisheries.

Back home, Ian provides a crucial support to Te Aitanga a Mahaki in its efforts toward putting in place sound management and governance structures for when Te Ohu Kai Moana begins allocation of fisheries assets later this year. His skills are also being utilised in the development of an iwi fisheries plan



and strategies to ensure more effective participation in all aspects of fisheries management.

"Understandably, all iwi are keen on sustainable management of the fisheries resource for the benefit of today and for future generations," says Ian.

He is also Te Ohu Kai Moana's representative on the Seafood ITO, and has written unit standards for aquaculture, customary fishing and management.

Education and training at all levels can only enhance economic prospects and growth within the seafood industry," says Ian.

In 2000, Ian established a paua aquaculture training facility for Te Runanga o Turanganui a Kiwa's training arm, Turanga Ararau. He is the facilitator of a Maori aquaculture cluster, which brings together 10 aquaculture farmers nationally, to share information and experience, and to create economies of scale.

He is hopeful that his work in aquaculture will pave the way for whanau, hapu and iwi to grow paua, rock lobster and other potentially viable seafood and freshwater species for both the domestic and overseas markets.

"My project is a small but significant step towards this goal," he says.

Tania McPherson credits her passion for the work she is doing at Te Ohu Kai Moana to her love of seafood and early upbringing.

"I'm really passionate about the sea and the food basket it contains," she says.

"Being Maori, I am concerned to ensure that our people and our values are cared for with regard to the food we source from the sea, and its overall sustainable management."



She embarked on university studies to provide a better future for herself and her son Jarome. Tania continues her studies toward a Masters in Environmental and Marine Science while she works. A scholarship winner, she too looks set to repay Te Ohu Kai Moana's investment in her education.

As a senior policy analyst at Te Ohu Kai Moana, she works hard to ensure that Maori interests inform all aspects of national fisheries policy. **bf**

AN EARLY ECONOMIC PERSPECTIVE

DAVE CHOWDHURY

Fishing was a very significant aspect of the Maori economy in pre-European times. Anthropologist, Atholl Anderson, says Maori became increasingly reliant on fisheries as a source of protein when populations of moa and seal collapsed, perhaps by the fifteenth century. Intensive big-game hunting had led to rapid population growth, and with the once readily available protein sources gone, consumption of freshwater and marine resources increased, along with fern root collection and agriculture.

"Fishing seems to be the chief business of this part of the country," wrote Captain Cook's botanist, Joseph Banks, after his encounter with Northland Maori in 1769.

Indeed, Maori had by then developed highly sophisticated fishing technology and methods utilising nets, traps, lines, hooks, weirs and waka. Huge seine nets constructed from flax enabled large-scale fishing to take place, up to 30 km offshore. So vast were some fishing operations that large storage facilities were required. Anderson and Matt McGlone have estimated that northern Northland Maori were able to take 1200 tonnes of snapper a year - roughly equivalent to today's commercial catches.

The earliest recorders of Maori fishing techniques were impressed by their sophistication. "We were by no means such expert fishers; nor were any of our methods of fishing equal to theirs," wrote Captain Cook in Queen Charlotte Sound. "Their fishing lines are infinitely stronger, and fitted to bear a heavier strain, than any made from European materials" wrote J.S. Polack, when visiting the Bay of Islands in the 1830s.

Maori flax seine nets and their construction (always carried out under strict tapu like every aspect of traditional fishing) also impressed Polack: "The making or repairing of fishing nets, or seines, some of which are several thousand feet in length, the material being unscraped flax, is the work of all the inhabitants of a village."

Elsdon Best's Fishing Methods and Devices of the Maori, published in 1929, recorded Captain Gilbert Mair's account of a "veritable taniwha of a net" measuring 2090 yards, constructed at Maketu in 1885.

Maori fishing technology appears to have been very effective. Mair's 'taniwha net' was later observed catching 37,000 fish. At times it was perhaps too effective. Anderson says proscriptions on resource use and conservation (such as rahui), which underpin modern Maori perceptions of environmental management, were introduced as tribal territoriality and population growth increased.



after breakfast we went ashore at a large Indian fort or heppah a great number of people immediately crowded about us ∞ sold almost a boat load of fish in a very short time they then went ∞ shewd us their plantations which were very large of Yamms, Cocos, ∞ sweet potatoes ∞ after having a little laught at our seine which was a common kings seine shewd us one of theirs which was 5 fathom deep its lengh we could only guess as it was not stretchd out but it could not from its bulk be less than 4 or 500 fathom fishing seems to be the cheif business of this part of the country about all their towns are abundance of netts laid upon small heaps like hay cocks ∞ thatched over ∞ almost every house you go into has netts in it making*

Joseph Banks' Endeavour Journal
December 4th, 1769
Northland

*around 800 metres

Image Left : Korotete (fish trap)

Image Right : Kororaraka Beach, Bay of Islands, New Zealand, Circa 1830 by Thomas Gardiner

Both images were supplied by Museum of New Zealand, Te Papa Tongarewa



Dreaming of Cyberfish

Louise Thomas

New Zealand's hoki fishery could soon have a simplified process for calculating its annual Total Allowable Catch (TAC), thanks to sophisticated population modelling by Canadian Fisheries Scientist, Vivian Haist. The new process promises to take any political horse-trading out of setting the TAC; final decisions will be based firmly in scientific modelling rather than pressure by various lobby groups on Government at the external end of the equation.

At present, scientific advice for managing our hoki fisheries is presented as risk analyses - the probabilities of exceeding specified measures of abundance. These result from a complex stock assessment model that is fitted to multiple - often conflicting - data sets. Different assumptions can lead to quite different estimates of how large the stocks are. Hence, managers face the quandary of which scenario to believe in. The system also means that resulting guidelines are subject to political pressures from both industry and conservation lobby groups.

Haist says the new process will use a simple algorithm for TAC-setting that is tested using operating models of the hoki stocks. These complex operating models reflect all likely hoki population dynamics, thus giving a picture of how the stocks would respond to different rules for setting the TAC. The new operating model encompasses the structural form of the two current hoki stock assessment models, with parameter uncertainty based on the Bayesian posterior estimates from the assessment model fits.

It sounds complex, but for the end-user it allows a much simpler process: data is inputted, then a recommended TAC outputted in a 'black box' scenario - the end-user doesn't need an in-depth understanding of the modelling involved. Eventually, it should make TAC-setting a much speedier annual affair.

Haist says the end process will be necessarily risk-averse, because of uncertainty as to stock dynamics. "The process has guidelines and requirements that have to be met. Ministry of Fisheries and conservation requirements will ensure that there are minimum targets for conservation to be considered in the process, and industry groups will obviously have both economic and social objectives that need to be considered as well."

"The idea is that eventually all the different interest groups will reach agreement on the parameters used in setting the TAC. In that process they

would be looking at the trade-offs, the economic benefits, conservation and sustainability issues, so those considerations become an in-built part of the method for setting the TAC."

Haist's work focuses on the biological parts of the equations that model the hoki population. She collates data such as catch figures, age of captured fish, and information provided by trawler surveys on size and abundance of fish. She also considers the impact of variables including ocean climate, fish fecundity, and life expectancy. Additional to this, economists at the New Zealand Seafood Industry Council will be able to calculate social and economic parameters, such as revenue and employment, which will feed into Haist's work.

The economic considerations for modelling are substantial. Hoki is New Zealand's biggest seafood earner, making up 20 percent of the industry's revenue, and contributing around 60 percent of export returns from mid-water fisheries.

Historical data on the hoki population is invaluable to Haist's work, though, she says that New Zealand's fishery data recording is not as extensive as she would like. "We have fairly good data starting in the late 1980s, early 1990s. But this is still quite a short period compared to other fisheries I've worked with. In North America, I'm normally working with thirty or forty years of data for the major fish stocks to develop these models."

While the process being developed is better than the conflicting models currently used, Haist warns that, at least in the near future, it may not be the silver bullet that is hoped for - uncertainties will always be a feature of the model. "Probably the largest uncertainty is what the future recruitment of the stock will be - climate is probably one of the most important factors driving this, as well as fishing impacts. Science can never be entirely precise in estimating fish stocks at any point, so the concept behind this management strategy evaluation work is to come up with a method for setting allowable catch that is robust enough to allow for those uncertainties."

"In many ways New Zealand is at the forefront of this kind of management," she says. "Industry funds research here, and has a strong involvement in stock assessment. In Canada, most fisheries have very little involvement, though that's starting to change - New Zealand seems to be used to test things out, probably because of its size and because there aren't as many political levels. There's less inertia, too, and people seem willing to try new ways of doing things."

Since 1999, Haist has spent a quarter of each year in New Zealand, working on hoki stock assessment. The rest of her year is spent in Canada, where she contracts to the Department of Fisheries and Oceans, focusing on stock assessment and related biological studies of sablefish off Canada's west coast. She also contracts to other international fisheries research organisations, including the International Commission for the Conservation of Southern Bluefin Tuna. **bf**

"In many ways New Zealand is at the forefront of this kind of management"





ANNIVERSARY

IT WAS MY PARENTS' WEDDING ANNIVERSARY—FORTY YEARS. I RANG TO SAY I'D TAKE THEM TO A RESTAURANT. MUM SAID THAT WASN'T NECESSARY. ANYWAY, YOUR FATHER DOESN'T LIKE TO GO OUT, SHE SAID. HE ALWAYS COMPLAINS HE CAN'T GET ENOUGH TO EAT.

V

We'll order a lot, I said, and if he's still hungry we'll order more. He won't be able to stand up after this meal.

It sounds terrible, she said, but if you're going, we'll go.

In the last year Dad had grown forgetful, a bit absent. He drifted in and out. Behind his smile there was confusion. No one said dementia.

At the restaurant Dad tucked his serviette into his shirt. Mum took it out of his shirt and put it on his lap.

Dad looked at the menu for a long time. He turned it over and turned it back. The steak is right there, Mum said. He always went for the steak.

She would go for the chicken. I always go for the chicken, she said.

Though Mum said it was a waste of money, I ordered a bottle of wine and we raised our glasses. To forty years, I said.

It doesn't seem like forty years, said Dad. He picked up his fork and looked at it.

I remember when we lived in our little flat, said Dad, brighter suddenly.

I remember the walls, said Mum, like paper.

This was when we were first married, Dad said, and your mother worked in the fish place. She was their best filleter. She used to bring home fish, cheap.

I wasn't their best, said Mum. You get tired of fish. It wasn't a treat to have a nice piece of fish.

But, said Dad, it was wonderful all the same.

It was boring hard work, said Mum.

Dad studied her. My wife was working as a filleter. Did you know her? Now you're just being silly, she said.

The waitress arrived with the meals: Mum's chicken, my pork. They're bringing your steak, Mum said to Dad, and don't say anything about the portions, we're not paying for this.

It's very kind of you, Dad said to me.

Then I spoke without thinking. You've been together forty years, I said. I was with Sharon for only six.

You can't compare, Mum said. You can't judge from the outside.

Who's Sharon? said Dad. Is that who we're waiting for? He looked across the table at the vacant chair.

I laughed.

Nice tablecloth, said Mum.

Finally the waitress came through with the covered plate. She put it down in front of Dad and lifted the lid. Steam flew up. It was a whole fish! We all looked at this fish; its flesh shone, its mouth was set in a sort of kiss. Mum put down her knife and fork. Her eyes filled with tears and she let them. She was smiling. You won't finish it, she told him.

Watch me, he said. I love fish. My wife is the best filleter around. The knife, she says, is an extension of the hand. He looked across at me. Your friend is very late, he said. Do you think she'd mind if we started?

Image series below : Salmon processing, The NZ King Salmon Co, Nelson
Image below right : Cushla Hogarth, Marion Horsfield and Shaaron Adams



STEPPING OUT

Phil Barclay

Cushla Hogarth admits setting up her own company was a brave move, but three years down the track, she says it's the best thing she ever did.

Established in 2000, Solutions in Seafood (SIS) has grown into a busy provider of training and specialist advice for the seafood industry in New Zealand and the wider Pacific region. Now, the only thing that makes Hogarth nervous is the fact she is responsible for the livelihoods of the six contractors who work under the SIS umbrella.

SIS grew from necessity. With several years' involvement in the industry, firstly as a technical manager for Sealord and later as joint dean at the Nelson Marlborough Institute of Technology (NMIT), Hogarth had identified the need for a more flexible consultancy and training provider. SIS's primary focus was to provide that flexible training service, in addition to consultancy work.

"It was a hard decision. My situation was difficult because my husband had just been made redundant and I was the chief bread winner. In the end, we just had to go for it. Until December 2001 I was on my own. We've built it up from that date," she says.

Now Hogarth, along with Warwick Neame and Marion Horsfield, looks after

the seafood processing area, while Shaaron Adams does first line management and manages the company's training programmes. Vicki Seager and Penny Perano deliver and assess aquaculture training and develop resource material, while Jos Edwards is the company's administration and schedules guru.

Hogarth's brave move quickly paid off. What began as something of a cottage industry, with contractors working at separate locations networked via computer and email, soon required the family to sell their 10-acre lifestyle block on the outskirts of Nelson and move to residential Stoke, where part of the Hogarth house provides a central gathering point, offices, and a meeting room for the contractors to share ideas.

While SIS initially focused on providing services at the top of the South Island, the company has since completed work around New Zealand, and more recently has gone offshore, working in Fiji, Samoa and Papua New Guinea.

"Our work in the Pacific is assisting them in setting up a legislative framework, and helping them get in place procedures to ensure continued export to places like the European Union. Part of that is setting up training institutions – not training – just the institutions to do it. Fishing is a big contributor to island economies, so there's a lot of satisfaction in that work," Cushla says.

"There are real inter-relationships in the Pacific in terms of seafood. On the surface it appears quite a large industry, but once you're in it, it's really quite small. The opportunities are there, whether they're with a teaching institution, a company, a government department or someone on the other side of the Pacific," she says.

In New Zealand, the majority of SIS work is driven by the industry's need for compliance with intricate fishing regulations to enable continuing export; the

“People are still an important part of the equation and an equally important investment”

need to ensure quality; and the need to keep pace with technology. Cushla says that increasingly, companies are coming to regard SIS as a one-stop shop to fill a gap, whatever that might be.

With quality crucially important to an industry with increasingly selective export markets, and rapidly advancing technology, work has become commonplace on quality management, systems design, hazard management and other processes that make seafood products better, safer, tastier, and more cost efficient.

Add to this general enquiries and trouble-shooting, and the only thing SIS is not, is routine. The work is constantly challenging and extremely varied – so much so, Hogarth says, that contractors often have difficulty explaining exactly what they do all day.

The industry is always thinking of new ways to optimise revenue, too, and there are often unusual – and commercially sensitive – enquiries.

"A lot of companies find the regulatory environment fairly complex and come to us saying, "Just do it! There is a lot of stuff required now that hasn't been done before, and we're particularly useful to companies when they have a big project on the go, but don't have the capacity to do it," Cushla says.

“Our aim is to be able to go to a company and offer them the full package. Whatever it happens to be, we want to be able to do it.”

"Our work is basically about assisting companies to cope with the regulatory requirements – designing and developing procedures that allow them to function better and continue to export. It's about getting into an organisation,

critiquing what they've got and making it better. Sometimes you have to build something from scratch, but you must get it right first time every time. It's interesting work because we get the range of the industry – canned, bagged, filleted and value-added," she says.

That looks set to expand further, with SIS keen to add product development to its repertoire, making use of Hogarth's and Horsfield's backgrounds as food technologists.

"Our aim is to be able to go to a company and offer them the full package. Whatever it happens to be, we want to be able to do it," Hogarth says.

While the consultancy side has blossomed, the training provision that is SIS's real bread and butter has also advanced.

Further growth is likely as SIS formalises mutually beneficial relationships with institutions and companies. Memorandums of Understanding are possible. Running training in Australia is the next likely endeavour.

Hogarth says training is an often overlooked key to developing the industry. Though technology is advancing, people are still an important part of the equation, and, she says, an equally important investment. Getting them on board is crucial to the success of the industry. Recognition by industry of the commitment people make to study, and the importance of seeing it through is half the battle.

"We push them hard, but we recognise they are people with other commitments. They all work fulltime, have families, the whole shebang, and really, it's quite difficult," she says. "But the rewards are certainly there. A lot of these people we train are achieving at levels they never thought themselves capable of. Some of the things we achieve here are fantastic. When you achieve something or see the light switch on in someone, then you know you're getting somewhere."

Looking back, it's all a far cry from the first training course Hogarth taught to 17 men and one woman under contract to NMIT while still a one-woman band. It seems, to her, like a long time ago. 2003 will be a year to consolidate the growth SIS has achieved, and Hogarth is satisfied.

"The seafood industry is something I'm passionate about, and there's no way I'd get out of it. The people in it are great. There are a lot of characters." She laughs. "At times they make you want to swear and curse, but at the end of the day, it's great." **bf**



a bob each way...

Bryn Somerville

In one corner a customer noses the glass on a small eyeliner cooler of \$18 Bluff Oyster pottles. Window shopping. Behind her, a Kiwi of Russian descent is scooping fresh salmon roe ("Special today – \$7.50/kilo") into a plastic bag. Each time he pauses and looks up, his partner smiles and lifts her chin. Keep working that spoon, is the message; I'll tell you when to stop.

A tray of still-to-be-pickled salmon caviar sits on the fresh chilled bar alongside offerings of shrimp and scampi, fishheads for soup or stock, small pointy fish the Japanese love to eat off the grill, and a good selection of whole and filleted wetfish.

The preparation area is behind glass, open to view. The fish splitter grins at a customer watching him whip the fillets off a blue cod. Everything's tidy. Catty corner to the fresh-seafood bar is your traditional New Zealand chipper-



counter, deep fryers, drain racks, the salt being shickered onto hot fried take-aways, extractors humming, the price board, magazines and a couch.

It's 6pm on an autumn Thursday in downtown Christchurch and this place is humming. There are eight people waiting on their takeaways, five or so circling the fresh fish section, folk coming and going all the time.

For the owners of City Seafood Market, Johnny "Fish" Pacevski and John

Hanson, this isn't the best time for talking. Customers come first, so make it lunchtime on Saturday when the chipper's shut and there's a bit more time for a yarn.

This business is in its third year. The shop used to be a greengrocery. Its neighbours are a high-end butchery and a youth hostel, so there's plenty of foot traffic.

The partners are brothers-in-law. As a lad in the 1980s John was brought out from Bradford to play soccer for Christchurch United. The young striker got a job selling TVs near where Johnny's family was running a fish and chip shop. "One thing led to another, you know how it is."

If the business is a success, they say it's because they're in there running it all day, six days a week. They work hard to make sure the customers are happy, keep coming back, and tell others.

Freshness is prime with today's customers. "We're fussy," Johnny says. "We keep it fresh. We buy for the day, cut for the day." The turnover ratio favours fresh seafood over fish and chips about 65/35, although fish and chips are gaining. They don't chase the wholesale trade. "It's like rentals," Johnny says.

"You want payers, not stayers."

They say the fresh retail market has two distinct segments – long-time fish eaters (including the new Kiwis from around Asia) and younger people who are coming to understand the attractions of seafood. They're working hard on the second group, explaining how to prepare different meals and encouraging them to try new things.

"In the past there had always been a fish shop inside the four Avenues (downtown Christchurch), but when we went looking, there hadn't been one for a few years," Johnny says. "If there had been, I'm not sure we'd have tried this. I don't think there's enough business for two."

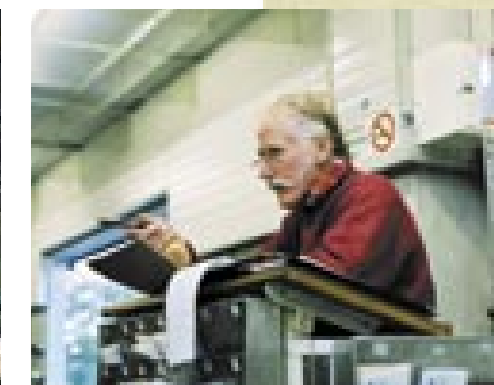
The men each go to one of the city's morning seafood auctions – John to the earlier one so he can get back and set up.

"We open at 9am and the fish and chips are available then too," he says. "It's usually pretty quiet at the start but it builds.

You look up and suddenly there are 20 people in the shop.

"You're explaining to someone about cooking whole fish and taking orders for two crumbed fillets and a scoop. It's bloody great. That's when I feel proud of what we've done." **bf**

They say the fresh retail market has two distinct segments – long-time fish eaters (including the new Kiwis from around Asia) and younger people who are coming to understand the attractions of seafood. They're working hard on the second group, explaining how to prepare different meals and encouraging them to try new things.



UNDER THE HAMMER

BRYN SOMERVILLE

Around 8.30am any weekday morning, the buyers' room at United Fisheries in Christchurch rings with sound – a great mix of Cantonese, English, Korean, more Chinese tongues, all interspersed with some spicy English swearing.

Men laugh, blow on their hot drinks, wave their arms and talk about ... who the hell knows what they're all talking about? One conversation seems to be about health inspectors. A lot of these people are new New Zealanders, many still fighting to get on top of the Kiwi English.

Some operate sit-down restaurants but most are owners of that great entry-level Kiwi family business – the fish and chip shop. They've come to this big seafood firm in Sockburn for the morning auction.

New Kiwis make up about half the usual crowd. The other half tend to be retailers and wholesalers whose language suggests a longer acquaintance with the country. This bunch is teaching the tyros the finer points of Kiwi swearing.

Christchurch's seafood retailers and distributors have a pretty unique situation with their auctions. There are two: Fresco Seafoods' auction kicks off in Sydenham at 7am, while the auctioneer at United climbs into his box and rings his brass ship's bell at around 7.30am.

You can get to both if you're quick. Some buyers have a bidder at each one. You'll hear them on the shoe phone – "Yeah, there's cases of it here so don't worry about it at your end."

By 8.45am or so, they've either bought what they need, decided the offerings were too expensive, or they've just come for a look and a natter. A lot of them are back in the smoko room having a cuppa.

Both auctions run out of large, clean, refrigerated loading bays and are set up so that language skill isn't vital. The common understanding needed is of weights and measures – kilos and currency.

The number of cases auctioned each time depends on how much of a particular species is being offered. Auction hands spread the cases out. Potential buyers pick up an end and crash the case to the floor, breaking the crushed ice cover so they can better see the fish size and condition.

Someone yells a starting bid – say \$2 (a kilo) – which – for a laugh – is generally well below the likely sale price. The auctioneer politely counters – "You're bloody mad, you are." Bids go up in 5 cent increments.

They nod to get in or stay in. They keep nodding or maintain eye contact until the lot's bought or becomes too pricey. Once a contract is made the auctioneer confirms buyer and price. A hand chalks each case with a buyer code.

The cases are slid aside, and the melee moves on. **bf**

off the shelf

Jane Arnott

What came first, the opportunity spied by former fisherman David Jose, seafood merchandise manager at Foodstuffs, or the new strategic direction of Foodstuffs in response to a heightened demand for seafood?

The answer may be a little academic, but it is clear that David Jose offers both the grit and the marketing savvy that ensure sales and respect. Over the four years he has held his current position, the seafood category sales for fresh fish and pre-packed smoked seafood at both New World and Pak 'n Save have increased by a respectable figure.

It was in 1979 that a much younger David won a NZ Fishing Industry Board scholarship to go to Europe to study fishing methods. While touring, he became impressed with the presentation, supply and quality of fish, not to mention the daily demand for seafood - way beyond the overtly British 'fish on Friday' routine evident in New Zealand. This interest developed to a point where he found himself running a wholesale seafood processing and distribution company and supplying the supermarket trade in Australia for a ten-year period.

New Zealand at that time was in the grip of an export-led fishing industry, which meant retailers, no matter their size, had to contend with either 'end of line' fish that failed to meet the export standard, or non-specified varieties. This approach stifled local demand and reinforced the notion that New Zealanders weren't interested in eating fish.

Upon taking the job with the supermarkets in New Zealand David recognised the status quo as a major problem. "If customers were seriously to con-

sider their local supermarket as the best place to buy fish then they needed to have confidence in both the reliable availability of their favourite fish species and its quality. So, we had to work right across the board - on issues of price, quality and consistency. To achieve our goals it has been critical to develop specific business partnerships with appropriate supply channels."

While David admits dealing with an export-oriented fishing business means having to pay more for export-quality fish he suggests that the price threshold for fish in terms of end customers had never been adequately tested. "When it comes to tarakihi, gurnard, trevally, hoki or lemon fish, all favoured varieties, household shoppers will comfortably pay between \$12 and \$20 a kilo for fillets. This precludes a species such as snapper and orange roughy which can reach in excess of NZ\$35 a kilo on world markets.

As for the chiller cabinet and the vacuum-packed and heavily branded 'pleasure products,' including hot smoked, smoked and value-added cuts of salmon, eel or marinated mussels, David believes price resistance is evident and is linked to over-packaging.

"Customers don't buy vacuum-packed smoked salmon as a meal in itself but for entrees and hors d'oeuvres." There are also too many brands in the marketplace - rationalisation is bound to occur over time, and will be the result of customer preference."

So what lies behind the greater interest in seafood? David believes a lot of the increased demand is a consequence of the supermarket-led attention to detail and, he reasserts, the basics of quality, presentation and consistent supply. He also highlights changes in both demographics and immigration. An ageing population becomes more interested in healthy food and, often, lighter food.



In Auckland, immigration has increased the number of people who see fish as a staple part of their diet. David cites the massive Botany Downs subdivision where many Asian families cluster, Albany with its high South African population, and Manukau City, a traditional stronghold for Pacific Island communities.

Interviewing representatives from each community reveals some interesting information. South Africans, for instance, value counter-staff who can explain and relate each fish species to those eaten 'at home'. The Asian consumer's preference for purchasing whole fish is largely influenced by socio-economic factors. Pacific Islanders, it emerges, though traditionally reliant for their Sunday fish treat on the fish caravan's appearance, now embrace the enlarged fish purchasing opportunities of Sunday shopping. Their fish buying is further encouraged when staff at the comprehensive supermarket seafood counters are from their own communities. There are markedly different fish preferences, too, with first generation Pacific Islanders enjoying fish heads and whole octopus when available.

Other influences include the New Zealander's love of cooking shows, which have boosted Kiwi confidence in trying out fish recipes, and the trend towards understanding more about diet and nutrition.

Changing shopping habits are a further interesting dynamic. Synchronizing nicely with customer preference for fresh fish (i.e. bought for same-day consumption) is the increased number of inner city apartment dwellers. Here, small fridges make for small and frequent shopping trips. This contrasts with the weekly or fortnightly shopping expedition of the suburban shopper who buys fresh fish to be eaten soon after purchase and the frozen, crumbed variety

In Auckland, immigration has increased the number of people who see fish as a staple part of their diet. David cites the massive Botany Downs subdivision where many Asian families cluster, Albany with its high South African population, and Manukau City, a traditional stronghold for Pacific Island communities.

to be eaten later in the week.

David has also been active on the training front. He initiated a seafood training school which has been designed specifically for seafood department managers. It covers all operational aspects of seafood marketing and merchandising and provides a one-on-one opportunity for managers to learn the extra skills needed to make a difference.

As for the future, David envisages customers wanting a greater range of fillets - a demand that will have to be met by even larger cabinet space.

For a man who started his career in gumboots surrounded by saltwater, it has been the upward move to the carpeted corridors of Foodstuffs' head office that has enabled him to turn the fishing industry around. His vision represents a significant shift in how the domestic market is viewed and serviced - a shift that put the fishing industry way ahead of many others. **bf**



THIS STORY WAS WRITTEN PRIOR TO THE HONG KONG / CHINA SARS OUTBREAK.

A toad sits, blinking, in my palm. Warm rain streams across his bumped, grey back. The woman running this live-fish stall in Wan Chai smiles. I try to imagine how to prepare it for the table.

“Lobster, no,” says the woman, when I describe New Zealand crayfish. She takes her toad back and tosses him in a plastic basket where 150 of his fellows await their fate. Spread along the footpath are cases of crabs – their pincers bound – eels, varieties of prawn, and a mass of twisting grey carp. “Special,” she says.

It's a wet and hot summer morning in Hong Kong. A typhoon is passing and most stores and restaurants in this normally bustling area are shut.

In this city of 6.8 million, crayfish is almost exclusively a restaurant dish. I take the train deep into the New Territories to meet a restaurant owner who has New Zealand crayfish as his menu centre-piece.

Drop a crayfish into a tank and it scoots down and away from the light, propelled by the powerful tail muscle that makes this crustacean such a prized catch. They have the Hollywood cardsharp's preference for the corner facing the door.

The crayfish I'm watching has performed his drop and scoot act five times over two months, since the day he climbed up and into a commercial craypot looking for the fish bait tied inside. This is his last tank.

He – all our export crayfish are male – is a long way from the New Zealand coast. His curved saltwater tank takes pride of place along one wall of the Floata Restaurant at Sham Shui Po. Inside are about a dozen crays, all New Zealanders. There are more in another tank out the back, and replacements arrive daily from importers and distributors around the city.

This crayfish has travelled more than 9000km, has been moved and handled many times, but still has its long feelers and all its legs.

Last year, New Zealand shipped more than \$175m of seafood to, and through, Hong Kong.

Live crayfish exports from New Zealand began in the early 1980s. Until then crays were tailed, frozen, and sent mainly to the United States. With the mastery of techniques to keep them alive, everything changed.

In New Zealand, crayfish is that rare thing – a delicacy that can still be caught by any keen fisher. Like our beef, lamb, and other fish, we pay international prices in restaurants, but with a bit of local knowledge and basic dive

gear, or a dinghy and pot, they are still there to be had, found in the rocky crevices all along our coast.

In the waters around Hong Kong and much of southern China, there is almost nothing to catch. Working boats are curiosities and this food-loving city relies on the world for its seafood.

With the dollar pegged to its powerful American equivalent, and importers providing channels into the huge mainland Chinese market, Hong Kong is an increasingly important target for Kiwi fishing interests.

“I'm a fish man. The greatest food,” says restaurant owner and master chef Peter Ip, banging his stomach. “Which one you want? How you want to cook it?” Typhoon Utor's progress has sent most Hong Kong residents straight home from work; about half the Floata's 2000 seats are empty which is unusual. Peter Ip's Cordon Bleu registration and Escoffier training have made his eateries a success in Hong Kong, China, and Canada. Normally, people book ahead for one of these tables.

We discuss cooking options and settle on a hot Cantonese style. He leans in and hauls out a crayfish, and we head for the kitchen. “We buy only New Zealand crayfish,” says Mr Ip. “People here think of New Zealand as green, with clean waters. It is a very important point. I prefer it because the water's clean and the people take more care. Chinese eat the live fish all the time. They can see it's much better quality.”

Eight white-smocked kitchen staff gather as Mr Ip gives his commands. 7.10pm. Within a minute the crayfish has been chopped into a dozen pieces, tailshell pieces and legs still attached to a bite-size of clear flesh. The tip of each claw is removed to ensure the legs don't explode in the coming heat.

Live crayfish exports from New Zealand began in the early 1980s. Until then crays were tailed, frozen, and sent mainly to the United States. With the mastery of techniques to keep them alive, everything changed.

A chef drops them into near-boiling oil, where they seethe for 20 seconds before the wok's contents are drained through a colander. Two ladles of soup stock go back into the wok, then the fish, ginger, green pepper, spring onion, and a spicy black-bean sauce.

The head chef lifts each piece out with long chopsticks and arranges them on the plate. In about five minutes we are following it back to our table. It's delicious.

We also try a Japanese-style crayfish sashimi, and a delicate steamed crayfish dish on a salty egg-white sauce, served with shredded dried scallops and a red vinegar and ginger dipping sauce. The head and body of the sashimi serving have meantime been made into a soup. The meal costs \$470.

At the other end of this live crayfish chain are towns such as Motunau, Haast, Bluff, Akaroa, Picton, and Kaikoura – the area named by Maori for its crayfish, where a tonne of quota, which seldom comes on the market, sells for over \$200,000.

crayfish tales

Bryn Somerville

New Zealand is only a small player in the international live crayfish market but its fishing season gives it several advantages. During June to September boats from most other countries are idle. That creates scarcity, which means higher prices.

New Zealand's commercial fishers are allowed to take 2700 tonnes annually - about two million crayfish. Australia produces eight times that amount, but its output is not strong until November. South Africa, with 1000 tonnes, starts to hurt prices when its exports begin in October.

Kaikoura crayfish quota is among the country's most expensive because its fish are relatively easy to catch and because its season falls squarely in that fallow international period.

Dick Cleal and his four sons own 9.5 tonnes of quota and lease some more from Ngai Tahu, the South Island's biggest quota owner. Ngai Tahu Fisheries buys the Cleal catch to export under its Tahu brand.

The Cleals run two 11m aluminium boats, fishing three reefs south of the town, 6km offshore. Their 180 pots sit on the sea floor 40m below the surface. Cleal boats are launched each morning off trailers and are well on their way to the fishing grounds by 6am. With so many pots to lift, empty, and rebait each day, the crews begin work in the dark, using GPS for positioning and floodlights to see the line buoys.

"We fish from April until the quota's caught, about November," says Simon Cleal, deckhand on the Ms Emma for his skipper brother, Peter. "They go dormant around July or August and really dry up, probably shelling (crayfish shed their exoskeletons every year as they grow). We bring about half the gear home, but work through because you don't know when they're going to go again. In the off-season we're set-netting."

Around Kaikoura, female crayfish are 'berried' - carrying eggs under their tails - from late April, and cannot be taken. Boat crews return these to the sea, along with undersize crayfish. The pots have a large gate to ensure the catch can be removed without damaging legs or feelers. Those meeting catch specifications are carefully placed in a huge container, kept cool by seawater pumping between its inner and outer skins.

"Right from go, you have to take care. We're trying to make sure they don't get stressed," says Simon Cleal. "The less you have to touch them, the better. The aim is to get every fish through in top condition."

Once boats are slipped in the late afternoon, a crew member will drive the catch over the hill to the family tanking operation. Water is drained and each fish is weighed before being placed in a tank with similar weighted fish.

Dick Cleal no longer goes to sea - "my hands are shot". He runs the tanks, taking care of the catch between the time it is landed and sold to Ngai Tahu Fisheries in Christchurch. "Ngai Tahu sends us up a price list every week, with information about the markets and how much they're looking for," Dick Cleal says. "We got into tanking so we can hold them until the price comes right."

In January 2003, the top price offered was \$43 a kilogram, for crayfish between 1kg and 2kg - about 30 per cent of the price in Mr Ip's Hong Kong restaurant.

At the other end of this live crayfish chain are towns such as Motunau, Haast, Bluff, Akaroa, Picton, and Kaikoura - the area named by Maori for its crayfish, where a tonne of quota, which seldom comes on the market, sells for over \$200,000.

The Cleal tanking set-up is protected by heavily barred doors and hefty locks. Inside are rows of blue baths, each the size of a double bed and 30cm deep. The only noise is of pumps running and water falling into the tanks, aerating the circulating seawater. Thousands of apparently healthy male crayfish are jumbled, forming dark, red, reef-like caves. Hundreds of feelers wave quietly above the surface.

This tanking system is replicated all the way to the final customer. Two types of bacteria circulate the closed system to ensure the water stays non-toxic. One converts the crays' wastes into a form that the other bacteria can further convert to a harmless surface scum. The scum is removed by filtering through a series of meshes and fibres.

The water temperature is slowly lowered as the crayfish approach their shipping deadline. They are not fed but can survive in this state for many months, keeping their weight. "I bring them down to a temperature a bit lower than the sea," Dick Cleal says. "It means they're less agitated when you're moving them around."

He recently bought another tonne of quota - a vote of confidence. Fishermen, he says, are constantly researching to understand crayfish and monitor their numbers. This, and introduction of a quota system, means fewer boats, thus helping the industry better manage its resources.

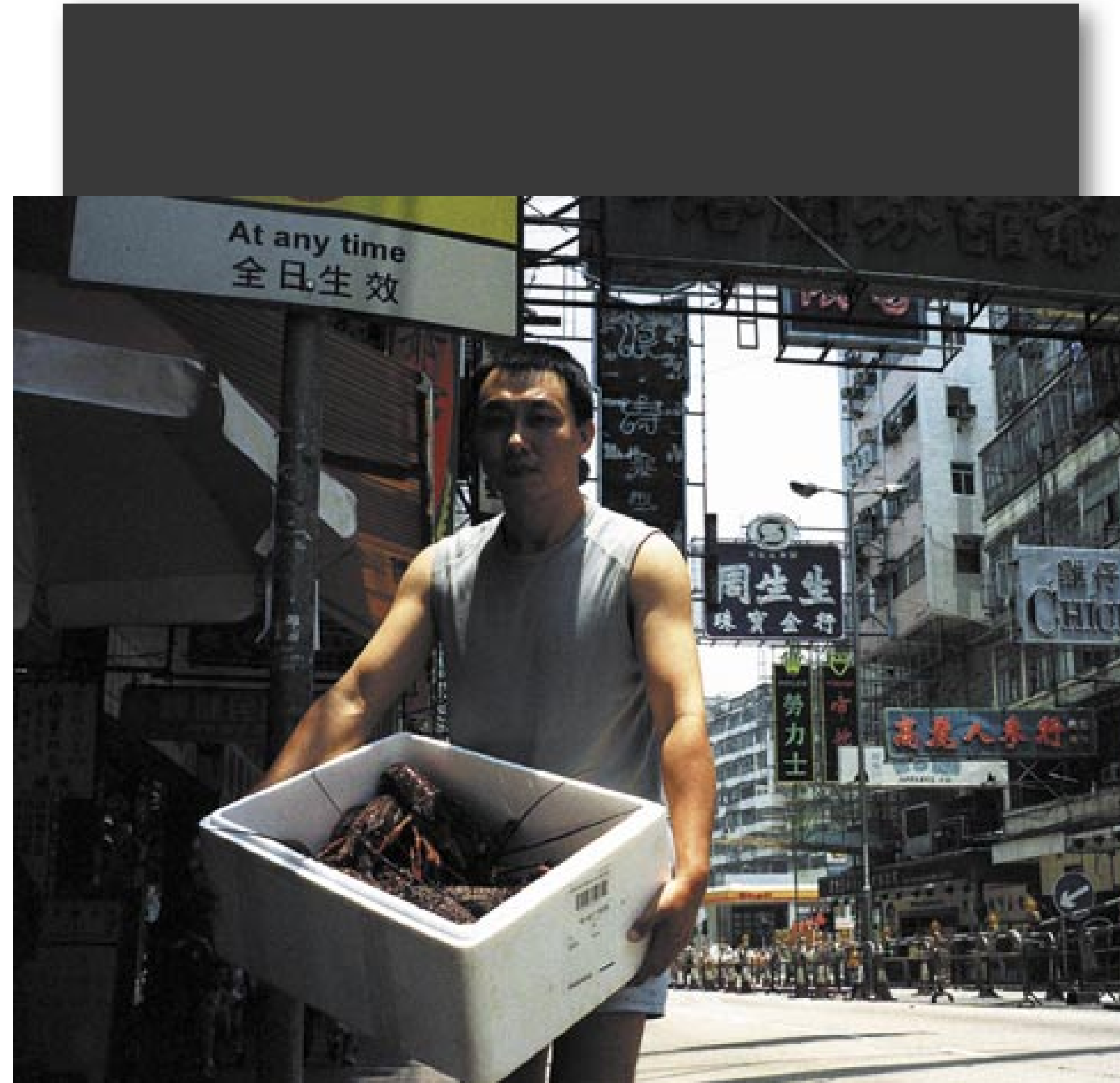
He worries, however, about the amount of quota now out of fishers' hands and doubts owners have the fishery's best interests at heart. "In my opinion they're trying to force the little man out, but so long as the little guy owns quota, they can't."

Crayfish costs are as impressive as prices earned: \$200 a day for fuel, \$150 a day for fresh-caught barracouta bait. Each pot and line costs about \$200. Annual Catch Entitlement could run up to \$30,000 a tonne; electricity is required to run the tanks; slipway and boat-parking fees take \$1200 a year; Government fees are \$900 a tonne and \$1400 a vessel per annum, and contribute to research and management of the fishery.

"Then there's the weather. A big swell can knock you back. You don't need too much to go wrong and you're back on borderline," Dick Cleal says.

Turnaround times at the Ngai Tahu Fisheries packing plant beside Christchurch airport are swift. Company sales and marketing manager, Kerry Russell, says trucks collect crayfish from throughout the South Island daily. During the busy season the staff of eight work 60-hour weeks, setting up and boxing export orders to be delivered to the airport.

This article is continued on page 44



"People here think of New Zealand as green, with clean water. It is a very important point."



NEW ZEALAND HOKI IS THE ONLY WHITEFISH TO CARRY THE INTERNATIONAL MARINE STEWARDSHIP COUNCIL ECO-LABEL. THE LABEL TELLS CONSUMERS THE PRODUCT IS SOURCED FROM A WELL-MANAGED, ENVIRONMENTALLY SUSTAINABLE FISHERY.



Image One : Tuna longline snoods
Image Two : Alfonsino



chilled out

Rose Northcott

Exporting chilled, fresh fish from New Zealand is a bit like running an All Black try from a set move. It takes expertise, precision timing, speed, and excellent communication amongst the various players.

And, like the All Blacks, premium quality chilled fish can attract top dollars in the best restaurants and supermarkets of Japan, Europe and the USA.

THE IMPORTER : Quality is the critical word, says Daniel Christen, a European importer of chilled, fresh New Zealand fish. With many expenses incurred getting the fish from the sea to the plate, Christen says success is only assured if you deliver a superior product. To achieve that, every step in the cold chain must run like clockwork.

Based in Switzerland, Christen has been importing chilled fish from New Zealand for 12 years. He is responsible for marketing and overseeing delivery to clients from Spain and the UK, from Poland, Germany and Norway.

For the European market, he says, the most popular species are snapper and kingfish, but he also deals in a wide variety of other species, including john dory, trevally, ling, orange roughy, bluenose and tarakihi. The fish is either whole or filleted, depending on the customer's requirements.

Christen says it takes three days from the moment the fish is caught in New Zealand waters until it arrives in the restaurant or supermarket chiller. There are challenges every step on that way – which is why the chilled, fresh fish business is both exciting and extremely stressful.

THE COLD CHAIN : "The fish are caught by longline boats. Each longline is about 800 metres with around 400 snoods, each with a baited hook," explains Christen. "The lines only stay in the water for 1 – 1.5 hours maximum to ensure the fish isn't fighting at the hook for too long."

"This longline method ensures that 99 percent of the fish are landed alive. As the fish comes onto the boat a spike pierces its brain, causing instant death – a Japanese technique called iki jime. The advantages of this method are minimisation of the stress suffered by the fish and the damage it can cause itself (like missing scales). The fish reaches rigor mortis much quicker, too."

Image One : Unloading tuna

Image Two : Packing for consignment

Image Three : Southern bluefin tuna heading for Tokyo

Image Four : Whole fish packed prior to consignment



"If every step in the distribution process is managed properly, the iki jime method of killing will see the fish keep its rigor mortis for up to eight days – 75 percent longer than a fish caught with a trawl-net."

After death by iki jime the fish are immediately put in a tank of seawater and salty ice until cooled to 0°C. The fishers then pack the fish, belly down, onto a bed of ice in an 'iki bin plasticbox'. Only the belly of the fish can come into contact with the ice to prevent freezing burns and colour fading.

Christen works in partnership with New Zealand seafood company Leigh Fisheries, exporters of fresh, chilled fish. He says their boats are out at sea for 12-24 hours. On return to port the fish is unloaded into a refrigerated truck and driven to the processing factory in Leigh, 1.5 hours drive north of Auckland. At the factory the fish is graded for size, colour and quality, and packed into polystyrene boxes according to client requirements. Less than three hours later it's en route to Priority Fresh, Leigh Fisheries' handling agent.

"All going to schedule, the truck arrives at Priority Fresh early in the morning. By 11am Priority Fresh must have the fish consolidated, documentation completed, and the containers ready for loading onto the aircraft.

"About 30 hours later, following a stopover in Singapore, the fish arrives at its European destination where it's either cleared through customs and taken by truck to the client, or transferred to another flight for its final European destination."

Christen says its imperative to keep the chilled, fresh fish in top condition. He says the flight is the variable where the most can go wrong.

"It works smoothly 95 times out of 100. When the system falls down it can be for various reasons – technical problems at the airport, late departure, missed

connections, someone could die en route and the plane has an unscheduled stop to deliver the body. There could be a strike, perhaps, or the possibility that when the fish arrives we don't have the documents so it carries on to somewhere else."

Christen says 'helpful' cargo attendants have occasionally toasted the fish – raising the cargo-hold temperature to 20°C in the mistaken belief that the fish is destined for an aquarium.

Greg Bishop of Leigh Fisheries says making money in the chilled, fresh fish export business relies on excellent relationships and communication between the various players – the fishers, factory workers, truck drivers, freight forwarders, airlines, importers, customs agents and clients.

"When every link in the distribution chain is working as it should, we're communicating 24 hours a day. It's all about people management, motivating the fishermen to go out and catch what you need, communicating with the market, knowing when to catch certain types of fish, trying to optimise the valuable resource and get the optimum dollar."

Bishop says it's essential to offer clients consistent quality and supply. To deliver that service his company works every day of the year.

THE FREIGHT FORWARDER : Perishable forwarding specialist, Priority Fresh, ensures that fresh New Zealand flowers, meat, fruit and veg, and seafood all arrive in destinations around the globe in tip-top condition. A rapidly growing business, the company has just moved to its new, purpose-built facility in the heart of Auckland airport. The new facility – four times the size of its previous dwelling – incorporates five chillers, a main freezer, temperature-

controlled loading area and offices.

Seafood is Priority Fresh's main product, says Director, Graham Bruce. He says wide-open communication is the biggest thing when handling fresh, chilled fish.

"There has to be a real rapport between all the players in the cold chain – if somebody drops the ball it affects everybody.

"Where other forwarders might close their doors, we have people on site so we can get the fish on the planes every day of the year. We have a very good relationship with all the major carriers – and we use different carriers to ensure that exposure is across the board."

Priority Fresh packs the fish in airline containers, documentation ready, for airline delivery within hours of its arrival at the airport. Foil-lined containers and plastic-wrapped interior boxes topped with dry ice keep the fish at the correct temperature.

The fish are monitored and tracked electronically, particularly for European destinations. Priority Fresh works closely with MAF, too, says Bruce, to ensure complex European documentation is correct.

THE FISHER : Dave Moore has been catching snapper and bluenose for fresh, chilled export for 20 years, 15 on his own boat. Since 1998 he's coordinated the activities of four, 12-metre boats. The price Moore and his crews receive for their fish depends on the quality and the price the exporter gets in the international market.

"The grader will tell me personally if fish quality doesn't command the best price. Then I'll talk to the fishermen about time and place of catch, fish colour,

that sort of thing."

Pride, says Moore, is as much an incentive for the crews as money. Moore's crews have had years of experience catching and handling fresh, chilled fish, and that knowledge has been passed down from skippers to deckhands.

While the supermarket or restaurant have the biggest mark-up, Daniel Christen says they are very labour-intensive and carry the biggest risk.

Cost of flying fresh, chilled fish to Europe	
Airfreight	approx \$NZ7.50-\$8.00 per kg
Duty into the EU	15% whole fish
	18% fillets
	22% whole tuna
Clearance into EU	approx \$NZ3.00 per kg

Airfreight, he says, is the link in the cold chain where costs have increased significantly.

"From September 2000 to September 2002, airfreight rates increased 21 percent, although the crude price oil was actually cheaper in 2002 than in 2000.

"Those increased costs have come in the form of various surcharges – fuel, insurance, war risk – many introduced by the airlines after September 11." Christen says when the New Zealand exchange rate is taken into account, the cost of airfreight has actually increased by 30 percent between these two years. **bf**

SEVENTY PERCENT OF THE SEAFOOD INDUSTRY WORKFORCE IS EMPLOYED IN THE PROCESSING SECTOR.



ANITA VELA continued from page 11

ELIZABETH LIGHT

technicians to reconfigure the machines so they are able to be adapted to cutting different sized portions. Now we make and market hoki in at least ten different styles," says Anita.

The other major development, in 2000, and one that Vela Fishing fully supports and enthusiastically promotes, is hoki's MSC (Marine Stewardship Council) certification – a seal of approval that hoki is a sustainable seafood.

It's early days yet but customers, particularly in Europe, have enthusiastically put the eco-label on their packaging, and many also put 'of New Zealand', 'de la Nouvelle-Zelanda' or 'della Nuova Zelanda', in pride of place on the packets.

"Hoki is becoming a brand in itself. In France, the UK and Germany, for instance, where Captain Iglo is sold, the fact that it comes from New Zealand is promoted," says Anita. "We are working with the Hoki Fishery Management Company (HFMC) and the MSC to promote the regionalising of New Zealand hoki, so that our customers, and their end-customers, understand that it comes from New Zealand, that it's different from South American hoki, and that it is a sustainably managed fishery.

"We have a lot more work to do before it's a well-known regional brand but end-consumers are becoming more aware of food's origins and this increasingly affects their buying decisions."

Philip says he has retired. "After 42 years non-stop in the fishing industry I deserve a break and it's time to let the new generation do the work." He says his bones are tired and arthritis means that he follows the sun, but he intends spending some time each year during the summer in New Zealand, and when he is not here he "misses it like hell. It's the most beautiful, and the richest, country on earth."

He might feel that his bones are tired but his brain certainly isn't. He keeps in regular contact with Anita for updates on developments and news within Vela Fishing and the fishing industry. His most recent project, before retirement, was successfully obtaining a prawn permit for Vela Fishing. The company is pursuing another one of Philip's visions by funding trials to see if commercially viable prawn fishing can operate in New Zealand waters.

Peter Talley says that Philip will always be in the business of fishing and very passionate about it. "He's now nagging the hell out of me over southern blue whiting. We only harvest whiting in a six-week spawn period and Philip says it should be viable all year round if we found out more about it. Given his track record I've got to take him seriously but the margins in fishing are such now that, unless you can do a cooperative research programme for something like this, it's difficult," says Peter.

"Philip is a visionary," says Anita. "We are the foot soldiers and continue to implement the vision that he had. He makes me proud. This is my father who has instigated so many things in the New Zealand fishing industry – developing hoki for instance – things that have contributed hugely to the New Zealand economy and will continue to do so." **bf**

MAUI'S CATCH continued from page 21

CAROLE VAN GRONDELLE

As Darrin Apanui explains it, Te Ohu Kai Moana recognised early the critical role that education could play in preparing Maori for stewardship of the substantial fisheries assets they now own. Industry-based training and tertiary study were seen as key mechanisms in developing the skills of Maori for the industry.

"We believe that many of the future potential Maori leaders are already working in the industry, we just need to find them and invest in their development," he says.

In eight years, the scholarship programme has created a 'critical mass', and provided in excess of 1,600 scholarships to Maori, who have extended their education to cover a wide variety of marine subjects as well as fisheries business, law, marketing and management.

"We want Maori to be highly skilled in all facets of the industry," says Darrin.

"The growth of the industry will come from better understanding of the sustainability and utilisation of the fishing resource, an intimate knowledge of international markets, and demonstrated skills in legislative reform, policy development and technical competence."

There are four streams of scholarship, he explains.

The first focuses on applied marine sciences, technology, aquaculture and resource management. These scholarships cover national certificates and diplomas right up to PhDs, and range from \$1,000 to \$15,000 in value.

Te Ohu Kai Moana recognised early the critical role that education could play in preparing Maori for stewardship of the substantial fisheries assets they now own. Industry-based training and tertiary study were seen as key mechanisms in developing the skills of Maori for the industry.

The second is in management training, and ranges from diplomas to MBAs to PhDs.

"We fund these scholarships on a co-sponsorship basis with iwi," says Darrin. "We will match their financial commitment to their iwi member on a dollar for dollar basis, up to \$5,000. The idea behind this is to encourage individuals to have a closer relationship with their iwi."

The third scholarship stream relates to technical training for the industry. This includes statutory marine qualifications as well as processing, harvesting and catching skills.

The fourth is a recent initiative established between Te Ohu Kai Moana and NIWA, called 'See and Learn'. It involves taking out young Maori secondary students on NIWA's research vessel 'Kaharoa', as a way of fostering a fascination for the sea, and encouraging them to pursue marine science tertiary studies.

"This is becoming a very successful programme," Darrin says.

"We get them to think beyond going to university to study humanities, to seriously consider the sciences. We also give them an idea of the support they can get and the career path they might follow."

Te Ohu Kai Moana also offers several elite scholarships aimed at international study.

Four \$20,000 scholarships are available each year for Maori to live and study aquaculture and marine science in Tasmania. They can attend either the University of Tasmania or the Australian Maritime College. The grant covers travel, accommodation and living expenses.

A second elite scholarship aims to encourage Maori law graduates to become specialists in fisheries and maritime law by studying extra-murally for an MBA in Fisheries Management through the Australian Maritime College. This two-year, \$50,000 scholarship is a joint venture with Nelson law firm Fletcher Vautier Moore Barristers & Solicitors.

But perhaps the most prestigious award of all is the Global Fisheries Scholarship, worth \$250,000.

This is a joint venture with the Japanese co-owner of Sealord Group, Nippon Suisan Kaisha Ltd ('Nissui'). It aims to give two Maori graduates the opportunity to work at Nissui in Tokyo for a year. The high value of the scholarship reflects the costs associated with living in Japan.

Prior to departure, the scholars are given intensive Japanese language training to prepare them for the months ahead.

The first recipients, Jarrod Buchanan, 23, and Aroha Spinks, 27, returned in January and both are now working for Sealord Group. Aroha is based in Auckland while Jarrod works in Nelson. The next recipients are preparing to depart in June.

"It has been wonderful to observe the changes in Jarrod and Aroha after their year in Japan," remarks Darrin. "Their skill levels, particularly their ability to 'solution think', are enormous and must surely be an asset to their team, and for the organisation generally.

"Both of them have done exceptionally well. They, like other Maori in the industry, have the potential to be future leaders in Maori fisheries."

"You can feed a man a fish," argues Craig Ellison. "Or you can make him a fisher.

"I think there's a bit of both in our role [at Te Ohu Kai Moana]. We want the settlement to be both enduring, and empowering, long term."

Craig says there is enormous promise still to be unlocked in New Zealand's fisheries industry.

"There's a lot of potential to grow – not in terms of volume, but what we can earn from it. By that I mean added value, smarter marketing, smarter sales, better relationships with customers, more efficient use of assets."

It will undoubtedly involve cooperation with existing players, says Craig.

"But there is no doubt in my mind that Maori will take a front seat in the future of the industry. No doubt at all." **bf**

CRAYFISH TALES continued from page 36

BRYN SOMERVILLE

"Ngai Tahu's been in it for about 10 years. We're shipping 1.5 tonnes every day now."

Crayfish live here in stacked fish crates, the chilled seawater cascading down each stack. Their temperatures are lowered even further, in preparation for air travel.

"We'll take them down to under 5°C before they're shipped," says Kerry Russell. "If you cool them too fast the legs will fall off. Hong Kong is about a 26-hour delivery. By that time they should be back up to 10°C or 11°C."

A Hong Kong pack starts well before dawn. Each crate is drained. Its weight and number of fish have been checked and lined up to correspond to the packing order. Polystyrene cartons and lids are waiting, as are bales of wood shavings and saturated blankets of chilled seawater. The team works fast, like an assembly line. The crays are positioned head to head, the wooden 'wool' packed between, to further reduce the possibility of damage. The seawater blanket goes in last, before the lid is taped on.

The team works fast, like an assembly line. The crays are positioned head to head, the wooden 'wool' packed between, to further reduce the possibility of damage. The seawater blanket goes in last, before the lid is taped on.

As long as there are no hold-ups the fish will arrive in good condition, transferring to the buyer's holding tanks soon after landing.

World prices are being pressured by other countries catching up on live-export technology, Kerry Russell says. New Zealand fishers and exporters need to continue working to ensure the quality of New Zealand crayfish continues to command a premium. "It's a valuable product, we're always thinking about how to do it better. Yes, there is a risk of cheapening the value of the product, but worldwide the volume's on the increase. You can get 25 tonne going to Hong Kong on one night - that's 25,000 fish." **bf**

THE ABOVE STORY WAS WRITTEN PRIOR TO THE HONG KONG / CHINA SARS OUTBREAK.

THROUGH BOTH DIRECT EMPLOYMENT AND FLOW-ON EFFECTS, THE SEAFOOD INDUSTRY PROVIDES 26,000 FULL-TIME-EQUIVALENT JOBS FOR NEW ZEALANDERS.

Feasting for life

Bess Manson talks to Dr Karen Silvers

Photography BRUCE FOSTER

Waiting at Auckland Airport recently, scientist Karen Silvers was, quite out of the blue, asked by a young man, "Do you believe you're going to Heaven or Hell?"

"I told him I don't believe in Heaven or Hell. I don't believe a just God would send us to Hell. I don't believe anything is that black and white. There's a lot of grey out there."

The black and white attitude held by that man at the airport is embraced by many when it comes to food, she says. There's a notion that a food is either good or bad. Really, it's not that simple. In today's world, with many believing the body beautiful can only be achieved by doing Jennifer Anniston's latest diet, food is too often seen as the enemy. Forget that, she says. Food is our friend and we've been neglecting it.

British-born, Dr Silvers has a Bachelor of Science with Honours in Physiology, a Masters in Medical Science in human nutrition, and a PHD in clinical nutrition from the University of Sheffield. She is currently a research leader at Crop & Food Research and is investigating the influence of nutrition on brain function and well-being. She's particularly interested in the health-giving properties of fish and seafood.

Fish offers so much, she says. "From a purely biological point of view it offers much more than many other foods." Fish consumption is associated with increased good health and a much lower risk of chronic diseases, such as heart disease, stroke, diabetes and inflammatory disorders. There's a huge body of literature supporting this, she says, yet doctors still fail to prescribe fish as the first line of attack against cardiovascular disease.

Some believe, Dr Silvers says, that a balanced intake of long-chain polyunsaturated fatty acids, including the omega 3s or fish oils, was responsible for our sudden brain expansion during the last one to two million years. "In order for our brain suddenly to expand we needed a really high quality source of nutrition. It's believed this came from the tropical freshwater fish and shellfish in the Rift Valley lakes of East Africa - the area thought to be where early *Homo Sapiens* originated. The long-chain polyunsaturated lipid ratios in these tropical freshwater fish are almost identical to those found in the human brain. It's only a theory, but entirely plausible," she says.

Karen Silvers has met me at a Wellington waterfront restaurant for a monster seafood brunch and to talk - about food. She admits to taking the odd supplement but still believes it's in food we'll find all we need. And, she says, it's a whole lot sexier eating - chewing the nutrients in a meal - than popping a pill.

"Our body is like an orchestra - all parts are working in relation to each other...our body continually strives to find balance, so by throwing in too much of one thing you force your body to work harder in order to cope. It's far better to get our nutrients from food rather than supplements because then we get Mother Nature's balance. There isn't such balance in a supplement pack. Food is richer all round, not merely because it provides nutrients, but because it gives you so much pleasure - and an opportunity to interact socially."

Dr Silvers' philosophy is simple: Grow it, cook it, eat it and be merry. As society has developed we've become disconnected from food and the ceremony of eating, she says. But the enjoyment of food is crucially important, both physically and mentally. Food is a fundamental part of our lives so we should embrace it.

How then should we go about reconnecting with food? I ask her. Tucking into her man-sized dish of hapuka she answers with delicious glee. Feasting. "We have very few opportunities in our current lives to feast. In other times we would have feasted at harvest, at Easter, at mid-winter, on many other occasions. These days we really only get the chance to feast at weddings. The sharing of food is very important. The companionship and the fun and the love that can be shared over a meal make the experience of eating vastly more pleasurable.

"We are essentially lazy these days and food is low down on the agenda when it comes to making time and effort," she says. "Our kitchens are getting smaller, we are buying more assembly food. It's interesting, too, that with people spending less time in their kitchens we suddenly have this plethora of celebrity chefs, like Nigella Lawson... I think often our way of connecting to food is vicariously, through these TV chefs."

So how, I wonder, have we come to treat food with such a cavalier attitude? Perhaps, she says, medicalising food has robbed it of the romance, taken the joy out of it. "Our minds have taken over and started ruling our hearts when it comes to food; it should be the other way around. I've played around with diets when I was concerned about what was in my food. But the day I stopped worrying about that was the day I stopped worrying about what I was eating. It's all about listening to your body, taking time to enjoy your food."

What about cravings? Dr Silvers is a slim woman with rather sensible and healthy cravings - things like fruit and vegetables. Not fair, I say. How about the rest of the population who want chocolate, hamburgers and French fries, now now now! "I think we all know what is best for us, if we look deep enough," she says. "We know what we need, and cravings can be an extension of that. If you know that you need something you should honour it. We shouldn't be hard on ourselves for liking butter or chocolate. It's really important to enjoy food and have a positive relationship with it, not deny yourself. And it's important not to go over the top."

Dr Silvers recently began to grow her own vegetables. It's a humble little plot, producing some respectable greens. It was an awakening, she says. "It made me aware of how disconnected we have become from food."

I tell her about my mother's tiny kitchen garden and how it produces the best damn vegetables and herbs I've ever tasted. Oh, she says, that's much more than the vegetables themselves. That's about love. "They probably tasted better because they were cooked by your mother." It might all sound a bit touchy-feely, especially for a scientist, but Dr Silvers is making no apologies. And as we wind up our long and leisurely brunch she leaves me with another culinary anecdote.

"I was having dinner with friends recently and we said grace beforehand. For the first time in my life I understood why we did that. It wasn't a religious thing for me, then. It wasn't about God. It was to give thanks for the fact that we do have food to eat - an incredible thing when you think about it, given where we could be in this world." **bf**



**Sweet
&
Sour**

Jenny Bornholdt



There's a satisfying hiss as the kingfish fillet slides into the broth simmering in a waiting pot.

A day ago, this kingfish was flicking through waters off the Northland coast. Tonight, accompanied by roasted shallots, coriander and celery leaves, it's headed for a table of diners at Anise, one of Wellington's newest restaurants.

It's the capital's only authentic Thai restaurant, say owners Janice Kirkwood and Sue Dempsey, both known to Wellingtonians as the owner/managers of Astoria – a buzzing downtown café.

Having fallen in love with Thai cuisine on their frequent trips to Sydney's restaurants, Sue and Janice decided it was time someone showed New Zealanders what they were missing. "We wanted someone to do innovative Thai food and since no one did we decided to," says Sue. "Thai food looks good, it's light and tasty. We were sure that style would go well in Wellington. People here really like eating out, they're good, educated diners."

To ensure they got it right, the pair employed consultant chef, Paul Blain, who is leading the renaissance of Thai cuisine in Australia. Blain established the Chilli Jam Café in Noosa, and runs The Tamarind – a luxury retreat and cooking school in the Noosa Hinterland.

"It's traditional Thai with a modern twist," explains Sue. "We used Paul because we wanted to do it properly. He can explain why flavours work, why dishes go together and how the flavours balance. He comes over regularly and it's great for the chefs, they get really fired up after he's visited."

Anise's dishes are based on the four palates of Thai cuisine – hot, sour, sweet and salty – and the idea is that diners will order and share a variety from the menu. Hot flavours are provided by chillies – either the tiny, birds-eye or the long red or green varieties. Whole peppercorns are used, but never ground pepper, and salt is a 'no no'. Salt was never used in traditional Thai cooking, Janice explains, because it wasn't available, but peppercorns have always played an important role. "Chilli's only been used for the last couple of hundred years." Salt tastes are provided by soy sauce, yellow bean paste and fish sauce. Palm sugar

and a thick sweet soy sauce – 'ketjap manis', say – provide sweetness. Lime juice and tamarind complete the quartet with their sour flavours. "It's important that each of these tastes is represented in a meal," said Sue. "It's all about balancing the flavours."

This style of cooking has been an eye-opener for Anise's chefs, who are mostly traditionally trained. "The 'no salt and pepper' is a complete mind-warp," laughs Janice, "and things like 'no stocks in soup' are pretty hard to take." Thai cuisine uses lime juice, coconut cream, even water, in place of stocks. Because of the fine balance of flavours, a lot of tasting happens in the kitchen, too, as it would have done back in the days of traditional Thai cooking.

Blain's 'innovative Thai' is based on 'royal Thai cuisine' which, as its name suggests, was prepared for the royal family. "Many of our dishes are from traditional recipes, but they're adapted slightly for local ingredients," explains Sue. "For example, maybe we'll introduce venison into a beef dish." Availability of ingredients also determines the menu. In Noosa, Blain has a large garden that

supplies The Tamarind with everything from green mango and paw paw, to beetle leaves and coffee beans. "Our climate means this produce is just not available, so we don't do those dishes. We cook around them," says Sue.

The pair was delighted to discover Phala Gunson, a Cambodian woman in Otaki, who supplies them with mint, coriander, kaffir lime leaves and other produce, and they say other local growers have sprung up because of restaurant demand.

Seafood features prominently on Anise's menu. This month's diners at the casually elegant Cuba Street premises could choose between crispy fish net salad with Asian shoots and leaves, birds-eye chilli, and a side dish of sweet pork; steamed and marinated mussels with Thai basil, kaffir lime and lemongrass; and stir-fry of crispy ling in a green coconut curry with vine vegetables and Thai basil. Those are just three of the seven seafood dishes available.

"We love using fresh seafood," says Sue. "We use a lot of shellfish because it's readily available, squid we can get most of the year, mussels and salmon are always guaranteed. We get cockles from Golden Bay and we use Waikanae and Kapiti crab. We've used eel, and we're thinking about using kina on the menu. Tarakihi we can guarantee. We'll always chase fish suppliers to expand what we can offer."

The raft of magazines devoted to cooking and food trends, and the move towards healthier eating, makes it clear seafood is enjoying a renaissance. "Our seafood dishes are extremely popular," says Janice. "They're light and healthy, and since a lot of people don't know how to cook fish, they'll take the opportunity to eat it at a restaurant."

Blain uses the New Zealand Seafood Industry Council's book of NZ fish species as his reference to pick fish for Anise's menu. He considers the fish that would be used in Thailand and chooses a local variety close in texture and flavour. "One dish on the menu is a whole deep fried fish," says Sue. "In Australia Paul uses barramundi, but here we use ocean perch; for our fish net salad we cook tarakihi, which is the closest to what he'd use."

Blain is French trained, but Thai food is now his passion. He worked at the original Darley St Thai in Sydney, under the guidance of David Thompson, the

"It's traditional Thai with a modern twist"

guru of Thai cooking. Thompson's splendid hot pink book, *Thai Food*, is the current Thai cuisine bible, and Thompson now runs the restaurant Nahm in London. A family tree of modern Thai cuisine might show the influence beginning in Sydney and spreading from there. "The new Thai cuisine has come out of Australia," says Janice. She and Sue credit the rise in popularity of Asian food to the demand coming from the increasing Australian ethnic populations. "Immigrants want to eat their own food. They start growing it, and the restaurants pick up on it... It's also come out of modern Australian food. New ethnic groups are adapting well to the available ingredients – things like mangoes – and they're doing that fusion kind of cooking."

Modern Thai suits people who are health conscious, they claim. "A lot of people these days have allergies, they don't want to eat as much meat, and they're concerned about fat intake. This style of food uses lots of vegetables and fish, it's dairy-free, mostly wheat-free and it's clear, tasty and healthy."

What more can the discerning diner ask for? **bf**



SALMON

YOUR NEW GIRLFRIEND IS A VEGETARIAN, WHICH MEANS YOU'RE SORT OF ONE TOO, FOR A LAUGH. YOU EAT NEW FOOD. YOU GO WITHOUT REFINED SUGARS FOR A DAY, TWO DAYS. YOU GO PLACES YOU'VE NEVER BEEN, TO EAT ORGANIC PRODUCE AND DRINK HEALTHY SHAKES. SHE SAYS, YOU DON'T HAVE TO FOLLOW MY WAY. I KNOW, I KNOW, YOU SAY. BUT IT'S FUN. GIVE IT A COUPLE OF WEEKS, YOU THINK, AND YOU'LL KNOCK IT ON THE HEAD.

V

She gives you a ceramic bowl for your birthday. The following week she puts fruit in it. You kind of like this.

She says, I don't mind if you eat steak in front of me or whatever. Watch me, you say, I'll slaughter a cow. But somehow you never do eat steak in front of her.

Your new girlfriend works as a gardener in the Botanic Gardens. On every day of the year she wears brown shorts and boots to work. She can name trees. She diagnoses the problem with the cactus you keep on your windowsill. I don't want to take over your life, she says. You're not, you say. But secretly you feel she is taking over your life and that you may want her to take over your life. This has never happened before.

Every lunch-time you meet her by the Begonia House, then you sit with her in the Rose Garden. You ask her the names of the roses and they go in one ear and out the other because all you are watching is her mouth opening and closing. You're not listening to a word I say, she says. Kiss me, I say.

Christmas is approaching, and you hear yourself asking your girlfriend if she'd like to come to your family's place for Christmas dinner. She says she'd love it, she's been dying to meet your family. I'll bring something, she says.

No, no, you say, you don't have to bring anything. And I should warn you my family are very traditional. It's always turkey. My father always carves.

On Christmas Day, you pick up your girlfriend and she's carrying a chilly

bin. You ask her what's inside but she won't say.

Your girlfriend walks around your mother's garden and they talk about plants. What a person this is, says your mother. I just want to pick her brain.

You've got a beautiful garden, says your girlfriend.

When you sit down to eat, your girlfriend goes to the fridge and brings over a large platter which she sets down in the middle of the table. It's a whole salmon.

Beautiful, says your mother.

Wowiee, says your father.

Where's the turkey? you say.


Oh well, says your mother, we talked about that and with this amazing offer of the salmon, we thought, we always have turkey. Time for a change. Your father nudges your elbow with his plate. Pass it along, he says, I'm starving.

Your girlfriend stands at the head of the table and with the flat of a knife gently opens the fish. It is orangey pink and suddenly you think there's a rose of this same colour! But of course you've forgotten its name. There is a rose exactly like this and the only person in the room who knows its name is serving your father his Christmas fish.

Then you have it. You do remember. And you say it.

Your girlfriend turns to you and smiles.

And you think in wonder, you are living for the approval of this person. This person has this power. It is Christmas and it is remarkable.



THE QUOTA MANAGEMENT SYSTEM ENSURES
OUR WATERS ARE FISHED SUSTAINABLY AND
THAT THERE IS A CONSISTENT SUPPLY TO MEET
YEARLY AND ONGOING DEMAND



for

