



# Keeping tabs on giant tuna

**Big game fishers, scientists and MFish are teaming up to help make the most of a world-class hunting ground for Pacific bluefin tuna off the South Island's West Coast.**

The goliaths of the fish world—which can grow to 300 kgs or more—are the subject of a three-pronged research effort to help New Zealand to make the best possible management decisions.

Charter boat operators chasing Pacific bluefin tuna off the West Coast over the winter of 2008 have been recording the number and weight of fish their anglers land—with consultations underway with MFish on a mandatory system that could be in place by 2010.

The new system complements the existing New Zealand Cooperative Tagging programme, under which anglers record information about the fish they tag and release.

Meanwhile, scientists are now tracking the movements of some individual Pacific bluefin tuna by satellite as they migrate vast distances around the Pacific Ocean.

Researchers planted hi-tech tags on 23 fish over the winter of 2008. The devices can collect and store months of data on location, depth, water and body temperature before they pop off, rise to the surface and beam the information to the research team.

The project has been managed by Bluewater Marine Research, with the University of Auckland and Stanford University in the United States. MFish is among the sponsors.

MFish Senior Fisheries Analyst, Graeme McGregor, says the popularity of the West Coast recreational fishery has taken off since 2004—with at least 13 charter vessels in the 2008 hunt.

“Chasing the fish of a lifetime in mid-winter, with the Southern Alps in the background is a wild, stunning experience you'd be hard pressed to find anywhere else in the world.

"Pacific bluefin like to hunt behind the giant commercial hoki trawlers for fish that escape through the nets, so the charter boats follow the fleet, hunting the hunters. Seals, sharks and seabirds also join the whole floating procession.

"We need better information about these majestic fish so we can get the right balance between what we allow recreational and commercial fishers, and support our management plan in international forums."

Pacific bluefin tuna are managed under New Zealand's Quota Management System—with one tonne of the 120 tonne Total Allowable Catch reserved for recreational fishers.

Given the size of the species this means only three to four bluefin tuna in total are now allocated to recreational fishers. However, they reported landing 44 fish in 2007, with another 87 tagged and released.

"We believe the total commercial and recreational catch in New Zealand is still well within sustainable limits. Furthermore, it's still a small proportion of the international take, and the fish we catch are adults," says Graeme.

"But it's realistic to expect international moves to limit fishing, and the better we are able to document our interest, the better abled we will be to offer constructive solutions to sustain the fishery."

## HEAVYWEIGHTS

Pacific bluefin are one of three species of bluefin tuna. Their smaller Southern bluefin cousins are also found in New Zealand waters. The third species is the Atlantic bluefin.

Last year a New Zealand-caught fish set an all-tackle world record of 325 kgs, while two fish, which were tagged and released, were each estimated at around 350 kgs. Scientists theorise some individuals may grow to more than half a tonne.

Their movements are complex and often mysterious. They are known to spawn in the sea between Japan and the Philippines. Many juveniles spend their adolescent years off the Mexican state of Baja California. Some adults move down to the South Pacific, eventually arriving off the West Coast of New Zealand in winter.

"When they first arrive they're in poor condition—of little interest to commercial fishers but still a prize for game fishers. They fatten up in our waters, moving around the tip of the North Island and down the east coast, where they're caught by commercial long-liners.

"A single fish can fetch the equivalent of \$40,000 in Japan, where they are prized for sashimi. But there are stories of high hopes cruelly dashed if a fish is judged to be less than perfect."

For recreational fishers it's about spending money, not making it. A 36-hour charter can cost \$8,000.

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"Because the flesh of fish caught recreationally is of poor quality, it's really only good for smoking and a lot can be wasted. So tagging and releasing is something we really want to encourage," says Graeme.



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