



Above: True to its name, a sea perch sits atop a well adorned horse mussel. Photo: Warren Farrelly

Opposite: The well disguised stargazer lies half buried in sediment, eyes swivelling in search of prey. When finally a small fish swims past, the stargazer's large mouth opens wide, devouring both its intended meal and a large quantity of water! Photo: Warren Farrelly

Opposite top: Most attacks on divers in the fiords come from the harmless looking girdled wrasse, rather than sharks. Divers are often bitten on the lip by the fearless wrasse, which here swims in front of a large black coral colony. Photo: Kathy Walls

Although the unique features and beauty of Fiordland's underwater world are not as visible to tourists as Mitre Peak and Sutherland Falls, they are no less worthy of protection. TVNZ's *Wild South* fittingly called the fiords a "mirror world" of the region's forests, mountains and wildlife.

The National Cancer Institute plans to research the potential of anti-cancer compounds contained in the marine organisms. As with rainforests, many of the organisms within the fiords may contain as-yet-undiscovered substances of use to medicine.

The Department of Conservation believes that, like the land of Fiordland, the marine environment of the region is also worthy of protection. Fiordland is a great natural asset and one of the world's special places. It deserves the greatest respect and protection. 🐟

Permissive conduct

THE FIORDLAND SEA CUCUMBER case raises important questions about the role of special fishing permits.

The Fisheries Act and the Marine Farming Act both have provisions for special permits. Originally special permits were designed to allow an applicant to carry out research into fishing or farming specified species of fish or marine vegetation.

Among the large number of permits issued to date have been some for paua harvesting at the Bounties and Antipodes Islands, seaweed cultivation in Northland, on the West Coast and at Kaikoura, and salmon farming in Big Glory Bay, Stewart Island and Akaroa Harbour.

The latest to cause concern is a proposal to harvest the giant southern spider crab on the Pukaki Rise in subantarctic waters. The crustacean, with a span of about 2m, was fished by the Japanese 20 years ago but has not been touched since. Fisheries scientists are concerned that it would be very easy to overfish this species in a short period of time.

So what are the concerns about special permits?

- There is no requirement for an environmental impact assessment before the activity starts or approval is given.
- There is no opportunity for the public to have a say, in the same way they are invited to comment on ordinary marine farm licences, for example.
- The permit can be issued in an area where certain fishing practices are banned under regulations or fisheries management plans.

The Royal Forest and Bird Protection Society believes MAF are taking an irresponsible approach to the question of special permits. This is illustrated by the sea cucumber example.

Any assessment of the sea cucumber fishery is likely to be highly speculative. A figure based simply on counting and measuring cucumbers from randomly selected sites at one time of the year will not take into account growth rate, breeding potential or seasonality. It certainly will not take into account the effect of the removal of this species on the rest of the fiord ecology.

Another danger with special permits is that an entrepreneur may invest large sums in a venture, even though it may be environmentally unsound. It then becomes extremely difficult to prevent the practice when the proponent applies for a full licence.

This area of fisheries is likely to come under intense debate in the coming review of the Fisheries Act. The fishing industry will want to widen the provisions for exploratory fishing or marine farming without public debate.

Barry Weeber, Forest and Bird researcher