It is generally supposed that marine protected areas should:

- be special or unique in their natural features
- be as pristine and natural as possible
- be remote from large centres of population
- have few previous human uses or activity

It is also generally supposed that rules and regulations should permit and approve traditional and culturally-important fishing; other fishing except when proven harmful; and cooperation with all existing users if possible.



Above: The Leigh Marine Reserve just north of Auckland was not created because it was special but because it was representative of the area's coastline. The author argues that 10 percent of New Zealand's coastline should be reserved immediately as representative reserves.

Photo: Bill Ballantine

Inset Opposite: Leigh Marine Reserve, looking south. The reserve extends to the cliff top.

Photo: Bill Ballantine

Opposite: Red moki, a coastal slow-growing fish whose populations have been drastically reduced by spearfishing, finds a safe haven within the Leigh Marine Reserve. Photo: Ken Grange

Did Not Conform

The Leigh reserve did not conform to any of these features.

- it was a typical and representative piece of coast
- spearfishing had ravaged the central area
- it was an easy drive from New Zealand's largest city
- it was popular for picnics, fishing, camping etc.

In addition, the regulations imposed by the reserve forbade all killing, removal or disturbance of life; gave no specific reasons for the restrictions; and provided no compromises with existing users although these, of course, continued their activities on all other coastline.

It is generally supposed that such tough restrictions, especially if imposed without specific and demonstrated reasons, will prove both unpopular and/or unworkable.

The experience at Leigh, however, shows that the benefits and popularity of the marine reserve are directly linked to the strict regulations and the resulting idea of complete naturalness. This is true both in the strictly scientific sense and in the view of the general public.

A more usual kind of marine reserve was created around the Poor Knights Islands off Whangarei in 1980. Spectacular in its scenery and underwater life, the Poor Knights Reserve was virtually pristine apart from deep sea fishing; it was 20 km off-shore and difficult to reach; and the islands were uninhabited.

Regulations were worked out that allowed big game and some other fishing to continue; distinguished different zones, methods and species; and initially won cooperation from existing users.

These rules have been successful in maintaining the Poor Knights as a very special and unusual set of marine habitats with a high degree of naturalness; at the same time protecting the status quo, including most existing recreational fishing.

New Zealand has therefore practical experience with two very different types of marine protected areas. Both have been



involved, only a change in public policy for a public asset. No useful purpose is served by delay. On the contrary, by pressing ahead quickly any difficulties will be reduced and the benefits maximised.

Of course, special areas will need to be protected because of their unique, rare or spectacular features. Protection of "the best" will obtain widespread support fairly easily. It will be clear which places are "the best", and what rules are needed to protect them. However, precisely because they are "special" these areas will be unable to provide general benefits.

Left: The deep sponge-dominated habitat at 30 m on the steep rock walls of the Poor Knights Islands. Designated a marine reserve in 1980, these habitats have been protected for their uniqueness and diversity of marine life.

Photo: Ken Grange

Below: A feather star or crinoid under a rock ledge. Just one of the unusual species that occurs abundantly within the Poor Knights Island marine reserve. Photo: Ken Grange



successful in their own way. One is the type found in many countries and is suitable for protecting special marine areas. The other is less common but has been remarkably successful in creating a major asset out of an ordinary piece of coast.

A Vision of the Future

I believe that the success of the trial marine reserves means:

(i) we should arrange for more; (ii) as some benefits are local we should have marine protected areas in all parts of the country; (iii) because the benefits only relate to the habitats protected, we should make sure some of each habitat is included in each part of New Zealand.

But what area of the coastline should be protected? In my opinion, at least 10 percent of all marine habitats and regions should be aimed for, a figure which would provide a reasonable level of insurance against specific greed and general ignorance.

We should commence at once and proceed rapidly to create more marine reserves. No purchase or compensation is

Therefore, the major effort should be put into obtaining the major benefits, and experience has shown that these lie in fully-protected areas which are typical, representative and accessible.

The only stumbling blocks are pyschological and social, although they are serious and normally inhibiting — unless active counter measures are adopted. While the case for the protection of specific places for specific reasons is reasonably easy to argue, the reservation of "ordinary" areas for general reasons is really quite difficult in any particular case. Why was this piece selected? Hard data can be produced to show somewhere is the "most special" in some respect, but it is not possible to prove anywhere is the "most typical" of its kind.

Furthermore, if the general benefits of naturalness are sought, it is not possible to give specific reasons for the banning of particular activities. People who have been fishing or otherwise exploiting an area for years and are told to stop, feel entitled to an explanation. If no actual evidence of harm can be provided, then they will be certain to question any bans.