

MPA mania - Some home truths

"Getting it right is important"

By WALTER STARCK

Marine Protected Areas (MPAs, a.k.a. green zones) are a current fad in marine resource management (and yes, science does have its fads).

Where renewable resources are overexploited some form of restriction is desirable. MPAs are but one of a range of restrictive measures that may be employed. Whether they offer any advantage or disadvantage to closed seasons, catch limits, limited licensing or other restrictions has not been assessed.

As one might expect, there is evidence that in heavily exploited regions there are more and bigger fish in protected areas and some of the protected population will spill over into the immediately adjacent area. However the spillover effect that has been observed is only apparent over a distance of a few hundred metres. In this respect lots of small reserves might be more effective than fewer larger ones although this is contrary to the current management idea that MPAs need to be much larger.

One would also reasonably expect that the increased populations and spillover effects would be proportional to the fishing pressure. Where only light pressure exists not much effect should be expected and indeed this has been what has been found with many of the closed reefs on the Great Barrier Reef.

From a fisheries management standpoint a key question is whether the increase in catch just outside a reserve is greater than what is lost by having the reserve itself. Or, to put it differently, is it better to protect a portion of an area and concentrate impact on the remainder or to spread the harvest over the whole and limit it by other forms of restriction.

At present we simply don't know and until such assessment has been made, the establishment of extensive MPAs amounts to large scale environmental meddling with no clear idea of efficacy or consequences. Ironically, this is in direct disregard to the precautionary principle so often cited as justifying the immediate need for such measures.

Most importantly there is no urgent need for extensive MPA's in Australia and we can afford the time to learn more and know what we are doing instead of imposing costly and un-needed measures that may create more problems than they address.

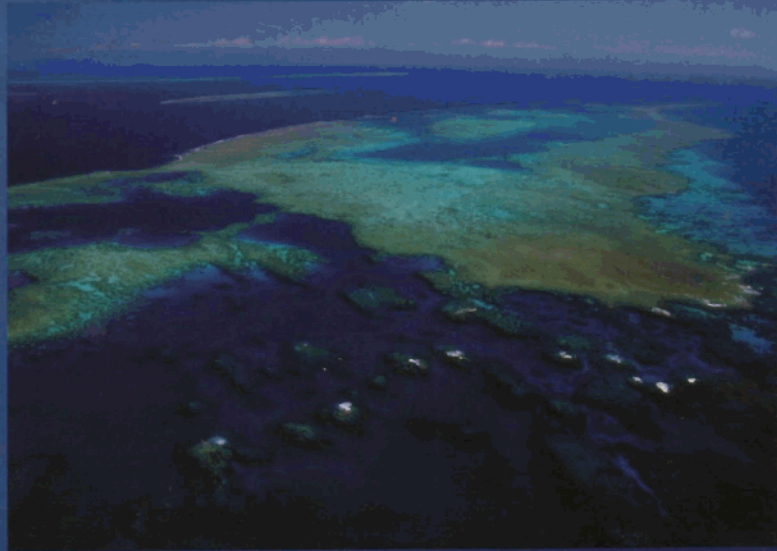
Few people truly appreciate the overall low level of fishing pressure in Australia.

Some comparisons are striking. Australia's coastline is about eight times greater than that of Thailand or Vietnam. The Exclusive Economic Zone is 21 times larger than that of Thailand and 15 times larger than that of Vietnam. However, our wild caught fisheries harvest is only one-twelfth that of Thailand and one-eighth that of Vietnam. Even New Zealand has over twice the total fishery production of Australia. In reality Australia has the most lightly fished waters of any nation in the world. It also has what are arguably the most heavily regulated fisheries of any developed nation.

Despite having more coastline and EEZ area *per capita* than any other country 70 per cent of domestic seafood consumption is imported and all of it comes from much more heavily fished areas than our own. In addition, these imports cost \$1.8 billion per year and they still impose the environmental impacts and resource depletion attendant to the other economic activity which pays for them. Worse yet, this amount is entirely removed from the economy and the flow-on benefits it would generate if spent domestically are lost as well.

Meanwhile, our resource managers are telling us we have the best managed fisheries in the world. If best managed means least productive and least profitable then we might be better off with no management at all or perhaps outsource it to Bangladesh. With an EEZ 1/74 that of Australia they manage to produce over four times more wild caught fisheries harvest.

MPAs, closed seasons, size limits, bag limits, quotas, gear restrictions, limited licenses, all are being imposed willy nilly with little or no evidence of need or evaluation of either efficacy or the socio-economic consequences. It seems that our current



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management has never seen a restriction they find un-necessary or superfluous on top of those already in place.

Although there are a few species whose particular biology makes them especially vulnerable to overfishing the broad picture of the Australian marine environment is that of a vast, very lightly fished and unpolluted region. There is no pressing urgency to impose a rapidly growing morass of restrictions but there is a very real need to better understand and evaluate what we are doing.

A huge expansion of MPAs all around Australia is just another hypothetical solution to imaginary problems. The very real consequence however, will assuredly be increased costs to and imposts on the marine based economy and to government along with further reduction in our already small fisheries harvest plus still more imports.

The proliferation of ill-considered MPAs should be put on hold. No clearly identified problem is being addressed. The effect of closed areas needs to be monitored and evaluated on an experimental basis before even considering their broad scale application.

In the few instances where overfishing is indicated there is nothing that cannot be effectively addressed by specific targeted measures rather than blanket closures of entire areas. No reduction in marine biodiversity has been found or is even suspected. Not a single marine species in Australia has been lost or is in danger of loss. Ramming through an ill understood and costly programme on a massive scale with no urgent necessity is not the kind of resource management Australia needs. Getting it right is important.

A much more empirical, rational, evidence based approach to management is badly needed. Commercial fishermen, aquaculturists, recreational anglers, divers and marine tourism operators all face similar threats from an overzealous and incompetent bureaucracy. Everyone must put aside blaming each other and join together to confront the real enemy. Divide and conquer is the bureaucracy's most effective tactic and a united opposition is the one thing they and their political overseers cannot ignore.

An inclusive, cohesive, organised, determined and aggressive approach must be taken by all stakeholders. Clear, well reasoned demands are important and some compromises between diverse interests will be necessary. Legal, political, public relations and scientific expertise is required and will cost money. A key objective must be for stakeholders to have a strong voice in management and regulation. Having politicians, public servants and academics manage by theory from air-conditioned offices is a recipe for disaster. This approach has been well tested by the various attempts at centrally planned economies. All have failed miserably.