

A Coral Sea MPA

Our gift to Asian Fishermen

Walter Starck PhD

Marine Protected Areas are a current fad in marine resource management. 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 properly assessed. At this time and they have not been found to be an important management tool in any of the world's well managed fisheries.

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, this spill over effect has only been noted over a distance of a few hundred meters. In this respect, numerous small reserves might be more effective than fewer larger ones although this is contrary to the currently popular claim that MPAs need to be much larger.

One would also reasonably expect that the increased populations and spill over effects would be proportional to fishing pressure. Where only light pressure exists not much effect should be expected; and indeed, this has been what one finds with most closed reefs on the Great Barrier Reef. This is unsurprising as the average fishing harvest rate for the GBR is less than $\frac{1}{4}$ of 1% of the conservative estimate of the sustainable limit for reef fisheries.

From a resource management standpoint a key question is whether the increase in catch outside a reserve is greater than what is lost by having the reserve. 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 there is no reason or evidence to expect this and 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 of the precautionary principle so often cited as justifying 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. We have the third largest EEZ area in the world and the second largest shelf area. On a per-capita basis we have by far the largest fishery area of any nation. We also have the most heavily regulated fisheries in the world with the highest management costs per unit of production. Despite widespread concern about overfishing, it simply isn't happening. Our already pathetically small fishing industry is rapidly declining as the burden of regulation drives existing fishermen to quit and deters new ones from entering. The

end result is the world's lowest fishery harvest rate at only about 1/30 of the global average and 70% of the seafood we consume must be imported.

These imports currently add some \$1.8 billion to our annual trade deficit. We are selling off non-renewable mineral resources to buy a renewable one we have in abundance. In addition, we still have the environmental impacts and resource depletion attendant to the other economic activity which pays for these imports. Worse still, this amount is entirely removed from the economy and the flow-on benefits it would generate if spent domestically are lost as well. Then, as a final certification of economic idiocy, we call this "sustainable management", which seems a double oxymoron in this circumstance.

Both the volume and unit cost of seafood imports is growing. All of these imports come from much more heavily fished resources elsewhere. They also entail significant needless energy consumption to transport them from thousands of miles away. Environmentally the whole thing is unconscionable. Continuing to add to an ever growing morass of restrictions on our own fishing is unneeded, unethical and unaffordable.

In addition to all this, medical research is increasingly finding significant health benefits from seafood. In particular, it is high in essential omega-3 fatty acids which are deficient in most terrestrial foods. Their consumption has been found to be beneficial in preventing or alleviating a broad range of ailments including asthma, arthritis, osteoporosis, diabetes, multiple sclerosis, hypertension, migraine headaches, certain cancers, age related maculopathy and some kidney diseases.

Omega-3s also play a vital role in neurological development and functioning. Perhaps most important of all, a diet rich in seafood facilitates brain development and has indicated significant cognitive and behavioural benefits for children. It has also been found to be valuable in reducing depression and schizophrenia in adults as well as reducing age related decline in mental functioning.

High levels of seafood consumption correlate directly with happier, healthier, longer lives. and government is budgeting millions of dollars to promote increased seafood consumption. Unfortunately, it is also continuing to increase restrictions on its production.

Fish really is a brain food and it is quite literally stupid to continue to mismanage our fisheries. It seems particularly ironic to call ourselves "The Smart State" and "The Clever Country" while closing down our fisheries, preventing aquaculture from even getting started and selling off non-renewable resources to pay for imported seafood we could easily produce in abundance at higher quality and better prices. One might well imagine a new generation of Asians talking about Australia, "Lovely country, too bad about their brains."

As if all this incompetence is not enough, we are now creating vast new MPAs to "protect" marine life that is under no threat at all. Despite having the lowest fishing harvest rate in the world and a rapidly shrinking industry, we have a disproportionate share of the global MPA area where it is needed the least and are rapidly adding more.

Until last year the GBR was the world's largest MPA; but, recently declared MPAs in the Phoenix Is. and N.W. Hawaiian Is. are now larger. Both these areas, however, are mostly open ocean with abyssal depths. Currently Australia has some 600,000 Km² of MPAs which is about 25% of the global MPA total. If the Coral Sea MPA as proposed by PEW is declared, Australia will be back up to nearly half of the total and with what is now beginning to be pushed for across our northern waters, the total Australian MPA area would be approaching 2/3 of the global total.

It should also be noted that most U.S. MPAs permit fishing with varying restrictions. Only about 1% of their MPA area is No Take. It is also important to be aware that no marine species of fish or invertebrate has ever been lost and none, not even one Australian species, is threatened with extinction here. All marine species listed as threatened are so classified because of their situation elsewhere.

The overwhelming majority of support for this malignant growth of MPAs comes from purported "stakeholders" who never have, nor ever will, even pay a visit to these areas. Their only "stake" is a self-proclaimed "concern" over something in which they have nothing invested and about which they know very little.

The Coral Sea area is under no threat of any kind. Distance, weather and our small population provide more than adequate protection. Already most of the islands and reefs are protected as National Parks. A looming era of tight energy supplies, increasing costs and global economic slowdown make significantly increased exploitation unlikely for the foreseeable future.

We can't go on imposing more and more costly and restrictive measures to prevent problem that don't even exist nor can we ourselves exist without detectable effect on the natural world. Ecology is above all holistic. Every organism must have impacts in order to exist. We are no exception. Aiming to maximize our benefits and minimize our detriments requires trade-offs and balances whereby we seek to spread our impacts across our whole resource base within the bounds of sustainability. Every resource we lock up puts more pressure on others and makes balance more difficult. An unnecessary restriction in one place becomes an increased impact somewhere else.

The Coral Sea area is under no threat and could easily sustain fishing well above current levels or any likely in the foreseeable future. From the 1950s through the 1970s Japanese longliners caught around 30,000 t of tuna each year in the Coral Sea. This ceased only when declaration of the 200 mile EEZ resulted in their no longer being able to fish there. Today we catch only a few hundred tonnes. This "saves" these fish to be caught by others elsewhere in their transoceanic migrations. Right next door, PNG lands some 290,000 t of tuna annually. Thank you Australia for your generous contribution.

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 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 an imaginary problem. The very real consequence, however, will assuredly be further decline in the marine based economy, more costs to government and 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 should 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 considered, poorly understood and costly program on a massive scale when there is no evidence of any need is not competent management.

Ongoing expansion of MPAs is a problem, not a solution. Their environmental benefit is dubious and unevaluated under our lightly impacted conditions. We also know from wide scale experience with the Great Barrier Reef Green Zones that they have seriously degraded the marine experience available to the public and the socio-economic impact has been orders of magnitude greater than originally estimated

Under the UN Convention on Biological Diversity to which we are signatory, Australia is required to protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements. It is important to be aware that “customary” and “traditional” in this context is not limited to indigenous people. The obligation to protect and encourage the customary practice of non-indigenous Australians is in no way different from that of indigenous Australians. It is further important to recognize that recreational fishing and boating is a very low impact activity. It is not incompatible with the purposes of conservation and sustainable use. Extensive no take and no entry areas clearly violate the obligation to “...protect and encourage customary use....”

It is also important to be aware that most of the proposed Coral Sea MPA would be declared under EEZ rights provided by the International Law of the Sea Treaty. However, this treaty provides that exclusive use of EEZ resources depends on utilization. Access to unused resources can be petitioned for by other nations. Such a petition regarding some of the un-utilised fisheries in our northern waters is now being considered by Asian fishing interests. It seems doubtful that vast no take MPAs would be considered utilisation.

In addition, government’s own legislative guidelines also require that procedural steps for good regulation should include:

- Definition of the problem and objectives in addressing it.
- Determination of practical alternative solutions.
- Evaluation of probable risks, costs and benefits of different solutions (including non-action).
- Monitoring of actual outcomes.
- Adjustment of measures in accord with results.

All of these guidelines have been slighted or ignored in establishment of MPAs.

The fundamental purpose of management is the determination and assessment of options with the aim of maximizing value. Simply claiming to be saving the environment while imposing more and more restrictions with no regard to the broader consequences is a travesty of the very concept of management. Our economy and quality of life are being increasingly burdened by a proliferation of poorly conceived regulations which provide little or no actual benefit. Environmental regulation in particular has come to be dominated by a narrow ill-informed environmentalist ideology and political pandering for green votes. We are paying for this incompetence with our health, happiness and pocketbooks. Australia deserves better and the electorate must begin to demand it.

All that will be achieved by declaring the Coral Sea an MPA is to turn a valuable asset into a liability requiring further millions in annual expenses in administration and enforcement.

We now face a global financial crisis, a looming energy supply crunch and emerging food supply problems. Advocating further ill-founded restrictions on our producers is tantamount to treason in a time of war. It is time that positive results be demanded from management, not just meaningless eco-waffle. It is also time that real evidence be demanded of researchers, not just unsupported opinions by a chorus of “experts” singing for their supper. Above all, it is past time for the public to realise that we are all paying the price of gross resource mismanagement in our cost of living, our health, and in the broader well being of the nation.

The era of cheap abundant resources is drawing to a close. Immediately beyond the current financial recession lurks a second blow from a resumption of steep energy price increases. The world faces tough ongoing economic circumstances. No nation is better situated than Australia to weather these conditions but doing so will entail making full use of our natural advantages. The long time Prime Minister of Singapore Lee Kwan Yew once infamously warned that Australia was in danger of becoming a white trash backwater of an Asian super economy. Sanctimoniously sitting on vast stores of badly needed resources while mouthing platitudes about biodiversity, sustainability and our precious fragile environment won't cut it. If we won't use our resources, having to scrape aside a bit of green scum to get at them won't be much of a deterrent to hungry others. The choice is ours.