

Marine Protected Areas as a Tool For Conservation

4 April 2003

Natalie Ban

Marine Campaign Coordinator

Canadian Parks and Wilderness Society-BC

Canadian Parks and Wilderness Society

- Canadian national non-profit organization
- British Columbia Chapter is one of 12 chapters across the country
- Over 20,000 members nationally, 3000 in BC
- Focus on creation and management of parks and wilderness areas, terrestrial and marine
- Work cooperatively with: other NGOs; federal, provincial and First Nation governments, other stakeholders

What are Marine Protected Areas?

- IUCN definition: “Any area of the intertidal or subtidal terrain, together with its overlying water and associated flora, fauna, historical and cultural features, which has been reserved by law or other effective means to protect part or all of the enclosed environment”
- BC NGO minimum standards: bottom trawling, finfish aquaculture, dumping, dredging, non-renewable resource exploitation
- Encourage no-take MPAs, or marine reserves

Scientists Agree that MPAs are needed...

- Consensus statement issued by 161 leading marine scientists at the February 2001 AAAS meeting in San Francisco
 - Marine reserves are a highly effective but under-appreciated and under-utilized tool that can help alleviate the declining state of oceans and collapse of fisheries
 - Marine reserves defined as areas of sea completely protected from all extractive activities – all biological resources protected

And MPAs Work!

- Review of studies of over 100 reserves (Halpern 2001)
- Findings from range of partially to fully protected reserves and moderate to excellent protection
- Marine communities respond quickly and strongly to protection from fishing:
 - Population densities were 91% higher on average
 - Biomass was 192% higher
 - Average organism size was 31% higher
 - Species diversity was 23% higher inside reserves

Other Scientific Backing for Marine Reserves

- Partnership for Interdisciplinary Studies of Coastal Oceans
 - The Science of Marine Reserves (2002)
 - <http://www.piscoweb.org>
- Pew Oceans Commission report
 - Marine Reserves: A tool for ecosystem management and conservation by Stephen R. Palumbi (2002)
 - http://pewoceans.org/reports/pew_marine_reserves.pdf

MPAs should be seen as an opportunity, not a threat!

What does Canada have?

- Canada has 244,000 long coastline and 3.7 million sq km continental shelf (1% of planets ocean surface)
- Total of 15 protected areas in marine waters
 - Mostly located in coastal fringe
 - Total area of 31,176 sq km or . 613%
 - Only 3 sites or less than 0.01% meet minimum protection or management standards suggested by NGOs
- Contrast this with 6% terrestrial protected areas in Canada

Canada is committed to MPAs

- WSSD Johannesburg commitment
 - ...the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012...
- PM's speech in Johannesburg at WSSD committed Canada to establishing 5 National Marine Conservation Areas over the next 5 years
 - Funding announced in February 2003 budget
 - Sites: Lake Superior, Gwaii Haanas, Southern Strait of Georgia, and 2 others
- February 2003 – BC Speech from the Throne
 - "We are going to continue to work with Canada ...[on] the creation of new marine parks to protect valuable marine assets along our coast."

Status of MPAs in BC

- British Columbia has 27,000 km of coastline, 6500 coastal islets, and 290,000 sq km of marine waters
- Less than 2000 sq km (<1%) of marine waters have some degree of protection, mostly concentrated in the coastal near shore region
- Only 50 ha are fully protected (no-take)
- Endeavour Hydrothermal Vents was designated as Canada's first MPA under the Oceans Act on March 7 2003

Status of MPAs in British Columbia - Provincial

- **79 provincial parks have a marine component - total of 124,323 hectares**
 - 34 of these are over 200 hectares
 - 30 of these have some fishing closures
- **14 provincial ecological reserves have a marine component - total of 46,651 hectares**
 - 7 of these are over 200 hectares
 - 8 of these have some fishing closures

Status of MPAs in British Columbia - Federal

- **1 national park reserve (Pacific Rim)**
 - 21,390 hectares
- **5 migratory bird sanctuaries and 1 national wildlife area**
 - 2310 hectares
- 1 Oceans Act MPA (Endeavour Hydrothermal Vents)

CPAWS Marine Program in BC

- Cooperative federal/provincial policy framework
- Site documentation and proposal development for large, zoned MPAs
- Grassroots, community involvement in campaign sites, including work with First Nations and fishing industry
- Ecosystem/network approach
 - Baja to Bering international program
 - Pacific Coast MPA mapping

Moving towards a network of MPAs

- Marine Conservation Features Mapping Project aimed at identifying representative and unique/distinct areas for a possible MPA network on Pacific Coast
- Goal: provide a regional perspective to local work
 - Areas of high ecological significance from a BC perspective
 - Major community types (ie. estuaries, kelp beds)
 - Habitats (ie. reefs, seamounts, tidal passages)
 - Processes (ie. upwellings, plumes, gyres)
 - Special biogenic communities (ie. corals, sponge reefs)
 - Collaborating with NGOs and agencies with interest in MPA network design

Designing a network of MPAs

THREE PHASES

 Mapping / Overlays

 Define SETS of candidate MPA's

 Select THE NETWORK of MPA's

Why are we doing this?

- Provide an agenda for MPAs and marine conservation in BC
- Engage discussion from stakeholders by providing them with the broader agenda
- Communications tool to engage the public
- Provides context for existing MPA proposals
- Opportunity for NGOs and agencies interested in MPA establishment to work together

Final Outcome

- A map of a network of proposed MPAs – to be updated as new information becomes available
- Context and guidance for government MPA programs: Oceans Act MPAs, National Marine Conservation Areas, Marine Wildlife Areas, provincial marine parks, ecological reserves
- Tool for integrated management planning

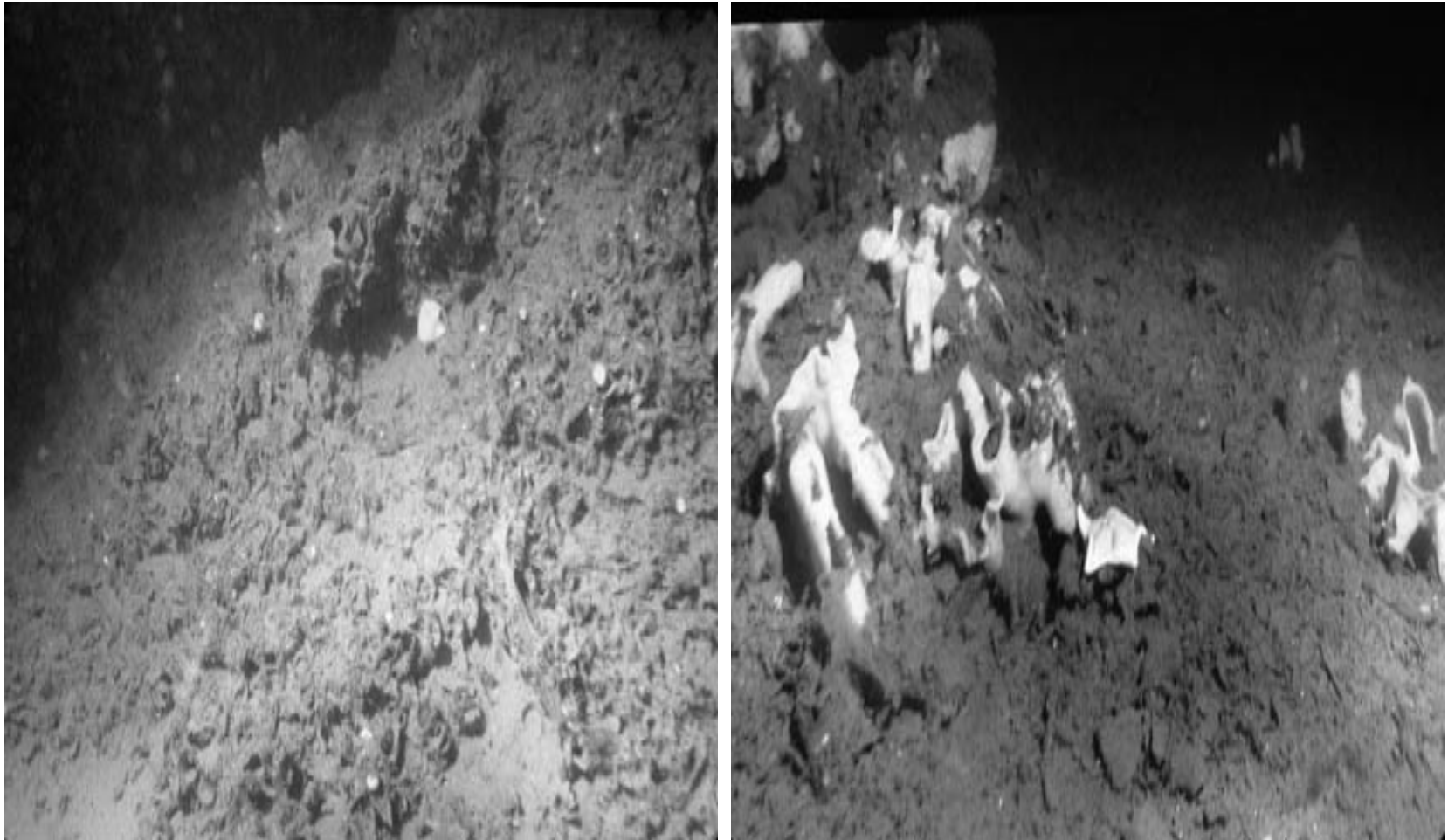
How do local MPA proposals fit in?

- MPA proposals by NGOs, communities, First Nations etc. can be included in this process – and we want to include them!
 - The proposed boundaries can be included in the map
 - Analysis then done to see what representative and distinct areas are covered by the proposals
- Local proposal encouraged! – research shows that the most successful MPAs are those supported by local communities

Next steps

We have so little marine protection in Canada, and threats are mounting, we need to establish MPAs quickly!

Trawling Destruction of Sponge Reefs



Keys to Success

- Need to have some positive examples of MPAs to show hesitant governments and stakeholders how they work
- Need to work towards co-management arrangements with First Nations
- Need to finalize the draft federal-provincial MPA strategy