

**Haida Gwaii/QCI Marine Strategy Workshop**  
**Cacilia's Bed & Breakfast, Tlell**  
**December 2, 2002**  
**10 am - 3 pm**  
**(Sponsored by WWF Canada)**

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*Disclaimer: Please note that this is a paraphrased record of workshop events. Any misrepresentation in workshop participant's comments, questions, and/or responses is unintentional.*

**INTRODUCTION & WELCOME:**

- Prayer and welcome by John Williams.
- Explanation of why the meeting is a necessary step in moving towards a marine strategy for the Islands.
  - Why? There are clear problems with marine management. Decisions are not meeting local needs regarding environmental and economic concerns. There is a need to act now while there are resources worth managing and protecting. There are problems with the current fragmented management of our marine area— agencies with poor communication, and many processes currently underway (eg. Gwaii Haanas National Marine Conservation Area, the Haida Gwaii/Queen Charlotte Islands Land Use Planning Process).
  - Where? The waters of Haida Gwaii.
  - Who? Local people with expertise must be involved in marine planning. Effective planning will require local knowledge, researchers, and fishermen working together.
  - When? In May 2002 we had our first meeting at which there was consensus regarding the need for an Islands' marine strategy. We are now at the point where we need to set priorities and requirements for the planning process. Estimated timeline that much of the information collection be completed by spring 2003 to start defining a strategy. By the end of 2003, we should aim to have completed a draft strategy.
- The key to the success of an Islands' marine plan is going to be defining our values, working to find creative solutions, and leaving blame at the door (there should be no finger-pointing in the process).

**IDENTIFICATION OF ISSUES AND THEMES:**

The intent of this meeting is to discuss the content of our 'blueprint' for an Islands' marine strategy. The issues and themes to be discussed were identified in the last workshop, and from meetings conducted with individuals in the community. There is now a need to clarify the issues as stated and brainstorm additional concerns.

- It was suggested that these issues and themes could be divided into three areas: (1) resources, (2) harvesting methods, and (3) legislation.

1. **Abalone:**

- Lack of abundance and threatened populations. Abalone is listed as 'threatened' by the Committee on Status of Endangered Wildlife in Canada (COSEWIC).
- Poaching/Black Market.
- Problems associated with monitoring and 'watchdogging'
- Return of the sea otters. Concern about sea otter impacts on abalone populations and recovery.

2. **Aquaculture:**

**a. salmon farming**

- Salmon farming risks are too great (general consensus). [Note: there was discussion over the proposal to remove the word 'too' in the aforementioned statement. The group felt that a strong tone was necessary in order to send a clear message that the risks are considered too great on the Islands].
- Land-based sites are preferable to open-net caging (eg. Norway, where they are moving from open-net to land-based in the next six years). Suggestion that we proceed with caution (eg. first we segregate from the marine environment using land-based pens before proceeding with broader aquaculture operations). In this sense we might be able to use an 'inland fishery' (closed system) as a pilot project.
- Reality of the false economic accounting of aquaculture operators. Salmon farming is not necessarily the economic generator it pretends to be. Mom and pop operations generally do not make money due to the need to increase efficiency and subsequent reductions in the value of the fish. Farmed fish should not be assumed to be profitable. Big business manipulates data to gain an advantage globally.
- Overcrowding concern and the problem of disease. Concern over the use of pharmaceuticals to combat disease and the additional issue of the dumping of diseased fish by operators.
- Use of halogen lights to attract resident fish (eg. fry and invertebrates) to reduce food bills for farmed species.
- Concern about not learning from our mistakes. There was a proposal to gather baseline data from problem areas in British Columbia and internationally. Suggestion that we consider the concepts of the "Precautionary Approach" and "Adaptive Management" (learning-by-doing) in the discussion of aquaculture development. Additional comment that fish farming was introduced in the province according to a 'precautionary approach' and was a total failure (eg. on Vancouver Island spawning Atlantic salmon have been recorded in six or nine river systems, and commercial fishermen are catching Atlantic salmon at sea). Suggestion that the promises of precautionary management are empty and that the lessons are already there: "we have a unique opportunity to shut down aquaculture at this stage, before it begins."
- Sea lice and impact on wild salmon populations.
- Focus on wild salmon and that with which we are familiar. Recognition that we have a long history with wild harvesting and are familiar with the issues surrounding wild salmon management. We are best to stick with what we know. Aquaculture and mariculture are entirely new to us and we are delving into an area that we have no history in. Suggestion that this might be considered a 'legacy of knowledge,' and that we are more likely not to repeat mistakes of the past.

### **b. Mariculture and other aquaculture**

- Any farming that requires the addition of food is a concern (eg. Shrimp and salmon farming)—farming that 'feeds itself' (eg. some mariculture) may be acceptable. Reminder that we are 'feeding carnivores' and that there are negative impacts on other species (eg. herring and pilchard). Observation that Japanese shellfish farming also has an impact on habitat and plankton, so mariculture is not without impact either.
- Issue of introduced species (eg. Atlantic salmon and certain oysters)
- Issue of access and competition among users. In particular, the concern that once a farm is in place, aquaculture might render the area single-use (eg. Alaska—no anchoring or tying-up).
- Ownership, land tenure, and local benefits. Generally there are low wages, and when mom & pop business expand into a larger operation there is reduced local benefit. Small businesses are gradually swallowed by large corporations with practically guaranteed land tenure in the form of 5-year renewable licenses. Policy of owner-operated business is a good idea (eg. Alaska) or using a cooperative model. This, however, would involve changes in government policy. Additional concern about economies of scale (why are we doing this? who are we feeding? local people?). Comment that local people also need jobs and that "to close the doors to employment is to close doors to reality."
- Concern about the scale of operations. Observation that there are different types of farming (mom and pop vs. large corporations). Economics must first be locally accountable, and then global.
- Displacement of natural species. In particular, there is a habitat risk in basing operations on the foreshore.
- Concern about the accountability of bureaucracy.
- Concern about the privatization of marine resources. There is a huge impact on coastal communities once a license is issued.

### **3. Geoduck:**

- Fishing methods may damage sea bottom habitat. Suggestion that sand blowing brings cysts into the water column, and that there is a negative link to other species and paralytic shellfish poisoning. Concern also on the impact of high-pressure hoses on the seafloor.
- The life history of the geoduck is poorly understood. Management of long-lived species is more difficult. Observation that geoducks do have specific habitat and that identifying habitat for species such as geoducks is important in marine planning.
- Unclear link with other species, especially bottom feeders. Geoduck is a prey species (eg. halibut eat necks of clams).
- No local benefit. There are no local geoduck fishermen. Suggestion that we need a local versus global analysis to understand where we sit in the broader geoduck industry (why have geoducks become important here? Are they depleted elsewhere?)
- Concern that the fishery is wasteful. Suggestion that for every 10 lbs harvested, they may sell one lb on the market because there is a specific demand for 'pure

whites.' Question as to whether or not we want to support this kind of fishery, and the 'philosophy of extraction.'

- Difficulty of monitoring. Comment that the Islands are isolated.
- Issue of the relationship between the black market for abalone and geoducks.
- Potential for species displacement due to overharvesting. If we take all the geoducks, then another species will move in and fill that niche.

#### 4. Halibut:

- Bycatch issue in halibut fishery largely addressed by present quota system. Noted that the halibut stock itself is generally healthy; it has been fished for 100 years and is a migratory species. There are also important spawning areas around Haida Gwaii that provide critical habitat as juvenile rearing areas (eg. Whaleback) that must be considered in marine planning. Suggestion that the stocks are managed by an international commission and this may account for their health and success.
- Concern about age classes. Concern that there is an impact on biomass because of the harvesting of larger and older fish that tend to be the egg producers. Comment that the only way to tell the age of a halibut is to get the otolith. Generally speaking, fish over 50 lbs are female, but determining age classes is difficult.
- Concern about benefits for local coastal communities and aboriginal people. Comment on the specific issue of privatization and the lack of local ownership. Sense that licenses are bought up by corporations and access to quota by local people is restricted. Suggestion to look into the Alaska CDQ (Community Development Quota) program in northwest Alaska (pollock fishery) to address concerns about increasing local benefits. Comment that the pollock fishery in Alaska is impacting the food chain and that the introduction of an additional stakeholder (communities) into the process can increase pressure on the stock and make management even more complicated.
- Issue of size restrictions for the sport versus commercial fishery. Comment that there should be a larger catch size limit for the recreational fishery because a lot of smaller halibut ('chickens') are brought into the docks by sport fishermen.
- Concern about the impact of the recreational fishery on stocks. The recreational fishery is generally situated closer to shore so it may have a larger impact on the juvenile stocks.
- Concern about the impact of the commercial fishery on stocks. Following a commercial opening in Rennell Sound, it takes up to three weeks for fish to return for the recreational fishery. Suggestion that there is potential for a protected area for stock rebuilding (where no one can fish).
- Concern about whether marine protected areas are useful for migratory fish. Because halibut are migratory, the effectiveness of a protected area may be limited. Comment that there used to be a protected area off Tow Hill (dropped by government) and now there are draggers out there and there is a critical need for some protection status.
- Concern about sectoral management allocation and access. This is a particular concern regarding MPAs (eg. making Rennell Sound only open to the sport fishery is unacceptable, as well as the fact that Langara is closed to the commercial salmon

fishery). A no-catch zone must be for everyone. Comment that a no-catch zone is different than an MPA.

## 5. Herring:

- Lack of abundance. Herring stocks in some inlets have not recovered from past fisheries. Suggestion that radical conservation measures in the herring fishery are necessary due to the stock condition. Recommendation that there be a shift in herring management from managing based on biomass to managing based on population age structure.
- K'aaw fishery (roe-on-kelp) first priority. K'aaw fishery doesn't kill fish (you do take some eggs but you leave the fish). The K'aaw fishery 10% mortality versus 100% mortality in the roe fishery. Comment that K'aaw is a sustainable fishery for herring (one of the most sustainable fisheries locally) and that this should be highlighted.
- The unsustainability of the roe fishery. Comment that the roe fishery kills off the whole spawning stock. Concern that DFO has not listened to the warnings of commercial fishermen and the Haidas, and continues to insist there be a roe fishery by gill-netters and seiners. Suggestion that 80% of all other sea creatures depend on the herring (a critical food source), and that there is a level beyond which you cannot go. Additional concern about the fact that waste products from the roe fishery generally go to aquaculture (cheap food for fish farms), or are used as fertilizer.
- Low stock levels of herring impact higher trophic levels. Herring abundance has impacts on other species (eg. Chinook) because they are feed.
- Relationship between herring and jellyfish. Herring eat phytoplankton and when they are gone the jellyfish populations fill this niche. They have had jellyfish problems in the Bering Sea due to an increase in populations with removal of filter feeders such as herring. This may also be linked to red tide.
- Concern that we know very little about the life history of herring. This is particularly the case for juvenile herring, especially regarding distribution. There is environmental variability in addition to fishing pressure. Spawning habitat is critical for herring and there is some good data available for marine planning and conservation.
- Issue of local economic development opportunities. Comment that we should consider the contemporary and historical context with respect to herring. There are opportunities for local small-scale production (eg. pickled herring) for targeted economies and markets. Noted that there are ten licenses held locally (16,000 lbs/license) but only one is processed locally. Opportunities for value-added enterprises need to be explored.
- Concern that use of herring bait is unsustainable. Suggestion that herring bait use should be 'outlawed' and that sport fishers should just use lures.

## 6. **Krill:**

- Risks too great to utilize because they are at the base of the food chain.  
Suggestion that there be an immediate moratorium on any krill fishery on the Islands and internationally. This is an issue of priorities—by eliminating the bottom of the food chain we eliminate everything else above. Comment that sand lance is another important forage species to which the same issues apply.
- Concern about initiating any new fishery without knowing the potential implications.  
This particularly applies to all filter fish including: krill, sand lance, pilchard (sardine), and capelin.

## 7. **Lingcod:**

- Abundance unknown. Suggestion that lingcod populations have increased in the last three years (there are a lot of lingcod around and they have been building up). Recommendation that a tagging program for lingcod be initiated.
- Concern regarding the impact of the sportsfishery.
- Concern about lingcod bycatch in commercial fisheries. Suggestion that longlining for lingcod should require a ZN license because bycatch of rockfish is so great. Schedule 2 on A licenses results in a lot of halibut and rockfish bycatch which cannot be kept. Comment that under an 'A' salmon license you can keep up to 15,000 lbs/calendar month until the TAC is reached. Any ZN license requirement may concentrate power and access in the fishery (and will affect smaller fishermen). The important issue is bycatch, and licensing restrictions are only one way to address it.
- Issue of local economic opportunities for lingcod fishery. Suggestion that value-added opportunities be explored (eg. smoked ling?)
- Concern that lingcod are easy to overharvest. They are a long-lived and territorial species (it is easy to overharvest a habitat). Stocks have been depleted elsewhere (eg. Strait of Georgia). Suggestion that there have been changes in patterns of fishing effort that may impact stocks (eg. relationship to inshore halibut fishery).
- Concern that lingcod is an important food fish.

## 8. **Local Economy:**

- Issue regarding local benefits. More local processing needed to create jobs from fish harvested around the Islands. Suggestion to bring back small boat fleet of day fishers. Recommendation of a community-based terminal fishery (eg. weir in the Yakoun) for island-wide economic benefit and resource escapement control. Question as to whether the provincial government holds any responsibility to local communities for economic development opportunities.
- Issue regarding local control. Suggestion that communal license should be held by an entity like Gwaii Trust (as already exists for the Haida under the CHN communal licenses). Organization of a support group for local fisheries management would also be useful. Comment that there needs to be resistance to international access and licensing.
- Issue of access to local seafood by communities. Question as to why local restaurants cannot access local seafood through small mom and pop fishing and processing operations.

- Concern about the data gap regarding First Nations and their constitutional rights. Reference to research stemming from the 'Back to the Future' conference at UBC. Comment that Haida constitutional rights to access take precedent over all but conservation concerns.
- Issue of marine tourism development.
- Opportunities for locally-sponsored research activities and opportunities. Question as to whether there is information on what stocks around Haida Gwaii have been negatively impacted (at present there is an incomplete list).
- Uncertainty surrounding how much of the local economy and population relies on marine resources. Comment that there is very little information about how much of our marine resources leaves the Islands.

#### 9. MPAs:

- Issue of the potential effects on fisheries and the biological effectiveness of MPAs. Question as to what species are likely to benefit and whether or not there is spillover for rockfish and other species. Recommendation that MPAs be used as research areas.
- Issue of access, including uncertainty surrounding First Nations food fisheries. Concern that once an area is closed, it may not be fished again. Question as to whether or not First Nations food fisheries will be permitted in protected areas.
- Issue regarding flexibility and adaptive management of MPAs. Suggestion for the need for flexibility in boundaries and regulations depending on whether the objectives of an MPA have been met. Comment that MPAs should be a living strategy to address needs as necessary.
- Importance of using local knowledge to define where an MPA might be located. There is a need for clear objectives in MPAs. Concern about local control of management and the importance of bringing this issue to the attention of local communities (eg. lost control of sport fishing industry). Comment that there is historical information available on what areas are 'used.'
- Issue of the additional benefits of MPAs. MPAs may be beneficial for tourism.
- Unclear policy context and concern about the role/interaction between province, federal, and local levels in designation and management of potential MPAs. Comment that the federal government intends to develop a network of MPAs by 2010 (this process has already been initiated). Unclear as to what regulatory body will/should take leadership (eg. DFO? Parks?). Need for clarity on agency direction, authority and mechanisms for designation.
- Confusion regarding MPAs versus 'no-take' zones. There is a need for clear definition of what an MPA is; comment that an MPA cannot simply be "an incubation site for community fisheries around it." Suggestion that the approach should be to protect large areas and then zone for use (versus protecting small areas and 'using' the rest). This effectively reverses the idea of creating MPAs to starting with an MPA and then identifying areas where resource extraction is sustainable.
- Issue of enforcement of MPAs. This issue extends beyond the marine environment into freshwater concerns (eg. the impact of the Forest Practices Code).
- Concern about concentration of impact in areas outside of protected areas. Potential for neglect in other areas if attention is focused on protected areas.

- Concern about lack of baseline data. The importance of collecting baseline data before designation.

#### 10. **Oil and Gas:**

- Risks are too great to support offshore oil and gas. Comment that there needs to be a better analysis of risks (eg. earthquakes- we might look to California for lessons). Suggestion that we look at the 93 recommendations presented by the 'Offshore Oil & Gas Panel' which addressed issues of seasonal drilling, migratory species, and seismic concerns.
- Issue surrounding long-term sustainable energy alternatives. Comment that oil and gas are a 'thing of the past' and that to invest is a waste of money. Suggestion that communities consider bigger questions of long-term economic sustainability and trends in energy use in addition to technological and engineering concerns surrounding oil and gas development. Comment regarding the 'fallacy of economic thinking' and addressing fossil fuel consumption at a moral level.
- Uncertainty around Hecate Strait ecosystem. Comment that there are very few long-term, detailed data sets (eg. habitat and species) for the Hecate Strait area which means we cannot make informed decisions.
- Local benefits of oil and gas development limited. Comment that local communities will make very little money from oil and gas development; rather large corporations with dominate and profit.
- Concern about potential impacts of oil and gas on food fisheries. Comment that the Haida culture is tied to marine resources for food and potential loss is unacceptable.

#### 11. **Red Sea Urchins:**

- Overabundance of red urchins is leading to a decline in kelp forest habitat. Comment that green urchins may also have an impact (in Masset Inlet especially). Response that red urchins tend to have a larger impact (they are the 'lawnmowers'), although we also have purple and green urchins around the islands. Comment that the changes in kelp habitat occurred approximately 100 years ago when the otters were removed—this raises the issue as to whether we are going to manage the urchins and kelp, or accept the new relationship (which may now be in balance). Additional comment that there should be further study into the importance of kelp to the inshore fishery (and natural system).
- Concern about link between sea otters and urchins. Comment that in order to get rid of urchins we may need to reintroduce sea otters. This is considered a better alternative to using chemicals (eg. bluestone) and there is a need to restore a natural balance (including addressing the impact of the commercial urchin harvest).
- Concern about local extirpation. Comment that sea urchins are shifting species composition in certain areas.
- Concern about relationship between red sea urchins and larval abalone. Comment that there is a need to better understand the abalone-urchin-kelp forest relationship (especially when considering the impact of urchin harvesting on abalone populations). Suggestion to look into the Sam Simpson abalone study in the 1950s that considers population and abundance, and the viability of a commercial fishery.



Comment that this information has somewhat changed since the use of SCUBA divers to collect data.

## 12. **Rockfish:**

- Rockfish need to be dealt with species by species. There are different concerns for different species and areas.
- Concern about local depletion. Areas of concern include Skidegate Inlet, Langara, and Rennell Sound.
- There is a lack of information about movement and abundance. Comment that rockfish are local and not highly migratory.
- Concern about the uncertain impacts of the sportsfishing industry. Concern about the high mortality rate for catch and release. Suggestion that it is possible to puncture the swim bladder to increase chances for survival and that you may be able to train people to do this. Concern that experience puncturing swim bladders is largely for live market fish, not fish that will be returning to great depths. Suggestion that there be a policy that 'you take home what you catch' because there is always some kind of damage (this may be the best way to go for all species, not just rockfish). Additional comment that the catch and release of rockfish does not happen as much in the north as the south of the province.
- Concern about bycatch in commercial fisheries. Concern about halibut fishery bycatch, and ZN licenses (directed fisheries). Comment that puncturing swim bladders in the commercial fishery is unlikely to work.
- There is a lack of information on age classes. Comment that rockfish are very long-lived and the impact of harvesting on specific age classes is unknown. Comment that there is some good information on age classes around the islands collected by Lynne Yamanaka at the Pacific Biological Station.
- Issue of local knowledge of rockfish. Comment that Haida elders have knowledge of rockfish.

## 13. **Wild Salmon:**

- Concern about local stocks. Many local stocks are depleted due to logging and fishing (eg. chum in Skidegate Inlet declined in recent years, terminal seine fisheries in 1970s and 80s impacted pink and chum stocks on east South Moresby). Small hatcheries may help to restore very low stocks. Question as to what would happen "if we just left it for 100 years?" Comment that this may be market-determined and an issue of economic viability.
- Concern about salmon fisheries targeting migratory stocks. Concerns about West Coast Vancouver Island (WCVI) salmon have restricted opportunities, even where very few of the WCVI stocks have been caught. Suggestion that there be a better tagging program to determine which stocks we fish and associated impacts (especially on local stocks).
- Concern regarding two sets of rules for commercial and recreational fisheries. There are inconsistent rules for both fisheries (eg. commercial troll fishery is closed to fishing springs when the sportsfishery is opened).

- Concern about restrictions on opening periods and areas. A year-round fishery would provide more information about when different stocks are migrating. Comment that wild salmon are a sustainable resource if managed properly.
- Relationship between Fisheries Act and habitat concerns. A 1985 study (Gester?) suggested that we are losing four systems/year. Comment that we need to take responsibility for fish habitat and forestry concerns. Suggestion that there needs to be a change in legislation to address provincial and federal responsibilities, accountability and communication. Comment that commercial fishery doesn't have a huge impact, but habitat is a concern (eg. less than 20,000 chum returned to Skidegate Inlet following a greater than 90,000 brood year). In the Park (Gwaii Haanas) runs haven't returned which suggests the problem isn't commercial fishing but something else (eg. herring? habitat loss?). Observation that gravel removal may impact fry.
- Concern about fisheries management data analysis and decision-making. Suggestion that there be changes in federal legislation to refocus exploitation rate (and associated mortality numbers) for WCVI chinook salmon. Comment that politics is playing into decision-making.
- Issue of value-added processing opportunities on-island. There is a need for more market information to determine whether people are willing to (or should) pay more for wild salmon.
- Concern about the impact of aquaculture on wild salmon. Comment that we need to protect wild salmon and there are issues associated with introduced Atlantic salmon in fish farming.
- Issue of access to wild salmon stocks in future MPAs. Comment that salmon are a migratory species and that access should not be restricted by an MPA.
- Issue of relationship between bears, salmon, and forest ecosystems. Comment regarding the importance of salmon transport by bears and associated nitrogen fertilization of forest ecosystems. Suggestion that this might be an educational opportunity (eg. tourism) with respect to wild salmon and the biotic link between marine and terrestrial ecosystems.
- Issue of natural variability of salmon stocks. Comment that fishing activities are not the only problem and that runs may be as high as they ever were (eg. sockeye in the Fraser River). We need to recognize that fish populations go up and down, that they will come back, and not always be so negative.
- Concern about the impact of future 'unknowns' such as climate change. Comment that El Niño and sea temperature change may dramatically affect marine ecosystems.
- Concern about the impacts of potential changes in salmon populations on other marine mammals. There is little information about the impacts on species that rely on salmon (eg. Killer whales) as prey. We need to look at predator mortality issues as well (including seals and sea lions). Comment that there has been a phenomenal increase in whales in the last few years from WCVI to Alaska (eg. humpbacks, sperms, grey and blue whales). Suggestion that the increased number of dead whales may be because there are more whales in general. Possibility that the increase in whales is due to changes in southern water temperatures.

- Issue regarding establishing a time when salmon are not fished. Suggestion that a 'replenishment time' be established.

#### 14. **Sportsfishery:**

- Concern regarding local benefit. Small vessel charters and personal recreational fishing is different than lodge enterprises (in terms of local benefit and impacts) and should be treated differently.
- Concern regarding mortality associated with catch and release. Concern that catch and release leads to predation due to the exhaustion of fish.
- Concern about impacts on salmon stocks and high catch limits. Comment that 30 spring/year is too high and unsustainable.
- Issue of accountability and monitoring. Suggestion that all fish be tagged and that a fish tax be implemented (eg. \$500/tag)?. Information on total catch by all sectors and species (food/commercial/sport) is needed (including data on catch and release).
- Concern about impacts of sport fishing lodges. There is a lack of information on the levels of extraction by lodges and individual recreational fishermen. Comment that according to DFO numbers, 46,000 spring were taken from the Langara area (all of North Coast, from Cape Caution north)?. Suggestion that there be a stipulation for lodges to register the numbers of fish taken. Comment that there should be a moratorium on lodges (eg. concern about location of Langara I. lodges, where all fish move through Dixon Entrance). Concern about floating lodges and their ability to get around regulations (eg. Jimmy Pattison is renovating two large seine boats for Langara and Rennell Sound). Lodges need to be addressed differently if they are land-based versus mobile.
- Concern about the high mortality associated with the double (tandem)-hook setup.
- Concern about the use of bait. Suggestion that bait be outlawed to reduce bycatch and encourage selective fishing.
- Concern about two sets of rules for commercial and recreational fisheries. Comment that there should be the elimination of 'ribbon boundaries' (eg. Langara) that give exclusive access to sports fishermen. There are also additional proposed 'ribbon boundary' areas including Tow Hill, Rennell Sound and Tian.
- Issue regarding the moral ethic of the sportsfishery. Comment that we need to set priorities (eg. food vs. commercial vs. sport).
- Concern about increased number of small boats used. Comment that there needs to be a cap on effort due to the potential impact on fish and pollution concerns.

#### 15. **Trawlers/Druggers:**

- Concerns regarding negative impacts on habitat.
- Concerns regarding volume and scope of catch.
- Concerns regarding bycatch.
- Issue of local benefit. Concern regarding license concentration and control by large corporations. Suggestion that there be a historical re-examination of local fisheries.
- Concern regarding monitoring and accountability.

- Issue of recognizing variable impacts of different dragging fisheries. Comment that there are distinct dragging fisheries, and a need to distinguish between mid-water and bottom draggers. The hake fishery may be an example of a generally good dragging fishery.

#### 16. **General Management:**

- Inadequate monitoring and enforcement. Comment that there is a lack of confidence in stock assessment numbers. Suggestion that more money be invested in monitoring and research. Comment that existing programs need better coordination (eg. relationship between Haida Fisheries Guardians and Fisheries Officers and associated roles/duties regarding stock assessment and enforcement). Suggestion that local management be the focus, over local enforcement.
- Problems associated with current licensing systems. Suggestion that there be an owner-operator clause or provision. Concern that quota system plus transferable licenses is concentrating ownership of the resource (eg. Jimmy Pattison).
- Concern about the treatment of First Nations. Concern about use of weapons and attitude toward First Nations fishermen.
- Concern about vertical integration of fisheries. Suggestion that processors should be restricted to processing to avoid vertical integration (processors owning licenses and fishing vessels as well as processing plants).
- Concern that monitoring of fleets be flexible and reflect capacity and scale. Comment that the small fleet is being over-monitored and cannot afford the cost of cameras and observers (whereas larger operators can afford it). Also any money spent on monitoring must be effective and have definitive results.
- Issue of multiple laws for one species. Suggestion that laws need to be synthesized.
- Issue of accountability. Concern about the fact that the responsibility for fisheries management keeps getting passed on.
- Issue of ecosystem management. Comment that we need to manage the whole, not parts.

#### 17. **Crab:**

- Concerns regarding the impact of the dip net (recreational) fishery on mating crab. Comment regarding impact of recreational fishery on disrupting mating crabs.
- Concern regarding the impact of the commercial crab fishery. Need for information on the number of crab pots in Hecate Strait, and the catch over the last five to ten years.
- Concern that undersize, female, and soft shell crabs are illegally being harvested. Comment that undersize crabs are 'juiced' and then discarded.
- Concern about deformed crab. Comment that some deformed crabs have been observed.

#### 18. **Sea Otter:**

- Concern that sea otters are a missing element in the ecosystem. Comment that they may need to be reintroduced, although they are slowly coming back naturally (spotted in south-end of the island and some in north-end including in crab traps).

Comment that sea otters are predators ('the top of the heap'). Suggestion that any potential reintroduction would need to be carefully controlled.

- Concern about First Nations food fishery and relationship between sea otters, urchins and abalone.

19. **Razor Clams:**

- Concern regarding impact of recreational fishery. Issue of tourists being untrained harvesters.
- Concern about commercial harvest. Comment that the commercial razor clam harvest is co-managed by DFO and Haida Fisheries (CHN).
- Issue of local abundance and population health. Comment that in the US, harvesting by First Nations had to be restricted because of low clam populations.
- Concern regarding biotoxins and monitoring. Comment that monitoring does occur here regularly which is why a commercial fishery is permitted.
- Concern about vehicle traffic on North Beach.
- Concern about use of clams for bait. Comment that we are "taking gold and selling it for peanuts."

CONCLUSIONS AND SUMMARY:

- Following this identification of issues and information needs, there will be an effort to collect information that is available. There will also be an effort to talk to local people regarding values, landings and local uses—to create a picture of what is going on around the islands. There is a need to clarify information that is correct, and identify what is still needed.
- The CHN will integrate this information into land and marine use planning. Recognition that this information belongs to the Islands—it is public information and is part of the common domain.
- Between now and the next meeting perhaps in late spring, there will be an effort to gather as much information as possible.

Meeting adjourned at 3pm.