

INTRODUCTION TO THE PRINCE RUPERT COMMUNITY PARTICIPATION WORKSHOP FOR ‘BACK TO THE FUTURE’ IN NORTHERN BRITISH COLUMBIA

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The BACK TO THE FUTURE (BTF) project in Northern British Columbia is a component of the Coasts Under Stress (CUS) interdisciplinary Major Collaborative Research Initiative project funded by both SHRCC and NSERC¹. This is a large project designed to assess the impact of changes in society and resource harvest patterns on individual, community and environmental health.

The major objective of community participation workshops like this one is to work with First Nations, government, community and industry partners to explore local, regional and national policies and options to ensure the long-term survival of vibrant and healthy coastal communities. The reconstruction of healthy ecosystems is an integral part of the process.

BACK TO THE FUTURE is a new philosophy of resource management developed at UBC Fisheries Centre (Pitcher *et al.* 1999) in collaboration with First Nations and other partners (Haggan *et al.* 1998) The central idea is that fisheries agencies are at best ‘managing the rate of decline’. If we do nothing, resources will continue to dwindle until there is nothing left. We argue that ‘sustainability’ is the wrong goal, when things are already depleted (Pitcher and Pauly 1998). That leaves restoration as the only option.

BUT, what is our restoration goal? BACK TO THE FUTURE says that we have to learn what the waters produced in the past, so that we can set restoration goals for the future. The first task is to make the best possible computer models of marine ecosystems and their fisheries at different times in the past. To do this, we need to combine knowledge from First Nations, history, archaeology, science, commercial fishers, processors and others.

The periods of interest for northern BC are:

- the 1750s, prior to first contact and before modern industrial fishing;
- the 1900s with the expansion of commercial salmon fishing but before steam trawlers in Hecate Strait;
- the 1950s; and
- the present day, or what we have left.

The models present an ‘audit’ of past abundance and diversity compared with today. This can be used to set future policy for restoration and to provide a consensual, community-based exploration of the costs and benefits of specific restoration policies. Here we employ a new form of economic analysis that includes ecological and social values. We also make the case for significantly lower discount rates for natural resources in the interest of inter-generational equity (Sumaila *et al.* 2001; Sumaila 2001). The long-term goal is to restore marine ecosystems to much higher levels of productivity. We assert that this will contribute to the well-being of coastal communities (Haggan 2000).

This project in northern British Columbia is based on earlier pilot work on BTF in the area (Haggan and Beattie 1999). Previous reports in the CUS project have covered the construction of the ecosystem models for each time period and the input of two ‘science workshops’, one on each coast of Canada, that facilitated input from experts in each taxonomic group. (Pitcher *et al.* 2002a, b; Ainsworth *et al.* 2002).

Table 1. Fisheries Centre members of the Back to the Future team for Northern British Columbia.

| Name | Title | Role |
|-------------------|----------------------------------|---|
| Tony Pitcher | Principal Investigator | Project design/modelling |
| Nigel Haggan | Project Manager | Ethics of collaboration, coordination, funding. Ecological, economic and social valuation of ecosystem states. Intergenerational equity |
| Rashid Sumaila | Resource Economist | Hecate Strait models |
| Sheila Heymans | Post-doctoral fellow | Modelling expertise |
| Eny Buchary | Doctoral Student | Hecate Strait models |
| Cameron Ainsworth | Doctoral Student | Modelling data, sport fishery, climate modelling |
| Robyn Forrest | Research Assistant | Modelling expertise |
| Richard Stanford | Masters’ Student | Aquaculture and modelling |
| Pablo Trujillo | Masters’ Student | Evaluation of community preferences, environmental ethics |
| Melanie Power | Doctoral Student | Interviews and historical database |
| Aftab Erfan | Summer NSERC Student 2001 and 02 | Rockfish fishery |
| Erin Foulkes | Undergraduate Student | |

¹ <http://www.coastsunderstress.ca>

Table 2. Prince Rupert Workshop Participants

| | |
|---------|---|
| Group 1 | <i>Fisheries Centre members – Melanie Power, Robyn Forrest Ray Gardiner Alf Ritchie Art Stace-Smith Paul Paulson Robert Lorne Warren Robert L. Johnson Cyril Stephens</i> |
| Group 2 | <i>Fisheries Centre members Richard Stanford, Nigel Haggan Debbie Jeffrey Justin Dickens James Bryant Laurie Ryan Stan Dennis</i> |
| Group 3 | <i>Group 3: Fisheries Centre members Rashid Sumaila Charlie Parkin Wally Thompson Heber Clifton Don Roberts Jr George Hayes</i> |
| Group 4 | <i>Fisheries Centre members Tony Pitcher, Pablo Trujillo Caroline Butler Esther Sample Doug Mavin Carl Stace-Smith Jim Christison Quinton Sample Robert H. Hill</i> |
| Group 5 | <i>‘Modelling Group’ Fisheries Centre members Eny Buchary, Cameron Ainsworth Sheila Heymans Erika Boulter Bart Proctor Foster Husoy Russ Jones Dave Rolston</i> |

Maritime community input: Prince Rupert Workshop

Preliminary, or ‘strawman’, models developed by the FC team in collaboration with DFO and other sources need to be ‘groundtruthed’ and improved with substantial input from the maritime community. In an ideal world, this would be done through a combination of fieldwork and community research assistants.

Available resources limited us to a July field trip to Prince Rupert to interview First Nations members, fishers and others who spend much of their lives on or beside the water. Additional interviews have since been conducted by the Haida Fisheries Program. Interview details are reported elsewhere (Ainsworth in prep.).

‘2nd generation’ models incorporating input from the July interviews were presented to a cross section of the maritime community at a December 4-6 workshop in Prince Rupert. Day 1 got off to a slow start courtesy of a snowstorm that grounded half of the team in Vancouver the night before (the senior members who, of all people, should know better). Participants showed a great deal of patience and traded information with the team in informal discussions. The workshop opened with a formal welcome by Tsimshian Tribal Council President Deborah Jeffrey and Deputy Mayor Cyril Stephens for the City of Prince Rupert. The delay made for a fairly compact schedule for the late morning and afternoon. Tony Pitcher and Nigel Haggan presented the scientific and participatory aspects of Back to the Future. Sheila Heymans and Rashid Sumaila then introduced the present-day, 1950s, 1900s and 1750s models and the methodology used to compare the ecological, economic and social value of the 4 systems. This led into a discussion of the problems that might arise if a ‘past’ or restored system were to be opened with today’s fishing fleet. Lastly, Melanie Power introduced a survey designed to identify participants’ preferred ecosystem state.

Day 2 got off with a heated debate fuelled by a bad choice of ‘what if’ fishing scenario that excluded gill-netters and trawl fisheries. This was the more unfortunate as it was perceived as a recommendation rather than an example. Participants, mainly from the gillnet and trawl sectors, said they had borne the brunt of conservation measures to fish selectively and responsibly and made their feelings known in no uncertain terms. On the credit side, the materials passed out on Day 1 and phone calls from participants meant that attendance was substantially higher than would otherwise have been the case. Formal sessions resumed with a presentation by Cameron Ainsworth on how we had used interview information in the models. The meeting then divided into 5 workgroups, one to discuss the models and assumptions, the other 4 to select a preferred system and recommend on the gear types that would be allowed to fish. Interestingly, each group chose a different system. The meeting then adjourned while the modelling team of Tony Pitcher, Sheila Heymans, Cameron Ainsworth, Eny Buchary and Rashid Sumaila ran the scenarios put forward by the groups. The modellers worked until 1.00AM on this.

Day 3 consisted of a report to the groups on the results of their ecosystem and fleet choices. We note here that not all criteria could be

incorporated – for example, the model is not strong on migrating fish such as salmon or the effects of different escapements and factors such as habitat loss. There is a version that can handle this, but the project would need extra resources to include it. But enough excuses, value comparisons presented by Rashid Sumaila showed that all past systems were substantially more valuable than the present-day system.

The workshop concluded with an invitation to all participants to attend the February 20-22 Back to the Future Symposium at UBC.

The Report is organised as follows:

- Summary of project and setup presentations
- Reports from the working group ecosystem preferences and recommended fisheries
- Results of the simulations
- Evaluation of Participants' ecosystem preference survey by MP
- General discussion
- Further model development/assessment of feasibility of participants' requests
- Community perspectives
- What the UBC team learned from the workshop

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