



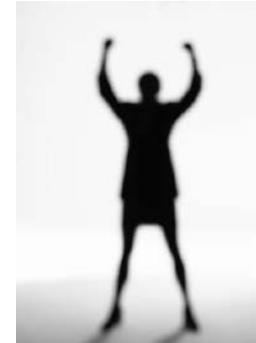
The Predator Pit: Are You Up For The Challenge?

Report of a Canadian Fisheries Research Network training workshop for students and post-doctoral fellows

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The idea for the [Canadian Fisheries Research Network's](#) Predator Pit Challenge grew out of a student workshop back in February 2013 that was held prior to the Network's annual general meeting (AGM) in Toronto. In discussing training needs at the workshop, students identified that they lacked experience in proposal development, a skill that would be important to their future careers. A group of students subsequently came up with a suggestion for an exercise inspired by the television show [Dragon's Den](#). The idea was to have interdisciplinary teams of students from across the Network pitch research proposals to a panel of judges drawn from the fishing industry, academia and government. The judges would then grill the students on their proposals, provide constructive feedback, and declare a winner.

Following the workshop, some of the students – Courtenay Parlee from the University of New Brunswick, Dan Mombourquette from Saint Mary's University, Mike Hawkshaw from the University of British Columbia, and Eric Angel from Simon Fraser University – decided to turn the idea into reality. Network Principal Investigator Rob Stephenson and Manager Susan Thompson gave their enthusiastic support to the student organizers. Over the course of several months of weekly conference calls and emails, the event took shape.

In September 2013, a call for ideas for research topics went out to industry, academic and government partners in the Network (Appendix 1). People were asked to identify a real-world problem in fisheries for which solutions require creative thinking, collaboration across scientific disciplines, and cooperation between scientists, fishers and managers. Over a dozen excellent suggestions were received (Appendix 2). The organizers whittled these down to two topics that lent themselves particularly well to an interdisciplinary approach. They then turned the topics into requests for proposals (RFPs) with assistance from the two industry partners who had submitted them – Maria Recchia of the Fundy North Fishermen's Association, and Nellie Baker Stevens of the Eastern Shore Fisherman's Protective Association. A third "open" RFP was added for students with research ideas of their own under a prescribed theme (Appendix 3).

The RFPs were sent out to all students in the Network in December 2013. At the same time, the organizers recruited a team of judges to evaluate the student proposals: Sylvain Langlois (Natural

Sciences and Engineering Research Council of Canada (NSERC)), Jean Landry (Fisheries and Oceans Canada), Maria Recchia (Fundy North Fishermen's Association), and Rosemary Ommer (University of Victoria and Network Independent Scientific Advisory Panel member). The original name for the exercise, the Shark Tank, was swapped for the Predator Pit since the former was already in use. By the time the proposal submission deadline rolled around, three student groups had submitted written proposals. In addition, the organizers decided to accommodate two shorter, oral proposal presentations, for a total of five submissions for the panel of judges to consider.

Participants gathered for the Predator Pit Challenge on February 28, 2014, the day prior to the Network's AGM and nearly a year to the date since the seeds for the event were first planted. The event took place on the 36th floor of the modernist Marriott Château Champlain Hotel in Montréal, locally referred to as the cheese grater on account of its semi-circular windows. About 35 people were in attendance: students, judges, organizers, industry representatives (Nellie Baker Stevens, Peter Connors and Martin Mallet) and Network personnel (Rob Stephenson, Susan Thompson and Lisa Settington). The day got underway with opening remarks by Rob Stephenson, Mike Hawkshaw and Eric Angel. Then everyone got down to business with the five student presentations.

The two oral proposal presentations came first and were grouped together in a session so as to evaluate them separately from the comprehensive written proposal submissions. Rachel Neuenhoff and Eric Angel presented a proposal to develop a framework for a regional co-management body for the Nova Scotia eastern shore lobster fishery in Area 31b with representation from DFO, fishing dependent communities and the fishing industry. Catarina Wor, Andrea Haas, Aaron Greenberg and Mike Hawkshaw offered up a proposal to quantitatively evaluate interactions between aquaculture and capture fisheries by incorporating local ecological knowledge and socio-economic information into a model for adaptive management purposes. After each presentation the panel of judges subjected the student presenters to challenging questions designed to expose any weaknesses in their proposals.



Students get feedback on their proposal from the judges' panel ("The Predators").

(photo: Susan Thompson)

A short break followed and then came the main event: three 15 minute presentations by student groups that had submitted a written proposal to the judges. The three submissions each responded to a different RFP, and differed very much in their approach to coming up with a winning proposal:

- Effects of Management Response to Model Selection Uncertainty on the Sustainability of a DFO-Managed Salmon Fishery (submitted by Allan Debertin, Fan Zhang and Kevin Reid of the Guelph Node)
- Proposal for a Quantitative Evaluation of Interactions between Aquaculture and Capture Fisheries (submitted by Gudjon Sigurdsson, Bryan Morse, Brady Quinn and Kristin Dinning of the Lobster Node)
- Building Interdisciplinarity and Stakeholder Participation into DFO Fisheries Management Decision Processes: A Comparison of the Effectiveness of Bayesian and Frequentist Approaches (submitted by Kevin Reid and Courtenay Parlee)

The questions that followed these presentations were both wide-ranging and probing, reflecting the significant effort that had gone into writing the comprehensive proposals.

During the lunch break that followed, the panel of judges met to review and evaluate the proposals. When everyone reassembled, the judges first spoke to the two shorter presentations that had started the day off. They highlighted the strength of community engagement in both proposals, and identified the great potential in each of them. Moving on to the longer presentations, the judges announced not one but three winners: the Visionary Award went to Kevin Reid and Courtenay Parlee, the Criteria and Guidelines Award to the Lobster Node students, and the Feasibility Award to the Guelph Node students.

The comments from the judges were detailed and broad, covering scientific aspects, context, relevance, grantsmanship, and oral presentation skills. This led to a lively Q&A session between the panelists and students (see Table 1 below). Rosemary Ommer also gave a useful presentation on practical tips for writing grant applications (Appendix 4).

Table 1 Q&A with Judges' Panel

Question	Panel Response
How were the evaluation criteria in RFPs used? More constructive feedback on the proposals would have been appreciated.	We used the evaluation criteria in the RFPs as they were presented and some of us prepared detailed score charts. For the purposes of this discussion we were asked to announce the winners only and focus on positive aspects. We felt that feedback applicable to the broader group would be more appropriate for this forum.

Question	Panel Response
<p>How do we know if we are qualified to respond to a particular RFP? How do we know which ones to go after based on our skills and experience?</p>	<ul style="list-style-type: none"> • Proposal elements include the issue, (your) vision, and feasibility. When these three elements come together, you know you have a good proposal. • First, canvass groups you are working with for issue(s) that are common to all of them. Then, look for funding opportunities that align with a project around that issue. • Your belief in your project is important, and you must be very pragmatic. Ask yourself – will my proposal really solve one of the emerging / priority issues in their organization? Will my solution really help them? • It’s about putting the pieces of the puzzle together. Are you linked with the right people in terms of skills to meet the objectives? Will each group involved benefit from the project? And is there a greater benefit to a broader group?
<p>How do we know what the pressing issues are for industry or government?</p>	<ul style="list-style-type: none"> • Spend time researching and reading about the situation or problem you want to solve and from that the priorities should become more evident. You can also push the agenda for something you believe is really important but which may not have surfaced yet as a priority. • Talk to people in the CFRN (use your connections!). • Review DFO’s programs on its website and you will see where their efforts are being focused.
<p>What advice do you have for a young person who is just starting out and trying to make a living by applying for grants and contracts? E.g., how many contracts should they apply for, how can they increase their odds or success, etc. so that they can get a foot in the door?</p>	<ul style="list-style-type: none"> • Consider how many hours in the day you are going to work, how much time it will take you to write proposals, etc. (some sort of cost-benefit analysis is required). Recommend going for a few smaller proposals when you’re just starting out, as opposed to one big one. You’ll get them done without drowning in work while doing them and your name will get out there and around. Be clear in your proposal about how “We are the best people to do this because...” • People reviewing your proposal will look at what you’ve done before. What was the impact of your previous projects? Were they delivered on time? • Be aware there is a lot of unpaid time in grant writing. Be very efficient in grant writing and know how much that is going to cost you. • Look at others who are responding to RFPs and see if you could partner with them on a proposal.

Question	Panel Response
<p>If I have a research idea but am not sure how to go about developing a proposal, how receptive do you think people would be to me calling them to discuss? I feel hesitant about making cold calls to industry and DFO.</p>	<ul style="list-style-type: none"> • When it comes to industry, it depends on the topic. In addition, there is a process of getting to know one another – an organization/group has to feel comfortable and confident in working with you. Recommend making those calls to get going on starting to build the relationship and comfort level, at least. • When it comes to government, the more time you can invest to build your case, the better. For example, if you already have your partners on board, it will be easier when it comes time to talk about money. Having said that, it's expected in government that we will be asked to explore issues and ideas. Sometimes we have to see how we can make something fit under an existing program. You have funding envelopes that were given by the Parliament to accomplish specific things; if you can link your ideas to these envelopes, you are in a better position ("market research"). • Conferences are really useful opportunities to discuss research ideas, especially poster sessions. Your posters should be designed to impress people outside of academia – get the message across in a way that grabs the attention of industry, government, consultants, etc. • Keep in mind that if you received the funding, it means someone else lost out on it. So it's a significant challenge and important to build your case as much as possible.
<p>Where are the research priorities and pressing issues stated?</p>	<ul style="list-style-type: none"> • For government, in most cases these are the DFO Programs, so look at the programs online to get an idea. • Build up your confidence and pick up the phone. Start making connections with people in the different sectors. You have to know the back story in order to go for grants that you're most likely to get. There is a lot of work to do upfront if you want to streamline your efforts and proposal so that it's not a shot in the dark.

Rob Stephenson summed up the elements of a good proposal, based on his observations from the day.
A good proposal should:

- Be pertinent to its audience (and there can be different audiences)
 - Anticipate and know your audience
 - Meet the needs of the funder
- Have a clear vision and goals
- Have a logical flow from start to finish ("connect the dots")
 - Tell a story with enough detail to make your case but not too much detail (find the right balance, avoid the use of jargon)
- Follow the required guidelines
- Be presented as a partnership (a team comprised of different groups/stakeholders involved)

The discussion then moved on to reflections on the Predator Pit exercise itself, whether it was useful and how it might have been improved. The consensus amongst students was that the day had been a valuable learning experience. In fact, all participants – organizers, students, judges, and invited contributors – felt they had learned a great deal from the process, and much more than they had anticipated. The skills gained are applicable whether applying for an academic grant or bidding on a proposal as a contractor or consultant. The proposals prepared for the Predator Pit have the potential to form the basis for actual proposals in the future. Those interested in pursuing funding for their proposed research were encouraged to do so with the support of the Network through mentorship and guidance, access to contacts, and a formal letter of support if needed.

Rosemary Ommer described the exercise as exciting, very impressive, and one that demonstrated lots of energy and commitment from the students. Sylvain Langlois stated that this type of event should become a best practice for other NSERC strategic networks or similar groups. In a concluding round table describing the day in one word, what came out included *learning, productive, constructive, efficient, and energizing*.

During the Network's AGM that followed, the organizers reported back on the Predator Pit Challenge in plenary (see Appendix 5), and concluded with some big picture reflections on the experience:

Reflections from Predator Pit Challenge Organizers: What did we learn?

- It's really hard to organize something when people are spread out across a country as big as ours.
- Things take a lot of time to develop and implement if you want to do something properly (usually longer than you expect).
- Everyone is really busy and stretched for time. It can be hard to get people's attention and keep it. It requires good and regular communication, and being clear on what people stand to gain from the initiative.
- As organizers of this year's HQP day, we highly encourage other students to collaborate and coordinate next year's activities. It requires time, dedication and patience but there is so much to be gained from the experience.

*Courtenay Parlee, PhD candidate, University of New Brunswick
On behalf of the Predator Pit Challenge Organizers*

Thanks to NSERC for providing Strategic Network Enhancement Initiative funds to hold the event, the panel of judges for their valuable feedback and insights, Rob Stephenson and the Network office for their support, and industry and government partners for their key contributions leading up to and during the event.

APPENDIX 1

Call for Research Topic Ideas to CFRN Members



September 3, 2013

Dear CFRN members:

RE: “Predator Pit” Challenge at 4th Annual General Meeting

Most of you probably know the show Dragon’s Den. At a Forum preceding next year’s Annual General Meeting (AGM) in Montreal, the students in the CFRN are going to be competing in their very own version, the Predator Pit. In response to a call for proposals to be issued in October, teams of 4-5 students will develop and present research proposals to a panel of judges drawn from the Network. The students responsible for the winning bid will be encouraged to pursue actual funding for their proposed research with support from the Network in the form of mentorship, guidance, access to contacts, and a formal letter of support as needed.

What we need from you is ideas. Specifically, we want you to identify a wicked, real-world problem in the fishery you work in – a problem that can’t be solved through a simple technical solution, but requires creative thinking, collaboration across scientific disciplines, and cooperation between scientists, fishers and managers.

Describe that problem in a paragraph, send it to us and we’ll pick three of the best and turn them into separate requests for proposals (RFPs) to send out to the students in the Network. You have until the **Friday, September 20** to send in your suggestions to Susan Thompson, CFRN Manager (susant@unb.ca).

What’s the benefit to you and your organization? First, students will get to hone their skills in proposal development, which will come in handy for future research and career pursuits. Also, we think the quality of the proposals is going to be quite high, and they’re going to be based on actual proposal formats used by government funding agencies. Most importantly, they’re going to be in response to real issues that you define – research questions with a real possibility of getting funded. Network partners will benefit through having the opportunity to explore very relevant, pressing research questions in fisheries. So, if you’re interested in getting some cutting edge, interdisciplinary, and collaborative scientific research done on your fishery, here’s your chance to get the ball rolling with a quality first draft of a funding proposal along with Network support to help make it happen.

Sincerely yours,

The Predator Pit Organizing Committee

Courtenay Parlee
Dan Mombourquette
Rachel Neuenhoff
Mike Hawkshaw
Martin Mallet
Eric Angel



APPENDIX 2

Request for Proposal Topics Submitted by CFRN Members

Predator Pit Challenge: Ideas for 'Request for Proposal' Topics

November 4, 2013

On September 3, 2013, a letter soliciting ideas for Request for Proposal topics for the Predator Pit Challenge was circulated to all Canadian Fisheries Research Network (CFRN) members. It was also advertised on the CFRN website and Facebook and Twitter pages. Below is a summary of the ideas received, for the consideration of the Predator Pit Challenge Organizers. Names are provided in the event that the Organizers wish to follow up with an individual for clarification or further input.

Name	RFP Idea
<p>Peter Meisenheimer General Manager Anishinabek/Ontario Fisheries Resource Centre North Bay, ON</p>	<p>Every management decision has at its base a prediction about what will be achieved. These are frequently stated in vague language but are at least implicit in the announced rationale for each decision.</p> <p>In other words, management decisions are experiments, albeit frequently badly designed ones, and are therefore subject to experimental analyses. Do the predictions match outcomes? Is there an historical trend in performance?</p> <p>Since standard scientific methods will be used, this is a natural science project, not social science.</p>
<p>John Couture Commercial Fisheries Liaison Coordinator Unama'ki Institute of Natural Resources Eskasoni, NS</p>	<p>I would like the proposal to deal with the market, productivity, and quality of Canadian fish products over similar species from our southern neighbor. Considering much of our fish products head south (at least in Eastern Canada), then go to other markets for food, it would be interesting to see if new markets would be open to experiencing Canadian market lobster, shrimp, scallop, snow crab, etc. The American version of our products are regarded as "less than" and if that feeling carries as they sell Canadian products, I am sure it will go a long way to harm it on the world stage. Perhaps it is time to correct the fallacy and move forward with this type of research although it is on a business more than scientific type of research.</p>

Name	RFP Idea
<p>Melanie Sonnenberg Grand Manan Fishermen's Association Grand Manan, NB</p>	<p>The Grand Manan Fishermen’s Association has worked tirelessly to arrest a change in management of the lobster fishery. While our community is currently feeling the direct impact of this decision, it has the potential to impact other fishing communities negatively, both socially and economically, throughout Atlantic Canada. DFO Maritimes region has decided that lobster licenses can be sold to interests based outside a respective lobster district. In passing this may not seem important, but to small rural communities throughout the Atlantic provinces, it could have dire effects on fishing communities.</p> <p>In short, by allowing a license to be fished from outside the district the beneficial interest from the license is lost on a number of fronts. The employment opportunities are lost; the dollars invested from the harvesting of the lobster into the community are lost; the economic and social investment by the captain and crew is lost; the spin-offs into adjacent areas (ie, within a 100 plus km in some areas where larger urban centers are frequented by these smaller community members) is lost; and the long-term sustainability and stewardship of the resource is jeopardized.</p> <p>The management of the fishery becomes difficult especially given the limited resources of the Conservation and Protection branch of DFO when outside interests are allowed in to fish. Typically licenses being acquired from outside a lobster district are of a corporate nature which essentially means that the crew are all hired hands even the captain and have no long term vested interest in the fishery of today or the future. Because DFO Maritimes region has such a strong emphasis on a more corporate style fishery there are already many examples of where that has literally destroyed communities; ie, groundfish dependent areas in the late 1980’s; can illustrate the pitfalls from a socio-economic vantage point.</p> <p>As more emphasis seems to be emerging on socio-economic components as it relates to the fishery, we believe that there is a study here that can be researched in collaboration with the Grand Manan Fishermen’s Association. We have a 32 year history of representing fish harvesters at management tables throughout DFO. The Association has also kept a large archival set of documents regarding such decisions that can be used as a part of the research.</p>

Name	RFP Idea
<p>Jake Rice Chief Scientist Fisheries and Oceans Canada Ottawa, ON</p>	<p>Every fisheries decision (at least every one large enough to matter) has ecological, economic, and social consequences. Substantial effort is invested in preparing science advice on the ecological consequences of both strategic policy and tactical management options, historically for the target species in the fisheries but increasing for both target species and other ecosystem effects of fishing. A key part of the ecological science advisory frameworks are the biological reference points (the B_{lim}, F_{lim}, "Lower Stock RP" etc. type benchmarks) in the decision rules (be the rules formal or informal). At least in the medium term strategic decisions, effort is also invested in developing advice on the economic consequences of options, using a variety of economic and bioeconomic models. Both advisory approaches are designed around non-linearities or "tipping points" in the ecological (e.g. the inflection point in stock-recruit curves) and economic (e.g. the MEY point in catch-effort curves). By contrast the social outcomes of policy choices rarely have formal advisory frameworks that input to the decision-making processes, to describe not just how much wealth may be generated by a fishery (the economic outcome), but how that wealth may be distributed among communities and individuals. Nevertheless the expected but unquantified social outcomes can have huge influence on the decisions that are made, and on the acceptability of those decisions outside the walls of government. So – two questions need to be evaluated. Are there social nonlinearities¹ that should be cornerstones of advice on social outcomes of fisheries decisions? If there are, how can they be identified and brought more formally into the advisory processes that inform decision-making?</p> <p>¹Possible illustration: Perhaps over a range of reductions in catches, fishery-dependent communities still receive enough earnings to support their basic community infrastructure [a store, a community centre, a church etc]. However there is some level of earnings below which the core infrastructure of a community cannot be supported, and that level may be reached quite abruptly after a period of just belt-tightening.)</p>
<p>Greg Thompson President Fundy North Fishermen's Association Dipper Harbour, NB</p>	<p>Several years ago, in Eastport Maine, I heard a presentation on clam seeding to increase production. They seeded marked areas with different concentrations of clam spat to determine optimum seeding density. They noted that when the wild spat settled at spawning time, it settled on the more heavily seeded grids and not in the very low concentration grids. I have always wondered if other shellfish spat, like lobster and scallops settle where adults are present indicating a "good" place. I mentioned this to a DFO shellfish biologist who heard the presentation and he dismissed the question as not interesting. I have read that spat have only enough energy to try settling a couple of times and if the presence of adults is a deciding factor, it would affect how we manage adult concentrations.</p> <p>For shellfish, does the presence of adults influence the "decision" of spat to settle?</p>

Name	RFP Idea
<p>Mark Fowler Population Ecology Division Fisheries and Oceans Canada Dartmouth, NS</p>	<p>We track commercial finfish fisheries primarily through single-stock (population or species) assessments. This is due less to recalcitrance than simple feasibility. The much-touted 'ecosystem approach' sounds very politically correct, but only appears to work at lower trophic levels, becoming too conjectural for direct application to the monitoring and management of fisheries. A possible oversight in typical ecosystem approaches to guide decision-making is the paucity of systematic attention to the trophic levels of direct concern. We might benefit from annual indices by ecosystem category (e.g. Bay of Fundy, Gulf of St Lawrence, Grand Banks, Scotian Shelf) derived from niche categories of higher trophic levels (e.g. pelagic, benthic, demersal) that include not only the species of commercial interest but other less regarded species that might serve as equal or better indicators of system status and trajectory (e.g. sculpins, sandlance, myctophids, hagfish, blennies, eelpouts).</p> <p>Ideally we want a suite of annual indices with reference points at a higher level than individually assessed stocks to guide management decisions. A single stock might appear fine, but perhaps be a sole survivor of a trophic niche in a given system that is otherwise compromised. The real challenges are defining stable (or desirable) ecosystems, a suite of metrics to monitor them, and coherent management rules to be applied when reference point thresholds are crossed – i.e. a strategy that will redress a problem. We dance around these ideas without ever grappling with them, so most ecosystem studies are seen as interesting and true but so what? We have nothing at a broader strategic level to modify stock-based decision-making.</p>
<p>Nellie Baker Stevens Coordinator Eastern Shore Fisherman's Protective Association Musquodoboit Harbour, NS</p>	<p>As a fisher organization that also manages fisheries we have a real disconnect between the science objectives, fisheries resource managers, C&P objectives and Ottawa bureaucrats agendas.</p> <p>For example they just closed fishing areas to protect the Russian Hats and in fact have now officially closed our Pollock fishery.</p> <p>Another example is changing who is responsible for providing tags/logbooks to fishermen.</p> <p>Learning curve for getting conditions online etc.</p> <p>More MPAs are coming we are told.</p> <p>More oil exploration for our coast.</p> <p>Salmon farms and their effects on our fishery</p> <p>Etc....</p> <p>It is getting very cumbersome for fishing organizations to try to stay on top of all of the changes and to attend all the multiple of meetings. I often wonder if DFO science, managers, enforcement and Ottawa are working separately or hand in hand. Is there a way to put everything together to try to make sense of our fishery and the future objectives?</p>

Name	RFP Idea
<p>Truong Nguyen PhD candidate Memorial University of Newfoundland</p>	<p>Through conversations with crews and academic researchers while out at sea about relevant fisheries management issues, I realize that there is still a “long” distance between fishermen/academic researchers and government researchers/managers in terms of communication, information exchange and cooperation. As a result, they (fishermen) likely “have to” or passively accept management measures rather than willingly adopt or actively follow fishing regulations issued by government managers. At the same time academic researchers, though they have been working on fisheries, may not consider/support “too much” or even may not be familiar with what government researchers/managers have tried to do to improve the sustainable development of fisheries. Therefore, it is very important to enhance the relationships among government, fishing industry and academia however best we can. For example, improve communications between government managers and fishermen for proposing and implementing fishing regulations to make sure they are both satisfied... or enhance research cooperation between government researchers and academic researchers.</p>
<p>Maria Recchia Executive Director Fundy North Fishermen’s Association St. Andrews, NB</p>	<p>For many years inshore fishermen who fish alongside salmon aquaculture operations have observed changes to their fisheries that they attribute to the salmon operations. Despite many requests there has been very little scientific investigation in to these concerns.</p> <p>Finally in 2011, a local knowledge study was conducted through UNB on the impacts of salmon aquaculture on the traditional inshore fisheries in southwestern New Brunswick (see attached reports). This study identified several common observations around aquaculture sites including a lack of berried female lobsters in and around aquaculture sites, an inability of herring weirs to catch fish when salmon sites are put nearby, a change in the coloration and taste of sea urchin roe harvested near salmon sites which has resulted in an inability to market these products, and a loss of scallop beds adjacent to salmon sites. It would be great if a student could take on a project to ground truth any of these observations with a scientific study to: 1. Determine whether there is any scientific support for the observations, 2. Begin to look into the specific causes of these changes. If we can pinpoint the impacts and possible sources of the problem, we may be able to work with the salmon industry to develop different techniques or changes to products used that will not impact on the traditional fisheries and the marine ecosystem so severely.</p>

Name	RFP Idea
<p>Martin Pastoors GAP2 Wageningen University Centre for Marine Policy The Netherlands</p>	<p>Case: Transition in EU fishery management (<i>Note: if you think it is of interest I could work it out a bit more</i>)</p> <ul style="list-style-type: none"> • EU fishery management (Common Fisheries Policy (CFP)) has been developed as a highly top-down system with many efforts to manage and control fisheries (i.e. fishermen). • The new reform of the CFP has announced that the burden of proof needs to be shifted back to the fishermen again. • But the legitimacy and credibility of the policy itself is really low, and fishermen distrust most of what is coming from Brussels. • The main innovation in the new policy is the obligation to land all catches (discard ban). • In order to get this innovation politically accepted there had to be many exemptions to the rule, which has led to a rule that is very difficult to interpret or control. • In addition, the discard ban has even less credibility with the fishermen. • It seems that despite the ambition to reverse the burden of proof, the new policy is leading to a widening gap between policy and fishers. • What could be done to break this negative spiral?
<p>Laura Ramsay Research & Liaison Officer PEI Fishermen's Association Charlottetown, PEI</p>	<p>Dynamics of Lobster pricing in Atlantic Canada (from the boat to the plate): "Low Lobster prices while the consumer pays as much as ever or more, combined with record high expenses in the industry"</p>
<p>Laura Ramsay Research & Liaison Officer PEI Fishermen's Association Charlottetown, PEI</p>	<p>1) Recent cuts to DFO and effects on Industry (downloading of services and research): A realistic approach to Management, Conservation & Protection, and research into the future. Innovative ideas?</p> <p>2) Seal overabundance in Atlantic Canada: Results/Consequences of the lack of action to control the population explosion in the Gulf.</p>
<p>Patty King General Manager Fishermen & Scientists Research Society Halifax, NS</p>	<p>1) Changes in lobster moult cycles due to climate change.</p> <p>2) Nutritional status of lobster.</p> <p>3) Reducing impact of seals on various fisheries.</p>

APPENDIX 3

Requests for Proposals for Predator Pit Challenge

Request for Proposals for:

A Quantitative Evaluation of Interactions between Aquaculture and Capture Fisheries.

Award Information:

The Predator Pit Challenge is an educational program designed to build skills in project management, proposal writing and proposal defense. As such, the Predator Pit Judges Panel will not be directly providing funded awards. However, judges will be evaluating each project based on its feasibility to become a funded project. Therefore, project teams are asked to include budgets of foreseeable project costs (\$20,000-\$100,000 CDN).

Closing date for proposals: January 31st, 2014

Background:

Since the 1980's, the New Brunswick salmon aquaculture industry has rapidly expanded throughout Southwest New Brunswick, where traditional fisheries such as lobster, groundfish and herring continue to operate. For many years inshore fishermen and salmon farmers have expressed concern about the effects of fish farming operations on marine environmental quality, lobster health and the concentration of ownership and lack of local control over the aquaculture industry. Despite many requests there has been very little scientific investigation into these concerns. The purpose of this research is to ground truth observations found in existing research through a social and natural scientific study.

Your team must be interdisciplinary and include at least one natural and social scientist.

Scope of work:

Questions that need to be addressed include, but are not limited to:

1. Is there any natural and social scientific support for the observations found in the study conducted by, for example, Wiber, Wilson and Young (2011)?
2. What are the social and economic consequences of the interactions between finfish aquaculture and capture fisheries?

Deliverables:

The following are suggested deliverables (others may be provided by your team):

- Report on whether or not conclusions drawn from your social and natural scientific study support the observations found in existing research.
- Scope of work for experiments to support or disprove hypotheses about the impact of aquaculture on capture fisheries and capture fisheries on aquaculture.
- Recommendations on future research.

Proposal Requirements and Format

General: Maximum ten pages in length not including CVs. Minimum 12 pt font.

Cover page: one page including Project Name, names and affiliations of proposed project personnel, contact information for Principal Investigator, submission date.

Executive Summary: maximum one page summary of the research objectives, the qualifications and strengths of the Project Team, the project deliverables, timeline and budget. Must be suitable for public release on the website of the issuing agency.

Technical Proposal: must include the following sections:

- Introduction
- Methods
- Anticipated Results
- Project Timeline

Financial Proposal: must include 1) name and title of all resources forming part of the Project Team, e.g., Principal Investigator, Project Manager, Research Scientist, etc. along with the hourly rate for each individual; 2) total professional fees for each resource; 3) Budget for travel. Note that all equipment and overhead costs are the responsibility of the bidder.

Bidder's Qualifications: CV's for each resource who will be working on the project.

Corporate Profile if bid is submitted by a corporate entity.

References: Maximum three, must be familiar with previous work of a similar nature completed by the Principal Investigator at a minimum.

Evaluation Criteria (maximum 100 points):

Technical Proposal: Feasibility of proposed research (20 points), Timeliness of work and deliverables (20 points), Proposal quality and adherence to guidelines (20 points).

Financial Proposal: 20 points.

Oral Presentation: 20 points

RFP Contact:

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Additional Contacts from the Predator Pit Organizing Committee:

Courtenay Parlee (courtenay.parlee@gmail.com) (lead for this proposal)

Dan Mombourquette (dmombour81@hotmail.com)

Eric Angel (eangel@sfu.ca)

Mike Hawkshaw (mike.hawkshaw@gmail.com)

Request for Proposals for:

A Methodology to Address and Strengthen Relationships (e.g. Collaboration, Participatory Governance and/or Co-Management) between DFO and the Fishing Industry.

Award Information:

The Predator Pit Challenge is an educational program designed to build skills in project management, proposal writing and proposal defense. As such, the Predator Pit Judges Panel will not be directly providing funded awards. However, judges will be evaluating each project based on its feasibility to become a funded project. Therefore, project teams are asked to include budgets of foreseeable project costs (\$20,000 - \$100,000 CDN).

Closing date for proposals: January 31st, 2014

Background:

There is an apparent conflict between the management objectives of Fisheries and Oceans Canada (DFO) who aim to balance the ecological and economic sustainability of fisheries, and the objectives of members of the fishing industry who seek to balance the social, economic and cultural sustainability of their respective fishing communities. Given this appearance of conflicting goals, there is an opportunity for project team(s) to be established to explore the causes of these perceived management gaps between DFO and the fishing industry objectives. The goal of this call for proposals is to develop a set of guiding principles that could be used to help foster better management relationships between DFO, coastal communities, and fishing industry in future.

Your team must be interdisciplinary and include at least one natural and social scientist.

Scope of work:

Will depend on:

- Management issue addressed. For example:
 - The increased role of industry organizations to provide support to their memberships (and the increased complexity these organizations face).
 - Examples of specific management decisions that may have adverse effects on fishing communities (there are many to choose from including ones provided by the Grand Manan Fishermen's Association and the Eastern Shore Fisherman's Protective Association).
- The scale/location of the fishery/fisheries under examination. For example:
 - Bay of Fundy Lobster
 - Eastern Shore NS Pollock

Deliverables:

The following are suggested deliverables (others may be provided by your team):

- A methodology and/or guidelines to bridge the perceived management gaps facing DFO and the fishing industry with a goal of fostering a better working relationship in future.
- There exists a demand for a permanent apparatus to continue the work of communication between DFO and industry. Provide structures for such an apparatus.
- Scope and be prepared to carry out a goal setting workshop. Also be prepared to address at a minimum: timelines, participants, roadblocks, and possible solutions.
- Propose a regional co-management authority incorporating the needs of adjacent resource users, the adjacent community, and DFO goals for the resource – be sure to address at a minimum regulatory and scientific frameworks.

Proposal Requirements and Format:

General: Maximum ten pages in length not including CVs. Minimum 12 pt font.

Cover page: one page including Project Name, names and affiliations of proposed project personnel, contact information for Principal Investigator, submission date.

Executive Summary: maximum one page summary of the research objectives, the qualifications and strengths of the Project Team, the project deliverables, timeline and budget. Must be suitable for public release on the website of the issuing agency.

Technical Proposal: must include the following sections:

- Introduction
- Methods
- Anticipated Results
- Project Timeline

Financial Proposal: must include 1) name and title of all resources forming part of the Project Team, e.g., Principal Investigator, Project Manager, Research Scientist, etc. along with the hourly rate for each individual; 2) total professional fees for each resource; 3) Budget for travel. Note that all equipment and overhead costs are the responsibility of the bidder.

Bidder's Qualifications: CV's for each resource who will be working on the project. Corporate Profile if bid is submitted by a corporate entity.

References: Maximum three, must be familiar with previous work of a similar nature completed by the Principal Investigator at a minimum.

Evaluation Criteria (maximum 100 points):

Technical Proposal: Feasibility of proposed research (20 points), Timeliness of work and deliverables (20 points), Proposal quality and adherence to guidelines (20 points).

Financial Proposal: 20 points.

Oral Presentation: 20 points.

RFP Contact:

Nellie Baker Stevens
Coordinator
Eastern Shore Fisherman's Protective Association
Musquodoboit Harbour, NS
902-845-2408
nellie@esfpa.ca

Additional Contacts from the Predator Pit Organizing Committee:

Dan Mombourquette (dmombour81@hotmail.com) (lead for this proposal)
Courtenay Parlee (courtenaye.parlee@gmail.com)
Eric Angel (eangel@sfu.ca)
Mike Hawkshaw (mike.hawkshaw@gmail.com)

Request for Proposals - open call:

A Case Study to Illustrate an Appropriate Interdisciplinary Management Model for a DFO Managed Fishery.

Award Information:

The Predator Pit Challenge is an educational program designed to build skills in project management, proposal writing and proposal defense. As such, the Predator Pit Judges Panel will not be directly providing funded awards. However, judges will be evaluating each project based on its feasibility to become a funded project. Therefore, project teams are asked to include budgets of foreseeable project costs (\$20,000 - \$100,000 CDN).

Closing date for proposals: January 31st, 2014

Background:

It is contended that DFO has a reduced capacity to manage holistically – where the needs of all aspects of fisheries systems (social, economic, ecological and institutional) are not properly addressed. If this is the case it is critical to provide solutions that allow DFO to appropriately manage in the future. Present your proposal for a case study to illustrate an appropriate interdisciplinary management model for a DFO managed fishery.

Proposal Requirements and Format

General: Maximum ten pages in length not including CVs. Minimum 12 pt font.

Cover page: one page including Project Name, names and affiliations of proposed project personnel, contact information for Principal Investigator, submission date.

Executive Summary: maximum one page summary of the research objectives, the qualifications and strengths of the Project Team, the project deliverables, timeline and budget. Must be suitable for public release on the website of the issuing agency.

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Bidder's Qualifications: CV's for each resource who will be working on the project. Corporate Profile if bid is submitted by a corporate entity.

References: Maximum three, must be familiar with previous work of a similar nature completed by the Principal Investigator at a minimum.

Evaluation Criteria (maximum 100 points):

Technical Proposal: Feasibility of proposed research (20 points), Timeliness of work and deliverables (20 points), Proposal quality and adherence to guidelines (20 points).

Financial Proposal: 20 points.

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Mike Hawkshaw (mike.hawkshaw@gmail.com)

APPENDIX 4

**Presentation by Rosemary Ommer:
Tips for Grant Applications**

Read the Guidelines

Tips for Grant Applications

Dr. Rosemary E. Ommer SSHRC Grants Facilitator

1

Working with your Grantscrafter

- Not a guarantee that you will get the grant!
- Application material, ideas and discussion will remain confidential
- Positive criticism
- Technicalities not addressed

2

Proposal: general rules

- Always explain the context of your work in accessible language
- state clearly why it is important
- explain why it is a problem to be solved
- how you are going to solve it – be precise
- what the expected impact will be

3

Proposal Layout

- Don't squeeze so many words onto a page that the whole thing becomes a nightmare to read.
- avoid jargon and specialist language
- A well-laid out proposal says to a committee "this person knows what they are talking about and they have taken as much care with their proposal as we are now doing."

4

Committees are non-specialists

- Assessors may have the kind of specialized knowledge you need, but a committee will not.
- Provide a rapid introduction (this is the context, explanation of problem, approach and expected impact) for intelligent non-specialists: make it exciting!
- Provide appropriate references.

5

Logical and Connected Proposal

- Always state the central problem and goals of your work and why these are important.
- Present research plans coherently, as a set of problems.
- In a logical and connected order.
- show how you will carry them out (details of methodology ... and make sure any statistics you use are correct!)
- Point to where future research would go.

6

Critiques

- If you are critiquing existing models or approaches in the literature,
 - do so lucidly, without partisanship, and
 - demonstrate clearly why your approach is better.
- Be precise.

7

Practicality, Training, Publication

- Show practical applications of your work where appropriate
 - creative training opportunities for your students
 - how these will be provided, institutional and other support.
- Be precise about dissemination and communication: this is outreach
 - names of likely journals, conferences, publishers
 - probable publication sequence over the period of the grant and beyond
 - use other means of knowledge mobilization also where possible (web, videos, "op eds" etc.)

8

Team research

- In some cases, the existence of a team (interdisciplinary or otherwise) will be helpful.
- If you need this, then you must show
 - how you will put it together
 - the contributions of each part
 - how it will help in training students, or how it will help a new scholar (or one who is starting up again after a long while) to integrate into the research world.

9

11. Track Record

- Be clear about what's a book, a chapter, a report, a talk and also about the "other scholarly production" category —web sites, "op eds", for example.
- Do not fudge this — co-authored means specifying how much was your contribution; forthcoming means accepted for publication, etc.
- Quality counts more than quantity.
- Explain the restrictions on you if your publications are limited.

10

Budget

- Do not inflate your budget, but do not underestimate it either.
- Explain why you have put particular amounts against lodgings, travel fares, RA salaries, materials costs, and the like: use quotes where possible.
- Don't expect to get money for "fishing trips" — find out in advance (or be able to show that you did as much as you could) about the contents of archives, for example.

11

Budget

- Keep equipment budgets to an absolute minimum, and explain why you cannot get them from your institution.
- If you are asking for travel money for a student or RA, justify this very carefully.
- Get other financial support as well, if you can.
- Provide information about where else you are looking for support. If this is not possible, explain why that is the case.

12

Adjudication Committees

- These are your audience, so write for them: most of them are interdisciplinary; some have non-academics on them. Therefore use accessible language – no jargon
- Committees get tired and impatient with complex obscure language, typos, poorly laid-out or explained budgets, and incomplete information.

13

Provide Information Clearly

- Committees are not only not infallible and tired, they are also starting with imperfect information about you and your institution.
- Give them the information you know is essential to your case, straightforwardly and without editorializing.

14

Adjudication Committees: my pet tip.....

- Ask a friend who is not overly familiar with your research to read your proposal some day/evening when he/she is tired and see if it makes sense.
- Then ask your friend to tell you which bits are confusing, or that had to be read twice.
- Then sit down again and work on getting rid of the jargon, or the long sentences, or . . .

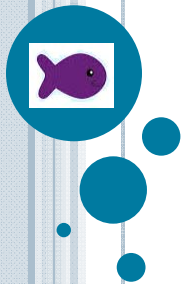
15

Good luck
and
thank you!

16

APPENDIX 5

**Presentation by Courtenay Parlee:
Predator Pit Challenge – Report of Forum for Students and Post-Docs**



PREDATOR PIT CHALLENGE

REPORT OF FORUM FOR STUDENTS AND POST-DOCS

Predator Pit Organizing Team:

Eric Angel
Mike Hawkshaw
Dan Mombourquette
Courtenay Parlee



THE PREDATORS!


- Rosemary Ommer from UVIC
- Maria Recchia from the FNFA
- Jean Landry from DFO
- Sylvain Langlois from NSERC




- Contributions from: Nellie Baker Stevens and Martin Mallet



WHY THE PREDATOR PIT?

- At last year's HQP day, students identified a lack of experience in developing funding proposals
 - Why not do something similar to the Dragon's Den?
 - NSERC Strategic Network Enhancement Initiative funds or SNEI
- 

AN EDUCATIONAL EXPERIENCE: STEP 1

- Solicited topics of interest from CFRN members
 - Chose Request for Proposal (RFP) format
 - 2 Topics were chosen from about a dozen submissions
 - 1 Open call RFP
- 

AN EDUCATIONAL EXPERIENCE: STEP 2

- 1 month to prepare
- Initially a voluntary activity
- Teams had to have at least one natural scientist and at least one social scientist
- Objectives: professional, multi-disciplinary or interdisciplinary collaborative work



PRESENTING PROPOSALS



PANEL FEEDBACK ON PROPOSALS

- Partial Proposals: strong in community engagement and have great potential
- Full Proposals: Visionary Winner, Criteria and Guidelines Winner and a Feasibility Winner


➤ We were all winners!




WHAT MAKES A GOOD PROPOSAL



OTHER COMMENTS THROUGHOUT THE ACTIVITY

- Follow the guidelines
 - Pay attention to detail
 - What about proposals that don't fall easily into one category or stakeholder group?
 - RFP's are not always clear
 - Use connections within CFRN to grow your network
 - We all learned something!
- 

AN ANALYSIS OF THE EXERCISE

- Why were only three full proposals submitted?
 - Not a lot of time for students to respond to the RFP
 - Support and encouragement from supervisors
 - Students did not want to fail
 - A better sales pitch
- 

HOW CAN WE INCREASE SUCCESS IF DOING IT AGAIN?

- Incentive/ award for a winner
- Involvement of academic project leaders
- Time to do proposals
- Provide choice -- Not limit proposals to RFP's



PRIORITIES FOR FUTURE TRAINING



- Making work relevant to policy makers
- Communicate to different audiences
- Internship or volunteer opportunities with industry or government
- Student involvement in DFO CSAS



Other students to coordinate next year's HQP Day???



THANK YOU!

