Remarks by Mead Treadwell Chair, U.S. Arctic Research Commission International Arctic Fisheries Conference Institute of the North/Hotel Captain Cook Anchorage, Alaska – October 19, 2009

## Arctic Fisheries: five things we should commit to now

Thank you, Ben, for your introduction, and for pulling this conference together. Some of you know Ben Ellis, some of you may not. Until a few weeks ago, I called him 'boss': I'd recruited him, and he'd succeeded me as managing director of the Institute of the North.

Ben, you've done a magnificent job for Alaskans, for the Arctic, for the country by doing what Governor Wally Hickel taught us both to do: convene a learned conversation to help Northerners address what's strategic, and to find a common voice.

Northerners everywhere can thank you for what you've done to advance fisheries, shipping, aviation safety, our common security, and sustainable energy in your work.

The tone and tenor of Alaska's political conversation – and talk throughout the Arctic – is calmer, cooler, and collected because of your dedicated work, including one of the Institute's hallmark programs, an annual "Alaska Dialogue" policy conference at the foot of North America's tallest mountain, Denali.

Don't get me wrong – I'm not saying Ben himself is always calm or cool or collected! Try bringing bananas on his fishing boat! Ben, every time we see your temper, it has been to get us all to chip in, to push us all forward, and forward we have come. Thanks.

I also want to recognize Ambassador David Balton who is with us this week. David's encouragement of this meeting allowed it to happen. My Commissioners are proud to cosponsor. We meet in a non-governmental setting, one that frees us to talk about possibilities without, we hope, getting in trouble. David, thank you for your leadership of U.S. Arctic Policy development and its implementation,

and thank you for all you do for the Arctic, the Antarctic, and the oceans – a consequential part of the world.

From the U.S. Arctic Research Commission, we are joined at this conference by my vice-chair, Michele Longo Eder, who also sits on the North Pacific Research Board. Dr. John Farrell, the Commission's executive director, is also here. We are seven members, appointed by the President, to advise the President and Congress on goals for the \$400 million a year U.S. Arctic Research program. One of our objectives this year is to get a good integrated Arctic Ocean research program started.

I've served on this Commission eight years, and I have to apologize. Nothing we've done in that period has prevented the ice retreat!

For those of you not from Alaska, welcome to our edge of the Arctic Circle. We're grateful you've come – fishing in the Arctic Ocean has a longer and stronger history across the pond.

Here in the North Pacific and the Bering Sea region, you will find our lines of communication are strong, and while we always strive for better results, Canada, Russia and the United States are proud of our fisheries cooperation here. I'm looking forward to learning more about cooperation on fisheries in the Barents Sea region, for what Norway and Russia have in place now will teach us lessons at this end of the world as the Arctic Ocean here becomes more accessible.

Our meeting this week is a first – really the first time I know of that people, <u>circumpolar</u>, have sat down to discuss the fisheries –past present and future – of the Arctic Ocean, this newly accessible, rapidly changing part of the world.

There are several reasons why this is a first. As one who was involved as we formed the Arctic Environmental Protection Strategy, and later the Arctic Council – both in the early 1990's – fishing issues were really put off the table.

It was convenient and appropriate, diplomatically, to leave fishing issues to other international forums, especially regional ones. What we thought about the Arctic then was there was a shield of ice, as well as little in the biology, that would have us have a reason to talk about fisheries in common.

And while we were beginning to talk about pan-Arctic exchange of contaminants through the Arctic Monitoring and Assessment Program, protection of the Arctic Marine Environment through the PAME program, conservation of Arctic Flora and Fauna through CAFF, and response to all kinds of emergencies through the EPPR working group, the idea that we had much to talk about in fisheries was just not ripe. Most Arctic nations have a dependence on fishing, but it cannot be said we are interdependent.

Today, with the Arctic so much more accessible to the world, it is possible to consider interdependence, even to see it, in Arctic fisheries.

We are <u>certainly interdependent</u> in our ignorance. Every year, it seems, the census of marine life adds species heretofore unknown in the Arctic Ocean. We've just scratched the surface of knowing how those species depend on each other, and on the physics that are rapidly changing in this part of the world.

We are <u>certainly interdependent</u> in our concern that an accessible Arctic opens up a new "high seas," beyond any of our jurisdictions, that could affect the biology of this region. In the United States, our Exclusive Economic Zone in the Arctic Ocean was closed to fisheries out of caution – we do not have the knowledge to manage the region properly – and the fact that someone can fish (whether or not they will) in high seas outside our zone bears watching now.

We are <u>certainly interdependent</u> in our common concern about climate change. If the trends continue, we have to look at this ocean as accessible, absorbing energy it once reflected. We have to look at this ocean and adjacent, very productive seas, as more acidic – and perhaps not as good a habitat for some species throughout the food chain. We have to look at this ocean as less hospitable for species at the top of the food chain – the polar bear, the walrus, some of the species of seals as well as at the bottom, such as the shelled pteropods, mollusk know as sea butterfly -- a food for salmon, mackerel, herring, cod. And we're told we have to look at this ocean as, perhaps, the site of more interspecies competition – the science and observation tells us there will be winners and losers; and some species will be introduced by their own doing, or by hitchhiking on itinerant vessels.

So far, <u>we've made very interdependent commitments</u> to observing the Arctic – collecting data through an Arctic Observing Network. This network known as SAON internationally may be the most important legacy of the International Polar Year. Please, if you are a field scientist, get involved, If you're a modeler, tell us what you need. We've only just begun to seriously design this network, invest in sensors to collect data, networks to disseminate the data, models of increasing resolution to analyze the data.

What further interdependent commitments will we make as Arctic nations, related to our fisheries? I have a few suggestions, drawn from work and <u>recommendations our Commission has made</u> in the United States and in international forums:

First, this week, we should start a circumpolar conversation that must <u>never finish</u>. While the Arctic Ocean comprises 11 of the world's 64 distinct Large Marine Ecosystems, these systems have much in common with each other; observation of one has much to learn from others. <sup>1</sup> Our stocks – between the Chukchi, the Beaufort, and the Barents don't appear yet to be mixing. Dr. Farrell reminds me not to forget about a Pacific diatom (small planktonic plant with a siliceous skeleton) which has, for the first time in 3.5 million years, been found in the Atlantic, indicating transport across the Arctic, possibly due to diminished sea ice. <sup>2</sup>

Are mixing stocks just a matter of time? And even if we know we have common issues. It is hard to imagine a time, from here on out, that we won't want to look at the Arctic Ocean holistically.

<sup>&</sup>lt;sup>1</sup> See <u>http://www.lme.noaa.gov/LMEWeb/downloads/Ime64\_blackwhite.pdf</u>

<sup>&</sup>lt;sup>2</sup> See David Perlman's article: <u>http://sfgate.info/cgi-</u> bin/article.cgi?f=/c/a/2008/08/09/MNKO127QHT.DTL

Assume we will. Ambassador Balton – getting a regional fisheries agreement is up to you. We will work to get you the science.

Second, we must commit and recommit to doing the science even if we're not catching the fish. Marine science funding in our country is often a tug-of-war between what's absolutely necessary to support setting quotas for existing fisheries versus the somewhat ideal, ecosystem approach to understanding the interrelationships in a given ocean region. The balance is often upset by an emergency of some kind, such as an issue brought forward by the Endangered Species Act. The President's Ocean Policy Task Force is trying to fix that, with long-term commitments to ecosystem management and the science to back it up, but it will be an uphill battle given the "stovepipes" we have in the way our agencies are organized.

As the United States made the decision to have a moratorium on most Arctic Ocean commercial fishing, our Commission has said, again and again, don't postpone Arctic Ocean science. We're hopeful that we can get several funding agencies, not tied directly to setting quotas, to move forward with an integrated program. If you're here from NSF, the North Pacific Research Board, some parts of NOAA, or the Alaska Ocean Observing System (AOOS), you've already started on this, with a workshop held in this room last January. We have, in the Bering Sea, a very good example of funding cooperation for marine science now.

Third, we must share the science all of us are doing as the basis for a common approach to ecosystem based management, and marine spatial planning in the Arctic Ocean. Those two phrases are being heard much lately, again in line with the President's Ocean Policy Task Force. The question of how we approach this in the Arctic legally and politically begins first with understanding the needs of the system. Our approach must be both national and international – by making SAON, the Sustained Arctic Observing Network, effective. We don't know what the resources of the Arctic Ocean are. Large parts of this ocean have not been mapped. But we continue to find riches, or evidence of same, in the water column, above it and beneath it.

In the past few years, the Commission has reflected the frustration and concern of U.S. scientists, even Norwegian scientists, that we have to improve science cooperation between our country and Russia. As we look at the Arctic Ocean, I cannot make this point stronger. We've urged the White House and the Department of State to consider an annual bilateral to focus on cooperation of all kinds in the Bering and Chukchi regions. Too often, entire science expeditions will "fall through the cracks," as an International Ocean Drilling Program attempt to drill in Russian waters did this summer, and the RUSALCA project voyages did the two summers before that. We depend on good Arctic Ocean sciences not only for fisheries that may come in the future, but for the very present concerns about climate change that are front and center on the world agenda.

That brings me to the fourth point.

Fourth, in the United States we continue to push for accession to the United Nations Convention on the Law of the Sea, and under UNCLOS, make sure science has free access to the Arctic Ocean. UNCLOS, as you know, is like the constitution for our common oceans. It guarantees our freedoms and it authorizes appropriate protections. Our cooperation in fisheries, as it will in shipping, comes under this umbrella. From our point of view, UNCLOS needs also to guarantee access to researchers, especially in the Arctic Ocean.

In Antarctica, legitimate science has access to the entire continent. In the Arctic, given the fact that researchers need permission to access the ocean bottom in a nation's EEZ, or soon, a nation's ECS, the Arctic Ocean may find itself legally closing to science, even as ice retreat makes it physically accessible. That's why the US Arctic policy calls for access, and why the Commission has pushed in every appropriate forum to see that issue discussed. I'm raising it here today.

<u>Fifth, in discussing circumpolar fisheries, we should be closely aware</u> of the other existing and impending uses of the Arctic Ocean. In our understanding of this ocean, we stand on the shoulders of giants – subsistence users who have lived in this area for over 10,000 years. We have the benefits, with increasing declassification of data, of science collected by military users during the Cold War. We have large amounts of data collected in the process of oil exploration, and the prospect – throughout the Arctic – that there will be more exploration yet. The recently completed Arctic Marine Shipping Assessment of the Arctic Council gives us a picture of shipping uses of this ocean.

All of these activities are interconnected in some way. Many of them require us to take on another kind of research – applied research into improving prevention and response techniques for oil spills in ice covered waters. Any appropriate oil spill research program, I've learned in Prince William Sound after the Exxon Valdez disaster, requires good baseline ecological research, and predictive modeling of factors affecting fish and wildlife populations. The Commission has called this year for a drastic new increase in this kind of research, and use of the oil spill response fund in the United States to pay for it. We are not keeping the promises we've made to ourselves in the Oil Pollution Act of 1990, and it is time we did with significant -- \$30 to \$50 million per year – commitments. Much oil spill research relevant to this region is due to the work of Canada, Norway, even Japan. Fishing vessels spill oil too, statistically more often than tankers. It is important that we all push for this.

The current Arctic efforts to build aids to navigation, port infrastructure, polar class icebreakers, search and rescue capability should not go unmentioned either. Any viable fishery depends on this kind of infrastructure. The Commission has worked hard to see the United States Coast Guard have the right kind of icebreakers to deal with this accessible ocean, and we're hopeful Congress will act. An Arctic Marine Shipping Assessment Implementation Act is part of the House version of the Coast Guard bill wending its way through Congress, and that should stimulate efforts at joint investment in this ocean.

Five points: keep talking. Keep studying. Share the science. Provide access to science. Work holistically with other users of the Arctic – subsistence, shippers, military, tourism, mineral resource development, nationally and internationally. I urge us to pay attention to the Commission on Arctic Governance convened by the Aspen Institute, another NGO. Several people in this room are involved in the process.

Ten years from now, even a hundred years from now, I believe people will look back to this meeting to ask, "What we were thinking?" What I think our record will tell them is we were thinking cooperatively, we were thinking holistically, we were beginning a conversation that must never end.

Another point in history they may mark – besides that of retreating sea ice and our increasing cooperation – is the fact that the Nobel Prize for Economics last week was awarded to a political scientist, Dr. Elinor Ostrom.

Dr. Ostrom has spoken in this room – about six years ago – as we focused on the commons of Alaska and the Arctic region at a meeting of the International Association for the Study of Common Property.

I like Dr. Ostrom's work. Like many of you, I became familiar with the concept of the "tragedy of the commons" by reading Garrett Hardin's 1968 essay of the same name. He argued a leviathan – not a whale, but a whale of a regime – is needed to fight commons tragedy. Ostrom, while conceding this is sometimes necessary, argues that thinking humans can avoid tragedy with constant communication. We can build sustainable commons by ensuring that economics, biology, and equity all have their place. The Community Development Quotas are an example of how to involve equitably the people who live there. We heard from Willie Goodwin and others on that this morning. In the Arctic setting, let it be said of us that we are guided by these principles, and that the fact that one of ours was awarded the Nobel just before this meeting was indeed, a happy coincidence well noticed by us all.

Thank you very much, and Godspeed in your work this week.