

University of Washington Focus the Nation Panel: Climate Change Impacts on Indigenous Populations

1/31/2008

75 attendees

Summarized by Joyce LeCompte-Mastenbrook

Moderator: Stevan Harrell, UW Professor of Anthropology currently focusing on environmental questions in China, particularly the sustainability of rural livelihoods in the mountains of SW China.

Panelists

Terry Williams, Fisheries and Natural Resources Commissioner for the Tulalip Tribes, former director of the EPA American Indian Environmental Office in Washington, DC (1995-96), and 1997 delegate/representative of indigenous peoples to the United Nations Conference on Biodiversity.

Tim Pasch: Doctoral Candidate in Communications researching ways in which social networking technology can preserve endangered languages – specifically Inuit Inuktitut in the Canadian Arctic; spent the summer of 2007 living with an Inuit family in Inukjuaq, Nunavik.

Kemo Langzen (Yang Qinqxia): Head of cultural resources unit in charge of conserving traditional culture and community development in Juizhaigou National Nature Reserve in the PRC. She is a Tibetan from one of the villages in the park, and is a visiting scholar at UW.

Mark Stege: MBA student at Seattle University and a native of the Marshall Islands. Mark is studying climate resilience policies and industries that will form an integral part in the global effort to reduce and prepare for the impacts of climate change.

Mark Stege: The total land area of the Marshall Islands is 70 square miles, consisting of 29 atolls and five coral islands. On average, land is 7 feet above sea level. Mark spoke mostly about Kwajalein Atoll. Kwajalein consists of 97 islets, 11 of which are leased to the US government for anti-ballistic missile testing. In many places, land is only 1 foot above sea level, making the islets very vulnerable to sea level rise. As elsewhere in the Marshalls, climate change has numerous other effects, including increased incoming wave intensity (which leads to land erosion), rising aquifer levels that break the surface and cause flooding further inland, coral bleaching and death caused by ocean warming & acidification (which affects other marine resources and thus food supplies), and changes in rainfall patterns. These factors lead to the very real possibility that the Marshall Islands may become uninhabitable due to climate change. The Marshallese are grappling not only with the physical effects of climate change but also the social – what does the possibility of having to leave this place mean in terms of their national and cultural identity?

The Marshallese are responding to climate change in a number of ways. They are working to increase cultural capacity through public awareness and educational activities, developing

renewable energy programs to reduce fossil fuel emissions (coconut biodiesel and solar energy), and they have revised their commercial dredging policy so that only vacuum dredging is allowed, which is less damaging to marine ecosystems (dredging is used in the process of creating seawalls and building up land on the shoreline). The UW is a collaborator on a number of projects – in Spring of 2008 Holly Barker is offering an applied anthropology course that will focus on ways to further the Marshallese response to climate change, followed by a study abroad program in summer of '09 where students will, among other things, help to collect baseline data that will be used to monitor the effects of climate change and to reconstruct past climates.

Tim Pasch: Tim presented his personal reflections/observations after a summer living with the Inukjuak in the Canadian Arctic during the summer of 2007. Tim suggested that because of their dependence on local resources and a life-way that is adapted to the cold arctic climate, that the Inuit people are the “canary in the coal mine” of climate change. He described a number of ways that the Inuit are experiencing the impacts of climate change, including the decline and in some cases disappearance of animals (such as the arctic tern), rising sea levels, softening permafrost, increased insect infestations, and an alarming string of warmer and shorter winters. Perhaps the most jarring affect of climate change that Tim mentioned was the fact that the Northwest Passage is now a passable route. This fact not only illustrates just how dramatically climate change has affected the arctic environment, but also raises important questions regarding contested “ownership” of the travel route, and the rights of the Inuit to have a voice in how the passage will be used by international vessels. Tim also mentioned the work of Sheila Watt-Cloutier an Inuit activist and theorist who led a petition drive in 2002 to define climate change caused by greenhouse gas emissions from the US as a human rights violation against the Inuit as defined by the American Declaration of the Rights and Duties of Man. Tim encouraged the audience to check out <http://globalwarming101.com> to learn about the 2008 Ellesmere Island Expedition. To foster awareness and dialogue about climate change, participants in this 1,800 mile trek by dogsled will examine the effects of climate change firsthand and communicate their experiences to observers on the internet.

Kemo Langzen: Juizhaigou is at the headwaters of the Yangtze River and is considered a biodiversity hotspot – 45% of wild pandas live in this region. Kemo shared her own observations of how the seasons have changed in Juizhaigo over her lifetime. This includes a trend toward warmer, drier temperatures overall, but also an increase in unpredictable weather events. Winters are getting warmer – there is no longer a need for Tibetans to make sheepskin robes for winter use. She showed a photo of herself at age 12 (ca. 20 years ago), playing on a frozen waterfall that no longer freezes in the wintertime. Insect pests that are adapted to warmer winters are increasing in number. Spring is coming earlier – she shows a photograph of a dandelion flower – these used to bloom beginning in April, and now they start flowering in December. At the same time, unexpected spring frosts can damage plants and reduce their productivity (i.e., walnut flowers). This has a direct effect on the informal Tibetan economy – for instance Tibetans in Juizhaigou trade with Tibetans from other areas who practice pastoralism - walnuts for yak butter – but now the Tibetans from Juizhaigou may not have walnuts to trade. The summers have become hotter and drier, now reaching 90° f. - 80° f. used to be the norm. Drought and floods have followed, because dry soils can't absorb the rainwater when it does come. Crops like maize are requiring increased amounts of water, which is not always available. Kemo also described landscape level changes in Lingshian Province – the

permanent snowcap has been melting since the 1950's, Five Flower Lake has been shrinking since the 1980's, and there is now blue-green algae spreading at Pearl Shoal waterfall. These places are culturally and economically important for local residents.

Terry Williams: Terry began by telling a story about how Pacific Northwest tribes are accustomed to change. The First People here watched the glaciers recede, they were here prior to the first salmon that came to the rivers, and they were here to watch the trees return to the landscape. These ancestors were a part of the evolution of this landscape – their practices shaped the structure of northwest ecology. When Europeans first made contact, they observed that the people here had a rich and complex culture. There was no evidence of a shortage of food, they had a complex system of trade with people from as far away as Yellowstone and southeast Alaska, they had time for artwork and constructed elaborate longhouses. They were a wealthy people with a rich lifestyle. This ability to live a rich life within ecosystem limits was not emulated by Europeans, who viewed the resources as commodities and set about changing the landscape to reflect their own values and desires.

Today in the Northwest, we are experiencing shorter winters, earlier snowmelt, and because the forests have been cut down, the vegetation is no longer there to mitigate the effects, which leads to increased flooding on the one hand, and a water shortage on the other. Aquifers don't recharge because the soil is compacted and the water runs off rather than percolating into the soil. In addition, we have a growing population, which leads to an increased demand for water. Resources that were once available are now declining – due in part to climate change. The impacts of climate change may not be as visible as they are in places like New Orleans – they impact in a more subtle way. Indigenous people recognize that their physical, cultural and spiritual health is linked to the landscape. Their bodies are not adapted to processed foods, and so they experience high rates of cancer and diabetes in their communities. Many people are working to return to a more traditional diet as a means of physical and cultural healing, and so it is imperative that these resources remain available into the future.

The State of Washington needs to learn to cope with climate change – we need to figure out how to manage our water better – how to make trade-offs between the needs of people and the landscape – agriculture, development, and logging for instance. The governor is convening a task force to develop an “adaptation plan” for climate change. Other people may come and go, but treaty tribes are tied to a particular place. This gives them tremendous incentive to try to fix the problem. Restoration, recovery – how are we going to get there? Even if we change our practices dramatically, it will still take a couple of hundred years to fix the problem. But tribes have the knowledge to get to the point of recovery, and so one important step is to learn how to work more efficiently and effectively with state and federal agencies and governments.

Notes taken by Joyce LeCompte-Mastenbrook, UW Department of Anthropology.