

## Take-home messages from the 13th Annual TWS Conference: Science-based Wildlife Management, Global Change, International Connectivity, Integrative Research and Leadership

By Falk Huettmann

The National Meeting of TWS 2006 just went by, and it was a blast. It was one of the largest TWS meetings ever: over 1400 national and international participants turned this meeting into a very busy one, with so many details, parallel sessions and social events one could hardly breathe. The opening remarks by Dave Klein set the stage very eloquently, addressing major issues for wildlife management in Alaska and elsewhere, inclusive of climate change, habitat conversion, the need for science-based management, ethical hunting as a tool for population management, and declining or endangered populations.

This meeting showed beyond any doubt that Alaska is among the hardest hit by global climate change and that the polar bear is among the hardest hit of many wildlife species. Further, it became obvious that Alaska widely lacks reliable wildlife inventory numbers and that it is not up to date with statewide monitoring schemes for assessment of status of wildlife habitats and the populations they support. However, presentations at this conference provided great examples of methodology and implementation from which to learn, including quantitative methods that enable follow-up assessment with well-designed occupancy models and are compatible with both agencies and landholders.

Many participants agreed with the headline of one session--that "*we have reached the peak of conventional oil,*" and that our hunger for "*economic growth*" will seriously affect wildlife and habitat in Alaska and elsewhere. Discussions went beyond the conference topic, delving into questions such as: how to reach "*economic steady state*" for the global village, how to distribute wealth, and how to grow in such a way that wildlife and habitat do not get harmed? One would have wished that the industry and oil companies could have directly contributed to these sessions, rather than through their contractors. The marine mammal sessions once more talked about predator effects on prey and simply transferred the Alaskan wolf and bear models more or less directly onto killer whales.

We also saw, for the first time, a comprehensive presentation of the great research projects done in the Tongass National Forest. It is very impressive that a vision formed 10 years ago was achieved, but now we need to define a new statewide vision. Studies and information systems should be collaborative and integrative; they should allow for a progressive and transparent synthesis of all the science done to date; and they should be shared with the public and should lead to decision-making that will assure sustainable resource management.

The conference had its usual share of great and international talks: from sea lions, bears and elephants to butterflies and herptiles. However, it missed opportunities to expand on how Alaska fits into the global context, for example, by describing effects of El Nino, across-border projects with Canada, or Alaska's role in the population ecology of the many wildlife species that migrate to virtually all continents of the world. Asia's marine and terrestrial resources connect us directly with each other, specifically with adjacent Russia and Canada.

A large number of details could be found throughout the entire conference, dealing with such topics as pollinators, urban wildlife, use of LIDAR (Light Detection And Ranging), co-management, and Alaska Native tribes and ANILCA (Alaska National Interest Lands Conservation Act). We have lost large numbers of tundra swans and eider ducks in Alaska, and apparently we have not been able to do much about it for lack of basic biological and ecological information on these species. Such things put our management and mandates in serious doubts. Secondly, data sharing, digital data, and data management were basically not mentioned or brought forward; nor were citizen-science projects discussed in sufficient detail. This needs a major

change in Alaska - the only state in the U.S. that still has no Gap Analysis Program (GAP). Also, one has to see it as an organizational oversight that in some sessions no microphones were placed in the audience, nor was adequate time provided in scheduling to allow subsequent feedback sessions and interactions with the interested and knowledgeable audience. However, the many coffee breaks and social events provided some compensation.

The final session on *Conducting Wildlife Science in the Public Eye*, which included predator control issues, brought many fascinating national wildlife issues to the forefront. Foremost, it showed that the Alaska Department of Fish and Game still lacks reliable estimates of wildlife numbers and sufficient wildlife research, partially as a consequence of the current politically-driven management of wildlife at the state level. Problems with the predator control effort near McGrath on the upper Kuskokwim River were well exposed in this session, and hopefully they will be addressed, using science-based, best professional principles. Additionally, it became very clear to all participants that earlier policies such as the 1994 "*intensive management*" law urgently needs to be revisited and brought in line with studies such as those reported in *Wolves, Bears and their Prey in Alaska* by the National Research Council (1997). We are at least 10 years behind on such issues and need to progress. We owe it to Alaska, to the nation, and to our profession. This conference provided us with all the necessary information and tools for a new Alaskan resource management vision to be formulated and implemented, allowing Alaska to renew its status as a global leader in wildlife and resource management.