Tongass Attracts Nationally Recognized Scientists

By John Schoen, Senior Scientist

In February a group of nationally recognized scientists from across the United States, British Columbia, and Southeast Alaska met in Juneau to participate in a two-day Tongass Science Workshop convened by Audubon Alaska and The Nature Conservancy. The purpose of the workshop was to discuss the current scientific understanding of temperate rainforest ecology and how to integrate concepts of conservation biology into forest management strategies on the Tongass National Forest.

The workshop featured detailed discussion of eight focal topics. The eight invited authors submitted papers well in advance of the workshop, so all 38 participants were prepared for focused discussions and creative problem solving. The participating scientists, representing agencies and universities, were very enthusiastic about this stimulating, multidisciplinary forum. Professor Emeritus Gordon Orians from the University of Washington, a member of the National Academy of Sciences and the Audubon Alaska Board, masterfully moderated the workshop. The workshop stimulated in-depth discussions, and a few highlights are briefly described below.

Joe Cook from the University of New Mexico kicked off the workshop with his paper on the island biogeography of the Alexander Archipelago. The Tongass encompasses thousands of islands with different patterns of species distribution, including many endemic subspecies and genetically distinct populations. Island populations are particularly vulnerable to local extinction, so an understanding of island biogeography is fundamentally important for land management decisions and for conserving biological diversity.

Paul Alaback from the University of Montana, who has spent many years studying old-growth forest on the Tongass, described natural disturbance patterns of Southeast Alaska’s rainforest. The assembled scientists discussed the differences between conventional logging versus small-scale natural disturbances, such as wind, as well as the importance of maintaining the complex structural and functional patterns found in old-growth forests for maintaining fish and wildlife habitat and biological diversity.

The Tongass, by far our largest National Forest at 16.8 million acres, stretches 500 miles down the coast of southeastern Alaska in a unique archipelago of over 5,000 islands.
DIRECTOR’S VIEWPOINT

Transition to a New President

By Stan Senner, Executive Director

Most of us have high hopes for President Obama and his new administration, even as he tackles a global economic crisis, to say nothing of two wars. Of course, we also have high hopes for what the President can do to better protect the environment, including here in Alaska.

In the run-up to the recent election, Audubon—along with a coalition of national organizations called the “Green Group”—developed a series of recommendations for the new president’s administration. Audubon Alaska’s John Schoen helped shape recommendations for the US Forest Service, while Pat Pourchot and I worked on materials for the Minerals Management Service and Bureau of Land Management, respectively.

The Arctic is one of the Green Group’s top conservation priorities. We asked the new president to:
1) develop a comprehensive conservation and energy plan for the Arctic,
2) take a precautionary approach to any new industrial activities,
3) initiate negotiations to develop an international environmental convention for the circumpolar Arctic.

We’re already seeing progress on at least the first two. First, the Bureau of Land Management is considering a new round of planning for the National Petroleum Reserve–Alaska in the Western Arctic, starting in 2011. Second, the new Secretary of the Interior, Ken Salazar, announced in February that he is extending public review of a new Outer Continental Shelf oil and gas leasing plan by 180 days. The plan, a relic from the waning days of the Bush Administration, includes massive oil and gas leases in the Arctic Ocean.

Although these steps are—at this point—only matters of process, they signal what we hope will be a more balanced and deliberative approach to industrial activity in the Arctic. Under the prior administration, there was a push to lease and explore every possible acre offshore, and it mattered not one bit that the climate was rapidly warming, the wildlife of the Arctic was under increasing stress, and the people who live year-round in the Arctic were crying “too much, too soon, too fast.”

Audubon’s approach to the Arctic is straightforward: we acknowledge that there will be increased industrial activity in the Arctic in the future, but such activity must be based on sound science, comprehensive planning, respect for the way of life of Arctic peoples, and recognition that some places are too sensitive and valuable to ever be developed.

After playing defense for eight years, we have new opportunities with the new Administration and Congress to achieve significant conservation gains in Alaska. But we also realize that all expectations must be tempered by the need to address the economic crisis, which affects us all, including Audubon nationally and in Alaska.

Thank you for your steadfast support during these challenging times. With your help, Audubon will continue to lead the conservation community, working to implement our balanced approach to conservation in the Arctic and throughout Alaska.

Dunlin
Photograph by Mike Buchan
On the second day, Dave D’Amore from the Forest Service Research Station in Juneau discussed riparian ecology in the Tongass. This sparked a vigorous discussion of the transport of nutrients from terrestrial watersheds into the marine environment and the alternate uploading of marine-derived nutrients from salmon into the terrestrial environment. The complex interactions between marine, estuary, aquatic, and terrestrial systems are key elements that make Southeast Alaska such a highly productive ecosystem and one of the most productive salmon habitats in the world.

Ken Lertzman from Simon Frazier University and Andy MacKinnon from the British Columbia Forest Service evaluated the effectiveness of using intact watersheds for conserving forest ecosystems. This paper resulted in a thorough discussion of the appropriate role of watersheds in a conservation reserve strategy. A watershed strategy works well for maintaining natural habitat diversity and ecosystem integrity, but less well for habitats or populations that occur in small, scattered, or disjunct patches. Participants concluded that intact watershed reserves are a useful conservation strategy, but specific conservation goals may require a variety of strategies.

A one-day public science conference followed the two days of intense discussion. The science conference, attended by more than 200 people, summarized the eight focal topics and three additional keynote presentations. Keynote topics were: Native Perspectives on the Tongass by Byron Mallott from the First Alaskans Institute; Climate Change and the Tongass by Terry Chapin from the University of Alaska Fairbanks; and A Global Perspective on Conservation and Management of Old-growth Forests by Jerry Franklin from the University of Washington.

The workshop and conference facilitated lively discussions on each of the focal topics and relevant management implications, information gaps, and research needs in Southeast Alaska. Participating scientists were invited to provide recommendations to the Forest Service Research Lab in Juneau regarding major research needs. We also intend to publish the papers, incorporating the workshop discussions, in a book or online journal in the near future. Abstracts from each of the presentations will be posted on the Audubon Alaska website, www.audubonalaska.org.

If you’re already a member, please pass this on to a friend.
FOCUS ON THE FIELD

A Step Backwards on Belugas?

By John Schoen, Senior Scientist

In January 2009, Alaska Governor Sarah Palin announced that the State of Alaska would sue the federal government over a recent decision to protect Cook Inlet beluga whales under the Endangered Species Act. In a public statement, the State said it was “troubled with the use of computer population models” and objected to the listing based on “extremely small likelihoods of extinction over extended timelines.”

The State’s announcement immediately drew rebuke from a wide variety of scientists. In fact, the beluga listing was supported by the best available science, strong consensus among marine mammal biologists, and recommendations by the US Marine Mammal Commission. Over the last 30 years, the Cook Inlet population has declined by 70 percent, and the current population is estimated at only 375 whales. A recent population risk assessment by the National Marine Fisheries Service indicated an 80 percent probability of population decline, a 54 percent probability that the population will decline below 200 whales in 50 years, and a 26 percent risk of extinction within 100 years. Belugas tend to concentrate at certain locations during the course of a year, so a catastrophic event, such as a mass stranding, could tip this small, isolated population of whales toward the brink of extinction.

Although the State of Alaska opposes the endangered species listing for fear of its impact on development, the vast majority of listings rarely stop projects. In Alaska, for example, the oil and gas industry has operated successfully in the Arctic despite the fact that both Steller’s and Spectacled eiders are listed as threatened and the bowhead whale is listed as endangered.

Audubon Alaska supports the listing of the Cook Inlet belugas. Further, we believe that the Endangered Species Act is an effective law in Alaska that rarely stops development. The State of Alaska’s pending lawsuit will waste time and resources better spent on species recovery efforts.
Airport Expansions May Impact Important Bird Areas

By Matt Kirchhoff, Director of Bird Conservation

A new directive from the Federal Aviation Administration is aimed at improving aircraft safety—but it may come at some expense to birds. Within the next seven years, all commercial airports in the United States will be required to provide 1,000-foot margins, or “Runway Safety Areas,” at both ends of their runways. In Alaska, the expansion of these overrun areas could harm essential habitats for breeding, wintering, and migrating birds.

With more than 20 million takeoffs and landings by commercial passenger planes in the United States annually, the chance of a runway accident is less than one in a million. However, when such accidents do occur, they are serious and account for roughly one-quarter of all aviation fatalities. Runway margins are intended to provide an extra buffer for aircraft in emergencies.

Because few airports in Alaska currently have the prescribed Runway Safety Areas, plans are underway at most major airports to comply. The requirements are one-size-fits-all; an airport in rural Alaska that serves three jets per day has the same requirements as a runway in a major metropolis serving 300 planes per day. The runway in Anchorage, which is more than two miles long, has the same requirements as the runway in Wrangell, which is only 6,000 feet long.

There is no question that these expansions will be expensive, but they may also come at a high cost for birds and other wildlife. Currently, at least two Important Bird Areas (or IBAs—significant habitats for birds) may be impacted by airport expansion: Chiniak Bay near Kodiak and Mendenhall Wetlands near Juneau. Both IBAs are designated as globally significant for bird populations.

The Chiniak Bay IBA, located to the east of the Kodiak airport, is heavily used by breeding and wintering waterfowl, including the Steller’s Eider, which is listed as threatened under the Endangered Species Act. Nearby are 14 seabird colonies. Up to 600 Black Oystercatchers (seven percent of the global population) have been counted at a single time along the Chiniak Bay shoreline. At present, the Federal Aviation Administration is in the planning process for extension of the Kodiak runway.

The Mendenhall Wetlands IBA surrounds the Juneau airport and is an important breeding and migratory stop-over for many birds, including Greater White-fronted Goose, Canada Goose, Surfbird, American Golden-Plover, Rock Sandpiper, and Short-billed Dowitcher. Up to 1,000 Surfbirds (one to two percent of the global population) have been seen on the Mendenhall Wetlands at a single time. Extension of the runway at the Juneau airport will begin in the summer of 2009.

What is Audubon’s position on these airport runway expansions? Where Important Bird Areas are threatened by runway expansions, Audubon’s goal is to encourage aircraft safety while minimizing loss of habitat, particularly for WatchList, endangered, and threatened bird species. We also want to discourage situations that promote bird strikes, which often is the case when airports are built on wetland habitats. With some creativity and flexibility, we hope these aims can be accomplished. Audubon—the state office and particularly our local chapters—will collaborate with all parties to find a balanced approach to protect birds and human safety.

Happy Birthday, Owen

Audubon Alaska staff presented Owen Hughes a Boreal Chickadee at his 90th Birthday celebration. Owen has been an incredibly devoted volunteer for Audubon for more than two decades, and he shows no signs of retiring from his weekly visit to help around the office. Happy Birthday, Owen, and thanks for all you do for Audubon! From left: Stan Senner, Matt Kirchhoff, Owen Hughes, John Schoen.
Precaution in a Changing Arctic

By Pat Pourchot, Senior Policy Representative, and Melanie A. Smith, Staff Biologist & GIS Analyst

As the climate warms and sea ice recedes, unprecedented prospects for energy development, shipping, commercial fishing, and tourism will grow in the Arctic. Climate change and new commercial and industrial activity could bring significant, lasting, and adverse impacts to the Arctic marine environment.

Conservation groups like Audubon Alaska have become increasingly concerned that melting sea ice and a northward expansion of fish populations could increase the likelihood of commercial fishing expanding into the Arctic. But this past February the North Pacific Fishery Management Council took forward-thinking, precautionary action to protect fish and invertebrate stocks. In a move strongly advocated by Audubon and our marine conservation partners, the Council banned all commercial fishing in Outer Continental Shelf waters in the Arctic (i.e., all federal waters north of the Bering Strait) until science shows that commercial fishing would threaten neither ecosystem health nor subsistence activities of local communities. As of this printing, the new Fishery Management Plan was before the US Commerce Department for final approval.

At least 15 bird species on Audubon’s Alaska WatchList depend on the Arctic Ocean, including Steller’s and Spectacled eiders, listed as threatened under the Endangered Species Act, and Yellow-billed Loons and Kittlitz’s Murrelets, which are candidates warranting endangered species listing. Audubon and our partners have identified 23 Important Bird Areas in America’s Arctic Ocean, plus six more on the Russian side, which together provide breeding, foraging, migrating, staging, and wintering areas for millions of shorebirds, seabirds, and waterfowl. Among these is the globally-significant Ledyard Bay Critical Habitat Area in the Chukchi Sea, which provides bottom-dwelling invertebrates for possibly all of the migrating Spectacled and King eiders in western North America. Three other globally significant areas near Cape Thompson and Cape Lisburne provide foraging habitat for about one million colonial nesting seabirds.

Commercial fishing in the Arctic Ocean could pose a significant threat to these magnificent seabirds via incidental take, reduced prey availability, and habitat disturbance. Yet relatively little is known about the fish and invertebrate stocks in the Arctic Ocean, the complexities of the Arctic food chain, or the potential impacts from climate change and commercial activities, including shipping and oil and gas developments. Understanding the distribution of wildlife, “biological hotspots”, and the changing Arctic ecosystem is vital to sound management decisions, and a precautionary approach to development is essential.

Audubon Alaska is compiling data and research from federal and state agencies, the University of Alaska, and conservation organizations to map the habitats and ecology of the Arctic Ocean. We have now completed the first draft of an Arctic marine atlas for the Chukchi and Beaufort seas, covering Alaskan, Russian, and Canadian waters. This is the only atlas to pull together comprehensive information across this area in the last 20 years. The atlas includes maps for 28 Arctic marine bird species that either are listed under the Endangered Species Act, named in our Alaska WatchList, or occur in Important Bird Areas. Also included are maps for 10 Arctic marine mammals, physical oceanographic data, fish distribution, sea ice, and benthic productivity.

Audubon Alaska will be analyzing all of these data layers to identify biological hotspots, and we’ll eventually examine climate change layers to determine how habitats—and conservation priorities—may change as the Arctic warms. We’ve already been sharing some maps with policymakers, and the final atlas and accompanying report will be complete by the end of 2009.
People of Audubon

Audubon Alaska Board of Directors


Audubon Alaska’s Award-Winning Staff


Audubon Alaska staff members were recognized in 2008 for their hard work, dedication, and commitment to conservation. Lorelei Costa was selected as a TogetherGreen Conservation Leadership Fellow by Toyota and National Audubon Society. Gretchen Hazen won an ACE Distinguished Achievement Award from National Audubon Society. And Stan Senner and John Schoen were jointly presented the prestigious Conservation Leadership Award from the Wilburforce Foundation.
Up For Adventure?
We invite you to explore the Great Land with Audubon Alaska…

Camp Denali
June 5 – 11, 2009
Visit beautiful Camp Denali with Audubon Alaska’s Executive Director, Stan Senner. Join Stan for spectacular hiking, birding, wildlife watching, and relaxing to the backdrop of North America’s grandest peak. Camp Denali is great for families and people of all ages and mobility levels, and Audubon members get a special 10% discount!

Teshekpuk Lake
June 7 – 18, 2009 and June 14 – 25, 2009
Celebrate our recent conservation success with a trip to ultra-remote Teshekpuk Lake and Colville River. Experience this unique, wildlife-rich wilderness first-hand with ecotourism pioneers Alaska Discovery and Audubon’s own Matt Kirchhoff and Pat Pourchet. As we paddle the middle Colville River and explore the wetlands around Teshekpuk Lake, we’ll hope to see nesting shorebirds and waterfowl, the calving caribou of the Teshekpuk Lake Herd, and incredible densities of nesting raptors along the cliffs of the Colville.

If you would like more information on either of these exciting trips, please contact Lorelei Costa at lcosta@audubon.org or (907) 276-7034.

Photograph by Richard Kahn, courtesy of Alaska Wilderness League