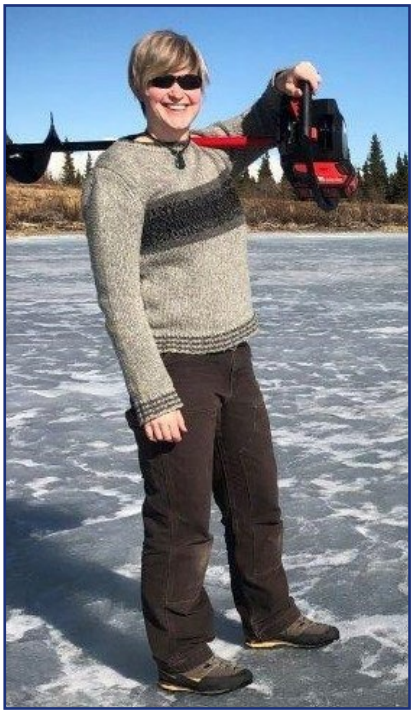
The Alaskan Wildlifer

Newsletter of the Alaska Chapter of the Wildlife Society

Spring Issue - May 2020

Message from President Kim Jochum



Hello fellow wildlifers! I hope our newsletter finds you and your loved ones well in these crazy times. Every one of us has their own challenges to cope with right now. As many others of you, I am currently highly time challenged to work full-time and start our field season while caring for a toddler. We are not alone in this. If there is any way we, the Alaska Chapter of the Wildlife Society, can help you with any of your current challenges, please reach out and let us know! We are here to support our members.

I am very proud to be serving on our newly elected Executive Board (EB) with a great team of people motivated to move our Chapter forward and work on needs that are identified by you – our members. One of our main tasks we will start to tackle within the EB this year is to reinvent our website to better be able to connect and serve our members. This will provide us with the opportunity to create member profiles, and through that, allow for a functional job board where members can post, develop a mentorship program, possibly a job shadowing program, and much more. Further, we will be able to keep all members in the loop about upcoming Working Group calls and their progress throughout the year regularly rather than only providing short updates in the newsletters and during the annual business meeting.

Our 2020 Annual Meeting in Anchorage was a big success thanks to all our volunteers who started planning early (see more details about our 2020 Annual Meeting within this newsletter). And as many of you know by now, next year we are holding our 50-year Anniversary Meeting in Fairbanks, Alaska. I am excited to share our date for the meeting

Issue Highlights

President's Message - Continued

already so you all can all plan ahead: **February 1-5**. The Conference Organizing Working Group is working hard to make this a memorable and timely meeting. Our theme will be "50 years AK TWS - Remembering the past, preparing for the future." We will be looking into the past, evaluating the present, and discussing the future of our Chapter in forms of workshops, panel discussions and special sessions. We want to acknowledge the importance of past and ongoing wildlife management challenges. Our field is not only about science and science-based decision making but also about informing and working with the public and policy in a meaningful way, about acknowledging the importance of inclusiveness and diversity, and addressing challenges for Alaska's wildlife and habitat conservation. To reach this goal we depend on many of you and your involvement to share your career experiences. The EB will be in touch with many former Chapter presidents and others that have been heavily involved with Chapter activities in the past, but I also want to encourage you to please reach out to me and/or the EB if you have any thoughts, ideas and interest to participate in identifying key issues.

As the incoming President, I wanted to start with giving you this background about our vision for next year's meeting as it frames nicely the vision and goals I have for my presidency the next 2 years. My vision is to bring together and connect members, and increase support for our members' interests and needs across all career stages. Specific goals to get there are to continue to create community and connect members, increase inclusion and diversity, empower capable members independent of age and career stage, and improve communication abilities. That is where updating our website is key to create additional online opportunities including a job board, sharing of relevant news, and online accessible programs and resources. I further intend to continue supporting our community though our long-standing committees and last year's initiated Working Groups. I am extremely proud about how many of you have stepped up over the last year to participate within committees and working groups; without our members' involvement we, the EB, could only get few task accomplished. However, when working as a larger team towards common goals we can learn from each other and support each other in many meaningful ways. Many good ideas have been brought up already that we are working towards within teams (see Committees and WG updates within this newsletter). However, there is always more to accomplish and only you, our members, can help us identify what is of relevance to address and tackle next. Please reach out with any ideas you have, no matter how small. We need your input.

Thank you all for your efforts and dedication to serving our Alaskan wildlife and habitat resources. I look forward to connect with all of you over the next years, if I have not yet, and I wish all of you a successful summer despite the added challenges.

Adult female brown bear in woods - photo by Kim Jochum.

Regional News

Northern

Kaiti Ott, Northern Representative

Personnel Changes

Shawn Crimmins was selected as the Assistant Unit Leader for the Alaska Cooperative Fish and Wildlife Research Unit at UAF, and **Lisa Dlugolecki** was selected as a Regional Invasive Species Strike Team Coordinator for USFWS in Fairbanks.

Recognition

USFWS Fisheries Biologist, **Randy Brown** will receive an Honorary PhD in May from UAF for his outstanding contributions to fisheries science in Alaska. Congratulations Randy!

ADF&G Division of Wildlife Conservation, received TWS' first ever Wildlife Restoration Award in the Wildlife Research and Surveys category for their project entitled "Factors Limiting Moose at High Densities in Interior Alaska." Read the full article on the significance of this research on pages 16-19.

Rod Boertje holds the Wildlife Society award, which recognized the significance of the study. Courtesy Rod Boertje.

Feedback on Annual Meeting Remote Participation Option - Tom Paragi

A few years ago I had encouraged both the Alaska Chapter and national TWS to offer remote viewing of presentations to reduce attendance costs, allow those without travel stipends or approval to participate, and reduce energy consumption with travel. The

TWS-Alaska Chapter Regions: Northern, Southcentral, and Southeast.

Alaska Chapter provided this option in February 2020. Dan Jenkins had provided an email ahead of time so people could verify connection speed before the meeting, which is important for sites with slower internet speeds. On the first day of the meeting, the tech support folks in Anchorage figured out quickly how to put the Powerpoint display in the lower 2/3 of the computer screen for clear graphic display and a smaller speaker image at the top of the screen. There were a few times when likely the bandwidth was taxed, resulting in brief pauses in sound or video, but overall the option worked well over 3 days. Several people in my office regretted not doing remote participation (only $90) once they saw me watching it from my desk as I attended to other chores during pauses! I didn't feel compelled to use the "chat" button to ask a question, but I'm sure that will become more common as this option is used, along with perhaps the ability to voice connect for questions or participation in the business meeting. All new technology has a learning curve. Fears over remote attendance reducing in-person attendance did not seem to play out for this inaugural event!

Southcentral

Max Goldman, Southcentral Representative

Personnel Changes

Paul Schuette joined the USFWS Marine Mammals Management (MMM) Walrus and Sea Otter Program Program, and **Stephanie Burgess** joined MMM's

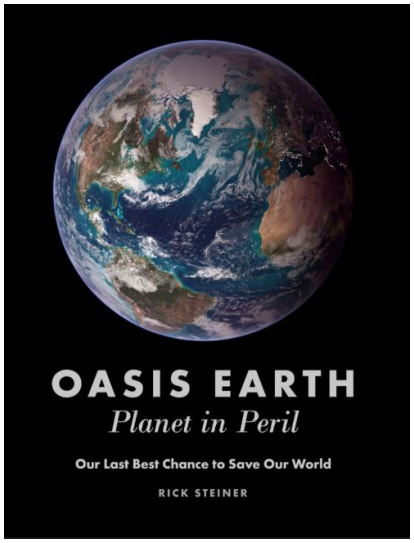
Regulatory Program, and **Hannah Vincelette** joined the Migratory Bird Management Program's Landbird Section. Kodiak National Wildlife Refuge recently hired Dr. Joy Erlenbach as their new bear biologist.

USFWS Supervisory Refuge Biologist at Kenai NWR, **John Morton**, Regional Fire Management Coordinator, **Doug Alexander**, Regional Chief of Law Enforcement, **Jim Hjelmgren**, and Izembek Refuge Pilot, **Ken Richardson** (see page 10), all retired in December. Other recent retirements include **Brad Shults** from Migratory Birds Management and **Susanna Henry** from her position as Refuge Manager at Togiak NWR.

Recent publications

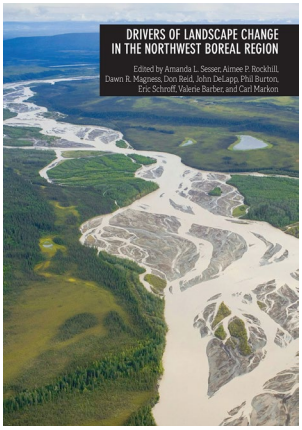
Wilson, R. R. and Durner G. M. 2020. Seismic survey design and effects on maternal polar bear dens. Journal of Wildlife Management. 84:201-212.

New Books!



Oasis Earth, Planet in Peril by Rick Steiner, Anchorage. Dr. Steiner, a former professor of marine policy at the University of Alaska-Anchorage, is making his book available for free as a low resolution PDF here. Dr. Steiner has assembled amazing images of biological diversity and both wild and human-affected landscapes globally, quotes from scientists and politicians, an array of statistics (e.g., the world has over 65 million miles of roads, 270 times the distance to the moon), and wonderful prose in a compelling story. Three sections describe the earth and life, risks of human population growth and resource consumption to wildlife and humanity, and thoughts on how to work toward a better future.

Drivers of Landscape Change in the Northwest Boreal Region.
Edited by Carl Markon, Amanda L. Sesser, Aimee P. Rockhill, Dawn R. Magness, Don Reid, John Delapp, Phil Burton, Eric Schroff, and Valerie Barber. Distributed by University of Alaska Press.



Southeast

Roy Churchwell, Southeast Representative

Recognition

John Neary was awarded the Alaska Chapter of the Wildlife Society's 2020 Wildlife Conservation Lifetime Achievement Award in recognition of his professional contributions to Alaska's wilderness and natural resources (see full article page 9).

Is it time to renew your membership?

New memberships and renewals to The Wildlife Society and the Alaska Chapter are available on-line at The Wildlife Society website.

Click **Join** or **Renew** to obtain membership forms. On The Alaska Chapter website click on **Membership**.

TWS Alaska Chapter 2020 Annual Meeting Summary

We held The Alaska Chapter of the Wildlife Society Annual Meeting on February 11 – February 14, 2020, in Anchorage at the Atwood Center, Alaska Pacific University. The meeting was well attended with 137 registered attendees, of which 30 were students, and featured an engaging range of speakers, workshops, posters, working group meetings, and social events; there was a little bit of something for everyone!

The theme of our 2020 Annual Meeting was "Wildlife and Advancing Technologies", a topic that holds relevance for anyone interested in wildlife research and management. Whether it is using isotope analysis to learn more about the life history of ancient mammoths, or using FLIR camera systems to protect denning polar bears from industrial disturbance, wildlife biologists in Alaska are complementing time-tested research methods with ground-breaking technology to great effect. From undergraduate students to established professionals, technology is being incorporated into every level of wildlife research and management.

All workshops were well attended at the conference: The Google Earth Engine, Scientific Writing for Journals, and the Wildlife Career Opportunities Roundtable. In keeping with the theme of the conference, the Google Earth Engine workshop gave attendees an introduction to how Google Earth Engine can be used for wildlife research applications. Scientific writing for Journals, with a focus on JWM, was attended by students and professionals alike, and we had a great panel discussing career opportunities with students and early career professionals across state, federal, university, for profit and non-profit agencies and organizations. All workshops received great reviews and were attended by biologists at every stage of their careers.

There were 46 high-quality oral presentations and 16 well-presented posters on display at this year's conference, highlighting a wide range of topics and species from around the state. During the poster session, The Wildlife Society also hosted a "Technology Show and Tell", a great opportunity for those in attendance to view demonstrations and get hands-on experience with the new technological hardware being used by researchers in Alaska. Several people who participated in this event said that learning more about these technologies has given them ideas for future research topics and methods.

During the banquet, biologist and author Caroline Van Hemert wowed the audience with a presentation of photos, videos, and stories from her 4,000 mile human-powered expedition from the Pacific Northwest to the Bering Sea. Van Hemert's adventure included packrafting on the ocean, skiing across glaciers, curious bears, hungry mosquitoes, and every other flavor of Alaskan adventure; it is no wonder her book The Sun Is a Compass is so popular.

Other highlights of the conference included the ever popular 5-minutes spark talks, internet streaming of the conference for remote participants, a student/ early career - professional mixer at 49th Brewery in downtown Anchorage, and a field trip to the Matanuska Experiment Farm. At the Matanuska Experiment Farm,

Annual Meeting Summary - Continued

visitors were able to visit the nutritional laboratory and the pens where the resident caribou and moose live. Those who visited these animals were surprised to see the caribou bossing around the moose!

Finally, we'd like to congratulate the following members who received awards at the Annual Meeting:

Wildlife Conservation Award for Outstanding Professional Achievement During the Preceding Five Years in Research and Management
Jesika Reimer
Dr. Travis Booms

Student Wildlife Conservation Award
Shelby McCahon
Jeff Wagner

After such a great conference, the Alaska Chapter of the Wildlife Society owes a BIG thank-you to all the presenters, attendees, sponsors, and especially the volunteers who contributed to this successful event. We will look forward to seeing you all at our 50th anniversary conference in Fairbanks next February!

SAVE THE DATE!

ALASKA CHAPTER OF THE WILDLIFE SOCIETY

2021 ANNUAL MEETING

Fairbanks, Alaska

University of Alaska Fairbanks - Wood Center
February 1th-5h, 2021

"50 years of AK TWS - Remembering the past, preparing for the future"

Join us for this special Annual Meeting as we celebrate the 50th Anniversary of The Alaska Chapter! The Conference Organizing Working Group is working hard to plan a meaningful meeting including a panel discussion on "Challenges and perspectives for Alaska wildlife and habitat conservation, 1971-2021," and workshops on "Communicating Science" and "Diversity in the Wildlife Profession." More details and updates will become available at: twsalaskameeting.com. Please contact Kim King Jones (kimberlykingjones.ak@gmail.com) or Kim Jochum (Kim.Jochum@colostate.edu) for volunteer information or to submit suggestions for special sessions. We look forward to seeing you at the meeting

TWS Alaska Chapter Annual Meeting - Presentation Awards!

At the 2020 Annual Meeting in Anchorage, we had 15 students representing the University of Alaska System (Fairbanks and Anchorage), and the University of Idaho. Student presentations contribute significantly to the success and overall experience of the Annual Meeting and the Chapter thanks all students who shared presentations! Read on for a short biography on each of the student winners.

Oral Presentations

First Place - Katie Anderson

Presentation Title: Effects of fire on diet composition, foraging behavior, and nutritional status of moose in Southcentral Alaska

Katie is a Master's student under Dr. Donald Spalinger working on quantifying the effects of fire on diet composition, foraging behavior, and nutritional status of moose in South-Central and interior Alaska. With this project she's had the opportunity to raise and study captive raised moose calves with the Alaska Department of Fish and Game. Originally from a small town in Montana, she moved to Idaho for undergraduate degrees in Ecology and Conservation Biology and Wildlife Resources. Katie's undergraduate thesis attempted to quantify context dependent relationships and the perception of safety for elk in the Sawtooth Mountains. She hopes to continue her current research on moose into a PhD program and collaborate with a number of researchers on the effects of plant chemistry and habitat disturbance on foraging behavior and the rumen microbiome.

Second Place - Megan Perra

Presentation Title: What Can the Reindeer Ear Hear?: Using Captive Reindeer to Evaluate The Range of Potential Acoustic Disturbance in Caribou

Megan is a graduate student at the University of Alaska, Fairbanks, supervised by Todd Brinkman. She studies soundscape ecology on the North Slope, focusing on how caribou respond to industrial noise. Outside of her work at UAF, she is currently collaborating on a project about pollutant exposure and feeding ecology in Icelandic Arctic foxes. She has previously worked as a science illustrator, and remains passionate about using art for science communication; her next art show will be in the Bear Gallery in Fairbanks in May of 2021.

Third Place- Elise Stacy

Presentation Title: Evaluating genetic structure of wolverines in Arctic and Subarctic Alaska: Populations on a changing landscape.

Elise is a first year PhD student under Lisette Waits at the University of Idaho, and a University of Alaska, Fairbanks alumna. She is studying how landscape features impact wolverine gene flow in northern Alaska and will expand

to some North America-wide analyses as well as looking into adaptive traits and their environmental associations. She began the project with logistical support from the Wildlife Conservation Society - Arctic Beringia in 2019, and developed connections with hunters and trappers across northern Alaska for harvest based sampling. Financial and logistical support from the National Park Service and Alaska Trappers Association President Randy Zarnke, helped the project take off. The majority of her work is in the lab but she is grateful to have the opportunity to travel back to Alaska to continue outreach and sample collection, especially in remote arctic communities.

Poster Presentations

First Place - Molly Garner

Presentation Title: Cardiac Contractility of the Red-Eared Slider Turtle (*Trachemys scripta*) During Anoxia and Low Temperature Exposure

Molly is a Masters student at the University of Alaska, Anchorage; studying Biological Science. Her current research focuses on *Trachemys scripta* (red-eared slider turtle) cardiac response to low temperatures and anoxia. Although originally from the UK, having conducted undergraduate research in Alaska, she developed a passion for American open spaces and wildlife. Moving forward she hopes to combine field and laboratory experience in the field of conservation physiology.

Second Place - Matt Kynoch

Presentation Title: Using triaxial accelerometers to examine activity and hunt rates in Canada lynx (*Lynx canadensis*)

Matt is a master's candidate in Wildlife Biology and Conservation at UAF researching Canada lynx activity and hunting behavior in the Brooks Range. He received a B.S. in Wildlife and Fisheries Biology from Clemson University in 2013, and has since worked throughout the states and abroad, predominantly researching carnivore ecology and predator-prey interactions.

Third Place - Kyle Callegari

Presentation Title: Effects of short photoperiod and carbohydrate consumption on the gut microbiome of diurnal grass rats

Kyle is a senior at the University of Alaska Fairbanks finishing up a Bachelors of Science in Biology. He's an active member of the University of Alaska Student Chapter of The Wildlife Society, and is currently leading an American Kestrel monitoring project the chapter is working to establish in Fairbanks. Kyle's interests include entomology, ornithology, and ecological research and he hopes to to work for a state or federal agency in the future.

Former Visitor Center Director Receives Lifetime Achievement Award

By Ben Hohenstatt, Juneau Empire

He didn't see it coming. John Neary was surprised to be handed a wooden walrus, but not for the reasons most people would be.

Neary, the former director of the Mendenhall Glacier Visitor Center, was awarded the Alaska Chapter of the Wildlife Society's 2020 Wildlife Conservation Lifetime Achievement Award in recognition of his professional contributions to Alaska's wilderness and natural resources.

Presented Friday evening at the visitor center, the award includes a depiction of a walrus. The news that Neary had earned the chapter's most prestigious award was not shared with him ahead of time.

"I'm very surprised by this," Neary said. "You pulled a good one on me." In addition to his work at the visitor center, Neary served as wilderness program manager for the Admiralty Island National Monument and has been an active member of the International Association for Bear Research and Management.

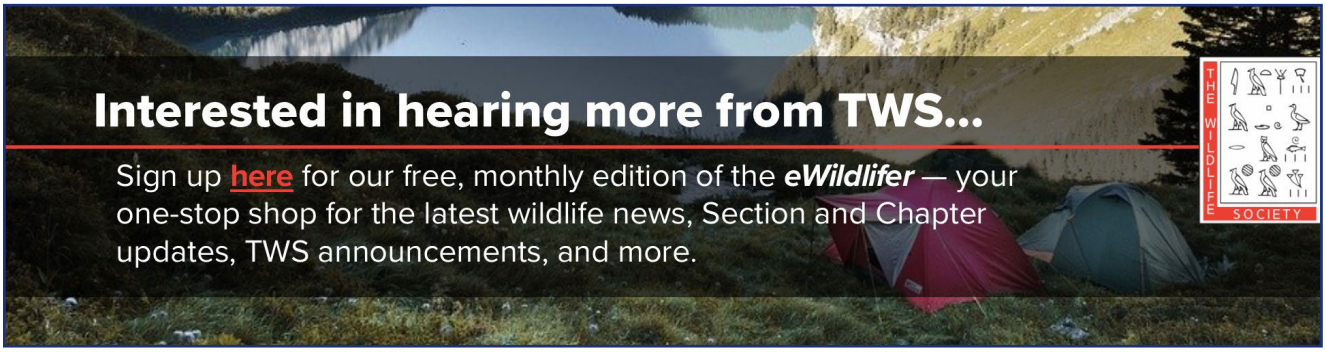
Anthony Crupi, a brown bear research biologist for the Alaska Department of Fish and Game, presented Neary with the award.

"For decades, he's worked to promote exemplary stewardship of the Tongass National Forest through science-based resource management," Crupi said. He said some years there are multiple recipients of the award and sometimes there are no recipients at all.

"It's their most prestigious award," Crupi said. The award was given to Neary shortly before a Fireside Lecture presentation about a well-known bear that is often seen in the area around the center.

Retired ranger Laurie Craig, who worked with Neary and gave the presentation, also praised his contributions to conservation.

"John is — and I will brag about him — he's basically the person who developed the protocols for Pack Creek bear viewing," Craig said. "He taught us an awful lot about how we could manage bears graciously for people and calmly for bears."



The Wind River Bear Institute establishes headquarters in Fairbanks, Alaska – offers services, internship opportunities

By Nils Pedersen - Wind River Bear Institute

The Wind River Bear Institute (WRBI) is a non-government organization that has been providing innovative, non-lethal solutions to complex human-wildlife conflict issues throughout western North America and Japan since 1996. Founded by bear biologist, Carrie Hunt (inventor of bear spray), the WRBI's mission is to reduce human-caused bear mortality and human-wildlife conflict world-wide. Hunt developed the concept of "Bear Shepherding," a program that simultaneously teaches humans to prevent conflicts and uses principles of operant conditioning to teach problem bears behaviorally based life lessons that create boundary awareness and avoidance of human occupied space. Keystone to implementation of Bear Shepherding is the use of Karelian Bear Dogs (under the working title Wildlife K-9; WK-9) for detection and shepherding of problem wildlife. The WRBI specializes in the breeding, testing, placing, training, certifying, and handling of Karelian Bear Dogs as WK-9s. Over the past 25 years of working with Federal, State, and Provincial agencies, as well as private land owners and industry groups, the WRBI's Bear Shepherding methods have resulted in over 800 actions on bears annually by the WRBI and program partners with no injuries to bears, WK-9s, or humans. In 2019, Carrie Hunt was honored with the Wildlife Society's "Special Recognition Service Award" for her outstanding contributions to the wildlife profession.

The current director of the WRBI, Nils Pedersen, is a life-long Alaskan and recent graduate from the University of Alaska Fairbanks with an M.S. in Wildlife Biology and Conservation. His research focused on human-grizzly bear conflict and bear den detection methods in the North Slope oilfields of Alaska. Pedersen established the WRBI Alaska headquarters in Fairbanks in 2019. Hunt and Pedersen split operations between Florence, Montana and Fairbanks in an effort to continue to address conservation efforts of all three species of North American bear. The WRBI also works with other species of large and potentially dangerous wildlife including wolves, cougar, moose, big-horn sheep, and trains other breeds of dog for wildlife detection and conflict, such as "Gracie" in Glacier National Park (Instagram: @barkrangernps). Taking on the role of conservationist, the highly adaptable WK-9 has proven to be a perfect partner for wildlife managers and an ambassador for educating the public. The WRBI Programs include state and federal biologists, officers, and private entities tasked with wildlife conservation, law enforcement, and applied management. The WRBI offers consulting services, dog training and evaluation, and education in bear safety and awareness. They are currently seeking summer interns looking to gain experience in the field of human dimensions of wildlife, training of working dogs for wildlife detection and conflict, and science education. For more information contact Nils Pedersen at n.pedersen@windriverbearinstitute.org or visit www.beardogs.org (Facebook: Wind River Bear Institute, or Instagram: @windriverbearinstitute).

Nils Pedersen and Kelsey Means working with Wildlife K-9s, Akela and Soledad, to sweep a bicycle race course for sign of bear and other large and potentially dangerous wildlife activity prior to the start of the race.

Get Involved in *Your* Alaska Chapter!

There are many opportunities to get involved with the Alaska Chapter! We have many active members helping out across various Working Groups and Committees, and we are always looking for enthusiastic people that would like to help shape the future of the Alaska TWS Chapter. Let us know what you are interested in any time, by sending an email to our President Kim Jochum, kim.jochum@colostate.edu, or to our Alaska TWS Chapter email twsalaska@gmail.com.

Working Groups (WGs)
Each WG within the Chapter focuses on achieving specific tasks and goals. Participating in a WG is a short-term time commitment (regular ~ bi-monthly conference calls with occasional emails and specific tasks assigned, maximum one to two-year).

- **Student/Early Career Professionals Development WG**
  Last fall this group of motivated students and early career professionals revised the Student Chapter bylaws to join students across the whole UA system (UAA-UAS-UAF) and allow them all to become members and officers in the Alaska Student Chapter! Further this group is busy identifying interests and possible activities to be taken on by Students and Early Career Professionals within our Chapter

- **Chapter Development WG**
  This group is tackling official document edits, currently completing a complete revamp of our bylaws. New bylaws should be available for members to vote on by this fall. Next steps include reviewing our current Strategic Plan and developing a financial short- and long-term strategies for our Chapter.

- **Conference Planning WG (Fairbanks 2021 Meeting)**
  A diverse team of professionals and students is busy planning an unforgettable and relevant 50th anniversary meeting in Fairbanks for next February 1-5! Our theme has been identified: "50 years of AK TWS – Remembering the past, preparing for the future." We are planning to include a panel discussion on "Challenges and perspectives for Alaska wildlife and habitat conservation, 1971-2021," and workshops on "Communicating Science" and "Diversity in the Wildlife Profession." More details and updates will become available at: twsalaskameeting.com.

Committees
The Chapter has currently two Committees, the Awards Committee and the Conservation Affairs Committee.

- **Awards Committee**
  The Award committee advertises and evaluates award submissions for our various Chapter awards available to wildlife professionals and students and nominates members for National awards. The Awards Committee is currently looking for 1 new recruit and we are looking to diversify our member base. Please consider to join.

- **Conservation Affairs Committee (CAC)**
  This committee is involved in identifying needs and drafting letters regarding conservation affairs that are relevant to the Alaska TWS Chapter. See page 13 for detailed updates.

Executive Board (EB)
With a new EB we are in the process of planning our goals for our 2-year term. We have a motivated and diverse team of professionals working together on these tasks and we always are happy for input in helping us guide our efforts (see page 20 for contact details of all EB members). Please share your opinions and visions about the Chapter with us any time. The EB itself meets by-monthly to discuss relevant topics and all EB members are participating across various Working Groups and Committees.

We are **still looking for a Webmaster (non-voting member)**. Please consider helping out!

Northern Latitudes Partnerships Promote Environmental and Economic Sustainability in Alaska and Canada

Three diverse partnerships are promoting sustainable environments and communities across Alaska and northwestern Canada. The Aleutian-Bering Sea Initiative (ABSI) and Northwest Boreal Partnership (NWBP) are successors to Landscape Conservation Cooperatives (LCCs) established in 2011. Along with the Western Alaska LCC (WALCC) these partnerships have continued to operate, with support from the Wildlife Management Institute (WMI), the Alaska Conservation Foundation (ACF) and Volgenau Family Foundation following the withdrawal of support for LCCs by the Department of the Interior (DOI) in 2017. ABSI, NWBP, and the WALCC continue to contribute vital information and conservation products for their members. For example, ABSI designed Geo-fences in Alaska's arctic marine waters in partnership with industry, agencies and tribes to help redirect shipping to protect vital marine mammal habitat and reduce the risk of vessel grounding, oil spills or illegal entry into Alaska. The NWBP published Drivers of Landscape Change in the Northwest Boreal Region, a comprehensive synthesis of the science related to resource management and climate adaptation across 1.3 million square kilometers in Alaska and northwest Canada. The WALCC is facilitating collaborative projects to mitigate the impacts of sea level rise, loss of permafrost, and changing ice dynamics on critical migratory bird habitat and communities along Alaska's west coast. Steering Committees from the three partnerships met recently in Anchorage to develop strategies to seek programmatic funding to support the collaboration essential to landscape scale conservation across the region. These three partnerships working together decided on their collective moniker: "Northern Latitudes."

Photo - Bethany Goodrich, Sustainable Southeast Partnership

Increased collaboration is essential to address today's conservation challenges. Migratory bird joint ventures and fish habitat partnerships were some of the initial mechanisms established to leverage multiple agency and non-government resources at a large scale. In 2010, the DOI launched a national network of 22 LCCs in an effort to expand collaboration to include all species and all organizations involved in conservation. Although some LCCs were less effective than others, and the DOI withdrew their financial and staff support for all LCCs in 2017, several of the partnerships established as LCCs have continued to function effectively. Among the latter are the ABSI, NWBP, and WALCC in Alaska, British Columbia, Yukon, and Northwest Territories. The impacts of climate change in the North are among the most substantial anywhere on earth, and these partnerships are vital to finding ways to help the environment, communities and economies of the region adapt to a profoundly uncertain future.

Over the past few years ABSI, NWBP, and WALCC have expanded to include new collaborators, including additional Alaska Native and Canadian First Nations organizations. These new partners are adding important indigenous knowledge to Western science and increasing linkage of local communities with federal, state, and provincial agencies. ABSI also engaged the Department of Homeland Security by demonstrating the benefit of Geo-fences as a tool to help expand domain awareness relative to shipping in the Arctic marine waters of the United States. Thanks in part to connections made with the Sustainable Southeast Partnership, each of the partnerships is now exploring

Partnerships and LCCs - Continued

connections to the for-profit sector, as well, to engage businesses in efforts to address a "triple bottom line" – People, Planet, and Profit. The partnerships have had considerable success securing funding for projects. Recent examples include:

- A $270,000 grant from the National Park Service to fund collaboration between the Alaska Department of Fish and Game and coastal Indigenous communities in Alaska and Russia, focused on understanding Steller sea lion expansion into the northern Bering Sea.
- A $250,000 grant from the National Science Foundation to connect community-based monitoring networks across Alaska and western Canada.
- A $25,000 grant from the Network for Landscape Conservation to the NWBP to enhance engagement with Tribes in Alaska and First Nations in Canada in land use planning.

Securing funding to maintain their day-to-day operations has proven more of a challenge for the partnerships. When the DOI ceased support for LCCs, WMI and ACF stepped in to fund staff, travel, and basic office expenses and convening of the Steering Committees which have proven to be so key for keeping the partnerships moving forward. A two-year grant from the Volgenau Family Foundation has been vital for the coordination of these three partnerships. Sustaining the partnerships in the future depends on finding other core funding support.

The ABSI, NWBP, and WALCC Steering Committees met March 3rd and 4th in Anchorage to develop short- and longer-term strategies to address their funding needs. For 2020, the subcommittees will be seeking support from the U.S. Fish and Wildlife Service which received a $12 million dollar appropriation this fiscal year to support landscape scale conservation. The Congressional appropriations language makes clear that these funds are to be used to support the type of work these partnerships are conducting. In the longer term, the partnerships will explore ways to distribute the costs of coordinating their work more broadly among the public and private parties that benefit from their work.

CAC Working Group Update

Since the Fall 2019, newsletter, the Conservation Affairs Committee (CAC) has remained quite busy. It seems the current administration will give us no break in our need to defend wildlife and its habitat. We recently submitted a response to the proposed exemption of the Tongass National Forest from the roadless rule; comment letters on the Draft Environmental Impact Statement (DEIS), a new Integrated Activity Plan for the National Petroleum Reserve in Alaska (NPRA), a proposed revision to the National Environmental Policy Act (NEPA) regulations, and a reinterpretation of the Migratory Bird Treaty Act that among other things would eliminate the prohibition on incidental take and thus the U.S. Fish and Wildlife Service's ability to mitigate such take; and a contribution to the Northwest Section's position statement on the transfer of federal lands to states (Alaska, Idaho, Montana, Oregon and Washington). We are currently beginning to evaluate the Bureau of Land Management's DEIS for a supplement to the Willow Master Development Plan (northeastern NPRA) to see if we should comment on that.

Any Chapter member can participate in these efforts in two ways. If you become aware of a wildlife or wildlife habitat conservation policy issue or topic, you may propose it for Chapter action either to the Executive Board or directly to the CAC (akyokel@gmail.com). Then you, a subset of the CAC made of people with the most knowledge of the issue, and any other Chapter member enlisted by the CAC Chair, can draft the CAC's response.

Find us on Facebook!

You can "like" us on Facebook! On our Facebook page, we are posting information on scientific publications relevant to Alaska's wildlife, announcements of upcoming meetings, and job openings. If you have ideas on how we can most effectively use our Facebook page, contact the Executive Board through Chapter email: twsalaska@gmail.com.

Flying Lessons - Alaska Bush Pilot Ken Richardson Talks About Life In The Air

Story and photos by Lisa Hupp, USFWS Outreach Specialist

When Ken Richardson flew his first plane in 1965, lessons started at $5 an hour. He was a private E2 in the U.S. Army stationed at Fort Devens, Massachusetts and was paid a grand total of $38 per month. “I got this wild idea,“ he remembers, on his way to join the local airport flying club, “this is what I’m going to do…”

“I don’t want to fly single engine,” Richardson thought, “I want to fly one of those twins. So they had a twin Beech [plane], that took just about a whole month’s paycheck, it was $25 an hour with an instructor. And I only got one hour in that because I ran out of money real quick.”

Richardson had joined the Army with the hope of becoming a helicopter pilot, but deployment to Vietnam put those plans on hold. When he was later accepted into a helicopter training program, he knew he was headed back for a second tour and chose to decline the offer. It wasn’t until after he was out of the Army that he returned to his wild idea of flying, using the GI Bill to gain his commercial pilot’s license in 1969.

He returned to his home state of Texas hoping to become a law enforcement pilot but couldn’t find any open positions, and so flew corporate planes instead. By early 1980, dreams of flying for the Alaska State Troopers drew him north and into a new world where the roads were few and climbing into an airplane meant freedom in an immense landscape.

“I Love the Challenge”

We stand beside a small white plane with orange and black stripes down the side. Richardson’s gnarled hands curl around the propeller as he talks about the numbers and letters painted near the tail. This is November 735 Hotel Bravo (N735HB), and it is the last Cessna 185 “Skywagon” plane ever built. He has flown this plane at both of the Alaska Refuges he has worked for, over the wide tundra north of the Yukon River and between the still-smoking volcanoes and long coast of the Alaska Peninsula.

Richardson walks over to open the hangar door and begins to push the little plane out on to the tarmac. It’s a windy fall day and the mountains of Izembek Refuge disappear into a ceiling of silver clouds. After decades of flying all over Alaska for hunting and fishing lodges and air taxi services, he has been happy to call the tiny town of Cold Bay home.

He serves now as the most senior pilot in a cadre of women and men who help manage some of America’s most remote and iconic public lands and resources from the air. His missions range from law enforcement to biological surveys of brown bear, tundra swans, and caribou. One day he might fly reconnaissance trips over remote beaches to patrol vulnerable wildlife habitat, and the next he’ll take his plane up into a river valley, helping biologists track the health of the Refuge’s infamously large brown bears.

“I love it out here. The weather will try its darnedest to throw a wrench into the gear sometimes. But you know, I love the challenge. And I mean, it’s a challenge every day that you go out.”

For Richardson, every flight is a puzzle to be solved. If it isn’t tricky weather or new terrain, it’s mental preparation for the unexpected. He ticks through a well-worn checklist: if my engine quit right now, where would I land? If I land on that beach, do I have a shovel in case I get stuck? What else do I need? Do I have a big sheet of plastic? Survival gear? He gives a rueful laugh remembering.

"I've had these engines quit in these airplanes. And if you're not prepared for it, it's quite the eye-opener. Because when that engine quits making noise? My goodness, does it get quiet in the airplane."

The vast expanse and mercurial weather of the Alaskan landscape can be an ultimate test for preparedness and the ability to make decisions, some that carry the weight of life or death. Richardson thrives on this requirement as a pilot:

"When you fly in Alaska, and get away from the big cities, all the decision making in that flight is on the pilot's shoulder, there's nobody else there that's going to hold your hand and get you through it."

The Ultimate

"Every day you get to fly is like a little bit of sunshine. And one of these days I'm gonna have to pull the mixture for the last time, chock the wheels, and walk away from it."

Richardson's hand curves with years of habit around yoke of the plane.

As he reflects on a lifetime career as a pilot, Richardson feels proud to have spent his final chapter as a refuge pilot, again in service to his country. "I've enjoyed it, and I'm glad I get to work for the people of the United States of America. You know, to me, that's the ultimate."

Flying Lessons: In His Own Words

Ken Richardson shares some wisdom from 40 years of flying in Alaska:

Always have a Plan B

This was taught to me early in my career: always, always have an alternate plan. I don't care how good the weather is, have an alternate, because someday you're going to need it. You know, I had an old timer convince me of that. He owned a fishing lodge on the Kvichak River. And he told me, he said, "Kenny, I don't care if I tell you to take one of my airplanes in to [the village of] King Salmon, which was 25 miles away."

He said, "You better know what you're going to do if you can't get there, and can't get back here." And I mean, he was constantly quizzing me on that. And, you know, there's been several nights I've had to spend on the beach, because I couldn't get in here. But I had my tie down. And I had my ropes. And although it was a little uncomfortable, you know, everything's fine. I've got survival equipment. I've got tents, I've got plastic, I've got sleeping bags in the airplane for me and whoever's in there with me.

Float Planes are Forgiving

Float planes are more forgiving than anything else, because you can land the floats on concrete if you had to. Out in bush Alaska, there's plenty of muskeg, swamp, water, lakes, rivers, sandbars, whatever. You run out of options quicker if you're in a wheel plane. And so if you're going to have an engine failure, you're better off to have it in a in a float plane.

Bend some Ears, Buy some Beers

A lot of times your decision-making ability arises from experience. And sometimes experience is a cruel teacher. The best thing a pilot can do if they've never been somewhere: when you arrive, go talk to the pilots that are there. Go talk to those people and bend their ears. You may have to buy them a beer, two beers to get the information, but do it. Because they're an almanac of knowledge for that area, and can be a tremendous help to you. Sometimes it doesn't need to be a pilot, you know, somebody that's lived there for 25 years can tell you about the weather, what you can expect.

Ken Richardson is a recently-retired pilot for the U.S. Fish and Wildlife Service at Izembek National Wildlife Refuge in Cold Bay, Alaska. He began flying for the Service in 2004, after decades of experience flying small planes throughout the state.

Unit 20A:

The most intensively studied and managed moose population in Alaska

By Alistair Gardiner agardiner@newsminer.com

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Last year, The Wildlife Society awarded a Wildlife Restoration Award to the Alaska Department of Fish and Game, for a study entitled Factors Limiting Moose at High Densities in GMU 20A, which is near Fairbanks. The Wildlife Restoration awards were established in 2018 as a way to recognize "excellence" in wildlife management and research. Those familiar with the Fish and Game study that won, however, use far more extolling adjectives than that to describe its significance.

Graham Frye deploys a radio-collar on an adult female moose in 2017. Tracking moose in this way, he said, was "integral to the project throughout its duration." COURTESY ALASKA DEPARTMENT OF FISH AND GAME

In the early 1990s, management biologists found that the moose population in unit 20A was growing with no signs of slowing down. As a result, they suspected, the moose were living in ever-worse poorer nutritional conditions. Thus began a 22-year-long study into why the moose population was proliferating, what impact this was having on the moose's health, and how the population should be managed to ensure the herd's survival.

Graham Frye, a Fish and Game wildlife research biologist for region three who was involved in just the past two years of the study, called it "a huge undertaking."

"Not only is it unique in Alaska, it is really the only kind of study like this in the world," Frye said. "This is a totally one-of-a kind data set."

Frye began working for the department in 2017, after he'd completed a Ph.D. in statistics at the University of Alaska Fairbanks. He immediately started working with Rod Boertje, the lead biologist on the study. He said that the findings of the study are applicable for management far beyond just the moose population of 20A.

"It's definitely generalizable — certainly across Alaska," he said. "It's increased our general understanding about the mechanisms of general population change, but it's also given us some great tools for management."

"The data that we've produced from this study — we're going to continue to learn from that dataset for years to come," he continued.

The biologist

"I've worked on Moose and Caribou my entire career," said Rod Boertje, a now-retired Fish and Game wildlife biologist. Boertje arrived in Fairbanks in 1978 and, after graduating from UAF in 1981, went to work for Fish and Game. After doing some projects revolving around caribou down in Southeast Alaska and working his way up to the point where he could start writing his own research proposals and taking on graduate students for assistance, he landed on a clear-cut issue to focus on.

"The obvious project was moose in 20A, just south of the river there. Some people call it the Meat Locker

of Alaska, because it does produce a lot of moose," he said. "It was growing steadily and I knew at some point that the population would either get out of control or collapse."

The moose population in the area had declined steeply in the 1970s due to severe winters, wolf predation and liberal antlerless harvests. But following the implementation of wolf control from 1976-1982, moose numbers had increased with consistency. Boertje said he wanted to "bring science to the table" to get the population under control.

The study

In 1994, it was decided that higher harvests of moose were necessary in certain areas of Alaska, including unit 20A. Given that the growing moose population in unit 20A had the potential to exceed the carrying capacity of the area — which means exhausting the resources required to support the population — data was needed to prove that higher female moose harvests were necessary. According to a report compiled following the completion of the study, this was particularly vital in order to convince "a skeptical public that liberal antlerless harvests were prudent to deter the further stockpiling of moose."

Troy Cambier weighs a 10-month old calf in 2017, toward the end of the study. COURTESY ALASKA DEPARTMENT OF FISH AND GAME

The study, which commenced in 1996 involved monitoring reproduction, survival rates, causes for mortality, predator-prey relationships, nutrition, harvest and how the density of the population interacted with all of this.

Boertje and a team of biologists and graduate students attached radio collars to 226 female moose and 164 male moose at 9–10 months of age. These moose were radio tracked and surveyed via aircraft for years, particularly during calving seasons.

"My work was based on birth rates and mortality rates of moose," Boertje said. "All the research that I was doing had to be summarized on almost a monthly basis."

Biologists conducted numerous studies on the health of the moose, including listening for mortality signals like double pulse rates, and examining the relationship between the depth of rump fat and blood condition. The moose's movements and diet were documented.

Boertje noted some of the unusual findings that were caused by such a high density of moose. "We noticed there was a lot more alder than other parts of Alaska. That's because the moose had taken over. Moose don't eat alder, they eat willow," he said. "The density was already much higher than we'd seen anywhere else in wild Alaska. Bear predation on moose was much lower in 20A than anywhere else we'd looked at in Alaska…we found we had a very unique situation."

He noted that most of Alaska provides relatively low moose harvests per unit area because of naturally high wolf and bear predation. In contrast, unit 20A has naturally low bear predation on moose specifically

An airplane circles moose in a fen to search for calves during spring twinning surveys.
COURTESY ALASKA DEPARTMENT OF FISH AND GAME

in the key calving area — the Tanana Flats — can be attributed to exceptionally poor drainage.

The results

The study found that, due to the high density of the population, the area was experiencing the "lowest moose reproductive rates in continental Alaska and Canada, the lowest body weights of nine-month-old calves in Alaska, and highest overwinter use of favored browse species," according to Boerjte.

The moose population, however, continued to grow until the local advisory committees permitted liberalized harvests of female moose in 2004 to bring the numbers to a more sustainable level.

"On an annual basis we'd bring this information to four different advisory committees," Boerjte said. "It was long-term enough that there really wasn't any doubt in the science. It wouldn't be a very good story if I'd stopped seven years ago."

The antlerless hunts proved controversial but gained public acceptance over time as the success of the management became apparent. It resulted in an intentional decline of the population from 18,000 to approximately 12,000 moose by 2012, when liberalized female harvests ceased and the population stabilized. The area now sees higher moose reproductive rates and lower browse rates.

"We didn't cause a very rapid decline, we caused a very measured decline," Boertje said. "I'm sure there are still people that don't like the cow hunts and want 20,000 moose there, but there was enough science to convince the ACs (advisory committees) that they had an alternative to waiting for another crash.

"Without that data we wouldn't have achieved the task at hand," he added, "which was to improve the nutrition of the moose."

Recognition

In his report nominating the project for the Wildlife Restoration award, Fish and Game Research Coordinator Dr. Scott M. Brainerd wrote that the moose population in unit 20A is "the most intensively studied and managed moose population in Alaska."

"I don't know of any studies in North America that are that long term and then have lead biologists follow through on it," Boertje said. "It's certainly extraordinary, and kind of unique for North America."

Brainerd wrote that the department now has the knowledge and research to effectively manage moose at sustained moderate densities across the state. This could lead to a reduction in the demand for predator control programs, which can be expensive and unpopular with the general public.

"It has provided essential information and knowledge crucial for managing moderate to high density moose populations with high hunter demand with intact

Unit 20A Moose - Continued

Tom Seaton measures winter browse twigs.
COURTESY ALASKA DEPARTMENT OF FISH AND GAME

predator populations in habitat of generally low productivity as is typical for interior Alaska," Brainerd wrote. "No other longterm study of moose in Alaska has had such consequential and important impacts on moose and predator management."

Brainerd wrote that the study was "well worth" the expense of $1.32 million in salary, contract and operating costs over a 24-year period. The project was mostly funded by a three-to-one matching grant from the Federal Aid in Wildlife Restoration Program. Boertje pointed out that the project had a direct impact for Fairbanks-based hunters.

"It's such a big part of Fairbanks hunting culture — it's pretty accessible by boat, by trail in the foothills and of course by aircraft, there are air strips everywhere — it had just always been a major hunting ground for Fairbanks," Boertje said. "It's really unique, but in the same time it fed right back into management."

More significantly, as Graham Frye said, the research will likely be used by management biologists for years, to the benefit of all hunters. "Just the general uniqueness of it all," Frye said. "The data that we've produced from this study, we're going to continue to learn from that data-set for years to come."

COVID-19 Impacts Annual Meetings and Conferences

Information changes day by day, however, the following State, National, and International annual meetings or conferences have been cancelled or postponed in response to the COVID-19 pandemic.

- American Fisheries Society – Alaska Chapter
- Alaska Miners Association Conference and Trade Show
- Institutional Animal Care and Use Committee Conference
- Alaska Surveying and Mapping Conference
- Alaska Oil Spill Technology Symposium
- Arctic Encounter Symposium
- International Oil Spill Conference
- River Management Symposium
- International Hunter Education Association Conference
- Western North American Region of the International Biometric Society
- International Loon/Diver Symposium
- International Conference on Bear Research and Management
- States Organization for Boating Access Conference
- American Statistical Association – Alaska Chapter

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