



The Alaskan Wildlifer

Newsletter of the Alaska Chapter of the Wildlife Society

Spring Issue - March 2022



Message from President Kim Jochum

Fellow Wildlifers, I hope this letter finds you all well. A long two years it has been. I vividly remember our Anchorage Annual Meeting in 2019 when I saw you all last in person, I moved from President-elect to President, and we had over 70 engaged members being active throughout Chapter Committees and Working Groups. Today, finally, it seems like we are getting a bit of normality back, one step at a time. This year we had to make the decision to hold another Annual Meeting virtually, coming up in April (18-21; see page 7), however we sincerely believe we will finally be able to meet in person again next year, 2023, in Fairbanks. Please consider submitting your abstract by April 1st to present at this year's Annual Meeting www.twsalaska.org/annual-meeting.

I miss engaging with you all in person, and it has brought its challenges to not be able to do so. At the



same time, we all have learned a lot and have grown in many ways we didn't expect to prior I am sure, such as a new balance of family and work life in the same space, using a huge variety of virtual communication techniques, and I am certain throughout this process we all have gained strength and endurance.

This disconnect has been challenging as well for our chapter. We are a team and only as strong as our members actively engaged in our chapter activities. I am so grateful for everyone who was able to carve out time and has participated and supported our efforts over these trying times. THANK YOU!

I am proud of and grateful to our Conference Organizing Working Group that we have received sponsorship support from many agencies and organizations for this year's Annual Meeting and therefore we are able to again provide free attendance

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President's Message - Continued

for students, early-career professionals, and retirees – this is huge. All you need to do is [register](#). Offering group registration costs is also a new tool in our toolbox. Thanks to our Chapter Diversity, Equity, and Inclusion Working Group we are able to offer a free workshop (however limited to 100 participants) on Improving Our Work Climate: Bystander Intervention Training and Responding to Hostile Behaviors, held by AdvancedGEO Partnership.

Tremendous thanks also to all members of the Conservation Affairs Committee! This team has addressed many important topics for our Chapter over the last couple of years.

We further have a new and well functional website with much more capabilities! Let's use it! This website includes for example, a job board where all members can post position announcements and volunteer opportunities: www.twsalaska.org/forums, as well as a membership directory. Please sign up and share a bit about yourself: <https://wildlife.org/alaska/membership/join-renew/>. We can interact with members now in real time in the membership portal, post updates to Working Groups such as meeting announcements, notes, and updates, and we are planning to develop a Mentor program with the help of our membership portal.

As my presidency itself is coming to an end, I am comforted to leave you in the very capable hands of Cynthia (Cyndi) Wardlow; she will take over as our Chapter President following our Annual Meeting in April. Welcome Cyndi! As past president, I look forward to having more time to address a few lingering topics such as completing our bylaw updates.

Reflecting on the past two years, many of you also met my other family members on zoom meetings, specifically my daughter Ellis; she joined us regularly. I was pregnant with her when I became president, and she grew into such an amazing toddler by now. I want to thank my daughter, son, and

husband, as well as you all whom I work with within our Chapter, for their / your support to accept all the parts of my life I care about – family, work and volunteer work as your President. I am truly grateful and honored to have supported our Chapter in this role and I look forward continuing to support our Chapter in more specific capacities in the future.

With a new 2-year term, elections are coming up and I urge you to consider putting your name in the hat – your Chapter needs you. Reach out to us, your Executive Board, and we would love to share more information about what it is all about. It is highly rewarding to work with our members, for you personally and for your career development. You get to meet and work with amazing wildlife professionals across agencies, universities, NGO's and beyond. You do not need a lot of experience, just the motivation, and we are happy to help guide you.

AK TWS Chapter Team – keep doing the important and meaningful work of supporting the conservation of our wildlife, its habitats, and wider ecosystems. I cannot wait to 'see' you in just a few weeks and learn about your ongoing work.

With my deepest gratitude, your President.

-Kim

Is it time to renew your membership?

New memberships and renewals to The Wildlife Society and the Alaska Chapter are available online at The Wildlife Society [website](#).



Click **Join** or **Renew** to obtain membership forms. On The Alaska Chapter [website](#) click on **Membership**.



Regional News

Northern

Kaiti Ott, Northern Representative

Happenings

Matt Cameron, a PhD candidate at the University of Alaska – Fairbanks and wildlife biologist with Gates of the Arctic National Park and Preserve and Yukon-Charley Rivers National Preserve, successfully defended his dissertation, entitled “Drivers of Migration for an Arctic Caribou Herd,” on December 7. His last chapter, “Mechanistic movement models identify continuously updated autumn migration cues in Arctic caribou,” was published in the journal *Movement Ecology* just before his defense. Matt will be continuing on with the NPS and his work with caribou, moose, bears, wolves, and other large mammals.

A story of a close encounter with a polar bear told by retired ADF&G Biologist, **Geoff Carroll**, for the live story telling program *Dark Winter Nights* was broadcast on NPR’s Weekend Edition in January. You can listen to the segment [here](#).

Southcentral

Max Goldman, Southcentral Representative

Happenings

Sara Boario was selected as the new Regional Director of the U.S. Fish and Wildlife Service in Alaska. Sara has nearly 20 years of public service experience in Alaska, including 16 years as a leader in conservation and public lands stewardship. Since 2014, Sara has served as Assistant Regional Director for External Affairs and recently as acting Deputy Regional Director. In these positions she has been a senior advisor on the Region’s highest profile policy challenges and provided critical leadership to cross-cutting efforts such as the Alaska Region’s Strategic Intent, Alaska Native Relations, Arctic Council Strategy (including creating the Arctic Youth Ambassadors Program), the Arctic Refuge Virtual Bird Festival, and urban engagement.



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

Sara was raised in welcoming communities across Alaska – Yakutat, Wrangell, Sand Point, and Fairbanks – where she grew up fishing, hunting, and exploring the natural world. The places where she grew up, and the people she learned from, shaped her personal and professional values and set the stage for her commitment to long-lasting, successful partnerships with Tribes, local governments, state agencies, and private partners. She is helping lead the Service on critical diversity and inclusion challenges, both within and outside the agency, including her role as a prominent voice on LGBTQ+ issues.

Southeast

Roy Churchwell, Southeast Representative

Happenings

BBC Filmmakers visit Southeast Alaska

BBC filmed an episode of their new series, *Eden: Untamed Planet*, in Southeast Alaska. One of the segments was about the Island endemic Prince of Wales Island flying squirrel filmed on **Winston Smith’s** (U.S. Forest Service) former study sites near Eagle’s Nest Campground along the Thorne Bay Highway.

Tongass National Forest 2021 Wildlife Activities and Accomplishments

Aleutian Terns:

- The Aleutian Tern is one of Alaska’s most



Regional News - Continued

imperiled seabirds, having undergone population declines of more than 80% at known colonies. Among other efforts, members of the Aleutian Tern Working Group completed a statewide survey in 2013 and [published it in 2015](#). We improved our survey methods over the past few years, and in 2021, developed and pilot-tested a new statewide survey protocol in and near Bristol Bay using an aerial grid-cell based approach. Our goal is to further refine the technique in 2022 and implement the statewide protocol starting in 2023. Please contact the Pacific Seabird Group Aleutian Tern Technical Committee [Committees and Delegates – Pacific Seabird Group](#) co-chairs Susan Oehlers (Susan.Oehlers@usda.gov) or Mike Goldstein (Michael.Goldstein@usda.gov) if you have information about this species or interest in contributing to this effort.

- Contributed to development and pilot testing of a State-wide Aleutian Tern monitoring strategy with ADF&G, OSU, USFWS, National Fish and Wildlife Foundation, and other partners.
- Monitored Aleutian Tern colonies on the Yakutat Ranger District.
- Coauthored a paper on Aleutian tern abundance at four globally significant colonies, with the U.S. Fish and Wildlife Service, Tern Again Consulting, Oregon State University, and IRC “Fauna” from Russia. <https://doi.org/10.1017/S095927092100037X>
- The Yakutat Ranger District and partners implemented a Covid-mitigated, community-based Yakutat Tern Festival, featuring locally based artists and educators and including bird watching lessons and field trips, a presentation and discussion on the history of bird conservation, and creative craft and game activities with ecological messaging.

Arctic Terns:

- Monitored Arctic Tern colonies at the Mendenhall Glacier on the Juneau Ranger District and at the Baird Glacier on the Petersburg Ranger District.

Queen Charlotte Goshawks and other Raptors:

- The Tongass surveys for goshawk and other

raptor nests in areas where activities are likely to affect nesting habitat. In 2021, surveys were done on Craig, Juneau, Ketchikan-Misty Fjords, Petersburg, Thorne Bay, and Wrangell ranger districts.

- Made progress on a LiDAR-based goshawk nest model on the Craig and Thorne Bay Ranger Districts.

Landbirds:

- Bird-friendly, transparent window treatments were installed along with informational flyers at 4 remote cabins on the Juneau Ranger District to reduce bird strikes and improve an estimated 30 acres of habitat.
- Implementation of 8 Breeding Birds Survey routes, 3 Alaska Landbird Monitoring Survey blocks, and 2 Christmas Bird Count routes to inform Forest, regional, and national bird population trends and conservation.
- Juneau Ranger District wildlife staff provided annual training to the Mendenhall Glacier Visitor Center interpretive staff about locally nesting birds with focus on Arctic Terns, American Dippers, and swallows and the importance and decline of aerial insectivores.
- This year’s Alaska Hummingbird Festival in Ketchikan during April included a mix of in-person field trips and bird walks, virtual presentations, and kid activities. Ketchikan-Misty Fjords and Juneau Ranger District wildlife biologists gave virtual presentations about Birding and Birdwatching and on Discovering the Rufous Hummingbird.
- The Stikine River Birding Festival is celebrated in April in Wrangell at the peak of spring migration. This year’s festival was spread out over 3 weeks and included a bird walk, scavenger hunt, movies, and a virtual speaker.

Bats:

- Implemented Forest-wide NABat surveys with ADF&G.
- ADF&G collaborator **Dr. Karen Blejwas** completed an interim bat monitoring report for the Tongass for fiscal years 2020-2021.

Beavers:



Regional News - Continued

- Monitored and maintained beaver dams and fish passage on the Juneau Ranger District with the Beaver Patrol.

Flying Squirrels:

- Collected pilot acoustical data with AudioMoths to assess utility in monitoring, and potential for software automation for flying squirrels, in preparation for an assessment being planned in 2022 on the Petersburg, Wrangell, and Craig and Thorne Bay ranger districts.

Sitka Black-Tailed Deer:

- Continued planning with ADF&G, The Nature Conservancy, community members, local tribes, and researchers to organize a Deer Summit in fall 2022 to learn more about forest habitat issues, predator influences, and hunter harvest effects on Prince of Wales deer populations.
- With The Nature Conservancy, ADF&G, and University of Idaho, published an article in the journal Forest Ecology and Management on a new LiDAR-based deer winter habitat model for Prince of Wales Island. The model was 94% accurate when tested against 3 years of deer GPS location data, 10% more accurate than other models.
<https://www.sciencedirect.com/science/article/pii/S0378112721006708>
- Provided logistical assistance to UAF (**Dr. Todd Brinkman** lab) and Juneau Forestry Sciences Laboratory and Hoonah Native Forest partnerships to assess deer, snow, and slash relationships on the Hoonah, and Craig and Thorne Bay Ranger Districts.

Moose:

- Enhanced 2 acres of moose habitat in a prime moose hunting area on the Petersburg Ranger District.
- Completed analysis to implement up to 659 acres of moose habitat enhancement with partners on the Yakutat Ranger District in coming years.

Mountain Goats:

- Worked with ADF&G to extrapolate the Lynn Canal winter and summer mountain goat habitat models to the broader Tongass to assist with mountain goat management and conservation.

Wolves:

- Assisted wolf population monitoring using a non-invasive, hair DNA, mark-recapture method on Craig and Thorne Bay Ranger Districts with ADF&G, Hydaburg Cooperative Association, and others.
- Collaboration with ADF&G and the University of Alaska Fairbanks to develop and test a camera-based study design for wolf population estimation on the Craig and Thorne Bay Ranger Districts in the coming years.

Bears:

- Installed 76 bear-proof boxes for safe campsite food storage at Juneau Ranger District campgrounds in partnership with the National Forest Foundation and TrailMix, improving an estimated 406 acres of recreational public lands.
- Continued bear-human interaction monitoring at bear viewing sites, including the Anan Wildlife Observatory on the Wrangell Ranger District, Mendenhall Glacier Visitor Center on the Juneau Ranger district, and Pack Creek Brown Bear Viewing Area on the Admiralty Island National Monument with recreation, wilderness, and ADF&G staff. The Fish Creek bear viewing site was closed again this year due to Covid.
- Used trail cameras to monitor changes in bear use of the Steep Creek area of the Mendenhall Glacier Recreation Area during a 2nd year of low tourist visitation.
- Educated the public on bear and fishing safety and best practices as part of the ongoing Situk River Ranger Program on the Yakutat Ranger District in partnership with the Yakutat Tlingit Tribe and with funding from the USFWS.

Amphibians:

- Completed surveys for a Forest-wide distribution and status assessment of Tongass amphibians and associated diseases using visual and auditory encounter and eDNA water sample methods with ADF&G and others. Lab and data analysis are under way.
- Worked with Partners in Amphibian and Reptile Conservation and others to develop signage to reduce spread of chytrid at key waters on the Wrangell Ranger District.



Regional News - Continued

Pollinators:

- Implemented pollinator surveys on Ketchikan-Misty Fjords (2 surveys), Petersburg (3 surveys), and Yakutat (1 survey) ranger districts in collaboration with the Alaska Center for Conservation Science and Bureau of Land Management.

Marine/Riparian Debris Removal:

- Removed marine and riparian debris from 499 acres on the Yakutat Ranger District with the help of tribal and community members and recreation staff, to reduce the potential for wildlife entanglement, ingestion, and toxin exposure.

Outhouse Vent Caps:

- Craig and Thorne Bay ranger district staff capped 9 outhouse vents across 8 locations in 2021, preventing cavity-dwelling birds and other wildlife from getting trapped in vertical ventilation pipes, and improving an estimated 345 acres of habitat.

Young-Growth Forest Restoration:

- Developed an agreement with the Hoonah Indian Association on the Hoonah Ranger District to implement at least 60 acres of young-growth forest restoration treatments on the Hoonah Ranger District in the coming years.
- Partnered with the Nature Conservancy on the Craig and Thorne Bay ranger districts to implement at least 76 acres of wildlife forest habitat restoration.
- Forest Service staff implemented riparian habitat restoration treatments within 108 acres of young-growth forest on Ketchikan-Misty Fjords, Petersburg, Sitka, and Thorne Bay ranger districts.

Climate Change:

- Continued progress on a climate change vulnerability assessment for Tongass wildlife with State, Federal, and NGO partners.
- Continued monitoring water temperature at a suite of ponds and streams on the Yakutat Ranger District as part of a long-term climate change data set.

Publications

Kupferman, C.A., A.P. Crupi, L.P. Waits, S.L. Gilbert. 2021. Spatial and temporal partitioning of mustelids in Southeast Alaska. *Ecosphere* 12(11): e03827.



CHAPTER AWARDS!



The Awards Committee for the Alaska Chapter of The Wildlife Society strives to meet one of our purposes in recognizing professional excellence and conservation achievement. Here is the structure of award categories with criteria suggesting appropriate recognition:

• Student Wildlife Conservation Award

- Individual or team achievement in research or management
- Distinguished service to the Alaska Chapter or UAF Student Chapter

• Wildlife Conservation Award

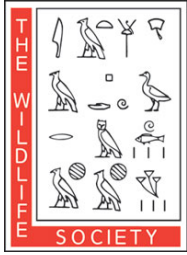
- Outstanding professional achievement during the preceding five years by individual or team in research or management
- Lifetime achievement for excellence in professional accomplishments over at least 20 years (may be received only once)
- Distinguished service to Alaska Chapter
- Distinguished service to students or young professionals

• Humorous award

- Good natured roasting for an embarrassing event presented at the banquet as capstone event following invited speaker; recipient name and year are added to object that is re-awarded each year
- Award name suggestions? (e.g., Colorado Chapter has a "blown blunderbuss" award)
- Please think of colleagues you consider deserving, and consider a nomination for one or more of the three categories (student wildlife conservation, wildlife conservation, humorous).

For more information on nominations visit our [website](#). Send nominations to cwardlowak@gmail.com.

****Nominations are due April 1st, 2022****



THE ALASKA CHAPTER OF THE WILDLIFE SOCIETY 2022 ANNUAL MEETING AND WORKSHOPS



Online (via Zoom)
April 18th - 21st, 2022

"A One Health Approach to Human Interactions with, and uses of Wildlife"

First Call for Abstracts! Abstract submission is now open for the Alaska Chapter of the Wildlife Society Annual Meeting. The meeting will be fully virtual and held online (via Zoom)

April 18th – 21st.

The theme for 2022 is, "A One Health Approach to Human Interactions with, and uses of, Wildlife." This is also the planned theme for our next in-person meeting in 2023!

Our Annual Meeting will be **FREE for students, retirees, and early-career professionals**. The fee for Chapter members is \$25, while the fee for non-members is \$50. Group registration is also available for organizations: 50+ registrants: \$1500 flat rate, 25-49 registrants: \$1000, or less than 25 registrants: \$500.

Submissions on all topics relevant to wildlife are welcome and encouraged. Full-length presentations (15 min) can be submitted either to the **General Session** or for our **Special Session** (this year's theme). Short presentations will be considered for our **Spark Session**, a fast-paced session featuring 5-minute presentations in a unique way of connecting ideas, engaging the audience and eliciting discussion about anything and everything we're passionate about in the wildlife profession. **We will not be hosting a poster session this year**, but we **encourage** you to submit an abstract for an oral presentation instead.

If your submission is accepted, you will have the option to either pre-record your talk and to be available for Q&As during your specific session, or to present live during the conference. You will need a computer that has video and audio capabilities, and an Internet connection that allows you to live stream. We'll take care of the rest!

To submit your abstract, go to twsalaskameeting.com. Remember that you must also complete a registration form and pay the applicable fees to attend the meeting.

If you have questions or to register a group, please send us an email: twsalaska@gmail.com.

****Abstracts are due on APRIL 1st, 2022****



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, kimjochum@gmail.com, or to our Alaska TWS Chapter email twسالaska@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**

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! This group is also 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 this winter. Next steps include reviewing our current Strategic Plan and developing financial short- and long-term strategies for our Chapter.

- **Conference Planning WG (2022 Annual Meeting)**

A diverse team of professionals are busy planning an unforgettable virtual meeting for 2022! Let us know if you'd like to be involved in the planning effort. More details and updates are available at: twسالaska.org.

Committees

The Chapter currently has 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 to diversify our member base. Please consider joining.

- **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.

Diversity Equity and Inclusion WG

Following the 2021 virtual meeting, a new working group formed with the initial objectives of promoting diversity, equity and inclusion within the Alaska Chapter, and providing support, resources, and actionable items that move beyond simply acknowledging the importance of diversity, to taking action to identify and break down barriers to under-represented groups in the wildlife profession, with a focus on working parents, POC, and LGBTQ members.

DEI Working Group calls are held monthly. Please email us (twسالaska@gmail.com) if you're interested in joining!

Upcoming Executive Board (EB) Elections!

Executive Board positions are up for re-election again this 2022. Think about getting involved in our Chapter in a leadership position. Positions up for 2022 re-election are President-Elect, Secretary-Treasurer, Northern Representative, Southcentral Representative, and Southeast Representative. We are also recruiting for a new Newsletter Editor (non-voting position).



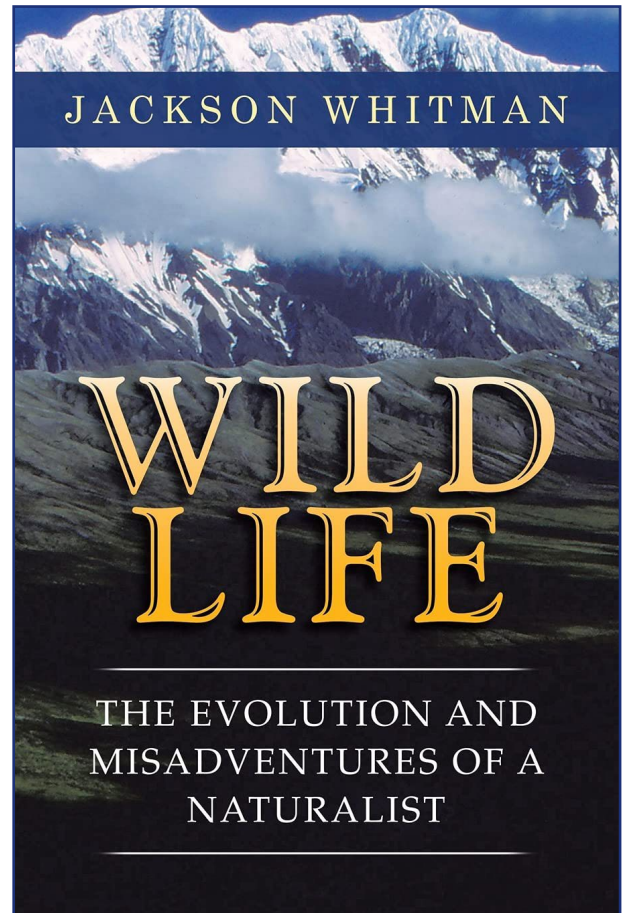
Wild Life: the Evolution and Misadventures of a Naturalist - Book Review

By Tom Paragi- ADF&G

A person for whom the line between vocation and avocation is blurred can be fortunate to earn a living while inspired simultaneously by professional and personal accomplishments. In *Wild Life: the evolution and misadventures of a naturalist* (2021, Trafford Publishing), Jack Whitman describes how his father exposed him to the outdoors through fishing at the age of 5. Fishing trips on nearby creeks and longer trips by vehicle with his family into the nearby mountains of Idaho included snap trapping small mammals, cleaning their skulls, and cataloging them after use of a dichotomous key. His growing interest in nature and fascination with predators led to falconry by age 12, where his mammal collecting skills served an additional purpose of feeding his winged companions. He hunted small and big game with his father and began trapping for fur in the fall and winter.

A life-changing opportunity occurred when Jack was 15 and finishing his freshman year in high school. A friend of his family was the leader of the Idaho Cooperative Wildlife Research Unit at the University of Idaho. A chance inquiry about Jack's summer plans by the famed mountain lion researcher Maurice Hornocker led to an offer of the first of several summer jobs assisting wildlife researchers on a range of species. That first summer was spent in the newly designated Snake River Birds of Prey Natural Area monitoring hawks, owls, eagles, and falcons. After the birds fledged, he then assisted another student, spending a month hiking in one of the most remote sections of the contiguous states to get daily telemetry locations on mountain lions. By the end of that summer, Jack knew his calling was to be a wildlife biologist.

Between his summer jobs for the Co-op Unit he hunted, fished, trapped, and worked at various outdoor jobs, "trying not to let school interfere with my education." In fall 1974, he began his undergraduate studies at the University of Idaho, paying the bills through his summer job with the Co-op and then working for a fur buyer during the academic year.



His grades suffered in the fall semester (hunting and trapping season), but he buckled down each the spring semester, awaiting the freedom from classrooms during his summer hiatus in the backcountry on ecological studies of mountain lions, badgers, and coyotes. He describes several anecdotes on live capturing a range of species using sometimes creative methods.

His graduate work on mink at the University of Idaho lasted 2 years. He knew he wanted to work on predators as a career, so he and his wife sold most of their possessions and drove to Alaska in 1981. Waiting for a job opportunity with the Alaska Department of Fish and Game, he volunteered in the agency lab to tackle a backlog of grizzly bear teeth for cementum aging. His initiative got noticed, and in a short time he started a 27 year career with the department. He began with research based from Glennallen on moose and wolves before serving as an area biologist in McGrath



Wild Life review - Continued

and Sitka, monitoring populations of big game, large predators, and furbearers for sustainable harvest. Along the way he became a skilled Super Cub pilot, which served him well in the Interior with aerial surveys for his job and for accessing remote areas for furbearer trapping during his time off work. In his last few years with ADF&G, he was as a non-game biologist based in Fairbanks. During this time he worked on microtines, boreal owls, and even a couple searches in alpine mountain “sky islands” of the western Interior tracking down credible reports of Eskimo curlews.

While in McGrath, Jack was contacted by Dr. Hornocker, who asked for assistance in establishing a research project on Amur tigers in far eastern Russia. Jack took a year leave of absence from ADF&G during 1993-94, leaving a relatively stable and comfortable life for an adventure matching wits with new predator species in a different culture and ecosystem. Working in the Sikhote Alin Nature Reserve northwest of the island of Hokkaido, he describes the awe he felt in handling his first tiger. He then spent several months in the Kedrovaya Pad Nature Reserve bordering China and North Korea, an area of high biological diversity where taiga and subtropical species overlap. There he and his team captured a Far Eastern Leopard for the first time. A few Himalayan bears were also foot snared and radio marked, whereas smaller carnivores captured incidentally were released without radios.

Jack’s passion for fur trapping and studying furbearers throughout his career will be evident to the reader. His handling of marten carcasses submitted by trappers led to scientific insights gleaned from anatomy, physiology, and demographics, all in support of ensuring sustainable harvest. Jack “retired” from Alaska in 2008 and moved back to the mountains of Idaho, but in a couple years he began another decade of work as a wolf specialist for Idaho Fish and Game, capturing wolves for radio collaring and teaching others how to catch wolves from the

growing population in the West. In this most recent period of his career he also came back to Southeast Alaska to help with wildlife surveys and went to Mongolia once to help live capture wolves in Hustai National Park. Yet through his years of large carnivore work, he never lost his interest in birding: <http://www.birdingisfun.com/2010/05/idaho-birder-jack-whitman.html>. In 2013, he received a special recognition award from the Idaho Chapter TWS.

At several points in the book he describes “hobby” research involving natural history on a range of species from desert reptiles to boreal insects. In recent years he began using motion-triggered cameras near his home to estimate carcass scavenging rate. Regardless of whether the reader has interest in his procuring of wild meat or furs or shares his deep appreciation of and curiosity about the less glamorous species across a range of ecosystems, *Wild Life* is replete with short anecdotes of time in the field, reflections on life, and a few images of wildlife across the decades (plus humorous misadventures as promised in the title!). The list of scientific and popular publications at the end hint at the diverse interests of this naturalist who freely admits to an interest in just about every species he encounters and that he has not been able to narrow that focus in 60 years of his wild life.

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: twسالaska@gmail.com.



Alaska Has Wild Wonders – Wildlife Outreach Directly to Students

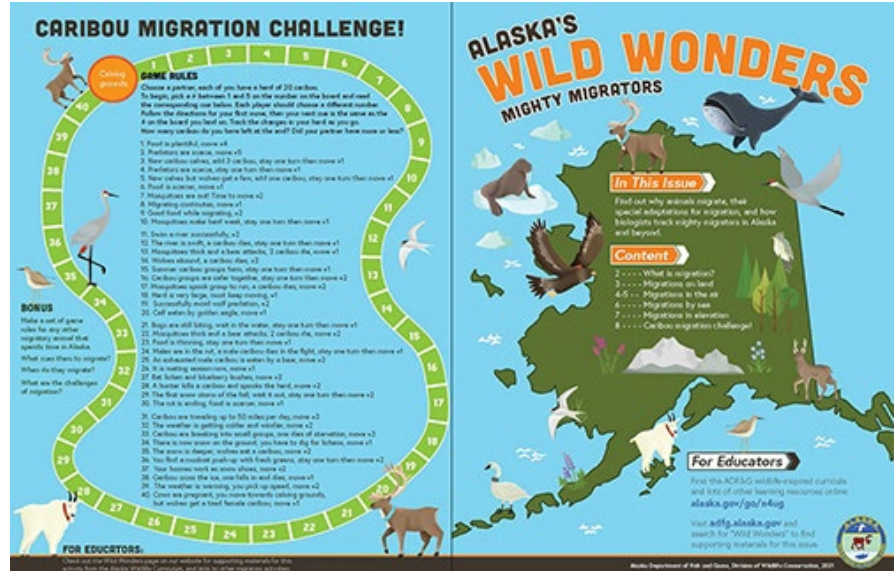
by Jen Curl - ADF&G

You are a caribou herd, migrating over the course of the year. You must forage, escape predators, swim rivers, survive hordes of insects, weather storms, and always keep moving. Will your numbers grow or shrink? How many of the herd will survive? How many calves will be added during calving season?

A one-year foray into the life of migratory caribou became an interactive activity on the back page of the most recent issue of Alaska's Wild Wonders, the annual magazine designed and produced by educators with the Alaska Department of Fish and Game. The title of the 11th issue is Mighty Migrators and highlights lots of different species and types of migration, including caribou. Each of the previous 11 issues – this 2021-22 school year will make the twelfth – features a back cover full of interactive questions, activities, and hands-on learning for kids in classrooms across the state.

Alaska's Wild Wonders is filled with natural history and real examples of research and management work done by ADF&G biologists and staff. For Kristen Romanoff, Program Coordinator of the statewide Wildlife Education and Outreach Program, the appeal of making a student-focused magazine like Alaska's Wild Wonders is to follow in the tradition of nationally produced nature periodicals like National Geographic Kids or Ranger Rick, but to make it specific to Alaska.

"Wild Wonders is more like getting to read a good book, something that both teachers and students get excited about arriving in the mail each year," she says. Although, Wild Wonders is also available online – PDFs of each issue are free to download, and a suite of additional resources are



Let's make some connections! Try these activities:

1. Cut out all the game pieces (hexagons) throughout the magazine. Ask questions and do some research to learn more about your favorite examples of wild foods. Find an adult who can share stories about how they foraged as a kid. What did they forage, where, and what did they learn?
2. Did we miss a wild food that is important to you? You can make your own or use the empty hexagons (template online) to draw and label a wild food that we have not mentioned. What ecoregion(s) does it live in?
3. Let's make a meal! Connect different hexagon sides to make a healthy meal – in a straight line or in a circular chain, or however makes sense to you. It can be a meal you once had, or one you might like to try.
4. Did all the foods on your plate come from the same ecoregion within the magazine? If not, how many ecoregions did you pick foods from?



Wild Wonders - Continued

located on the webpage for each issue (see link at the end) for teachers who are looking for even more.

In 2020, for example, with many schools operating remotely and educators and parents looking for more hands-on activities to do at home, Wild Wonders focused on wild foods that could be found and foraged for in a diversity of ecoregions across the state. The goal was to encourage students, wherever they were, to get outdoors and see what they could find in their own backyards. The issue was made to be cut apart into game pieces that were useful for many different activities and games, either at home or at school. It also featured an online version of the same activities, giving teachers the option to use what works best for their individual teaching set-up.

Wild Wonders began a little more than a decade ago. The Wildlife Education and Outreach program is small – and the demands are large. Producing educational resources for K-12 teachers and classrooms is only one of the many ways that the Wildlife Education staff communicates to the public. Wildlife outreach also includes creating publications and short video documentaries on wildlife research and management,

teaching adult/youth outdoor skills classes, managing the department's wildlife-focused social media pages, and coordinating public presentations. Most K-12 education efforts are focused on reaching as many students as possible by making resources available to teachers – developing and promoting curriculum guides, creating and managing educational kits for check-out, and offering professional development for teachers. Wild Wonders has created a unique opportunity for wildlife educators to reach out directly to students, while still engaging teachers in the process.

Approximately 15,000 students across hundreds of communities throughout Alaska receive a copy of Wild Wonders each year, all facilitated through a teacher subscription service, that is free to any Alaska educator. Class sets are mailed out in September to coincide with the start of the new school year. The Wildlife Education and Outreach program does not generally promote this service – instead, most new subscriptions come from word of mouth amongst educators. “Every year, my students love getting these magazines, and my fellow educators love getting

Alaska's Wild Wonders: WILD FOODS

Learn, Harvest & Share

Wild foods are plants and animals that are not intentionally grown by humans.

Here is a chance to play with food — specifically with wild foods found in Alaska. Here's how it works...

Choose an image of a food from the collection of photos. Use your mouse to click and drag one of the hexagons over to the playing board of empty hexagons. Release your mouse. This is where the hexagon will stay until you move it again. Give it a try!



Greater white-fronted goose

If you leave this page and come back a new set of images will appear. Your work will not be saved. [You can 'refresh' your page to see more selections of images to work the challenges.](#)



Back cover activity and online version of 2020 wild food game pieces/activities.



Wild Wonders - Continued



Wildlife education staff are based in five communities in Alaska: Abby McAllister (Douglas/Southeast Alaska), Brenda Duty (Anchorage-based statewide Alaska Wildlife Curriculum Coordinator), Marian Snively (Anchorage/Southcentral and Gulf of Alaska), Mike Taras and Jen Curl (Fairbanks/Interior and Eastern Arctic), Kristen Romanoff (Juneau, statewide Program Coordinator), Sierra Doherty (Palmer/Southcentral and Aleutians), and Heather Jameson (Nome/Western Alaska).

any extra copies shared with them to use. I hope this publication can continue to be a highlight every year” shares a fifth-grade teacher from Kotzebue.

Wild Wonders is targeted to an upper elementary reading level, but the fascinating facts and inclusion of more advanced vocabulary makes the material relevant and expandable to an older audience. Every year, adults enlisted to help review Wild Wonders, which include ADF&G staff, say they learn a thing or two when they read an issue.

The overall goal of Wild Wonders is to not just to reach out to students with interesting information about wildlife in Alaska, but also to help teachers build units around a topic, come up with ideas for additional activities, and access existing resources such as web pages, educational kits, and teaching guides. Several issues have themes designed to coincide with kits or

highlight curriculum resources, such as the Alaska Wildlife Curriculum, or shorter guides focused on topics like fur, skulls, or bears. Brenda Duty, the Alaska Wildlife Curriculum Coordinator for ADF&G, emphasizes that Wild Wonders incorporates literacy and math into its focus on science, ecology, and the outdoors. She hopes each issue gives teachers new and innovative ways to tackle existing requirements and standards, while encouraging student-led inquiry, time outdoors, and developing relationships with the natural world. Brenda also says with a broad smile that she hears constantly from teachers that students really enjoy every issue.

Wild Wonders is available to anyone – it is not just for teachers or students. If you or your kids want to take a walk through many types of wetlands, start learning about animal tracks, marvel at the unique and amazing adaptations that allow species to thrive in Alaska, or learn a bit more about what ADF&G biologists are doing in the field, Alaska’s Wild Wonders is a great place to start.

All previous issues of Alaska’s Wild Wonders are available as PDFs on the Wild Wonders webpage. All curriculum guides are available free online on the ADF&G Education website, or hard copies can be purchased. Each regional ADF&G office has kits for check-out, including mail-out options for remote communities.

[Wild Wonders webpage](#)

[Statewide educational kit page](#)

[Curriculum guides](#)

Jen Curl works for ADF&G in Fairbanks as part of the Wildlife Education and Outreach program within the Division of Wildlife Conservation, and has designed the layout and edited Wild Wonders for the past three years.



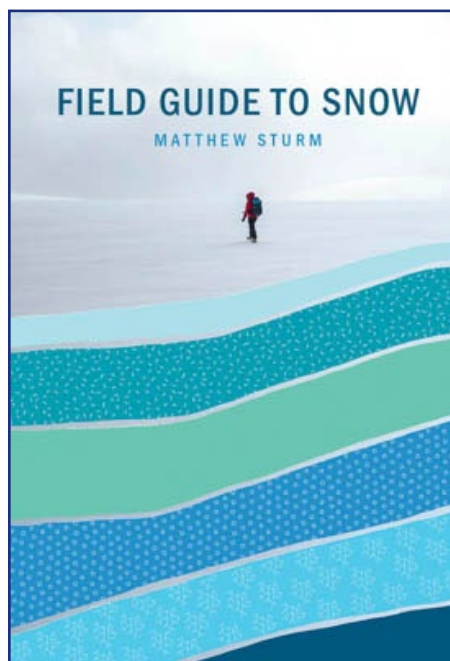
Field Guide to Snow - Book Review

By Tom Paragi- ADF&G

Climate change is leading to dramatic variation in regional weather. Alaska in the last 2 decades has experienced local extremes in temperature and precipitation. Shrinking of sea ice extent or changes in seasonal atmospheric flow may be allowing winter moisture from the open ocean to reach farther inland in boreal and arctic regions. Whether this moisture falls as snow, or as rain on snow (subsequently freezing as an ice layer), can have profound effects on a host of wildlife that lives for half or more of the year above or below the snow surface. Wildlife biologists would benefit from a better understanding of the range of snow conditions as we monitor its effects on species ecology.

Field Guide to Snow (2020, University of Alaska Press, 192 p.) is an engaging treatise in language that conveys scientific principles in terms understandable to engaged lay readers, frequently using practical examples to explain concepts. Snow physicist Matthew Sturm spent 26 years as a researcher with the U.S. Army Cold Regions Testing Laboratory and now is a professor of geophysics at the University of Alaska Geophysical Institute.

He begins the book with general topics of snow occurrence globally and classification of snow types before describing how temperature and water vapor saturation influence snow crystal formation and transformation in the atmosphere. Core chapters describe the physics of how falling snow crystals interact and distribute into layers above the ground surface and then how the accumulating snowpack subsequently undergoes metamorphosis over the winter. Gravity (settling), wind (hardening),



temperature gradients (water vapor sublimation and condensation in “dry snow” one molecule at a time), and heat (water) are the agents that can change snowpack conditions over days to months, affecting wildlife interactions with snow. Dr. Sturm also synthesizes the importance of snow to society and biota as water yield, a travel medium, and its role in albedo for planetary cooling. The final chapter is a brief introduction for biologists new to higher latitudes on how properties of snow (distribution, density, hardness, subnivean space) influence biota.

The compact volume (5.5 x 8.5 x 0.5 in.) easily fits in a field pack or parka pocket. It includes a concise bibliography and a 16-page index. Some figures and tables serve as classification keys that the author notes could be scanned or copied for lamination for easier carrying in the field. His illustrations skillfully aid interpretation of reproduced images from scientific publications.

For a historical companion text on snow ecology, see *Wild harmony: Animals of the north* (1967, Nick Lyons Books) by W.O. Pruitt, Jr., a snow ecologist with experience in boreal and arctic biomes of western North America. It has wonderful illustrations by William D. Berry and is masterfully told from the perspective of different wildlife species. For parents and educators, Dr. Sturm also wrote *Apun: The arctic snow* (2009, University of Alaska Press) geared for elementary-age science education that describes types of snow and each phase of the “snow year.” Check out his team’s website *Our Winter World: Snow in Science, Culture, and Climate* (ourwinterworld.org). It has sections on wildlife adaptations for blending in, getting around, and shelter and insulation, plus an “activities” section for kids on the scientific method with questions about what affects wildlife sinking depth in snow.



An Abundance of Eagles - Alaska Supports Five Times More Golden Eagles than Previously Thought

By Travis Booms, Neil Paprocki, Joseph Eisaguirre, Chris Barger, Stephen Lewis, Greg Breed

In an era of bad news for North America's bird populations, some good news emerges from Alaska. Researchers there recently found many more golden eagles than previously estimated – as many as five times more.

The biologists counted migrating eagles each spring as they returned to Alaska from their winter homes in the Lower 48 and southern Canada. They combined those counts with high resolution movements gathered from satellite transmitters placed on 53 eagles to estimate their summer density in southcentral Alaska. They then carefully applied

that estimate across the breeding range of eagles in Alaska, an area almost twice the size the state of Texas, resulting in a total estimate of 12,700 birds. The previous estimate was only 2,500 eagles.

To be clear, this does not mean their population has increased five-fold. Rather, scientists were able to more accurately enumerate the number of eagles that have likely always occurred in Alaska. The state's vast wild landscapes and lack of infrastructure, along with the high cost of wildlife surveys over such a huge area, had previously limited researchers' ability to accurately estimate population size. The new



Adult golden eagle showing the golden-colored feathers on the back of its neck for which the species was named. Rarely visible from afar, the golden hackles are stunning up close. Photo by Chris Barger.



Eagles - Continued



Travis Booms, biologist with the Alaska Department of Fish and Game, holds a golden eagle just prior to release in Southcentral Alaska. The bird was harnessed with a satellite transmitter that helped researchers more accurately estimate the number of eagles in Alaska. The new estimate of 12,700 eagles is five times larger than previous estimates. Photo by Caitlin Davis.

estimate recently published in *The Journal of Raptor Research* suggests that Alaska supports about one quarter of the entire USA golden eagle population.

Unlike its more abundant fish-eating cousin, the bald eagle, golden eagles inhabit open landscapes across North America where they prey on rabbits, hares, ground squirrels, and a wide variety of duck-sized birds and mammals. Once considered vermin and the target of bounties, golden eagles are protected by the Bald and Golden Eagle Protection Act. Weighing up to 12 pounds with a wingspan stretching to 7 ft, these powerful predators are at the very top of the avian food chain, capable of capturing almost every other bird species on the continent.

Golden eagle abundance in Alaska: migration counts and movement data generate a conservative population estimate is freely [here](#).

About the journal: *The Journal of Raptor Research* is a peer-reviewed, international journal dedicated to the dissemination of information about birds of prey and is the official publication of the Raptor Research Foundation.

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More on golden eagles and eagle research:

Species profile: <https://www.adfg.alaska.gov/index.cfm?adfg=goldeneagle.main>

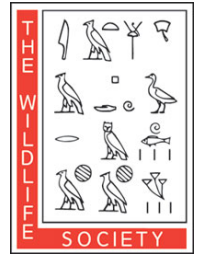
Good News about Golden Eagles – ADF&G: http://www.adfg.alaska.gov/index.cfm?adfg=wildlifeneews.view_article&articles_id=997

Video – Gunsight Mountain Golden Eagle Research: <https://vimeo.com/99765034>



TWS Journals: A New Look & Top Downloads of 2021

Increases in digital readership spawn a new contemporary look for TWS Journals.



You may have noticed a few changes to the appearance of *The Journal of Wildlife Management*, *Wildlife Monographs*, and *Wildlife Society Bulletin*. After more than a decade without a change in design, TWS Journals have received an updated look. This new contemporary design is intended to improve digital readability of TWS publications while also implementing new industry standards, like eLocators.

One of the most noticeable changes is a switch to a single column format. Over the past several years, TWS has seen a dramatic shift in how our journal content is consumed by members and beyond. In 2021, TWS printed around 2,000 issues of JWM for approximately 200 print subscribers. By comparison, digital article downloads exceeded 425,000 in 2021. Over the past five years, digital downloads of TWS Journal articles have increased by over 85%.

With more people reading our publications on computer screens, tablets, or cell phones, a switch to single column means larger text and less scrolling up and down. We're certainly excited about this forward-looking layout and hope you too enjoy the new design. For a timeline of changes to TWS Journals dating back to 1937 and some additional discussion on the new journal design, check out this [editorial](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.22063) (<https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.22063>) from the editors of all three TWS Journals.

Wondering what your fellow wildlifers are reading? The table below includes the top 10 downloaded papers in 2021. Members of TWS receive free access to all TWS publications. To take advantage of this exclusive member benefit, simply log into Your Membership (<https://wildlife.secure.force.com/customlogin>) and go to the "Publications" tab.

Table. Top 10 most downloaded papers in 2021

Title / Author(s) / Journal
<u>Best Management Practices for Trapping Furbearers in the United States</u> (open access) -- https://wildlife.onlinelibrary.wiley.com/doi/10.1002/wmon.1057 H. Bryant White, Gordon R. Batcheller, Edward K. Boggess, Clifford L. Brown, Joseph W. Butfiloski, Thomas A. Decker, John D. Erb, Michael W. Fall, David A. Hamilton, Tim L. Hiller, George F. Hubert Jr., Matthew J. Lovallo, John F. Olson, Nathan M. Roberts <i>Wildlife Monographs</i>
<u>Climate change effects on deer and moose in the Midwest</u> (open access) -- https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21649 Sarah R. Weiskopf, Olivia E. Ledee, Laura M. Thompson <i>The Journal of Wildlife Management</i>
<u>Stakeholder trust in a state wildlife agency</u> (free access for TWS members) -- https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21501 Shawn J. Riley, J. Kevin Ford, Heather A. Triezenberg, Patrick E. Lederle <i>The Journal of Wildlife Management</i>
<u>Effects of Wind Turbine Curtailment on Bird and Bat Fatalities</u> (open access) -- https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21844 K. Shawn Smallwood, Douglas A. Bell <i>The Journal of Wildlife Management</i>



TWS Journals - Continued

[Sage-Grouse Population Dynamics are Adversely Affected by Overabundant Feral Horses](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.22089)

(open access) -- <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.22089>

Peter S. Coates, Shawn T. O'neil, Diana A. Muñoz, Ian A. Dwight, John C. Tull

The Journal of Wildlife Management

[Dynamics, Persistence, and Genetic Management of the Endangered Florida Panther Population](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/wmon.1041)

(open access) -- <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/wmon.1041>

Madelon van de Kerk, David P. Onorato, Jeffrey A. Hostetler, Benjamin M. Bolker, Madan K. Oli

Wildlife Monographs

[Preparing Wildlife for Climate Change: How Far Have We Come?](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21969)

(free access for TWS members) -- <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21969>

Olivia E. LeDee, Stephen D. Handler, Christopher L. Hoving, Christopher W. Swanston, Benjamin Zuckerberg

The Journal of Wildlife Management

[ctmmweb: A Graphical User Interface for Autocorrelation-Informed Home Range Estimation](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/wsb.1154)

(open access) -- <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/wsb.1154>

Justin M. Calabrese, Christen H. Fleming, Michael J. Noonan, Xianghui Dong

Wildlife Society Bulletin

[Effects of future sea level rise on coastal habitat](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21633)

(open access) -- (<https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21633>)

Betsy Von Holle, Jennifer L. Irish, Annette Spivy, John F. Weishampel, Anne Meylan, Matthew H.

Godfrey, Mark Dodd, Sara H. Schweitzer, Tim Keyes, Felicia Sanders, Melissa K. Chaplin, Nick R. Taylor

The Journal of Wildlife Management

[Increased scientific rigor will improve reliability of research and effectiveness of management](https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21413)

(free access for TWS members) -- <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21413>

Sarah N. Sells, Sarah B. Bassing, Kristin J. Barker, Shannon C. Forshee, Allison C. Keever, James W.

Goerz, Michael S. Mitchell

The Journal of Wildlife Management

Thank you to Associate Editors and Reviewers!

As a final note, TWS would like to express our sincere gratitude to all of the associate editors and reviewers who contributed to the success of TWS Journals in 2021. Without your efforts, the quality of our journals could not be sustained. Thank you!

Associate editors and reviewers are essential to the publication process and our editors are constantly

looking to expand our base of topic area experts.

Should you be called upon to fill one of these important roles, I encourage you to answer the call (or assist our editors in finding a suitable individual).

Click [here](https://wildlife.org/publications/) (<https://wildlife.org/publications/>) for additional information about TWS publications, including contact information and author guidelines.

Cameron Kovach



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