Please note: The Raven, a publication of the Juneau Audubon Society, is moving to a quarterly publication schedule. Please expect The Raven to be mailed out and published online in January, April, July, and October 2023.

Juneau Audubon Society Field Trips Are Back!
By Doreen Prieto
I am happy to report that JAS has once again assembled an amazing schedule of field trips for spring and summer 2023. There will be eight bird walks, including those designed for beginning birders, photographers, families, and young scientists. What’s more, we will honor the wonders of the Mendenhall Wetlands State Game Refuge
Field Trips Cont.

by cleaning rubbish from several Sunny Point properties that are conserved to ensure that “the natural lands surrounding Sunny Point would be preserved forever” (Southeast Alaska Land Trust, “Lands We Steward”).

Several outstanding guest speakers and scientists will accompany the two Berners Bay Cruises with Allen Marine Tours, and a bird-banding demonstration on World Migratory Bird Day will present the opportunity to view real-time data collection from hummingbirds and migratory songbirds with Gwen Baluss from the U.S. Forest Service.

Check out JAS’ Eventbrite, Facebook, and Instagram accounts sites before your field trip as departure times and other details may change.

Also, I encourage you to check out the links in the calendar below. They may provide great information on how to navigate to the field trip sites here in Áak’w Kwaan Territory.

See you on the trail!

Juneau Audubon Society Events

April 13, 7 p.m., UAS Egan Lecture Hall — As the Seasons Tern: Tales From Four Field Seasons of Aleutian Tern Captures: Tory Rhoads will present highlights of fieldwork from 2017 to 2021 of four colonies of Aleutian Terns. Her research offers insight into breeding season movements, migratory routes, and timing.

April 15, 8 to 10 a.m., Fish Creek Delta — Bird Walk for Beginning Birders: This first walk of our JAS field trip season will be led by President Marsha Squires and Secretary Thomas Young-Bayer. For more information on Fish Creek, see juneau.org/parks-recreation/fish-creek-park.

April 22, 9:30 a.m. to noon, Sunny Point — Litter Free, Inc. Annual Cleanup: JAS board members will be gathering rubbish at Sunny Point. Park at the dead end of Sunny Drive to join us!

April 29, 8:30 a.m. to 12:30 p.m., Statter Harbor — Berners Bay Cruise: Our annual JAS fundraising event via Allen Marine Tours. Tickets are sold through the Juneau Arts and Humanities Council (JAHC). See bit.ly/jas-bbc-tickets!

May 6, 8 to 10 a.m., Outer Point Loop Trail — Bird Walk: This bird walk will be led by Doug Woodby and Mary Hausler. For more information on Outer Point Loop Trail, see juneaunature.discoverysoutheast.org/wp-content/uploads/2015/10/10outer-brochure.pdf.

May 6, 11 a.m. to 6 p.m., Peratrovich Plaza — Juneau Maritime Festival: Juneau Audubon Society will be participating in this festival celebrating Juneau’s rich maritime culture, history, and commerce to encourage more interest in our events, including public lectures and birding hikes. We would like to increase our membership, diversity, and inclusion.
JAS Events Cont.

If you can help volunteer at the JAS table, please contact Member At-Large Brenda Wright at 907-321-4739 or at-large_b@juneau-audubon-society.org

May 13, 7 to 10 a.m., Juneau Community Garden — World Migratory Bird Day 2023: Celebrate the return of migratory birds by joining JAS for this global education event. Every year, World Migratory Bird Day focuses on a conservation theme — and for 2023 it’s water and its importance to birds (see worldmigratorybirdday.org). Here in Southeast Alaska, we have an abundance of water. But how are we going to safeguard its quality?

Family-friendly events are planned at the Juneau Community Garden, including a songbird banding demonstration by JAS Board Member at Large and Wildlife Technician with the U.S. Forest Service Gwen Baluss, from 8 to 10 a.m. Check our website (juneau-audubon-society.org) and social media for details to be posted in late April.

May 13, 10 a.m. to noon, Juneau Community Garden — Bird Walk for Families and Young Birders: This walk follows the songbird banding demonstration and will be led by Alex Hale and JAS Field Trips Chair Doreen Prieto.

May 14, 8:30 a.m. to 12:30 p.m., Statter Harbor — Berners Bay Cruise: Our annual JAS fundraising event via Allen Marine Tours. Tickets are on sale through the Juneau Arts and Humanities Council (JAHC). See bit.ly/jas-bbc-tickets!

May 20, 8 to 10 a.m., Airport Dike Trail — Focus on Photography Bird Walk: This walk will be led by JAS Treasurer Betsy Fischer and her husband Scott Fischer. For more information, see ak.audubon.org/southeast-alaska-birding-trail-town/airport-dike-trail-mendenhall-wetlands.

June 3, 8 to 10 a.m., Airport Dike Trail — Bird Walk: This walk will be led by former JAS board members Jeff Sauer and Patty Rose. This walk will be limited to 10 birders.

June 10, 8 to 10 a.m., Dredge Lakes Area — Bird Walk: This walk will be led by wildlife biologist Deb Rudis. For more information, see fs.usda.gov/recarea/tongass/recarea/?recid=78791.

June 17, 8 to 10 a.m., Eagle Beach — Bird Walk: This walk will be led by Rob MacDonald, a biological scientist with the U.S. Forest Service. For more information, see dnr.alaska.gov/parks/aspunits/southeast/eaglebeachsra.

June 24, 8 to 10 a.m., Sunny Point and the Mendenhall Wetlands State Game Preserve — Bird Walk: JAS is partnering with Southeast Alaska Land Trust for this walk. For more information, see southeastalaskalandtrust.org/lands-westeward/juneau/mendenhall-wetlands/sunny-point-park and adfg.alaska.gov/index.cfm?adfg=mendenhallwetlands.main.
JAS Board Member Spotlight
Secretary Thom Young-Bayer
Thom grew up in Oregon, spending his youth volunteering for a raptor refuge center where his favorite bird to work with was a Prairie Falcon named “Tizzy.” He transitioned to the marine world as a college student, earning his master’s degree while studying Pacific coast kelp forests. Recognizing his inherent restlessness, Thom detoured from academia to earn his Captains’ License and become an organic farmer. He has spent nearly a decade farming in New England and the Pacific Northwest and has sailed across a substantial portion of the Pacific Ocean, including a research expedition to the “Great Pacific Garbage Patch.”

Thom’s most memorable wildlife encounters all involve animal reproduction, which perhaps explains why he married a marine reproduction biologist. These include a giant Pacific octopus guarding her eggs, a leatherback turtle laying eggs at night, ornate crested hawk eagles sitting upon their enormous nest, and a coyote warning him away from her hidden den of pups. His proudest birding moment was finding a Peregrine Falcon eyrie and returning almost daily to watch the falcons mate, hunt for their eyasses, and then fledge their young. His favorite birding spot in the world is currently Látrabjarg, Iceland, the seabird cliffs where he saw his first Gyrfalcon and his wife saw her first Puffins. He fully expects that Southeast Alaska will reveal many breathtaking wildlife encounters in the years to come.

Thom currently lives in Juneau with his wife and small family of rescued animals. When the birding and aurora watching are not good, he enjoys trail running or muddling through the next Rachmaninoff or Beethoven tune he has decided to foolishly tackle on his piano.

National Audubon Society Keeps Its Name
By Juneau Audubon Society
On March 15, 2023, the National Audubon Society (NAS) publicly stated that — after a yearlong process of reexamining the use of John James Audubon in its name — the NAS Board of Directors has voted to keep the organization’s title.

As chapter leaders, the Juneau Audubon Society (JAS) was alerted of this news via NAS in addition to global media coverage on the topic. We are now passing this information on to you — our readers and members.

However, in its communication, NAS made it clear that “as independently incorporated entities, each chapter has the autonomy and authority to make decisions in respect to their naming as best serves their needs.”

The JAS Board will explore a possible name change for our chapter in the near future. We will inform and engage membership as we progress.
The Latest on the Juneau Douglas Second Crossing
By Brenda Wright

Many long-time Juneau residents are familiar with the possibility of a “Second Crossing” being built from the mainland to Douglas Island.

Ever since 1934, Douglas Island has been accessible by a bridge downtown. A new bridge (the one we have now) was built in 1981, and there has been an interest in building a second bridge since. Interest was raised about concerns about access to the hospital and most retail stores if our one bridge ever failed. So although the process of studying other sites for the feasibility of building a second bridge, no other structure has been built.

In the fall of 2022, a new study found funding for a second crossing. The original report included 14 possible sites. All of these proposed sites are very similar to the 1984 study. Just like previous studies, the majority of the proposed crossing sites would affect our Mendenhall Wetlands State Game Refuge.

This fact is what is of most concern to the Juneau Audubon Society board and members. The Mendenhall Wetlands Important Bird Area provides vital stopover habitats that are limited within Southeast Alaska, most notably salt marsh, grasslands, and expansive glacial-fed tidal flats.

A very large concern is that construction degrades feeding and resting areas, especially for migratory shorebirds. Fragmentation of wetlands (regardless of mitigation) diminishes habitat quality and reduces the abundance and diversity of birds that inhabit or seasonally use habitats.

We want our members to be aware of our concerns and hope you will be informed on this project as it goes through the next steps for determining feasibility and effects on birds, fish, recreation, hunting, and natural habitat changes or effects.
What The Roadless Rule Reinstatement Means for Southeast Birds
By Lauren Cusimano

As of January 25, the National Roadless Rule has been officially restored to the Tongass National Forest by the Biden administration.

The Tongass' 17 million acres are the ancestral homeland of the Tlingit, Haida, and Tsimshian peoples and serve as the country's largest forest carbon sink — holding approximately 44% of all carbon stored in the United States National Forest system according to Audubon’s Natural Climate Solutions Report. Hundreds of species of birds live in the Tongass thanks to the 11,000 miles of shoreline in Southeast Alaska, the waters of the Inside Passage, and stand of old-growth trees, and multiple wetland areas.

Priority birds — defined by the National Audubon Society as “species of conservation need representing the range of habitats and communities we work in” — include Marbled Murrelets and Northern Goshawk. Other species range from Common Ravens, American Crows, and Bald Eagles to Greater Yellowlegs, Glaucous-winged, Herring and Short-billed gulls, Varied, Hermit, and songbirds like Red-breasted Sapsuckers, Swainson’s thrushes, Chestnut-backed Chickadee, Pacific Wren, Oregon Junco, and Steller’s Jay.

But what’s more, the Tongass and Southeast Alaska “hosts about 70% of the species known to occur in Alaska, or about 40% of the bird species found in North America” according to the “Ecological Atlas of Southeast Alaska” generated by Audubon Alaska.

This news follows the announcement on June 11, 2021, that the administration would “repeal or replace” the Alaska-specific Roadless Rule. That’s because, in October 2020, the Trump
administration canceled the application of the nationwide Roadless Rule to the 9 million acres of the Tongass that were previously protected. The public submitted nearly half a million comments — more than 60,000 comments coming from Audubon members — during the federally required public process. The U.S. Forest Service analyzed a subset of the comments, finding 96% support keeping the Roadless Rule in force, and only 1% support the exemption ultimately selected by the Trump administration.

Originally adopted in 2001, the Roadless Rule is one of the most significant conservation measures adopted to protect the national forests of the United States. Applicable nationwide, it prohibits industrial logging and most road-building in intact areas of the national forest system, with a few exceptions. Alaska's Tongass National Forest was protected under the national rule in 2001 but was exempted first under the Bush administration and later under Trump. Now, the Roadless Rule is back in place across the Tongass, protecting its nine million acres of roadless areas from logging and road-building.

According to research published in Science in 2019, the United States and Canada have lost 3 billion breeding birds since 1970 — which shakes out to one in 4 birds. Now, the State of the Birds 2022 report has identified 70 “Tipping Point” species that have “lost half or more of their breeding population since 1970, and are on track to lose another half or more in the next 50 years.” Some Southeast species are on that list, including the Rufous Hummingbird, Short-billed Dowitcher, and Ruddy Turnstone.

The next step for many conservationists is to move the Roadless Rule toward more of a Roadless Law. One solution is the Roadless Area Conservation Act (RACA), or legislation that would permanently protect the national Roadless Rule, keeping protections in place for 9.3 million acres of the Tongass and an additional 49 million acres on National Forest lands. This could protect vital wildlife habitat and carbon-sequestering vegetation on the Tongass National Forest in perpetuity.

### Tongass Wildlife Conservation Strategy: Recollections and Reflections

**By Winston Smith**

As with other national forests in the U.S., the Tongass National Forest periodically undergoes complete forest plan revisions. The last revision was in 1997, a process that began in the early 1990s and was prompted largely by concerns over maintaining viable and widely-distributed wildlife populations across the forest, especially endemic bird and mammal species that rely on old-growth forests. The U.S. Forest Service brought together a team of resource specialists and managers with the national forest system and a team of scientist with Forest Service research to develop a forest plan with specific elements and policies to sustain biological diversity and ecosystem functions in the context of multiple use of natural resources.

The Tongass National Forest is one of the largest, relatively pristine,
pristine, temperate rainforests in the world with nearly 17 million acres distributed across thousands of islands and a narrow mainland. The region is further stratified by 21 biogeographic provinces according to various configurations of physical, climatic, and biotic features.

The narrow mainland is largely isolated from other large, contiguous landmasses because of mountains, glaciers, and ice fields immediately to the east. Southeast Alaska is globally recognized for its expansive tracts of intact rainforest that contribute to climate stabilization. The forest canopy is dominated by western hemlock and Sitka spruce in uplands but includes shore pine, mountain hemlock, western redcedar, and Alaska cedar in wetlands. These habitats support complete wildlife communities, most notably all-inclusive trophic assemblages that include primary producers to top carnivores. The Alexander Archipelago has a terrestrial fauna with a nested structure that resulted primarily from differential colonization following glacial retreat. Thus, southeast Alaska has a unique fauna that is significantly correlated with island isolation and extinction events resulting from differential colonization and island area effects.

Regardless of the primary mechanism, habitat loss and fragmentation are expected to reduce biological diversity through increasing extinction probabilities.

In 1997, U.S. Forest Service planners were commissioned to manage wildlife habitats to maintain viable, widely distributed populations of existing native and desired non-native wildlife as directed by the 1982 viability rule of the 1976 National Forest Management Act. Historical timber management of the Tongass limited old-growth rainforest available to planners in framing a conservation strategy. A large majority of timber harvests occurred before the 1997 forest plan revision, with cumulative disturbance and ecological consequences from five decades of clearcut logging that produced a dichotomy of sharply contrasting landscapes. While about 79% of the Tongass remains largely undisturbed and undeveloped (stream and shoreline buffers, reserves, wilderness areas), most of the unmanaged portion is highly fragmented, comprised of thousands of small (less than 1,000 acres), uninhabited islands with little opportunity for timber harvest. The highest rates of change occurred among biogeographic provinces and landform associations that contained the largest concentrations of highest volume (productive) old-growth forests.

The U.S. Forest Service responded to this management challenge with a comprehensive, science-based revision of the forest plan. The 1997 Tongass Land and Resource Management Plan (TLMP) combined familiar, previously used elements and processes gleaned from the scientific literature with regional ecological information from journal publications, workshops, expert panels, and agency reports to design a unique, strategic conservation framework, the Tongass Wildlife Conservation Strategy. Tongass planners chose a management plan alternative that departed substantially from the natural disturbance regime (wind) in which the vast majority (at least 95%) of canopy openings produced by windstorms average (less than 0.08 acres). The 1997 TLMP continued to emphasize clearcut
Tongass Wildlife Conservation Strategy Cont.

logging, adding broad-scale disturbance to expansive landscapes of young, mostly unmanaged, even-aged second growth.

The 1997 Tongass Wildlife Conservation Strategy (WCS) represents a complex land and resource management framework that comprises numerous elements intended to maintain biological diversity. Although there have been forest plan amendments (2008 and 2016) since 1997, the WCS largely remains intact. An initial, integral step in developing a forest plan that prioritizes maintaining biological diversity is establishing a procedure in which planners can objectively evaluate the impact of various forest plan alternatives on the persistence of native wildlife and ecological communities. The Forest Service convened numerous assessment panels comprised of subject matter experts with knowledge of the natural resource under consideration. Seven panels estimated the relative risk that implementation of a range of alternative approaches to management of the Tongass would impose upon continued persistence of select wildlife species across the landscape. Risk assessment panels evaluated the likelihood of persistence of the Northern Goshawk, Alexander Archipelago wolf, brown bear, Marbled Murrelet, American Marten, Sitka black-tailed deer, and other terrestrial mammals. Other terrestrial wildlife included a group of more widely distributed mammals (12 species or subspecies) and a group of endemic small mammals (14 species or subspecies) whose known distribution in southeast Alaska is restricted because their distributions were limited to one or a few islands.

An eighth panel evaluated old-growth ecosystems, assigning likelihood scores to outcomes that characterized the expected persistence of interconnected and representative ecosystems across southeast Alaska, which considered (1) if old-growth forests would be equal to or greater than the long-term (100 years) average and is well distributed across environmental gradients, provinces, community types; and (2) whether connectivity (unimpeded movement across landscapes) would be as effective as it was prior to large-scale timber harvest. A critical component of this ecosystem assessment requires considerations of the ecological scale at which management policies and actions are implemented. Managing an archipelago (and isolated mainland) as a single, contiguous forest ecosystem fails to adequately consider the uniqueness and diversity of island communities, the variety of species compositions and interactions, and how old-growth timber harvests might differentially affect persistence and ecological processes.

A cornerstone of the Tongass WCS is the old-growth reserve system (OGR), which is comprised of small, medium, and large reserves of intact old-growth forest. The OGR system is intended to serve as habitat conservation areas for select proxy species and to facilitate landscape connectivity (unimpeded movement) across managed landscapes. The concept of using habitat conservation areas (OGRs) was borrowed from the Northwest Forest Plan, which used OGRs to provide habitat for the northern spotted owl. On the Tongass, large OGRs are expected to support viable populations of the Alexander Archipelago wolf and medium OGRs were designed to support American marten populations. The northern flying squirrel
squirrel was selected as the proxy species for small OGRs, the assumption being that if viable populations of flying squirrels can be supported in managed landscapes, other endemic small mammals will persist across the Forest.

A second component of the Tongass WCS is forest-wide standards and guidelines, which are policies or actions implemented for the protection or management of different forest resources. A standard is a course of action or level of achievement that must be accomplished to achieve forest goals and are mandatory. A guideline is also a course of action that must be followed, but guidelines relate to activities in which site-specific factors might require flexibility and require further analysis. Standards and guidelines apply to all or most areas of the Tongass, are organized by resource conservation status, and are used in conjunction with additional standards and guidelines included within each management prescription. Standards and guidelines were established to manage locally important habitat for native wildlife and sensitive species, especially those that were not explicitly considered by viability assessment panels or selected as ecological proxies in the design of the old-growth reserve network.

For example, the northern goshawk was designated a sensitive species and underwent viability risk assessment. Goshawks received special consideration on the Tongass largely because of concerns over populations of the endemic Queen Charlotte Goshawk. Formally described as a metapopulation (multiple separated subpopulations), the Queen Charlotte Goshawk’s distribution includes Prince of Wales and barrier islands, coastal British Columbia, and nearby islands. The Tongass forest-wide policy is focused on protecting confirmed and probable goshawk nests, which standards and guidelines propose to accomplish through maintaining an area greater than or equal to 100 acres of productive old-growth forest and generally centered over the nest tree or probable nest site. Another stated objective is to manage foraging habitat to retain essential features of forest stand structure in areas of timber harvest because tree density of unmanaged second-growth reduces prey abundance and diversity and prevents aerial pursuit of prey by goshawks. Forest management throughout its range typically occurs across the entire forest, producing a diversity of habitats varying in age and size (including mature forest) rather than sharply contrasting dichotomous landscapes of clearcuts and unmanaged forests.

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Tongass Wildlife Conservation Strategy Cont.

WCS was implemented as an “experiment” that included several critical underlying assumptions. The effectiveness of achieving desired and expected outcomes relies on the implementation of a comprehensive, long-term monitoring plan or scientific studies to examine the robustness of the underlying assumptions. Amendments to TLMP have occurred since 1997 (2008, 2016), yet today the Tongass WCS remains largely intact. Unfortunately, a continuous decline in funding since 1997 has limited resources and capability to implement a proposed comprehensive long-term monitoring plan for sensitive species. Consequently, there has been limited documentation regarding the implementation of management or conservation actions or corresponding responses and outcomes for intended forest resources. Fortunately, there have been a number of scientific studies that examined vital underlying assumptions of essential WCS procedures and elements. The results and implications of those studies will be published in a journal article available later this year.

JAS Membership — Need to Join or Renew?

Joining or renewing membership with the National Audubon Society using an address in Southeast Alaska will include automatic JAS membership. Visit action.audubon.org/renew/membership to do so. Or for local-only JAS membership, print or copy and mail this section with a check for $10 made to Juneau Audubon Society for annual dues. Members receive a one-year subscription to The Raven.

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