### Alaska Songbird Institute

P.O. Box 80235, Fairbanks, Alaska 99708 www.aksongbird.org

#### 2019 Year In Review



Conserving Alaska's boreal birds through ecological education & research



#### A Message from the Board of Directors

Dear Friends of ASI,

For all of us who call Interior Alaska home, 2019 was a year to remember. It began with another mild winter, record warmth in March, and many of us passed the summer enveloped in wildfire smoke. With each passing year, we see signs of a changing climate all around us. Yet, the impact of environmental change on birds and their habitats remains poorly understood, especially here in the boreal forest where landscapes are vast and there are few human eyes and ears. People from a range of backgrounds can make important contributions to our shared knowledge of boreal birds and their response to a changing environment. I'm proud to be involved with an organization that brings the multi-talented Fairbanks community together to advance the knowledge and welfare of Alaska's birds. With our dedicated volunteers, generous donors, and fantastic staff, ASI is doing great work that you can read about in the pages that follow. On behalf of all of us at ASI, thank you for your support. Happy Holidays! See you at an ASI event soon!

Gerald "J.J." Frost, President, ASI Board of Directors

# Going, going...gone? North America's vanishing birds

At its core, ASI's mission is to conserve Alaska's birds. We work towards this goal by gathering and sharing information. Together with our community and collaborators, we contribute to some of the largest datasets on Alaska's songbirds. Our projects integrate unique learning opportunities for people of all ages to connect with Alaskan scientists, wild birds, and our shared ecosystems. Each season we work closely with youth, teens, university students, and early career professionals to prepare the next generation of scientists, educators, and conservation leaders.

A study published this fall in the prestigious journal *Science* is a stark reminder to all of us who care for birds just how urgent our work is. The collaborative study, conducted by researchers from the American Bird Conservancy, Smithsonian Conservation Biology Institute, U.S. Geological Survey, Canadian Wildlife Service, and others, revealed tremendous population declines across diverse habitats and bird groups. Nearly three billion birds have been lost since 1970, one in four, in less than one average human lifetime.

Their methods included analysis of large datasets like the North America Breeding Bird Surveys, Audubon's Chistmas Bird Count, and others. Authors also looked at data collected by weather radar, a tool used to estimate migrating flocks. (Check out the live migration maps provided by the Cornell Lab or Ornithology: http://birdcast.info.)

There isn't one single cause of this pervasive loss to rally around and solve. There are myriad direct threats: widespread habitat loss, collisions with skyscrapers, and predation by outdoor cats, to name a few. These are compounded by environmental factors like pesticides, declining insects, and of course, global climate change, and its broad-scale impacts on habitats and seasonality. *So where do we go from here?* 

(continued on page 2)

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## **Creamer's Field Migration** Station: 28 years and counting



Western Palm Warbler ever banded in Alaska.

The 28<sup>th</sup> year of operations at the Creamer's Field Migration Station was a success thanks to over 57 volunteers. three apprentices and two interns. Yellow-rumped (Myrtle subspecies) Warbers dominated the capture charts once again, with Orange-crowned Warblers close behind. Unusual captures included two Brown

captured on the last net run Creepers, a Northern Flicker, and of 2013. This year's Western a Lesser Yellowlegs. Adding to the Palm Warbler was the fifth year's excitement, we banded our first Spotted Sandpiper! However,

the star of the season was a hatch-year Western Palm Warbler, only the fifth individual ever banded in Alaska! The total number of Palm Warblers banded in the western U.S. barely reaches the double digits, with the exception of a few locations in California where they total into the low 1000s. Typically thought of as an eastern warbler, recent range maps now acknowledge their presence in the far west, thanks in part to banding and citizen science efforts.

Why do we band? Our efforts are the farthest north in North America, and make essential contributions to a continent-wide effort to understand dispersal, migration, behavior, life span, survivability and productivity (just for starters!) For example, yearround residents of Creamer's Field, including chickadees and woodpeckers, give us insight into local population health, dynamics, and survivability. This year we recaptured a female Black-capped Chickadee and male Hairy Woodpecker. Both are five years old and have likely been breeding annually at Creamer's since 2014. Migrants that return every spring or fall (like a Hammond's Flycatcher that we caught for the 3<sup>rd</sup> consecutive year this spring) give us insight into life span and site fidelity. Likewise, migrants captured at other stations inform us on timing, migratory routes, and habitat use. A Swainson's Thrush banded at Creamer's last fall was captured 6 days later, 700 miles away at Teslin Lake, Canada-incredible!

Not only is Creamer's Field Migratory Waterfowl Refuge an important stopover and breeding area for migratory and resident birds, it is an important resource for ASI's research and monitoring efforts. We hope that you'll find time to stop by in 2020 and join us on our adventures at the station!

#### 2019 was another year the record for



books! Rarities detected during spring migration included Greater Yellowlegs, Eurasian Wigeon, Franklin's 03/08/2 Gull, Sabine's Gull, Marbled

Godwit, and Brown-headed Cowbird. The rarest find of the year allows Fairbanks to boast the fifth Alaska record of a Yellow-billed Cuckoo. It was a "quiet year" for Northern Hawk Owl and Snow Bunting reports. However, Brown Creepers and Red-breasted Nuthatches were increasingly common across the borough. Keep an eye out for a couple up-and-comers: Common Yellowthroats popped up multiple times and Red Crossbills are the new feeder bird to covet. (Pictured above, photo by Philip Martin.) Reports of juveniles suggest they may be here to stay.

2019 Fairbanks Birding Report

# North for Science! 2019



North For Science! 2019 was a remarkable success with a diverse group of Fairbanks students learning and camping together for eight days, June 5-12, along the Dalton Highway. Students assessed water quality, compared ecosystems, and participated in a bona fide hare population study. They practiced bear safety, spotted a Northern Wheatear and a Snowy Owl, searched for fossils at Galbraith Lake, and visited with researchers at Toolik Field Station.

They also found plenty of time to play and explore the beautiful far north in between. Thank you to everyone who helped to make this



outstanding experience possible, especially our project partners: U.S. Fish & Wildlife Service, National Park Service. and Bureau of Land Management. The 2020 North for Science! expedition is planned for lune 3-10.

COUNTERS ARE NEEDED FOR THE 59TH ANNUAL FAIRBANKS CHRISTMAS BIRD COUNT ON SATURDAY DECEMBER 14. VISIT ARCTICAUDUBON.ORG TO LEARN HOW TO SIGN UP AND JOIN A TEAM!

(Going, going, gone...continued from page 1) It's important to remember that success in reversing these precipitous declines is possible, and that everyday actions by individuals can save millions of birds. Here are some places to start. (1) Get to work! Volunteer. Participate in citizen science. We need your eyes and ears in neighborhoods and wild places to track what is happening in real time. (2) Join forces! Share information and solutions with others. Support organizations and individuals working towards bird and habitat conservation. (3) Make bird-friendly consumer choices such as shade-grown coffee, reducing plastic, and avoiding products that use pesticides. (4) Create bird-friendly spaces. Make windows safe from collisions, keep cats indoors, and increase native vegetation. For resources visit 3billionbirds.org, a website launched by the Cornell Lab of Ornithology and its partners. Thank you!

# Mentoring Alaska's Next Generation of Leaders











Meet our 2019 interns! From left to right:

**Lily Downing**, a student in our high school internship program, bands a Tree Swallow at the University of Alaska Fairbanks.

**Calvin Samson**, a high school student from Bethel, traveled to Fairbanks to train with ASI. Calvin works with the U.S. Fish & Wildlife Service and the Orutsararmiut Native Council studying Tree Swallows around Bethel and the Yukon Delta National Wildlife Refuge.

**Melanie Graeff**, our 2019 Science Education Intern prepares to release a Canada Jay at the Creamer's Field Migration Station. Melanie led many of the 74 field trips to the station this season.

**Zarah Laker-Morris** bands a Tree Swallow at Creamer's Field. As an 8<sup>th</sup> grader, Zarah may have been the youngest of our 2019 cohort, but she just completed her *sixth* season studying Tree Swallows with ASI!

**Ellen Munshower**, our 2019 Boreal Songbird Intern, prepares to release a Sharp-shinned Hawk captured this fall. Ellen worked to develop digital outreach at the station, including a new video.

Together this hardworking crew captured and banded thousands of birds, collecting valuable data on songbird ecology, migration, and reproduction in the boreal forest, and sharing their research and passion for Alaska's birds with over 3,500 people along the way. We can't thank them enough for their time and effort!

ASI's internship and mentoring programs are designed to provide a pathway for youth, teens, and young adults to progress from interest to knowledge, to proficiency, and understanding in boreal ecology, research, and conservation. Each opportunity is rooted in hands-on learning and helps our students develop the creativity, confidence, critical thinking, and problem-solving skills that are the pillars of great science. Our students also build lasting connections to Alaska's wildlife and our shared ecosystems that they will carry with them in whatever path they choose. **Stay tuned to our website and facebook page for announcements on our 2020 mentoring, internship, and apprenticeship opportunities.** 

Please join us in thanking these sponsors of our 2019 internships: City of Fairbanks Hotel-Motel Discretionary Fund, Arctic Audubon Society, Carol McIntyre & Ray Hander, and ExxonMobil\_Foundation's Community Summer Jobs Program.



ExonMobil Community Summer Jobs Program



**Meet 1601-60747!** The male Tree Swallow (*Tachycineta bicolor*, on the right in this photo) was banded as a chick at Creamer's Field in 2013. He has been incredibly faithful to his natal home, returning to raise chicks in one of just two neighboring nest boxes every year since! In 2013-14 we tracked a sample of our Tree Swallows with geolocators (light sensing data loggers). We learned that upon leaving Creamer's Field they travel southeast across Canada, down the Mississippi River Valley, and across the open waters of the Gulf of Mexico to their wintering grounds on the Yucatán Peninsula (and beyond), a round trip of *at least 11,000 miles*. Weighing in at 20 grams, this amazing creature has made the journey SIX TIMES and produced at least 40 offspring!

Like many songbirds, Tree Swallows have an estimated mortality of a whopping 79% in their

first year, and 50-60% each year thereafter. Life is a challenge for many songbirds, but for aerial insectivores (birds that consume insects in flight), conditions are getting even harder. Aerial insectivores, a diverse group including Alaska's swallows and flycatchers, are declining more rapidly then any other. Evidence suggests that no single cause is to blame, rather a cascade of impacts are occuring throughout their annual lifecycle. Of particular interest to ASI's scientists, students, and collaborators are the potential mismatches in timing that may result from shifting seasons (e.g. migration, egg production, hatching, and fledging in relation to insect emergence) as well as the impact of more extreme weather events characterisitic of climate change in the boreal forest. In light of all this, 1601-60747 is a hallmark of survival! We wish him a successful winter alongside hummingbirds, tanagers, and toucans, and hope to see him again at Creamer's Field in 2020.

Special thanks to the 19 youth and teens who volunteered over 445 hours to make this work possible in 2019, and to our hard working apprentice Laurel Devaney and intern Melanie Graeff for their dedication and smiles amidst the seemingly relentless bird poop!

## **Thank you for supporting the Alaska Songbird Institute!**

Please join us in thanking these generous supporters of bird research, conservation and science education in Alaska!



Anonymous, Dr. Ron & Mary Kay Teel, Susan Campbell, Joyce Potter, Frank & Judy Williams, Maria Berger, Ed & Gretchen Murphy, Carole Romberg, Fairbanks Optimist Club, FitzWilliams Fund





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Frequent Flyers

You hail from communities across Alaska, large and small, from Kotzebue to Craig, and at least 14 other states from Massachusetts to California! You are a diverse group, united by your committment to conserving Alaska's wild birds and their habitats.

Thank you!

Please consider a tax-deductible donation to the Alaska Songbird Institute. A donation of any amount makes you a member of ASI. Your membership lasts 12 months from the date of your last donation. Members receive ASI's print newsletters, invitations to special events, and best of all, the warm, fuzzy knowledge that you are making a difference by supporting songbird research, science education, and conservation right here in Alaska. Fill out and return the form below, or join immediately online at: aksongbird.org/donate. If you are interested in joining *ASI's Frequent Flyers*, our amazing community of sustaining donors, visit our website or call (907) 888-2121.

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