



## Meeting Attendance

**In-Person:** Amy Pocewicz (USFWS), Arin Underwood (ADF&G), Ben Lagasse (UAF), Callie Gesmundo (USFWS), Carly Eakin (USFWS), Courtland Brown (Trent University), Dan Ruthrauff (USGS), Danielle Gerik (USGS), David Sonneborn, Denise Saigh, Donna Dewhurst (retired USFWS), Emily Weisner (USGS), Erin Cooper (USFS), Eva Allaby (ADF&G), Jim Johnson (USFWS), Julie Hagelin (ADF&G), Katie Christie (ADF&G), Laura McDuffie (USGS), Lauren Attanas (ABR), Liliana Naves (ADF&G), Mark Coura (Kachemak Bay Birders), Maureen deZeeuw (Bureau of Ocean Energy Management), Rachel Richardson (USGS), Rick Lanctot (USFWS), Steven Matsuoka (USGS), Zak Pohlen (USFWS), John Pearce (USGS Alaska Science Center), Rachel Gingras (ADF&G)

**Online:** Aaron Yappert (Iowa State University), Alison Williams (USFWS), Amal Ajmi (USFWS), Andrew Solis (USFS), Becky Jones (USFS), Chris Harwood (USFWS), Chris Latty (USFWS), Colleen Handel (USGS), Debora Nigro (BLM), George Matz (Kachemak Bay Birders), Gwen Baluss (USFS), Hannah Vincelette (USFWS), Hunter Wells (Iowa State University), Ingrid Harrald (ACCS), Jaime Welfelt (USFWS), Jeff Wagner (ADF&G), Jenell Larsen Tempel (ADF&G), Kayla Shively (WCS), Kelli Stone (USFWS), Kristine Sowl (USFWS), Lauren Cusimano (Audubon Alaska), Lauren Puleo (University of Massachusetts Amherst), Lindsay Hermanns (NPS), Marci Johnson (USFS), Marcy Melville (Kachemak Bay Shorebird Festival), Mary Anne Bishop (Prince William Sound Science Center), Morgan Ziegenhorn (Universite De Moncton), Nathan Senner (University of Massachusetts Amherst), Oscar Johnson (Montana State University), Pam Sinclair (Environment and Climate Change Canada), Rebecca McGuire (ABR), Rozy Bathrick (University of Massachusetts Amherst), Sadie Ulman (USFWS), Sam Simon (UAF), Sarah Hoepfner (Iowa State University), Sarah LaMarr (BLM), Shelby McCahon (University of Idaho), Stan Senner, Sydney Bliss (Environment and Climate Change Canada), Tara Rodkey (Caesar Kleberg Wildlife Research Institute, Texas A&M University), Terry Schick (ABR), Travis Booms (ADF&G),

### 9:00-9:10 Welcome and Announcements – *Laura McDuffie*

- Please ask Rick Lanctot (richard\_lanctot@fws.gov) if you wish to be added to the shorebird Listserv.

### 9:10 Shorebird Activities of Interest Updates from 2024

- **Midcontinental Shorebird Conservation Initiative (*Kelli Stone*)**
  - Developed MSCI framework covering all of South America
  - Framework available April 2025 online. Available website: [shorebirdflyways.org](https://shorebirdflyways.org) has all of them
    - scroll down to the midcontinent. Unifying theme in flyway: how many shorebirds rely on working lands

- [Midamericasshorebirds.org](https://midamericasshorebirds.org)
  - Not all information is available on the website at this time, work in progress
  - Flyway threats: climate change is the main threat
  - Working hard on objectives to monitor short term progress
  - Next steps: workshop participants need to review framework. It will be posted, translated, and implemented (2025)
  - Concentrate on cross-flyway collaboration with continent and pacific flyways
  - Will look for coordinator to help manage entire flyway
- **Copper River International Migratory Bird Initiative & Copper River Delta Shorebird Festival (Erin Cooper)**
  - **Copper River International Migratory Bird Initiative (CRIMBI )** was supposed to be in Panama 2023, ended up being in March of 2024 due to conflicts in Panama
  - 5 components: Conservation, knowledge, partnerships, education, funding. These goals define the work and are the driving forces
  - CRIMBI: protects federal work internationally, international partnership makes conservation more efficient
  - Meetings are every other year all over world, dispersed through flyway
  - Last meeting was in Panama, did school visit with Panama Audubon
  - WHSRN site dedication, local community present along with politicians and international guests: USFS presented dedication to community. Showed support and value
  - Latin American conservation issues
    - Pollution, development, capacity, will continue to discuss these issues
  - **Copper River Shorebird Festival: 34<sup>th</sup> festival last spring!**
  - This is the first event in Cordova before the fishing season, eco tourism. Chamber of commerce sees it as one of leading events for the year. Family focus and family friendly, event is not just for bird nerds
  - 2 keynote speakers, Subhankar Banerjee, Biana Bosarreyes. There are field trips, community activities, kids, art, ideas, birding, local businesses, paint nights at the bar for birds. Local community taking ownership of putting all this together. Local, national, international partners.
    - You can see and appreciate the spectacle of migration, huge field trip
  - Hired media interns from U of O. invaluable. People telling the story, taking photos. Leadership often engages with visual media rather than text, so these photo and video projects are invaluable in engendering support and understanding.
  - Promoting MOTUS towers, there are 3 towers. [Motus.org](https://motus.org) to see results
  - Visiting biologists from Venezuela working on red knot project. Interconnectivity
  - People of different areas and agencies can connect on the ground, opportunity to discuss current and future projects
- **Western Hemisphere Shorebird Group & East Asian-Australasian Flyway Partnership (Rick Lanctot)**
  - Talking about western hemisphere group and east Australasian flyway group
  - Shows what bigger groups are doing, maybe ASG can get ideas from these other groups

- Goals of WHSG: raising awareness, conservation, range wide management. Started in 2006.
  - [Westernshorebirdgroup.org](http://Westernshorebirdgroup.org), also on Facebook, and on a listserv. Let Rick know if you want to be on the WHSG listserv.
  - WHSG has a biannual meeting, every 2 years
  - The last meeting was New Brunswick, Aug 2024. 10th group conference. 268 in person attendees, 46 online, 23 countries, 35 organizations
  - At the meetings there is a science program which always has 3-4 speakers or so. The meeting is 5 days so there's a field trip, workshops, species working groups, issue working group, flyway meetings, and lots of informal meetings. Attendees get a better idea of the flyway and what priorities for species should be. Lots of awards. Silent auction, dancing, banquets, field trips
  - People from Latin America are sponsored to come to the meeting, WHSG funded 48 professionals, 9 students
  - Next meeting is in La Paz, Mexico. Nov 2026, please come!
  - **East Australasian Flyway:**
  - History of group: founded 1998.
  - Group has a new structure: Rick moves info from this group to Alaska
  - Goal: conservation, raise awareness, management, education, research
  - Lots of task forces and subgroups, color marking protocol. Organized the first EAAF conservation forum Oct 2024 in Beijing. You can get a \$5,000 grant from this group for shorebird conservation, for students and such
  - Made some buttons and outreach materials, brochures
  - EAAF meeting of partners in 2023 in Australia. Next meeting is in the Philippines. This is a policy higher-level type group
  - There are SWG webinars and meetings (get info on these from listserv)
- **Road to Recovery (*Katie Christie*)**
    - R2R is about saving our shared birds. Formed after Rosenberg paper on 3 billion birds. Proactive recovery of most rapidly declining species
    - Purposeful integration of biological and social science. Action must include humans or it won't be successful
    - Target decline causes through whole life cycle of bird species
    - Co-production of sustainable solutions to benefit both birds and human communities
    - One of the main things is engaging and empowering species working groups, create tools to grow, find funding
    - Example of tool provided for working groups: Species recovery wheel. You fill out a survey about your working group, who do you work with, what have you done, identified threats? Areas? Strategies? A wheel is generated. Shows where you need to focus efforts in near and long term
    - What do we need? Research focused on identifying limiting factors and key habitats, migratory connections. Need community engagement, social science

- Visit [r2rbirds.org](https://r2rbirds.org), subscribe to email listserv, get announcements on webinars, virtual sessions (1 per month), species working group webinars, engagement sessions. Virtual and in person meetings.
- Encouraging people to participate in sessions and align skills and passions with a working group. Check R2R website for all groups
- **International Wader Study Group & Tuxedni Bay industrial port for proposed mine (Dan Ruthrauff)**
  - **International Wader Study Group:** <https://www.waderstudygroup.org/>
  - Mostly Europe and Africa. The Atlantic flyway.
  - Often has 400 participants at meetings.
  - They have a great journal: [Wader Study](#)
  - Meeting is every year, 2025 will be in the Netherlands
  - **Tuxedni bay industrial port for proposed mine. Mineral extraction for gold**
  - Johnson tract transportation and port site easements in Lake Clark national park and preserve
  - 21,000 acres tract. Mt Redoubt. Tract is up the valley. CIRI has a holding up there. Road access and ports being investigated
  - Rock sandpipers winter in Cook inlet. Tuxedni bay is also important to migrating shorebirds. 65,000 birds a day in the spring.
  - Next steps: public input closed, waiting on resource analysis assessment. Lake Clark looking at potential impacts
- **Alaska Native Claims Settlement Act 17(d)(1) withdrawals (Sarah Hoepfner)**
  - D-1 land withdrawals. 28 million acres proposed to be opened
  - Under ANCSA, 28 million acres put aside in 1971 by ANCSA for conservation. But during the last presidential admin, it was proposed to be opened to mining and drilling, under review in 2022. Once lands are opened for development, they cannot be put back into conservation.
    - Important for caribou, shorebirds, salmon
  - In Feb, ASG committee wrote letter about this
  - Update: Aug 27, 2024: 15,000 public comments, half of AK tribes commented. EIS found that lifting withdrawals would have neg effects. DOI finalized protections, continue to prohibit mining, drilling, etc
  - Example of how ASG can offer letters of support to these proposals. If you find things that have comment periods, reach out to ASG ExCO to see about writing a letter. Stand up for these lands
- **Kachemak Bay Shorebird Festival (Marcy Melville)**
  - 32<sup>nd</sup> annual festival. Managed with friends of AK wildlife refuges and FWS.
  - Every year there are roughly 700+ participants, 130 species reported, 50+ events, 250+ volunteer hours
  - Contract out with other local businesses, \$50K paid out to local businesses
  - Pay for festival tickets and events

- Demographics: 80% from AK. Expanding into lower 48. 65% from Kenai. 14 family friendly events, 16 all-abilities events
- Accessibility limited in Homer due to marshy areas, we're working on it
- 25% of attendees attending festival for the first time, 15% had over a decade of participation.
- Featured speakers and artists. Junior and teen birder program being expanded
- Bird for next year is Surfbird! Please reach out if you're doing Surfbird research or projects
- **Utqiagvik Migratory Bird Festival (*Lindsay Hermanns*)**
  - Lindsay coordinated 2023 festival, this year we followed the 2023 model, focusing on all bird species now, not just shorebirds
  - There can be some problems when western-based science comes in to regulate traditional uses of species, tricky to navigate historically. TEK has helped shaped major conservation efforts and decisions.
  - 2023: festival was 2 days long, 80 people, artist workshop, field trips. Highlighted traditional language and knowledge. Yup'ik are main people of the area.
  - 2024: festival was 3 days, tours, artist workshop, kids activities, science talks, raffle, art night, live music, art vendors, more bird species. Audubon was the main funder, helped with planning and logistics. Way more support from other entities, FWS crew, colleges, local groups, ANSEP, school district, etc
    - Participation at 340 people, 40% were local, what we want. Grassroots festival
  - Next year: where do we want to go? Grow locally. Maybe June 14-15 2025. Work with festival planners, incorporate local businesses. Free admission still? Birding festival passports? Continue art night!

### Shorebird Outreach Updates

- **Culture- and place-based learning at schools and Indigenous communities (*Lili Naves*)**
  - Shorebird outreach in YK delta
  - How did this start? Very important: 2017,19. Social scientists looked at shorebird harvest data, what was the role in Native culture and TEK? 25 years of data on shorebird and egg harvest 1990-2025. 2,800 shorebirds harvested per year. Less than 1% of total bird harvest in rural AK.
  - Research Yup'ik knowledge about shorebirds. Local tribal councils interviewed 80 people across communities. Shorebirds and eggs are harvested in small numbers, but are still an important food source. Shorebirds are a part of daily life and key values.
  - Kids learn to hunt on small birds like shorebirds. Becoming a hunter is very important as are elders, sharing, people and nature, tradition, culture, language
  - Bird arrival is a big event in the spring, winter has ended! Interviewees had noticed a shorebird decline over time
  - Support co-stewardship for shorebird ecology and conservation, transmit traditional knowledge, youth interest and learning
  - Migratory birds as a learning subject for kids. Incorporates science, geography, math, culture, language

- program includes workshops, staff visits, kits, and online resources. lots of activities and materials to choose from, available in both languages
  - 2022-24, reached 3,167 students in 18 communities, 87 kits distributed
  - researching shorebirds in Yup'ik culture. mask found depicting a shorebird from the early 1900s.
  - next steps: wrapping up 2024-5 fall winter cycle. anchorage museum partnership, event in anchorage in the future
  - seeking funding for upcoming years!
- **Alaska Birding Trail (*Callie Gesmundo*)**
    - Born out of ABOG. Trail that empowers conservation by raising awareness and encouraging action. Similar to the planet walk in Anchorage
    - 2020 sign for LEYE migration: installed oct 2023 at Basher Bog, not much action on project after this
    - Initial concerns of trail: does this already exist? Yeah, lots of resources on birding spots in anchorage and state, ebird, Audubon. How do we get more people into birdwatching?
    - Maybe we don't need people to love birds to care about them though? Opportunity to tap into audiences that already go outside a lot, who also care about fishing, hunting, etc. We can be different from what's already out there.
    - Draft story map: who is the audience? Tourists? People who watch sunsets, go fishing, are already outside, but perhaps don't know a lot about threats or actions for birds. Maybe target those people?
    - More threat and action-based perspective, use birds or ambassador species to tie together.
    - Where are people recreating, popular places in anchorage? Utilizing people that are already there.
    - Funding is a problem. If everyone can donate to make one sign, we could make some more! Talk to Callie or Rick about this if you have ideas
  - **Migratory Bird Day birding events (*Callie Gesmundo*)**
    - Callei and Zak hosted 4 bird outings on migratory bird day. We had extra guides and scopes, 3 hours for hightide.
    - Highlight awareness of birds and habitats
    - We want to expand who might know about these events. Encourage people to come and birdwatch and talk. Callie wrote a story about them: protect insects, protect birds
    - Coordinate with national and regional social media team
    - Next year's theme: shared spaces, creating bird-friendly cities and communities
      - World migratory bird day website, graphics, key messages, talking points, free to share
      - USFS partnering with zoo to unveil feather friendly windows at alaska zoo next spring!
  - **Anchorage Bike to Work Day (*Callie Gesmundo*)**
    - Cosponsoring treat station for bike to work day in 2024. Sponsored my municipality health dept and supported by nonprofits.
    - Passed out handmade chickadee from John Pearce. Handed out to bikers going past

- 2024: 3-4,000 people attended. We interacted and spoke to 100 people. Business cards linking to USGS bike to work, bird species near station. We talked about loons and lead, bird coffee, eBird, collisions.
- People wanted food and water. Maybe next year we will have bird chocolate and coffee. Donated feather friendly stickers? With info packet? Is someone willing to donate?

## Research Presentations

- **Passive Acoustic Monitoring and PRISM (*Morgan Ziegenhorn*)**
  - Post doctoral researcher at universite de Moncton
    - Program for Regional and Internation Shorebird Monitoring (PRISM)
      - Active in the Arctic since 2001
      - Documents population distribution and trends, and habitat use
  - Observational and acoustic surveys. Acoustic added in 2022, cheaper and longer than observational
  - Can we get same info (abundance, distribution) from ARUS 9listening data that we got from observational surveys?
    - ARUS detected more shorebirds than 90 min of observational surveys but struggled with quiet species. How are species specific distributions different between 2 types of surveys?
  - What new insights can we get from this?
    - Getting new species at sites that weren't picked up in observational survey. Vocal activity at different times of day. Species that are vocally active in the morning, or middle of the day, or at night. New insights, new data source
    - Conclusions: ongoing, conclusions are preliminary. Can get same info, yes, but with caveats. How to pick up quieter species? Lots of new insights too, lots to explore, different patterns among sites? Why? Different across species and time and sites.
    - Question: From Dan R: Can we find the actual abundance? Is there any way to tease that out? 1 ARU per site? Maybe we could have multiple? How to get real numbers? Answer: Possible to put out more than 1 device, but not feasible long term. Working with other researchers on how to get density using 1 ARU. If that doesn't work maybe we can use data from intensive plots and compare to no shorebirds present plots
- **Current and Future Distribution of Buff-breasted Sandpiper across Four Critical Stopover Regions (*Tara Lafabrique Rodkey*)**
  - Based on work by Rick Lanctot and Lee Tibbetts, identified hotspots for BBSA migration. We are taking a deeper look into 4 of these regions. Spots in Canada, Gulf of Mexico, 2 in south America.
  - Took land cover and climate variables and used GPS tracking data from Rick and Lee combined with survey data and eBird data. We used bioclimatic variables to capture more relevant data (mean avg temp, precipitation during wettest part of year). Compared current period with future period under model climate change scenario.

- Change surface between present and 2070, models show dramatic losses in temp region and Arctic region. In south America region there is a southward shift and contraction. Losing high suitable habitat. Western gulf plain: difference in distribution. Contraction to core of range. Future importance of mid coast of Texas. Arctic lowlands: dramatic shrinking to SE most corner to Victoria island. Largest loss of total area.
  - Where are climate strongholds? Where can we focus on conservation?
- **Variation in Adult Body Size and Egg Size through Time (*Hunter Wells*)**
    - 21-year data analysis of temporal variation in Arctic-breeding shorebirds located near Utqiagvik, AK.
    - 2003-present. Under Rick Lanctot
    - Looked for nests of 8 shorebird species. Measured eggs, adults, temp, snow melt, invertebrate samples
    - Looking at temporal variation in egg size. Calculate egg volume, shape, compare across species
    - Pectoral sandpiper egg volume decreased over time. Slight decrease, not accounting for clutch variation yet, just basic numbers of 8 species. Preliminary, needs work
    - Variation in adult body size: dig into morphological metrics, change in body measurements over time, relate to environmental conditions. Compare across species. In 2025 collect additional body size data
    - Questions: Dan R: with red knots, van hills found body size had shrunk, attributed to nonbreeding conditions. Question is what are your predictions? Why does body size change? Hunter: other paper on SPSA shows wings are getting smaller from additional predator abundance. Prediction: dependent on breeding season, species, since all have different migration strategies. All in all, I don't know yet, it's complex.
- **Are Roads Refugia? Road Use of Dunlin during the Pre-incubation Period (*Aaron Yappert*)**
    - Roads are going to increase on the north slope. Transportation development connecting Utqiagvik to other villages and such. But how are shorebirds impacted by these roads?
    - Utqiagvik has gravel roads, houses clustered alongside. But focusing on main stretch of road on SE edge of town to gas and landfill.
    - At the end of May, Dunlin arrive, ground is snow covered, they are hungry, looking for food. The big road is ploughed for landfill access. Week later things start to melt. Dunlin are looking for nesting territory, building nests.
    - What about that 1 week before nest building? Hundreds of birds are along the road in early melt period, there are huge 30 ft piles of snow from plough. Road edges melt first.
    - We tagged 93 birds over 4 years. 2021-24.
    - Found that roadsides are important prior to nesting. Food sources. Birds hang out by road network. Kernel density estimate can help identify core areas across years. A few Dunlin leave road to early melt areas. Most are by road though
    - Dunlin repeatedly travel between core road areas and final nesting territories.
    - Not here to say roads are good for Dunlin, but they do use them and rely on them. They will be impacted by additional road networks.
    - Thesis defense in January



- Questions: Lindsay Hermanns: If the roads weren't there, what would Dunlin do?  
Aaron: hard to find bird concentration away from human settlements, so we don't know. But I think the birds stop in northern most melt areas and scout north to check out nest sites. We also captured the latest ever snow melt in study period, climate variability plays a part in how they interact with the road network.
- **Lesser Yellowlegs population in Churchill, Manitoba (*Courtland Brown*)**
  - Nest survival for threatened shorebird. Boreal and subarctic region of north America
  - Steep declines for LEYE, east birds at higher risk of harvest than west birds
  - We don't know if declines are due to high adult and juvenile mortality or low replacement rate or possibly to both
  - No data was available of reproductive success in Canada prior to this work
  - Primary objective: calculate reproductive success and compare to anchorage. Daily nest survival rate and overall survival
  - Found nests, determined age, monitored, recorded failure or hatch
  - Did success differ between Churchill and anchorage, if so, what are the factors?
  - I Predicted higher success in Anchorage. It is the Southern range limit in the west, boreal forest, maritime climate patterns. Churchill is subarctic, northern range of eastern limit. There is a difference in temperature, Churchill is colder, variable weather. There is more dense vegetation in anchorage, Churchill habitat is open
  - 5 field seasons in Anchorage (2018-2022), 2 seasons (2022-23) in Churchill.
  - 75 nests in full dataset
  - Found that daily nest survival was higher in ANC, 63%. Churchill was 28%, less than half of Anchorage.
  - Higher temperature and nest concealment = daily nest survival. There was a mid-season dip in survival rate. Maybe predation cycles? Ravens hatching?
  - Takeaway: reproductive success varies widely across breeding range. Effects of low survival in Churchill compounded by high nest fidelity, etc
  - Future work: other Canadian sites?
  - Question: Dan R: Are you working on IPMs? Katie C: someone working on IPM for Anchorage population, more of complete dataset for Anchorage than other sites, we are hoping to use Anchorage populations to make inference about other populations, Canada and Fairbanks.
- **Lesser Yellowlegs & Insecticides in the Prairie Pothole Region (*Shelby McCahon*)**
  - Master student at University of Idaho
  - Neonicotinoid insecticides- growing concerns, declining shorebirds. Fastest growing and widely used class of insecticide. Seed treatment during planting. It enters the environment and persists for years in soil.
  - Neonics are metabolized in birds in 24 hours. But can cause appetite suppression, loss of fat. Repeated exposure harms invertebrate communities, loss of fat. LEYE are trying to refuel on stopover sites, this is bad
  - Neonic use is increasing and widespread

- We want to quantify neonic exposure and accumulation, effects on birds and prey. North and South Dakota
  - Collected water and prey samples. Collected blood and recorded body conditions.
  - Frequent neonic detections in water, prey, and shorebird plasma.
  - 57% of spring water samples, 7% fall water samples positive for neonic
  - Concentrations in water below toxic effects level for invertebrates
  - No impacts on biomass or diversity for macroinvertebrates
  - For shorebirds, 60% spring bird plasma had neonic. 20% fall samples across multiple species had neonic detections.
  - Next steps: measure impacts on shorebirds and invertebrates
  - Measured effects of neonic on LEYE fat, refueling, and muscle. No impact on body condition. But support of agricultural impacts on prey biomass and refueling
  - Low prey biomass in high agriculture use wetlands
  - LEYE: reduced refueling in high agriculture use wetlands
  - Leye foraging in high intensity agriculture wetlands, had reduced refueling. I am investigating this now
  - Frequent detections in water, prey, bird plasma, but water concentrations are below toxic levels, no impacts on body condition, etc
  - Questions: Rick Lanctot: how did you calculate refueling rates from birds. Shelby: using principal component analysis, triglyceride and beta levels from each bird. PCA, PC1 from that analysis
  - Question: Katie C: Can you speculate if you think decreased refueling rate and prey biomass in high ag areas are due to pesticides? Diff in vegetation components? soil type? Will you investigate these? Shelby: this is the next step, nothing at the moment
- **Shorebird migration study (Rozy Bathrick)**
    - Phd candidate, Umass Amherst
    - What shapes migratory strategy? How does it differ between species, population, flyway? Difference in risks that migrants might encounter based on different strategies
    - Studying 6 AK breeding shorebirds, deploying GPS transmitters. Tracking from 2 different locations in breeding range. Capture differences between species, populations, areas of breeding range
    - 2022 tracked SBDO from Beluga and King Salmon. Learned they had long flight over Gulf of Alaska (GOA) straight to California. They arrived at their winter site 3 weeks earlier. Different strategies: crossing the gulf vs not doing so.
    - Looked at wind conditions, found birds departing from farther west had better tail winds.
    - Can cross GOA depending on where you leave from as tailwind access varies. This can shape departure decision and speed of arrival. First chapter of this just came out!
    - Next project is LEYE. 2023-24, tracked LEYE from fort Yukon, the interior, and the farthest west point in range on AK peninsula. Most far west birds didn't use the pacific flyway! Most used midcontinent flyway, which was unexpected.
    - How does Prairie Pothole Region (PPR) act as a hub? It supports LEYE from many different areas. Huge tracking effort.

- No difference in arrival time between different breeding areas. Between 3 ranges, the birds use distinct areas of PPR as they move through, there is a lack of overlap in populations. How is the PPR subject to change and projected to change?
  - AGPL 2022, tracked from Nome and Utqiagvik, circumvented North America and went to the Amazon
  - Tracked GRYE, similar to SBDO. LBDO tracked from Kotzebue to PPR wintered in Mexico and gulf.
  - Community science night at Naknek! Bird migration in Bristol Bay.
- **Surfbird Breeding Ecology on the Steese National Conservation Area (*Sam Simon*)**
    - UAF, master student.
    - Steese Area: eastern interior. Alpine tundra
    - Huge latitudinal span in onbreeding areas. Pop estimated at 70,000 individuals, low for shorebirds. Stable though. First western scientists to find nests were 1920s, not much study since then
    - Objective: create resource selection function, predictive model for where in Steese in good habitat. Built from GPS data for this summer and next summer.
    - Create distribution map for AK, give data to migratory connectivity study
    - Habitat insights: vegetation data is from ACCS foliar layer dataset. Areas with high dryas has bird GPS points, good predictor. This dataset covers whole state.
    - Strategic science plan for Steese. Funded by BLM, we want to give them a project they can use. For example, the unregulated use of ATVs during caribou hunting season tears up the tundra. If BLM installs trails in the future we can tell them where to put them, what areas the Surfbirds aren't using.
    - We caught birds with nooselines, herding towards traps. Deployed 7 tags
    - Transmitters, leg loop harness, small. Perform well.
    - 16 fixes a day on tags, set to decrease throughout fall and nonbreeding season.
    - Questions: Mary anne bishop: where did they winter? Sam: wintered in Juneau to Vancouver along stretch of shoreline. Working on which pop goes where, is it different? Is there any connectivity?
- **Lesser Yellowlegs Habitat Use in the Midcontinent Americas Flyway (*Hannah Vincelette*)**
    - First year master UAF
    - Understanding LEYE habitat use in PPR to inform conservation action
    - 1.45 million LEYE observations in ebird
    - LEYE migrate 16,000 km from AK and CAN to Central and South America.
    - PPR is a critical stopover location. Lots of other species too
    - 60-70% wetlands lost in PPR
    - LEYE select active croplands in PPR
    - Objectives: determine critical habitat features, understand land use effects
    - Do they use habitat features as a migration stopover cue in PPR? What are these features if so?
    - Understand impacts of future land use and land cover change scenarios
      - Use eBird status and trends

- Identify areas for conservation, critical habitat for LEYE.
- **Overwintering in the East China Sea or Japan is Associated with Concerningly Low Survival in Adult *arctica* Dunlin (*Ben Lagasse*)**
  - Grad student at UAF
  - Rapid population declines along EAAF
  - Primary factor is habitat loss in the Yellow Sea
  - Dunlin that breed on North slope and winter on EAAF have low survival. But are these declines from habitat loss in yellow sea?
  - We tracked birds along the EAAF. Birds moved through AK and Russia in similar way but differed in Asia. They went different places, farther, or closer. Where a bird winters determines what its exposed to along flyway
  - By comparing survival rates between 3 diff populations, we can investigate where and why declines have occurred. Most birds wintered in the China Sea, and then an even split between the Yellow sea and Japan. Annual apparent survival: Yellow sea birds had highest survival, followed by China sea and Japan.
  - Model suggest yellow Sea birds might have been stable or slightly decreasing whereas China sea and Japan have concerningly low survival
  - In other species, declines are also linked to the Yellow Sea. So why is it different with Dunlin? Not sure yet. But those species linked to the Yellow Sea have specialized prey requirements. While dunlin are more general and widespread. Maybe more adaptable.
  - Surveys on Japan Dunlin: had steep decline 2000-2017. Birds in that area had low survival.
  - Next steps: survival studies on wintering grounds. Update survivalist (10 years old now), identify factors driving low adult survival, increase certainty and spatial resolution (1 rate for all of Japan, maybe we can update and be more specific)
  - Questions: Julie Hagelin: Dunlin in Yellow Sea are generalist, what is different about China sea and Japan then? Ben: behaving the same but conditions are different, maybe bycatch in China sea is a factor (nets for razor clams),
  - Question: what kind of habitat is used in Japan? Mud flats or agriculture? Ben: mud flats, they will also use rice patty wetlands, but most birds are on the coast.

### **12:30: Lunch and Shorebird Trivia**

### **1:30 Election of Officers**

- Chairperson: planning ASG meeting, leading executive committee, letter feedback: 2025 ASG chair is Arin Underwood
- Secretary: several nominations: Sarah Saalfeld is new secretary
- 2x Executive committee: attend EXCO meetings to plan ASG, review opinion letters
  - Courtland Brown, Hunter Wells

### **Annual Summary & Alaska Shorebird Group Website**

- **Alaska Shorebird Group Website (*Laura McDuffie*)**

- Several tabs to choose from, lists executive committee and contact, all publications, shorebirds in AK, project explorer, Past meetings and minutes
- Maybe data depository on website will not continue as it's too labor intensive, didn't hear much from people this year.
- Jim Johnson suggestion: add objective list
- New officers should send bio and pic to Zak to be added to website
- **Synopsis of annual project/initiative summaries (*Arin Underwood*)**
  - 29 projects, 8 recent publications, 1 unpublished report, 2 web documents

#### **Research Presentations cont.**

- **Human Disturbance Effects on Dunlin Nest Survival – after 4 years (*Sarah Hoepfner*)**
  - 2021-24 Utqiagvik
  - Assessed Dunlin nest survival through 3 levels of nest disturbance
  - Monitored birds to find true nest survival of birds away from human disturbance.
  - Also temp monitored nests, nest not visited after this
  - Highest level was human monitored nests: traditional monitoring, visit every 5 days
  - Results: GPS monitored nests had higher nest survival compared to other 2. Nests that are visited had lower survival, lowest was traditional survey methods
  - Remotely monitoring nests is feasible, GPS tags are expensive though.
  - Assess the impact we have on studies, can we account for biases? Minimize nest visits since there is negative effect?
  - Questions: Emily Weisner: dramatic results, important to see, thank you for sharing. Rick Lanctot: surprised that tiny tag method had an effect since it was single visit but was almost as bad as every 5 days visit. Jim Johnson: is there any bias based on background activity, people walking around even if not at nest. Sarah: some near or off plots, varied.
- **Monitoring Pribilof Rock Sandpipers on Bering Sea Islands (*Rachel Richardson*)**
  - Endemic to AK, small and restricted range, small size (20,000 birds)
  - One of smallest shorebird populations in all North America
  - Completed all surveys, starting to analyze now
  - St. Matthew Island raw counts, counted more birds in last few years, counts not adjusted for imperfect detection
  - Next steps: account for imperfect detection, estimate abundance, change in population size, identify key habitats
  - Questions: Zak P: sneak peak on why increasing? Rachel: Not really, haven't looked into it, primary food is upper cook inlet, things okay for now. Maybe no food problems in Pribilofs so far. Reindeer do trample stuff and cause disturbance though, no humans. Question 2: Is density on 2 islands the same? St Matt has highest density of 4 islands. What subspecies on St. Lawrence? Jim Johnson Q: density accounts on Pribilofs, has that changed? Would be interesting
- **Factors Affecting Success of Dorsally Mounted Tracking Devices on Shorebirds (*Emily Weiser*)**
  - Dorsally mounted tags, lots of tags from diff species and projects, migratory species representing more of world than just capture sights

- Success: if you put out a tag and get location data, that's a success. But we were more stringent and said success is when tag reaches the expected life span.
    - Success = Tag active, bird alive, data received, lasted expected lifespan
    - Factors affecting success: remote upload tags
  - First year of tag is right of first plot. Lots of failures in the first year as things aren't ironed out yet. This is all remote tags not geolocators
  - Another factor is power source. Battery vs solar. Solar had a lower risk of failure than battery
  - Data retrieval methods affected risk of failure. Deploy tag at non breeding sites, less likely to last lifespan
  - Glued on tags, variety of ways gluing on. Most complicated one, trimming feathers, material between bird and tag, these reduced risk off failure.
- **PRISM Surveys in the Arctic National Wildlife Refuge (*Rick Lanctot*)**
    - 2002-2022
    - Focusing on 1002 area of ANWR
    - Concerns: drying of tundra, pred changes, trophic mismatch
    - Oil and gas development
    - Goal: distribution and abundance of birds, pop trends, any geographic changes?
    - Select plots, select some randomly. A person is dropped off and walks around 96 min, estimates bird #s. then correct with detection ratio, extrapolate to other plots not visited
    - Most common species: AMGP, SESA, RNPH, DUNL, PESA (huge amount this year, either 2 big years in a row or species is increasing), REPH
    - Most likely oil and gas development is above blue line in maps, birds likely to be impacted
    - What is driving change, 2002-2022. More yellow than red on map despite population changes, driven by PESA numbers showing higher individuals
    - Results: significant declines for many species. Curation on PESA, RNPH and REPH, drops in numbers could be low breeding years, species are opportunistic. Other species just had poor precision
    - Questions: Katie C: declines correspond with declines in reproduction success? Rick: yes for Dunlin, declines are most likely due to nonbreeding grounds. Sarah Hoepfner work also shows breeding success might be biased low. But dunlin 1/10<sup>th</sup> number of birds seen in 2004 or so.
  - **Building an effective EAAFP partnership (*Kayla Shively*)**
    - Qupaluk on the north slope designated EAAF site.
    - Higata is EAAF sister site, also hosts lots of Dunlins
    - EAAF encourages sister sites to collaborate on monitoring, communication, education, research
    - We've been meeting with partners to build sisterhood
    - First step is info sharing, threats to shorebirds at each site. Pollution and sedimentation problems, increase in typhoons too
    - Educational exchange with schools, field trips, bilingual shorebird lesson plan

- Cultural exchange: connect with Utqiagvik festival,
- Please reach out if have suggestions! [kshively@wcs.org](mailto:kshively@wcs.org)
- Questions: Dan R: how did the sister city partnership evolve, just because of Dunlin?  
Kayla: ask Casey how sister site was formalized. Mostly dunlin connection. Ceremony and certification of sister site relationship last year. Casey was chair of EAAF partnership. Started idea. Some Native groups had qualms about subsistence being limited (not true, outreach helped with this) then concern about limiting gas, had to choose areas away from people
- **Effects of a Large-scale rodent Eradication on Migratory Shorebird Populations at Midway Atoll (Dan Ruthrauff)**
  - Following report not to be cited or distributed, in revision
  - 2 small islands, influenced by humans. Largest albatross colony, big bird refuge
  - Midway has mice. Where staff live is affected by human presence
  - Only in certain years do mice attack seabirds, mostly Laysan albatross. There's also birds in burrows, mice may be affecting those
  - Eradication efforts can have negative effects on native wildlife. Birds that forage at sea are safer though. But anyone who feeds on arthropods, like shorebirds, are affected by mouse poison
  - Shorebirds eat arthropods that consume poison and have bioaccumulated while not dying
  - Goals: estimated trends in pre and post eradication populations. What is the effect of eradication on bird survival?
  - Hand and aerial dispersed mice poison. Eradication planned for 2021 summer. Due to covid, eradication done 2023, July. Eradication failed, couldn't eradicate all mice. But learned a ton. What happens when birds come back? Can you haze them?
  - Survival estimate is coming, Lee still analyzing data. Found a bunch of dead shorebirds, AGPL

### **Informing the 2025 State Wildlife Action Plan using Alaska Shorebird Plan Objectives**

- **Overview of SWAP 2025 (Julie Hagelin, Katie Christie, Rebecca McGuire, Lauren Attanas, Terry Schick)**
  - Basis for state grant funding, federal dollars that fund TED program and partner work
  - Goal: keep species OFF endangered list, proactive research and actions to promote conservation
  - Timeline: March 2025: draft due to ADFG commissioner
  - Landbird and shorebirds being included in SWAP can help chip away at shorebird goals
  - 2025 SGCN list, broad and flexible, half are birds (194 spp)
  - Included if met any one of 4 criteria
    - Threatened or endangered, Alaska Species Ranking System (ASRS: ranks 1-4), Alaska Shorebird Plan, Alaska Landbird Plan.
  - What can we do with so little time for SWAP?
    - 8 required elements, just 3 though are public input

- Descriptions of priority research and survey efforts needed to conserve species and habitats
  - Descriptions of conservation actions
- Breakout groups, review and discuss objectives, rank if needed or say equally important. Second goal: think about, in near and longer term, in next 2-3 years, what are some actionable items (choose 1 objective), that are able to be accomplished. What can we do now to chip away at chosen objective?
- Successes of breakout groups in BPOF in 2022
  - Lightning round of brainstorming
  - 1 success is McKay's bunting and rock sandpiper survey. These were expedited because of this. Southern wings collaborations, Conserva Aves
- Can AK jump on Canada and help with Conserva Aves as well?
- **3:30 Breakout discussions for SWAP projects and goals**
  - Remember to submit your google form doc on your discussion

**5:00 Adjourn**