

Pacific Seabird Group Aleutian Tern Technical Committee Meeting  
February 14, 2023, 10-12 PST

1. INTRODUCTIONS

Attending: Robin Corcoran, Susan Oehlers, Jill Tengeres, Heather Renner, Robb Kaler, Megan Boldenow, Brie Drummond, Matt Rustand, Don Lyons, Mike Goldstein (phone line)

2. REVIEW AGENDA AND REVISE AS NEEDED

*Requested addition:* How to survey hard-to-survey areas (Kodiak, Aleutians)

*History of ALTE TC addition:* Susan gave a brief history of the ALTE TC and the knowledge gap/project prioritization list that was previously developed for ALTE; focus since its development has been on collaborative work to better understand status of the species: colony assessment, consistent monitoring methods, tagging work to look at movements and connect flyways, work to look at nest success, other work to lead toward statewide survey. Some international work (Russia, wintering range).

3. 2023 FIELD SEASON PLANS AND PRIORITIES

- a) **Statewide survey update, Robb and Susan:** A small subset of the TC has been building statewide survey plan over the last two years (through pilot efforts) and are beginning to implement the statewide survey year, beginning in SE Alaska.

*Survey design:* Trent MacDonald is providing professional services (basic habitat model, study design). Until a contract is in place, he will submit an invoice to be paid by credit card. A draft study plan and map has been sent to Susan, including habitat as a function of survey and study design. Making progress.

*Survey coordinator:* Anne Schaeffer (Prince William Sound Science Center) is our coordinator via cooperative agreement; fund request and forms moving along. Anne has not officially started yet but hopefully soon and is giving us some of her time already. **Megan and Robb will plan to tackle paperwork together after PSG (Robb to reach out to Megan).**

*Logistics progress:* Susan has been coordinating with Anne to get her integrated into planning and field season logistics. Aircraft is lined out with USFWS + Susan has been in communications with local pilots for air support (helicopter and fixed wing) for non-FS ground crew

Susan, Anne, Tania Lewis (Glacier Bay NP) working on scientific research permit, including an exemption to land helicopters in the Park Wilderness.

Working on identifying survey teams for aerial plus ground surveys (Anne + USFS staff + local Cordova and Yakutat-based folks); multiple observer teams based in multiple locations; will remove observer bias statistically.

Aerial survey crews will change between Yakutat and Cordova (removing detection bias by not having local observers survey their local area because they think they know where colonies are or aren't).

This year hope to use ground crews to get to as many of the known colonies/found colonies as possible. Might get into known colonies for monitoring in advance of aerial crew. Outer coast has accessibility issues. Strategy is to have as many options for accessing colonies as possible, to get ground counts done

as soon after aerial survey as possible.

*Additional discussion on study design:* Is study design incorporating known colonies? No; although known colonies inform how far inland we survey (habitat model component), we have not found known colonies to be informative during pilot surveys.

Last year, there were colonies in Cold Bay we missed. Would be good to have statisticians think about whether pulling in known colonies in advance/known but missed colonies during post-survey analysis could improve study design (how can this be used for detection estimate?).

Drones are allowed again (DOI has lifted the ban). Would it be valuable to have this as a back-up opportunity for “ground counts”?

*Discussion on expanding awareness:* Group would like to get some outreach going in SE around the survey effort. Use Don’s Audubon resources and Lisa Hupp (USFWS Outreach)?

- b) **Tagging work background and update, Robin and Don:** Started tagging in 2017+2018 (Yakutat, Dillingham). Tagged on Kodiak in 2019 (10 birds). Tagged in Nome in 2022 (8/10 transmitters out). Transmitters are performing well and transmitted into migration. Birds all seem to be doing approximately the same thing post-breeding (staying near the tagging site; max ~100-300 km) before heading into migration.

We have two tags available to put out in 2023, and Robin and Don wanted to discuss where they should be deployed. Logistically easier in Kodiak for Robin, or could be put out in Cordova/Copper River Delta. Overlapping tagging with surveys (SE region to be surveyed in 2023) is another way to build confidence we are detecting colonies reasonably well within the survey area. Cordova FS might be able to provide support for a dedicated tagging team, but Susan would need to follow up with Erin Cooper. Finding easily accessible colony might be an issue. Glacier Bay as an option within this region? Has one colony that can be accessed by kayak and is on the edge of the breeding area, so could be interesting. There has been some question as to whether breeding colonies might be found farther east or south. Yakutat would also be a good option. Kodiak was determined to be a safe back up option if colonies are not easily accessed in SE/if this proves too big of a lift in this region during the colony survey in 2023.

There was a question as to whether putting additional tags out would be beneficial/needed. 4-6 tags would be a good number to aim for if we can get some more funds to purchase. Tags are \$4500 each + there are data charges (\$800/mo for 4-5 months?); on federal cards we can only buy two tags within the credit card limit. Could fit into the NFWF budget as well? Mike and Robin would prefer to look for other funds.

Microwave needs to know by early March latest to produced and ship tags in time for the season. Tags would deliver right around May 1.

Is tagging/ordering new tags for SE logistically feasible given survey timeline? Tagging work usually occurs last week of May – June 12 (before peak survey period, so might help avoid resource/personnel conflict or impacts to survey). Have had the most success catching terns right before laying or right after laying.

There is a growing pool of people that know how to put on the tag/attachment (these are “outside” resources, meaning they are not involved in the SE survey this year), but it would be in the project’s best interest if a local resource were available to help with finding colonies/knowning how to access colonies/etc. Surveys starting in Cordova with USFWS Partenavia plane coming in May 30. So would need to tag earlier than this, but ALTE do seem to show up early in this region. Could tag 1-2 weeks before planned survey.

#### 4. COMMITTEE MEMBER UPDATES: ROUND ROBIN

- *EEAFP Year of the Tern update, Robb*: Raised awareness in the flyway for terns; flyway is traditionally very shorebird and wetland habitat focused. Chinese crested terns were featured at the **Biodiversity Conference** in Montreal; terns are getting a lot more attention in Asia.
- *SE Alaska annual monitoring update, Susan*: Will be monitoring in SE. Continuing to work with Wildlife Acoustics to deploy song meters at Yakutat.
- *Kodiak NWR update, Robin*: Kodiak will also be trying to get a count of ALTE colonies with the boat.
- *NFWF grants update, Robb*: \$38k from 2020 grant still available (\$174,999 from 2022 grant); requested remaining \$270k from NFWF. Robb continues to track in-kind (federal and non-federal). **We pledged amounts and need to provide letters with confirmed hours worked.**
- *Genetics sampling update, Heather et al.*: Patty Szczys is going to revisit extracting DNA from eggshell membranes and may get close to a point where she **needs input from the group: how much more sampling do we want?** One big gap is western Aleutians (esp. without Russia) but won't be able to achieve big sample size. Will get to Adak this year, so if ALTE nest, collecting samples might be doable. Anywhere on Bering Sea coast would be interesting (check to see whether NPS has anyone going into Bering Land Bridge/Cape Krusenstern?). **We need to look at five-year agreement deadline and funds left, and get break down of sample sizes from Patty.**
- *Stable isotope/diet work update*: Jill also would be interested in eggshells from Bering Sea/Aleutians/Nome to supplement her compound specific isotope work.

#### 5. COMMITTEE BUSINESS (GOALS AND OBJECTIVES) / CONSERVATION SYNTHESIS REVISIONS

- **Conservation synthesis needs some updating, and the Birds of the World account at the same time.** Jill and Don are down to help. Heather drafted in by Don. Planned update after field season.
- **Also need to update committee goals and objectives;** this was not discussed in detail. Don wants to consider the audience for this document as part of this conversation. Originally focused on NFWF? Mike says initial audience was ADF&G (for SWG funding), then focused on NFWF.
- What role will Anne have on this committee as the statewide survey coordinator? Don thought at a min. she would be a primary information source to this committee; will she be reporting statewide survey effort to the broader committee, or just to a small subset? Is someone else taking that reporting role? Hope to have her be available to report out during this annual meeting going forward.
- Question on whether anyone would be interested in stepping up as co-chair role-Jill Tengeres expressed interest after further consideration (post-meeting)

#### 6. AGENDA ADDITION:

- How to survey the Aleutians and other areas with aerial survey/ground count challenges? Working group to help think this through?

Known colonies on Attu, Adak, Unimak, Amchitka. Some may no longer be there, but no one has really been there to look and prove they are gone/not gone through a formal effort.

Another question on the table from Don: How do we combine regional estimates from differing years into a statewide estimate? Each regional estimate will have a best abundance estimate along with an estimate of uncertainty, and somehow we'll integrate/combine this into a statewide population abundance estimate. We could strategize on how to survey western Aleutians, and how this is accomplished will likely be quite different from the aerial survey. We may not be able to integrate methodology. Will need to document when islands were visited/effort at that time, whether there was an ALTE presence observed. We may not get a quantitative estimate here, but could get an upper bound. A Bayesian framework could be appealing. Known colonies in 2015 paper = our priors. Robb said there are 13 colonies in Pacific Seabird Database (Heather noted 6 on Amchitka are not there any longer, but the biggest 2015 criticism is all the places we did not look, so we need to look).

Heather noted if we want to do anything this year, while the ship will be in the western Aleutians, the Refuge needs to know what would be helpful.