

July 17, 2017

TO: BirdLife International

The Pacific Seabird Group (PSG) is writing to comment on the current IUCN status ("Least Concern") of the Aleutian Tern. We believe that current data on the population status of the Aleutian Tern is sufficient to justify the elevation of the IUCN status of this species.

One of PSG's Technical Committees is the Aleutian Tern Technical Committee, which includes agency, university, and independent scientists and managers interested in the ecology and conservation of this species. Our committee includes representatives from throughout the Aleutian Tern range, although the majority are based or working within Alaska. Collectively, the Group's members have a great deal of knowledge and experience with respect to Aleutian Terns in the Alaska region.

As you know, Aleutian Terns are a species with a limited breeding range (Russian Far East and Alaska) and a relatively small population that migrates through the East Asian-Australasian Flyway to wintering areas in Southeast Asia and Indonesia (North 2013). In general, most aspects of their life history and ecology (e.g., lifespan, migration, breeding biology, habitat associations, and foraging ecology) are only anecdotally known. Throughout Alaska, however, colony counts of Aleutian Terns at known colonies have decreased dramatically (Renner et al. 2015). The rate of decline would fulfill the IUCN criterion for "Critically Endangered" (92.9% decline over three generations [conservatively hypothesized to be approximately 33 years]; 95% CI = 83.3%–97%); however, the authors point out caveats to the data that were incorporated into the trend analysis such that more work on the species needs to be done to achieve a better estimate of trend. Alaska comprises a large part of this species' global range, but only an estimated 20% of the remaining population. If the Alaskan colony counts are representative of the species as a whole, the evidence points to a species in crisis.

While the Renner et al. (2015) analyses for Alaska are the only quantitative trend information that we are aware of, it is reasonable to question whether this trend is representative for the species as a whole. At least two alternative hypotheses to species or population level declines could be considered:

Could the decline of Aleutian terns in Alaska be due to these birds moving to Russia? We have no data for or against this hypothesis, but consider it unlikely. The geographic distance would be far greater than any typical breeding dispersal distance of other tern species. While individual colonies may shift their location by a few tens of kilometers, in extreme cases hundreds of kilometers, we are not aware of a case of more than just a few individual terns (or any other seabird species, for that matter), abandoning established breeding locations and resettling at a new location thousands of kilometers away. There is no precedence for terns to move their established breeding sites in a biased direction from such a wide geographic scale (each region within Alaska showing similar declines, Renner et al. 2015) to settle in a new area.

Could Aleutian terns in Alaska be moving to as-of-now undiscovered colonies within Alaska? New colonies do continue to be discovered. As documented in Renner et al. (2015), all the recently discovered colonies are of small size, however. Unless there are some major colonies remaining to be discovered, this mechanism is unlikely to account for the decline seen in colony counts. We would also have to postulate a biased dispersal from known to unknown colonies.

Widespread declines across a coastline as large as Alaska's suggest that declines are not strictly caused by local factors. Aleutian Terns across Alaska likely share a common migration pathway through the East Asian-Australasian Flyway, where many other species of migratory waterbirds have also experienced declines. This flyway is also shared by Aleutian Terns migrating from the Russian portion of the breeding range, so Russian breeders may also be at risk if threats exist in this region. Quantitative trend information from the colonies in the Russian Far East is lacking at this time, but from the discussion on the birdlife.org forum, we note that Christoph Zockler reports declines from several colonies in the Anadyr and Chukotka region. Because many of the Russian colonies are remote and difficult to access, long-term monitoring data will likely not be available for the majority of these colonies in the near future.

Given the declines over the Alaskan portion of the species' range (suggesting "Critically Endangered" for that subpopulation), and the paucity of trend data from Russia (indicating "Data Deficient"), PSG recommends the IUCN status of the Aleutian Tern be elevated from "Least Concern" to at least "Vulnerable". Retaining the "Least Concern" status would seem to be in conflict with the available evidence. If skepticism regarding a status elevation exists because of uncertain Russian trends, the logical alternative, in our view, would be "Data Deficient".

Thank you for your consideration.

Sincerely,

Mark Rauzon

Vice Chair for Conservation Pacific Seabird Group

North, M. R. 2013. Aleutian Tern (*Onychoprion aleuticus*), The Birds of North America (P. G. Rodewald, Ed.). Ithaca: Cornell Lab of Ornithology; Retrieved from the Birds of North America: https://birdsna.org/Species-Account/bna/species/aleter1. DOI: 10.2173/bna.291 Renner, H.M., Romano, M.D., Renner, M., Pyare, S., Goldstein, M.I. & Arthukin, Y. 2015. Assessing the breeding distribution and population trends of the Aleutian Tern *Onychoprion aleuticus*. Marine Ornithology 43: 179–187.

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