



# Archiving Historic Bird Checklists from Southwest Alaska's National Parks into eBird and Avian Knowledge Network Databases



Kelly Walton<sup>1</sup>, Tracey Gotthardt<sup>1</sup>, Jennifer Stein<sup>1</sup>, Bill Thompson<sup>2</sup>

<sup>1</sup> Alaska Natural Heritage Program, University of Alaska Anchorage, Anchorage, AK 99501; <sup>2</sup> National Park Service, Southwest Alaska Network, Anchorage, AK 99501

## eBird What are eBird and AKN?



**eBird** and the **Avian Knowledge Network** are online repositories of bird observational data managed by the Cornell Lab of Ornithology and are available to the public and researchers.

- **eBird** ([www.ebird.org](http://www.ebird.org)) is a real-time, online checklist program that targets bird observations made by recreational and professional bird watchers.
- **Avian Knowledge Network** (AKN; [www.avianknowledge.net](http://www.avianknowledge.net)) is an international initiative that organizes observational data on bird populations across the Western Hemisphere and provide tools to discover, access, and analyze these data.

## 8,704 new observations were entered for 183 species

Table 1. Summary of observations entered in eBird and AKN databases for all five SWAN park units.

Data Summary	AKN and eBird Incidental Observations
Total number of records entered	8,704 (AKN=6,032, eBird= 2,672)
Total number of species entered	183
Number of new species for the NPSpecies list	4
Number of species with status upgrade on NPSpecies list	23
Number of species of conservation concern	65
Number of reports	82
Date range of reports	1919-2004

## Most of the observations were from the 1960s to 1990s

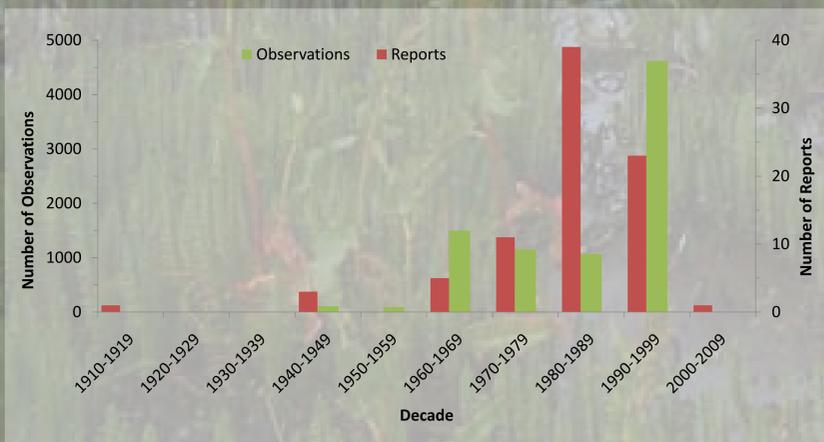


Figure 1. Histogram of number of observations and reports by decade for all five SWAN park units.

## Why enter NPS data into eBird or AKN?

The Southwest Alaska Network (SWAN) of the National Park Service has many field notebooks, ranger logs, and visitor information cards that contain historical observations of birds in its five parks. These records contain valuable information on relative distributions of birds in these large, remote parks that are largely unsurveyed. However, this information is not easily accessible and is at risk of being discarded if not properly archived.

## Objectives

1. Assemble and summarize historical bird observations recorded by park visitors and staff in five SWAN parks.
2. Upload bird observations from SWAN parks into the eBird web portal or AKN where they can be accessed by researchers and the general public.
3. Develop a user's manual for park staff and visitors to encourage them to enter bird observations into eBird.

## Many new observations occurred in areas not previously surveyed

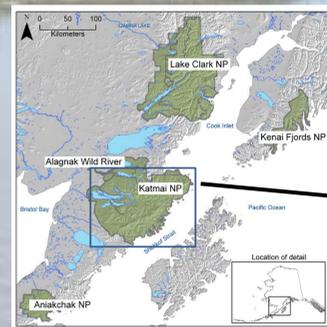


Figure 2. Map of SWAN park units.

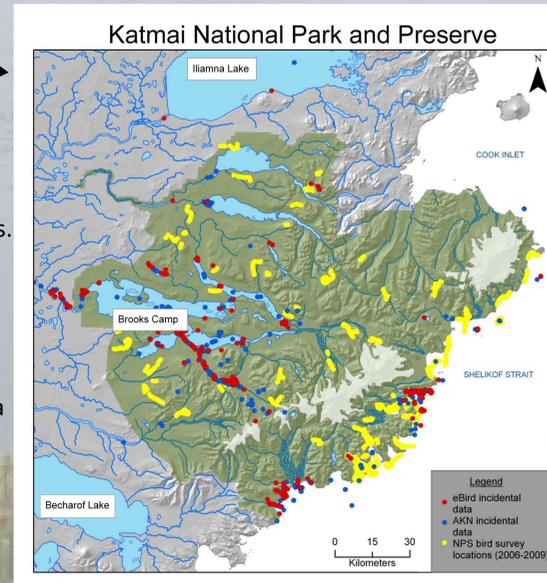
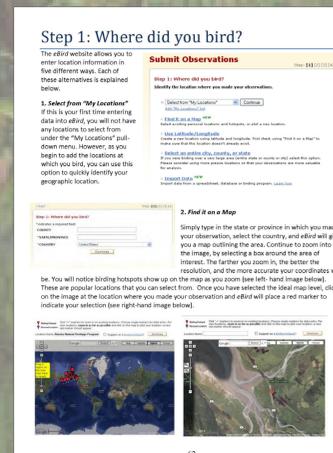


Figure 3. Map of data entered into AKN and eBird in comparison to NPS survey data for Katmai National Park and Preserve

## Created a User's Manual to guide data entry into eBird

Figure 3. To make data entry into eBird even easier, we created a user's manual explaining each step of the process.



## Methods

- Observational data primarily comprised of bird checklists from established field camps and ranger trip logs
- Information gathered from files at SWAN park offices and from network staff
- Data Entry
  - eBird is not designed to handle spatial and temporal uncertainty
  - If the observation contained an exact date and the geographic location could be assigned within 2 km, then the observation was entered into eBird.
  - Observations entered into AKN that could not be entered into eBird
- Compared the newly entered observations to bird checklists (NPSpecies) from individual SWAN parks to identify if species were known to occur within the park
- Noted species of conservation concern as defined by Audubon Alaska, Partners in Flight, Alaska Shorebird Group, Boreal Partners in Flight, Alaska Department of Fish and Game, or U.S. Fish and Wildlife Service.

## New information for NPS bird checklists

Table 2. List of bird species by park whose status was upgraded to "present" based on documentation from this project.

Species	Previous Status
<b>Alagnak Wild River</b>	
Hudsonian Godwit	Probably present
<b>Aniakchak National Monument and Preserve</b>	
Pacific Loon	Probably present
Short-tailed Shearwater	Probably present
<b>Katmai National Park and Preserve</b>	
Semipalmated Sandpiper	Undocumented
Red Phalarope	Undocumented
Boreal Owl	Probably present
Hairy Woodpecker	Probably present
Black-backed Woodpecker	Probably present
Cliff Swallow	Probably present
Eastern Yellow Wagtail	Probably present
<b>Lake Clark National Park and Preserve</b>	
Red-tailed Hawk	Probably present
Red Phalarope	Undocumented
Glaucous Gull	Probably present
Parasitic Jaeger	Probably present
Parakeet Auklet	Unconfirmed
Rhinoceros Auklet	Probably present
Willow Flycatcher	Undocumented
<b>Kenai Fjords National Park</b>	
Surf Scoter	Encroaching
White-winged Scoter	Encroaching
Black Scoter	Encroaching
Common Loon	Encroaching
Yellow-billed Loon	Encroaching
Northern Fulmar	Encroaching
Sooty Shearwater	Encroaching
Long-tailed Jaeger	Encroaching
Cassin's Auklet	Encroaching
Rhinoceros Auklet	Encroaching