

Edwards Air Force Base
Sensitive Avian Species Inventory
Citizen Science Plan, Bird Blitz

The formal surveys taking place in the Sensitive Avian Species Inventory project on Edwards Air Force Base require thorough coverage of an area resulting in a comprehensive list of observed bird species. However, many birds are in constant movement during each survey and a single biologist walking or driving a route guarantees that the area will be covered linearly. Though the route and surveying techniques are designed to optimize detection of the target species in their areas of highest potential at their times of highest activity, it is still impossible for the surveying biologist to be everywhere at once. This is particularly significant for the large and complex survey areas like the Piute Ponds. A “birding blitz” uses a group of experienced volunteers, divided up and given sectors to survey simultaneously. The resulting combined list represents the nearest approximation to a complete bird inventory of an area.

Methods and Procedures:

Data collection

All bird species and numbers of each are to be collected by each team in each survey sector. Note is to be made if birds are observed moving from one sector to another to avoid double counting (this may only be an issue for large birds flying over or flocks of birds moving between sectors). The results for each sector are to be compiled in eBird checklists (preferably one for each sector, but multiple may be needed for sectors that span county lines).

Survey areas

The Piute Ponds complex (including the south end of Rosamond Lake) can be divided into the following survey sectors:

1. Duckbill Lake, Windy Waters, Pintail Flats, and flooded areas to the north and west of the C-Dike and Duckbill Lake
2. Big Piute and flooded areas south
3. Little Piute, Shuttle Pond, Coot Chute, Mattquetty Marsh
4. Clod Creek, Goose Sluice, Thoreau Ponds, San Miguel Lagoon
5. Teal Pond, North Ducks Unlimited Pond, Friends Pond, McKee Slough
6. Rosamond Lake

Target species

Though all observed bird species are to be recorded during each visit, special note is to be made if any of the project target species are observed. Those species are: Cinnamon Teal, Redhead, American Bittern, Least Bittern, White-faced Ibis, Northern Harrier, Black Rail, Snowy Plover, Forster's Tern, Short-eared Owl, Willow Flycatcher, Bell's Vireo, Yellow-billed Cuckoo, Tricolored Blackbird, and Yellow-headed Blackbird. These species are among those for which occurrence in the area is historic, hypothetical, irregular, local, and/or threatened.

If any of the target species or threat species to the target species is observed, the following information should be collected and included in the species notes of the eBird checklist:

1. Position (location within survey area, *e.g.* GPS coordinate or described location)
2. Description of occurrence
 - a. Habitat usage (*e.g.* open water, mud flat, reed line, tamarisks)
 - b. Behavior (*e.g.* foraging, displaying, nest-building, flying, sleeping, *etc.*). Breeding information to be added to the eBird checklist as breeding codes.
3. Confirmed or potential threats (*e.g.* Common Ravens present near nesting site or adult seen feeding a Brown-headed Cowbird chick)

Survey visit timing

Surveys of each sector are to begin simultaneously at or near dawn and continue until finished. Complete coverage of a sector should take approximately 3-4 hours.

The bird blitz can be implemented at the Piute Ponds complex (including Rosamond Lake) in mid-August at the peak of southbound shorebird migration and again in January when large numbers of wintering waterfowl are present and the ponds are flooded out into the desert and lakebed.

Survey methods

Areas will be covered on foot and by car as feasible with the intent of maximum and thorough coverage of the sector. Binoculars are standard pieces of equipment and knowledge of bird vocalizations is ideal. A spotting scope will be required for coverage of open water at the Piute Ponds. Notes describing the survey route and basic conditions should be taken and can be included in the comments in the eBird checklist.

Broadcast recordings to elicit response are to be used sparingly and only when necessary (and according to USFWS protocols for applicable species) and not in the immediate presence of threat species or in other situations that may needlessly endanger the target birds.

Data collection

As mentioned above, all data is to be compiled within eBird checklists and shared with the Edwards Air Force Base eBird account (EdwardsAFB). The complete results of a bird blitz will be the sum of all birds observed in each sector for each survey area.