



Birds

Importance

Hundreds of species of birds occur in the American Southwest, as do some of the best birdwatching opportunities. Birds are a highly visible component of many ecosystems. They are considered good indicators of ecosystem health because they can respond quickly to changes in resource conditions. Monitoring changes in bird population and community parameters can be an important component of any comprehensive, long-term monitoring program. Monitoring birds is especially critical given population declines for some species in recent decades, especially neotropical migratory birds.

Status and Trends

Amistad National Recreation Area (NRA) and its surroundings are in a transitional zone between eastern, western, northern, and southern avifaunas. More than 200 species of birds have been recorded at the recreation area, with many of them observed during migration. Birds have been the subject of a number of monitoring and surveying efforts at the park, and the Chihuahuan Desert Network (CHDN) Inventory and Monitoring (I&M) Program will begin annual landbird monitoring at Amistad NRA in 2010.

Of 161 bird species recorded during an early study (1976) of the birds of Amistad, Passeriformes (e.g., the vermilion flycatcher [*Pyrocephalus rubinus*] and cliff swallow [*Petrochelidon pyrrhonota*]) comprised the majority of the list, followed by Anseriformes (e.g., green-winged teal [*Anas carolinensis*] and buffelhead [*Bucephala albeola*]), Falconiformes (e.g., osprey [*Pandion haliaetus*] and Cooper's hawk [*Accipiter cooperi*]), and Charadriiformes (e.g., killdeer [*Charadrius vociferus*] and least sandpiper [*Erolia minutilla*]).

A relatively high number of individuals and species were captured (with mist nets) during a five-year (1998-2002) monitoring project of breeding birds at Amistad NRA. The species caught in the highest numbers were Bewick's wren (*Thryomanes bewickii*), common ground dove (*Columbina passerina*), Northern cardinal (*Cardinalis cardinalis*), olive sparrow (*Arremonops rufivirgatus*), painted bunting (*Passerina ciris*), and yellow-breasted chat (*Icteria virens*). Two new breeding species were recorded for the recreation area at that time—the Cooper's hawk and yellow-billed cuckoo (*Coccyzus americanus*).

RESOURCE BRIEF



NPS PHOTO

Interior least tern

The many migratory species documented at Amistad NRA include the clay-colored sparrow (*Spizella pallida*), ruby-throated hummingbird (*Archilochus colubris*), American redstart (*Setophaga ruticilla*), yellow warbler (*Dendroica petechia*), orange-crowned warbler (*Vermivora celata*), Nashville warbler (*Vermivora ruficapilla*), black-and-white warbler (*Mniotilta varia*), worm-eating warbler (*Helmitheros vermivorus*), winter wren (*Troglodytes troglodytes*), least flycatcher (*Empidonax minimus*), indigo bunting (*Passerina cyanea*), and Swainson's thrush (*Catharus ustulatus*).

The federally-listed interior least tern (*Sterna antillarum athalassos*), which uses islands in the reservoir from late April to August, has been known to breed at the reservoir since 1988. Surveys for the species have been conducted at the NRA every year since 1985. Four other state-listed species may also occur at Amistad—the bald eagle (*Haliaeetus leucocephalus*), brown pelican (*Pelecanus occidentalis*), peregrine falcon (*Falco peregrinus anatum*), and white-faced ibis (*Plegadis chihi*). The first three of the four species were also federally-listed until relatively recently (2007, 2009, and 1999, respectively).

Discussion

Annual landbird monitoring at Amistad NRA (beginning in 2010) will provide data to estimate species occupancy, richness and composition, and density (when feasible). This information will build on the surveys and studies that have already provided information on birds in the area. Previous work has shown that the riparian habitat along the Rio Grande is of high significance for avian species, probably serving as a refuge during drought events.

