

**ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM**

Animal Abstract

Element Code: ABPAE33043

Data Sensitivity: Yes

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Empidonax traillii extimus*
COMMON NAME: Southwestern Willow Flycatcher; Traill's Flycatcher
SYNONYMS: *Empidonax traillii*
FAMILY: Tyrannidae

AUTHOR, PLACE OF PUBLICATION:

TYPE LOCALITY: Dudleyville (formerly Feldman) on the lower San Pedro River.

TYPE SPECIMEN: May 30, 1940. G. Monson (A.R. Phillips collection # 707, Phillips 1948).

TAXONOMIC UNIQUENESS: Eleven species of *Empidonax* in North America, 6 breed in Arizona. *E.t. extimus* one of 4 subspecies of *E. traillii* recognized in North America. *E.t. traillii* and *E. alnorum* once considered the same species, the Traill's flycatcher (*E. traillii*). Some sources consider *E. traillii* and *E. alnorum*, and all their subspecies, to constitute a superspecies, the "*traillii* complex." Two species separable by song type, habitat use, structure and placement of nests, ecological separation, and genetic differentiation.

DESCRIPTION: *E.t. extimus* is a medium-sized bird approximately 15.0 cm (5.75 inches) long, including tail. Body brownish-olive to grayish-green on upper parts with pale olive breast, pale yellow belly, and whitish throat, and two white wing bars. Eye ring may be faint or absent. Bill relatively large with upper mandible dark and lower mandible usually entirely yellow or pale orange, often with a small dusky tip. Both sexes alike. Species best identified by vocalizations (see "Aids to Identification" below).

AIDS TO IDENTIFICATION: *E. traillii* and *E. alnorum* have almost identical appearances but can be distinguished by voice, range, and habitat. Typical call of *E. traillii* is a repeated "whitt." Typical call of *E. alnorum* is a sharp note transcribed as either "pip", "peek", or "bic." Song of *E. traillii* is a sneezy "fitz-bew" or "fitzi-bew" with accent on first syllable, while that of *E. alnorum* is a falling, buzzing "fee-beo" with an emphasis on the second syllable. Another distinguishing feature of *E. traillii* is the tail, which is wide compared to most *Empidonax*, especially at junction with body (Stallcup 1992). *E.t. extimus* tends to be paler in coloration than other subspecies, but dark individuals have been observed at higher elevations in eastern Arizona.

ILLUSTRATIONS: Color drawing (Scott 1987:291)

Color drawing (Peterson 1990:239)

Color photo (www.sweetwater.org)

Color photos (<http://fresc.fsl.orst.edu>)

Color photo (www.usgs.nav.edu)

Photo and map of distribution (<http://biology.usgs.gov>)

Photo and map of distribution (Sedgwick, 2000)

TOTAL RANGE: Known from southern Nevada, southern Utah, southern California, Arizona, New Mexico, western Texas, and possibly southwestern Colorado. Breeding birds from southwestern Colorado show great individual variation and are intermediate between *E.t. extimus* and *E.t. brewsteri*. *E. traillii* is a neotropical migrant and most likely winters in Mexico, Central America, and perhaps northern South America.

RANGE WITHIN ARIZONA: Breeds locally along Colorado River in Grand Canyon near mouth of Little Colorado River, and south of Yuma; at Little Colorado River headwaters near Greer and Eagar; very locally along the middle Gila, Salt, and Verde rivers; middle to lower San Pedro River; and upper San Francisco River near Alpine.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: *E.t. extimus* arrives on breeding territory by late April to early May and migrates southward again in August and September. Nest is compact cup built of shredded bark, cattail tufts, and grasses and is lined with fine grasses and feathers. Preferred nesting habitat is mature *Populus fremontii*/*Salix goodingii* forests along still or slow moving watercourses at the lower elevations. Also found in *Tamarix pentandra* thickets (Suckling et al. 1992). At higher elevations some are found in pure willow stands (*Salix* spp.). Brown-headed cowbird parasitizes nest by laying an egg in flycatcher's nest. Cowbird eggs hatch sooner and often out-compete the host young. As a result, flycatcher nest parasitized by cowbirds usually produces only cowbirds. Breeding colonies usually about 1.5 acres. Densities about 9-14 pairs per 100 acres.

REPRODUCTION: Males sing repeatedly from exposed perches while on breeding grounds, occasionally during migration. Breeding birds often heavily affected by brood-parasitism by brown-headed cowbirds. Clutch of 3 or 4 eggs laid from May through July. Incubation lasts 12-13 days and nestlings fledge after 12-14 days. Usually 1 brood per year but have been known to raise 2. Young tended by both parents. Leave nest at 12-15 days.

FOOD HABITS: *E.t. extimus* is insectivorous, collecting flying insects by sallying (flying out short distances from perch) and, to a lesser extent, hovering and gleaning. Also eat few berries and seeds.

HABITAT: Riparian obligate. Prefers dense canopy cover, a large volume of foliage, and surface water during midsummer. Appears to avoid riparian areas found in steep, closed canyons.

ELEVATION: Found in Arizona at elevations ranging from 75 - 9,180 feet (23–2798 m).

PLANT COMMUNITY: Willow-cottonwood thickets, tall dense tamarisk (*Tamarix pentandra*), Russian olive (*Eleagnus angustifolia*) and riparian associates.

POPULATION TRENDS: Extreme population reductions noted range wide since 1800's because of habitat loss, though quantitative data are lacking. In the 1993 statewide survey, 23-27 paired males detected. In 1991 and 1992, Grand Canyon flycatchers, using patches dominated by tamarisk and varying in size from 0.08 hectare (0.2 acre), to 0.32 ha (0.8 acre), to 0.63 ha (1.5 ac), declined from 11 pairs in 1986 to present number of 4-5 singing males (3-4 pairs) (Tibbitts and Sogge 1993).

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: Critical Habitat (USDI, FWS 2005)
[Critical Habitat Set Aside 2001 (in USDI, FWS 2002)]
[Critical Habitat (USDI, FWS 1997)]
LE (USDI, FWS 1995)
[PE USDI, FWS 1994]
[C1 USDI, FWS 1991]
[C2 USDI, FWS 1989]

STATE STATUS: WSC (AGFD, WSCA in prep)
[State Endangered AGFD, TNW 1988]

OTHER STATUS: Group 2 (NNDFW, NESL 2001, 2005)
Forest Service Sensitive, Apache-Sitgreaves (USDA, FS 2000)

MANAGEMENT FACTORS: Very threatened throughout range. Riparian habitat loss and fragmentation and brood-parasitism by brown-headed cowbird are two major causes for willow flycatcher decline. Other factors include diversion of water, draining of wetlands, channelization and levying of streambeds, construction of canals, drains and impoundments, livestock grazing, off-road vehicles, and the cutting of woodlands. Possible factors include predation and invasion of riparian habitat by exotic tamarisk.

PROTECTIVE MEASURES TAKEN: Critical Habitat designated in 1997, identifying 18 critical habitat units totaling 964 river km in Arizona, California, and New Mexico.

SUGGESTED PROJECTS: Protection of willow-cottonwood thickets, and restoration where such habitats have already been destroyed, along rivers and streams at middle and lower elevations. An intensive on-going, state-wide survey of known and possible breeding sites, and study of the relationship between the willow flycatcher and the brown-headed cowbird will be done in 1994. Create a standard survey technique that can be used to detect breeding southwestern willow flycatchers.

LAND MANAGEMENT/OWNERSHIP: BIA – Colorado River, Havasupai, and Hualapai Reservations, and Navajo Nation; BLM – Arizona Strip, Tucson, Safford, and Yuma Field Offices; BOR – Phoenix Area; NPS – Glen Canyon National Recreation Area and Grand Canyon National Park; USFS – Apache-Sitgreaves and Tonto National Forests; USFWS – Cibola, Havasu, and Imperial National Wildlife Refuges; State Land Department; Alamo Lake State Park; Picacho State Recreation Area; AGFD – Alamo Wildlife Area and Mitty Lake; City of Kearny; TNC – Bingham Cienega and Hassayampa River Preserves, and Cascabel Community Management Area; Private.

SOURCES OF FURTHER INFORMATION

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ADDITIONAL INFORMATION:

Field workers should be aware that the subspecies *brewsteri* is often present in *extimus* range during migration.

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