

WILPLIFE NOTES

Southwestern willow flycatcher

The southwestern willow flycatcher (*Empidonax traillii extimus*) is indeed a 'rare bird' in every sense of the word. On March 29, 1995, it was listed by the Federal Government as an Endangered Species under the Endangered Species Act of 1973. It is also state listed by New Mexico. The U. S. Fish and Wildlife Service is still gathering data before official designation of Critical Habitat can be made.

Although it's endangered, the southwestern willow flycatcher isn't often identified by birdwatchers. Why isn't it as widely known or viewed as the whooping crane or Kirtland warbler? Most likely it's because this drab, plain little bird is scarcely distinguishable in the field from its close relatives. Only its song and habitat preference set it apart.

Then why do we worry about its continued existence? Because this species is a prime, critical indicator of the health of Southwestern riparian ecosystems (*riparian* meaning waterside vegetation, such as willow thickets). It depends on these lush locales for successful breeding. By working to preserve this small, unassuming bird, the proverbial 'canary in the coal mine', we aid efforts to conserve our remaining riparian ecosystems.

EXISTING POPULATIONS

Southwestern willow flycatchers breed primarily from southern California, eastward through Arizona and New Mexico, and north to southern Utah. A census taken in the late 1980s indicated only 300-500 breeding pairs remained in the United States. In New Mexico, they're found primarily in the Rio Grande and Gila Valleys, with lesser numbers in the Chama, Zuni, and San Francisco River drainages. In 1995, New Mexico population figures projected less than 200 remaining pairs.

PESCRIPTION

The southwestern willow flycatcher is a subspecies of one of the 10 North American flycatcher species in the genus *Empidonax*. This small bird (5.75 inches long) shares its coloration with four related subspecies. All five willow flycatchers have white eye-rings, but that of the Southwestern willow flycatcher is often indistinct. All five have olive-brown upperparts with two white wing bars, white throat, pale olive breast, and light yellowish belly. Both sexes look alike. Its song, which denotes the male's breeding territory, is a burry, trilling *fitz-bew* or *feech-a-bew*. Another vocalization is *whit* or *weet*, a contact call between sexes which also doubles as an alarm. This species is an efficient insect eater — an important fact for humans to bear in mind, particularly in areas thick with mosquitoes. It feeds while on the wing and also gleans insects off foliage.

NESTING

This flycatcher prefers to nest in mixed stands of willow, cottonwood, box-elder, and ash, but it will use tamarisk (salt cedar) and Russian olive where native vegetation has been lost. It specifically seeks dense thickets with lush foliage and a broad canopy cover.

Surface water, saturated soil, or a nearby stream is a definite



requirement for a nest site. Nests typically are built in a fork of small branches, from 3-45 feet off the ground, in a medium-sized bush or small tree. Nesting materials vary widely but all are soft: grasses and feathers, moss and lichen, catkins, spider webs, bracken. The nests themselves are small, untidy cups about three inches wide and three inches high, not counting the dangling material at the bottom.

BREEDING

The southwestern willow flycatcher is a late spring/early summer breeder. By mid-May it's finally onsite and singing, heartily and frequently, from territories chosen by the males. Females settle into territories already occupied by males. Males sing most often — sometimes up to 30 times a minute — in late May and early June, typically from the highest point in their territory. They build their nests and lay eggs from late May well into June. Clutch size is 1-4 eggs with the average being 2.25, and typically only one brood per year is produced. Flycatcher eggs are buffy white with brownish speckles concentrated at

the larger end. Eggs are laid at one day intervals and incubated by the female for 12-15 days. Males sing far less frequently once the eggs hatch. Youngsters fledge about 13 days after hatching.

COWBIRD PARASITISM

As with many other bird species today, the southwestern willow flycatcher is increasingly beleaguered by the brown-headed cowbird 'parasit-

izing' its nests. The cowbird does not build its own nest or care for young. Instead, it lays its eggs in the nests of other birds. As young cowbirds hatch, they're larger and faster-growing than the birds they 'parasitize,' causing the smaller nestlings to starve or be pushed from the nest by overcrowding. Usually only the cowbird survives. Cowbird parasitism is on the increase as willow thicket habitat is fragmented due to livestock grazing or other human intervention.

MIGRATION

Southwestern willow flycatchers leave their New Mexico breeding territories in mid-August. They are classified as neotropical migrants, meaning they fly great distances to Mexico, Central, and northern South America during our winter. Migration routes and specific wintering areas are not well known. This bird doesn't sing during migration, and, without its characteristic song, it's almost impossible to distinguish.

THREATS FOR THE FUTURE

Various human activities, such as water diversion, groundwater pump-

ing, heavy recreational use of riparian areas, grazing, flood control, wood-cutting, and vegetation clearing, have altered or destroyed about 90 percent of this bird's former habitat. In addition, such activities have facilitated an increase in cowbirds and the spread of tamarisk (salt cedar). Loss of native riparian vegetation has lowered the water table and, with its deep root system, tamarisk thrives where water has been reduced or lost. Cattle won't eat tamarisk; however, they eagerly feed on willow and cottonwood seedlings. Tamarisk does not provide thermal protection for birds as broadleaf species do. As tamarisk has spread, southwestern willow flycatchers have decreased. Protection and restoration of riparian habitats is critical to conserving and preserving breeding Southwestern willow flycatchers in New Mexico and throughout its Southwestern range.

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