Southwestern Willow Flycatcher

(Empidonax traillii extimus)—Endangered

Description

Willow flycatchersaresmall(6" tall)birdswithgreyish-green backsand wings, whitish throats, light grey-green breasts and pale vellowish bellies. They have two white barson each wing and usually lack the white evering of similar smallgreen flycatchers. At extremely close distances, willow flycatchersrevealabillwhichis blackonthetop(uppermandible) and completely yellow on the bottom(lowermandible). Willow flycatchersaresosimilarin appearance to other flycatchers of the Empidonax genus, that the best way to distinguish them is by their song-asneezy "fitz-bew" or "fitz-a-bew."

Distribution and Habitat

Twosubspecies of willow flycatchers breed in Utah and a third may occur during spring and fall migration. These subspecies cannot be distinguished in the field and may interbreed in portions of the state. However, southwestern willow flycatchers are generally considered to breed



Photocourtesy of Renee Netter.

in southern Utah in the Mojave, Utah Mountains and Colorado Plateauecoregions. The other subspecies(*Et.adastus*)breeds in western and northern Utah. **The current distribution of the** southwesternsubspeciesisnot wellknown in Utah. Recent surveyshaveconfirmedonlytwo nestingsites(one on the Virgin River, the other near Fish Lake), thoughsuitablehabitathasbeen locatedalongseveralstreamsand riversincluding the Virgin River and its tributaries, Kanab Creek, Paria River, and the Colorado RiversystemincludingtheSan Juan. Escalante and Green Rivers. Locations with historic records for thissubspecies include Virgin and Santa Clara Rivers, Beaver Dam Wash,KanabCreek,SanJuan **Riverand southern portions of the** Colorado River. Additional records from the Moabarea and the Green River indicate that the subspecies may extend into the BookCliffsof northeasternUtah.

Thewillowflycatchernests exclusively instreamside shrubs and trees (i.e., riparian habitat), nestingsites are usually characterized by a combination of willows, cottonwoods, and box elders. In somelocationswherenonnative plantshaveinvaded, these flycatchersmaynestintamarisk andRussianolivedominated habitats. Breeding habitats usually consist of thick, relatively wide stands of riparian vegetation over 10 feet tall. Standing water is often present below or near the nest site. The flycatchers for age extensively in riparian habitats and occasionally feed over open water or in adjacent upland habitats. Their diet consists of a wide variety of flying insects and insect larvaesuchascaterpillarsand beetlegrubs.

The wintering grounds of willow flycatchers are not well known,

but they probably winter in western Mexico and western Central America. Winter habitat characteristics are not known.

Life History

Willow flycatchersare relatively late nesters in Utah. They arrive on the breeding grounds in late May and usually start nesting in early June. The female buildsa small,compact cup nest made of dried weeds, leaves, grasses, bark, and lined with feathers, hair, and plant down. After laying 3-4 eggs. the female incubates for 12-13 days. Eggshatch in mid to late Juneand both parents tend the nestlings; nestlings fledge in 12-14 days(late June to early July). Youngandadultsmaystayin the nestingarea until August or early September beforestarting their southerly migration. Willow flycatcherswinterinthesubtropics, most likely in western Mexico and the Central American isthmus. Duringtheirfallandspring migrations, willowflycatchers oftentravelatnightinflocks mixedwithflycatchersandother songbirds.

Threats and Reasons for Decline

Southwestern willow flycatcher populationshavedeclinedover the last 50 years and there are currently only around 500 breedingpairsremaining. The primary reason for decline is the loss and alteration of riparian habitat in the southwestern U.S. Additional factorsinthedeclineinclude parasitism by cowbirds. Cowbirds have expanded their range into all of the western states and are experiencingarapidpopulation increase. Cowbirds remove eggs fromflycatchernests(andnestsof many other birds), replacing them with their own eggs, leaving the

host flycatcherstoraisecowbird young Cowbird nestlingsgrow morerapidly than flycatchers and out compete the flycatcher nestlings for food brought to the nest by the flycatcher adults Nests that are parasitized by cowbirds rarely produce any flycatcher fledglings

Lossof riparian habitat continues to be a major threat to willow flycatchers(and a large diversity of riparian-nesting birds). Riparian habitat is altered or destroyed by urban development, flooding of reservoirs, road construction, overgrazing, conversion to agriculture, invasion of nonnative plants, and some recreational activities. Cowbird parasitism is also a threat in some areas where largenumbers of cowbirds congregate near riparian areas.

Recovery Efforts

A recovery plan has not yet been written for the southwestern willow flycatcher. However, a team of Utah biologists has been formedtowriteamanagement plan which can be used until a recovery plan is in place. In addition, surveys have been conducted in several parts of the statetolocatewillowflycatchers and suitable nesting habitat. Once nest sites are located they can receiveprotectionfromharmful activities. Both genetic and vocalization research is being conductedtodeterminethe distribution of Willow Flycatcher subspecies in Utah. Because of the importance of riparian habitat toa widevariety of wildlifespecies, riparian conservation and restorationprogramshavebeeninitiated in several parts of the state. These efforts will help to preserve and enhancenesting habitat for willow flycatchers.

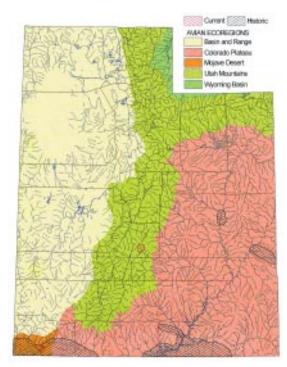
How You Can Help

Several groups are engaged in riparian restoration and conservation as well as clean-ups. You can takepart by contributing time or money to these efforts. These groupsare often looking for volunteerstohelpplant riparian trees and shrubs. You can contact your local Utah Division of Wildlife Resources office and ask if they know of any projects in your area.

Willow flycatchersareextremely difficult to identify and can only reliably be distinguished by voice. But, if you are certain you've heard a willow flycatcher in **riparian habitat in June or July**, contact your local Utah Division of Wildlife Resources office to report it.

Where To Learn More

There are a few published books or articles dealing specifically with flycatchers. Check bookstores and libraries for general books and audio tapes on birds and songbirds(see reference provided). Also look for books on riparian birds and riparian restoration or management. Other educational materials such as videotapesandCDROMsare availablethroughspecialty (nature)bookstoresand(wild) birdshops. Websites can be foundbysearchingforthe keywords"Willow Flycatchers," "Empidonaxflycatchers,""flycatchers," and "riparian birds."



Probable historical Southwestern Willow Flycatcher distribution.

For More Information

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Southwestern Willow Flycatcher nest photo courtesy of Renee Netter.

References

- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The Birder's Handbook. Simon and Schuster, Inc., New York, N.Y.
- Harris, J.H. 1991. Effects of brood parasitism by brown-headed cowbirdson willow flycatcher nesting successalong the Kern River, California. West. Birds 22:13-26.
- McCabe, R. A. 1991. The little green bird: ecology of the Willow Flycatcher. Palmer Publications, Inc. Amherst, Wisc.
- McDonald, K. P., L. C. Peterson, and M. St. Germain. 1997. Results of 1996surveys for southwestern willow flycatchers in the upper Virgin River drainage and southern Utah. Publ. No. 97-3. Utah Division of Wildlife Resources, Cedar City, Utah.
- Sogge, M. K., R. M. Marshall, S. J. Sferra, and T. J. Tibbitts. 1997. A Southwestern willow flycatchernatural history summary and survey protocol. Tech Rep.97/12 USDI National Park Service, Northern Arizona University Colorado Plateau Research Station, Flagstaff, Ariz.
- Tibbitts, T. J., M.K. Sogge, and S. J. Sferra. 1994. A survey protocol forsouthwestern willow flycatcher (*Empidonaxtrailliiextimus*). Tech. Rep. 94/04. USDINational Park Service, Northern Arizona University Colorado Plateau Research Station, Flagstaff, Ariz.
- Toone, R. A. 1991. General inventory for southwestern willow flycatchers on the Fish Lake National Forest, Utah. 1991 Cooperative Challenge Cost Share Project. Utah Department of Natural Resources, Salt Lake City, Utah.
- Unitt, P. 1987. *Empidonax traillii extimus* An endangered subspecies. Western Birds.18(3):137-162.
- U.S. Fish and Wildlife Service. 1995. Endangered and threatened wildlife and plants final rule determining endangered status for the southwestern willow flycatcher. Federal Register 60:10694-10715 (February 27, 1995).
- Utah Division of Wildlife Resources 1997. Southwestern Willow Flycatcher Occurrence and Habitat in the Escalante River, Kanab Creek, and Paria River Drainages in 1997. Publ. No. 97-12. Utah Division of Wildlife Resources, Cedar City, Utah.



Southwestern WillowFlycatcher habitat photocourtesyof ReneeNetter: