



**UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ENDANGERED SPECIES PROGRAM**

TELEPHONIC INTERVIEW (Time 7:55)

SOUTHWESTERN WILLOW FLYCATCHER (HOST SARAH LEON WITH GREG BEATTY)

This transcript was produced from audio provided by FWS Endangered Species Program

P R O C E E D I N G S

(Music plays.)

MS. LEON: Hello, there. This is Sarah Leon for the U.S. Fish and Wildlife Service and I'm on the phone today with Greg Beatty, Wildlife Biologist at the Arizona Ecological Services Field Office in Phoenix. Now, Greg, what can you tell us about the southwestern willow flycatcher?

MR. BEATTY: Well, the southwestern willow flycatcher is the sub-species of the willow flycatcher and it nests in six southwestern states: Southern California, Arizona, New Mexico, Southern Nevada, Southern Utah and Southern Colorado. It had nested in the past in Southwestern Texas, but we haven't found it there for a long time. The flycatcher's in a group of birds that are called neotropical migrants and that's because they travel down to Central and northern South America for about half the year, from October to April, places like Costa Rica, Nicaragua.

That's one of the amazing things about flycatchers is these little five inch birds that travel so far every single year. And I think as far as a flycatcher goes, one of the things that it's really attached to is its unique habitat that it uses. It requires abundant riparian or riverside vegetation that grows in broad, flat flood plains. And I think one of the other neat things about the flycatcher, but it's difficult, is that they're a bird that's difficult to see and identify because they do exist in dense vegetation and they don't have the typical colorful markings that some other birds have, like a duck, that makes it easy to distinguish.

So what it does have, though, is a unique call. It's described as a sneezy "fitz-bew," and that's how it's most commonly detected is through its call.

MS. LEON: All right. And, Greg, why is this species in trouble now?

MR. BEATTY: Well, like most species, it's primarily due to the impacts to their habitat. Now, it's no mystery that in the arid southwest, river flow and river water has been altered dramatically through damming, groundwater pumping, river diversion, storage, levees, et cetera, and this changes the distribution of water in rivers and flood plains, it changes groundwater elevation, soil composition and the frequency timing magnitude and duration of river flow. These changes impact the ability of vegetation to grow as species of trees that are able to flourish. So, in some respects, it's a fairly simple concept.

More trees grow with more water. But there's some ways in which rivers have been altered that may not appear significant on the surface, but they can have a big impact. For example, someone who drives across a bridge over the Colorado River below Hoover Dam might see an immense amount of water flowing and wonder, "What's the problem?" But the dams that control that river alters the movement of soils, which reduces the ability of the flood plains and the aquifers to maintain higher groundwater elevations and/or create seed beds for trees.

Similarly, certain species of trees, like cottonwood and willows, that flycatchers use disperse seeds that are timed with late winter or early spring floods, and when the dams prevent the river flowing during that time, help change the species of trees that grow along rivers. So these changes to our rivers really affect their habitat and there are other additional stressors that have more direct impacts to vegetation abundance or quality, and those are things like ungulate grazing or recreation road development and vehicle use. So all of these alter the habitat for the flycatcher.

MS. LEON: All right, Greg. And you mentioned earlier that the flycatchers actually depend on a certain type of habitat, but that area has actually been taken over by non-native vegetation, trees and plants like Russian olives and the Saltcedar. How do these non-native plants compare to native vegetation in terms of habitat for the flycatcher?

MR. BEATTY: Well, I think people might be kind of surprised to hear that the USGS conducted a fairly extensive comparative study on the productivity of flycatchers using Saltcedar or tamarisk versus native habitats, the bird's long-term survival between these two habitats, their physiological condition from examining blood samples and their diet. And the eventual conclusion was the flycatchers are doing just fine using suitable tamarisk nesting habitat. There really wasn't any significant difference between those two habitats.

They were able to take advantage of those plant structure and do just well versus somewhat fortunate. There are other riparian plants out there that flycatchers wouldn't use just because the structure of that tree is not suitable for them. But just like not all

native riparian habitat is flycatcher nesting habitat. Not all tamarisk isn't suitable condition for nesting flycatchers either. There still needs to be those moisture and plant density qualities to the habitats. So in general, water is still really the key to support suitability of either native or tamarisk or mixtures of those plant species for nesting.

MS. LEON: I understand that there's also right now a large effort to remove Saltcedar. How is this going to affect recovery?

MR. BEATTY: That's a really difficult question. There's really an incredible amount of misinformation about Saltcedar and its effects to the environment and wildlife and why it persists. It's come to a point now where journal articles are being written about the application of the science. I've seen two articles just recently and they have almost complete opposite points of view. One said that removing the plant can save the water for the city of Las Vegas.

And another from University of Arizona's Agricultural Department described that the science's contribution to land and water management is at issue here and that University of Arizona, Arizona State University, USGS and other agencies, including the Arizona and Utah Department of Water Resources have argued that the environmental benefits of tamarisk outweigh the arguments to eradicate it. So science has basically refuted the long-held beliefs about Saltcedar effects on wildlife and the environment.

Getting that message to people is difficult because kind of as you suggested, the mantra for so long has been we need to remove this plant. There's nothing good about Saltcedar. Remove it at all costs. And the science has really showed us that the issue is not as black and white as it has been previously portrayed. In Arizona and New Mexico, here where tamarisk is particularly prevalent, the reasons for its flourishing isn't because it's simply an exotic plant on this continent, it's because of the way land and water is managed. Saltcedar is symptomatic of those changes.

Even if you remove tamarisk on many streams, native tree species would not thrive in those places and could not grow. It's because we've changed the conditions in which those plants grow to understand the amount of habitat that the flycatcher is using that's tamarisk-oriented, over 50 percent of the sites used by nesting flycatchers have a Saltcedar component to it. So removing Saltcedar without understanding whether the landscape can support native vegetation can result in degrading habitat conditions for flycatchers and other animals.

MS. LEON: Thank you so much, Greg, for taking the time to speak with us.

MR. BEATTY: Yeah, you're very welcome.

MS. LEON: For the U.S. Fish and Wildlife Service, this is Sarah Leon. Thanks for listening.