An Environmental Paradox

The Southwestern Willow Flycatcher and Me

by David Ogilvie, Rancher

U Bar Ranch is a commercial ranching and farming operation in southwestern New Mexico along the Gila River. The ranch can be considered an environmental paradox because the largest known and most successful population of Southwestern Willow Flycatchers is found on the private land that we graze and farm.

Seldom a day goes by that one does not read in some publication or hear over some broadcast media of the endangerment of this species. Most environmental groups, with few exceptions, are calling for the removal of all livestock along riparian or riverine systems as the solution. The accusation is that livestock grazing (cattle in particular) have led the Flycatcher to the brink of extinction.

Federal Register Targets Livestock

One would only have to go to the listing of the Proposed Rules in the Federal Register of July 23, 1993 to find extensive references to the so-called negative influence caused by agriculture or livestock grazing. The many factors listed by the publication include destruction and overuse by livestock, cowbird parasitism, modification to the habitat resulting in invastions of exotic tamarisk or other non-native species, water diversion and impoundment, channelization of rivers and so on. In reading the listing, one finds that agriculture (specifically, cattle grazing) is identified as the cause of the demise of this song bird. If one was to believe all the information regarding this species' endangered status, you would immediately assume that the factors cited in the Register would have been scientifically studied, based, and supported. But, are they?

U Bar Ranch's involvement with the Flycatcher began with the Federal Register's listing because it referenced the Gila River. A total of 643 miles of stream and river were proposed as habitat, including the entire Gila River system.

Population Survey

U Bar Ranch's concern was that we knew very little about the Southwestern Willow Flycatcher and wanted information regarding its status on the private land we lease. In response to our concerns, a population survey of the birds inhabiting the U Bar was undertaken in May 1994 by qualified biologists using an established U.S. Fish & Wildlife Service protocol. The population survey continued through June and ended in July 1994, showing a high population of 64 pairs. It should be noted that, in

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1997, the second largest population known was located on the Kern River in California, with 38 pairs. U Bar Ranch's population in 1994 was almost twice that.

Another interesting observation during the initial 1994 survey year was that the nesting habitats of preference on U Bar were not young dense stands of Willow and Cottonwood as identified, but flood plain forest patches comprised mostly of Box Elder, older mature Cottonwood and Willow, and introduced Russian Olive trees. These trees are more commonly found protected from the river in secondary stringers located along old earthen irrigation ditches. Even more interesting was that cowbird parasitism was not commonly observed.

Population surveys have been conducted every year since 1994. The 1995 survey ended with 107 pairs, the 1996 survey with 138 pairs, the 1997 survey with 174 pairs, and the current 1998 survey with 186 pairs. Keep in mind that the next highest population is 38 pairs where there is no livestock. Coincidentally, with the increase of Flycatchers came a corresponding increase in farm ground U Bar Ranch put under irrigation. In 1995, U Bar Ranch returned approximately 300 acres of fallow farm ground to irrigation production, with an additional 280 acres being returned to production in 1996.

Research Expanded

With these interesting departures from the best available scientific information, it was felt that there was a need to expand the scope of the research. In April 1997, the Rocky Mountain Research Station of the U.S. Forest Service, headed by Dr. Scott Stoleson, was asked to be involved along with Dr. Dale Zimmerman, Professor Emeritus, Western New Mexico University, a respected ornithologist, and Dr. Roland Shook, also of Western New Mexico University. Credibility of the research was of prime consideration, and the issue of credibility could be addressed with the cooperation of these other parties.

Specific objectives in the expanded research included evaluating the population densities of all breeding bird species in habitat patches occupied by Willow Flycatchers, evaluating reproductive success of Willow Flycatchers, quantifying nest site characteristics of Willow Flycatchers, and quantifying the floristic and landscape-level characteristics of occupied habitat.

With this expansion of the research, many interesting and significant observations have been made. Although the habitat found on U Bar Ranch is not typically touted as Southwestern Willow Flycatcher habitat, it appears to optimal for the species. Nesting success is higher than in any other known population with the lowest parasitism by cowbirds found anywhere. The nest placement with regard to nest height and vegetation of preference are significantly different from what the established science has been suggesting. Some nests heights exceed 70 feet above ground. All of these situations have occurred with high densities of livestock. It is important to note that, while the regulating agencies are steadfast in adhering to regulations that call for the removal of all livestock from riparian areas, the science that supports those claims is not being substantiated.

No Flycatchers Without Livestock

The only long-term scientific study of Southwestern Willow Flycatchers in conjunction with livestock has been on the U Bar Ranch. The identification of entire river systems in the Southwest as potential

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habitat (643 miles), including the Gila River system, was probably unwarranted. Extensive survey work has been done on the Gila River in the Gila National Forest and no Flycatchers have been found to exist in the narrow canyon bottoms in the absence of livestock, even with excellent vegetative characteristics. Present areas with wide flood plains and older more diverse stands of flood plain forests seem to be preferred. These situations are most commonly found on private land (not public lands) used for farming or ranching.

Livestock management in riparian areas warrants special considerations. The study on U Bar Ranch demonstrates that livestock grazing can be compatible and even complimentary to sustaining some habitats. One reason that the older more diverse flood plain forest patches exist in the Gila/Cliff Valley is due in part to grazing. Historically, grazing has reduced fire fuels and has provided protection from fire. Earthen farming ditches have promoted the establishment of a variety of tree species and are critical to sustaining the Flycatcher habitat. Earthen levees have allowed the flood plain forest patches to attain maturity.

Flexible Management

U Bar Ranch's livestock management, in association with the occupied habitat, has always been flexible, with some of the pastures being grazed strictly in the dormant season, while others are used in a rest/rotation system in direct association with nesting bird activity. Most farming activities in close proximity to nesting bird habitats are minimized during the active nesting season. On U Bar Ranch, the Flycatcher population is stable and increasing even with this variety of management.

Of great concern to U Bar Ranch is the flooding activity that has occurred along the Gila River. The flooding damage is endangering occupied Flycatcher habitat. We are interested in participating in projects that protect older known habitats and encourage new habitat growth. An example of this involves a completed restoration project on the Gila National Forest with which U Bar Ranch is involved as a permittee. The techniques used to restore a flood damaged section of the river were not commonly accepted. They involved redirecting the river away from exposed vertical soil banks with gravel berms and exposing the water table below the berms to enable planting of native riparian vegetation in backwater marshes to create a vegetative barrier. The berms protected and allowed the vegetative plantings time to establish. After two or three growing seasons, they have been very successful in stabilizing the river banks. Cattle are also managed to foster the recovery of the vegetative plantings.

This project was started in June 1995, with additional work in 1996. Population survey work was completed in 1998 in the Gila Bird Area (the location of the project) and 8 pairs of Willow Flycatchers were found nesting where none had ever been recorded. This same area had also been extensively surveyed in previous years, starting in the 1950s, with no recorded Flycatcher sightings.

We are discouraged about the lack of support from the agencies in charge of adminstering such restoration activities. There are other sites in need of restoration in the Cliff/Gila Valley, but it has been very difficult to obtain cooperation and approval from the agencies. It is hard to understand why such agencies ignore their mandate to protect and foster populations of an endangered species with proven practices, while forcing the elimination of a valid compatible use, livestock grazing.

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