
Riparian areas critical for migratory birds, other wildlife in the Great Basin

The Great Basin, the entire area of drainage between the Rocky and Sierra Nevada mountain ranges, contains the largest of the four United States deserts. It encompasses about 200,000 square miles of Nevada and seven other States.

“In the Great Basin, riparian areas represent an oasis of biodiversity within a vast sea of arid uplands,” says Josiane Bonneau of the Wildlife Habitat Council (WHC).

Bonneau and other WHC staffers made an assessment of the wildlife and habitat found in the Great Basin, including threats to the riparian ecosystem that supports many of them.

“These riparian areas are essential habitat for bird species of the arid and semiarid west, including upland birds, waders, shorebirds, raptors, and passerines,” Bonneau says. “Nearly all species of birds in the Great Basin depend on wetland or riparian habitats during some phase of their life cycle.”

According to one estimate, more than half of the 134 species that breed regularly in the Great Basin are associated with riparian areas.

The majority of bird species found in Great Basin riparian areas are not year-round residents, but rather summer residents, winter residents, or migrants.

Because of their water and plant availability, riparian areas provide important stopping points for neotropical migratory birds passing through the desert.

The destruction of riparian areas is viewed as the most important factor in the decline of western land bird species.

Perhaps more than any other group, amphibians are dependent on riparian areas because they require slow moving or standing water in which to lay

their eggs. While little data are available on the effects of riparian habitat loss on amphibian populations in the Great Basin, conservationists are concerned because as a class, amphibians may be the most threatened group of animals worldwide and are useful as indicator species of aquatic health.

As part of the assessment, the WHC developed *Riparian Areas of the Great Basin: A Management Guide for Landowners*. The publication analyzes threats to riparian habitats and wildlife in the Great Basin and offers guidelines for landowners to restore degraded riparian areas.

Those guidelines include assessing current land and water conditions, including ground cover, then using best management practices to correct problems found in the assessment.

Establishing a riparian buffer is a central component of any riparian restoration project. A healthy riparian buffer protects the stream from influxes of pollution and sediment and protects upland areas by managing stream flow during floods. Plants are critical for stream stabilization and provide food and shelter for wildlife.

The guide offers a good overview of the value of riparian areas to wildlife and the dangers of habitat loss and points out management practices that lead to long-term protection of the areas, according to Charlie Rewa, a biologist with the U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) in Beltsville, Maryland. Funding for the overview was provided by the NRCS Agricultural Wildlife Conservation Center (AWCC).

The AWCC, located in Madison, Mississippi, is a fish and wildlife technology development center.



NRCS photo by Ron Nichols

Riparian area in arid Great Basin

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