## This Rancher is 'All in' When it Comes to Wildlife

ituated amidst a magnificent convergence of two deserts, miles of open grasslands, and the dramatic, forested mountain ranges of the Sky Island Region of southeastern Arizona, the Cienega Ranch provides incredibly diverse habitat for a wide range of species, both flora and fauna. With an estimated 4,000 plant species, untold number of invertebrates including approximately 500 species of bees alone, and almost 500 species of vertebrates, the Sky Island region remains one of the most biologically diverse semi-arid ecoregions in all of North America, despite 10,000 years of documented human history, including four centuries of Euro-American exploitation. Because they often exist as small populations on the edge of their geographic ranges and in isolated mountain ranges, an unusually high proportion of Sky Island species are rare, endemic and many are considered imperiled.

In conjunction with a commercial cow-calf operation, rancher Josiah Austin has spent more than 30 years conserving, expanding and improving the Cienega Ranch in support of wildlife. He believes strongly in a working landscape where livestock coexist with endemic wildlife species. To that end, he has strategically used conservation easements as a means of not only protecting large parcels of land from fragmentation and further development, but also to generate proceeds from the easements for restoration projects and to acquire additional contiguous land parcels to expand the ranch's overall footprint and provide greater connectivity for wildlife, both local and migratory.

To date, two conservation easements totaling more than 19,000 acres have already been completed on the Cienega Ranch, both held by NMLC. The landowner is currently working with The Trust for Public Land and NMLC, along with U.S. Natural Resources Conservation Service (NRCS) and other partners on a third easement that will protect more than 7,000 acres – and Josiah hopes there will be a fourth easement in his future, as well.

Over the years, Josiah has successfully reintroduced threatened or endangered species on the ranch including the Chiricahua leopard

frog and the Yaqui and Gila topminnows, all the while improving the condition of the grasslands deemed of "special environmental significance" by NRCS, which provide essential habitat for an abundance of grassland birds. He continues to talk with Arizona Game & Fish about the prospect of reintroducing other species such as pronghorn, prairie dogs and black-footed ferrets on the property.

Josiah's commitment to conservation and restoration doesn't stop there. He plants agaves to help fortify the few species of nectar-feeding bats that feed almost exclusively from the plant's night-blooming flowers. He has added numerous water pipelines throughout the property, and most recently, he installed 45 additional "tire drinkers" made from retired mining truck tires, 12 feet across, halved, each half weighing 5,000 pounds, laid sideways on poured foundations, with rust-resistant concrete ramps extending down into the water to allow critters a way out of the pool should they accidently fall in. Javelina, birds, even bear and a host of others take advantage of the precious man-made watering holes.

Any new fencing installed on the ranch includes a barbless bottom wire raised a full 18 inches above ground to allow easier clearance for animals such as pronghorn to pass under; a top wire no higher than 42 inches allows creatures such as mule deer to more readily leap over the fence.

The importance of protecting this expanse of unique habitat and other adjacent "sky islands" in the Southwest cannot be overstated. Private landowners like Josiah Austin are critical to ensuring that the incredibly diverse

wildlife found in this arid region of the Southwest endures. # Dog in the drinker.



FACTOID: Tequila is made from agave plants, but many commercial distilleries now cut down the plants before they flower, creating a shortage of nectar for bats that depend on this food source.

Planting agaves for nectar-feeding bats.

FACTOID: Despite common reference, the pronghorn is not a species of antelope. It is the only species with its genus (Antilocapra) and is the last surviving vestige of a family of even-toed.

hoofed animals dating back

to the Pleistocene epoch in North America.



Adding water pipeline on the ranch.

A bird fest at the new desert "bird bath."

FACTOID: These "tire drinkers" are made from retired

mining truck tires – 12 feet across, and halved, each half weighing 5,000 pounds. They are laid sideways on poured foundations; rust-resistant concrete ramps

are added for wildlife to successfully get out of the pool

should they fall in.



Lesser long-nose bat, drinking nectar from the agave flower.

