Owl research is a HOOT

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Mountaineer staff

Stacey Hollis, a biological field technician from the University of Arizona, was on post June 25-30 to conduct a study on burrowing owls downrange.

Hollis is traveling to several military installations in the western states to study migrations and shifting populations of burrowing owls. According to Hollis, there have been decreases in populations of northern owls and she is trying to determine if burrowing owls from northern states are migrating south and staying there.

Hollis was assisted by U.S. Fish and Wildlife Service technicians Tracy Perfors, Krystal Phillips and Nina Nedrow, and Innovar biological science technician Rick Clawges, all of whom work with the Directorate of Environmental Compliance and Management.

Since burrowing owls use abandoned prairie dog tunnels to nest in, the biologists went downrange each night before dark to scope out prairie dog colonies for owl activity.

Once owls were spotted flying around an area, the biologists checked out nearby prairie dog holes for signs that owls were using them. The presence of droppings (whitewash), food such as bugs left by adults for the nesting babies to eat and other decorative items surrounding the outside of a hole were good indications owls were inside.

Two-way traps made from wire and burlap were placed over any potential burrows, allowing the owls to be captured without being harmed. Spring traps were also placed near burrows that used a caged gerbil to lure adults hunting for food. When an adult tries to grab the gerbil, it triggers the trap, capturing the owl and leaving the gerbil unharmed.

After placing traps in one area, the biologists traveled to another prairie dog colony to look for other owls and set more traps. They returned to the original area after about an hour to check for any captured owls.

Hollis took any captured owls back to her vehicle to weigh them, measure their wings and legs and determine their age. She also took blood and feather samples and banded them with an identification ring. The blood samples are used to determine if the genes of northern owls are present in southern birds. Isotope studies performed on the feathers determine where the bird was from.

Most of the baby owls found were about 25 days old and almost fully grown.

Each owl was gently returned to its burrow after Hollis collected data and the biologists moved on to check the traps they set in another area.

Hollis has been working on this study for two years. After visiting Fort Carson, she spent a week at the Army's chemical depot in Pueblo where she caught 12 owls in one night.

Left: *Stacey Hollis, University of Arizona biological field technician, uses a Global Positioning System unit to mark the location of a two-way trap that she placed on a prairie dog tunnel that she thinks contains burrowing owls.*

Rick Clawges, Innovar biological science technician working for Directorate of Environmental Compliance and Management, weighs a young burrowing owl.

Left: *Rick Clawges, Innovar biologist working for the DECAM, left, and Stacey Hollis, set up a spring trap to try to catch some burrowing owls.*

Stacey Hollis, University of Arizona, measures the wing on a 25-day-old burrowing owl that was trapped for a study. The hood shown is placed over the owl's head to keep it calm while Hollis measures the wings, takes feather and blood samples and weighs the owl.

A burrowing owl is placed back into its burrow after measurements have been taken, samples collected and it has been tagged.

Photo illustration by Julie M. Lucas

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