

## Base participates in burrowing owl study

by Airman Samantha S. DeVries 366th Fighter Wing Public Affairs Office

7/25/2007 - **MOUNTAIN HOME AIR FORCE BASE**, **Idaho** -- As dusk settles in, the owl moves closer for the attack. The mouse, sitting safely in a small cage, begins circling, trying to find a place to hide.

As the owl tries to remove its prize, the trap is sprung, and a net covers the scene. Soon after, researchers move in to do their job.

Through a grant given to the University of Arizona, The Department of Defense selected Mountain Home, along with 29 other military bases in the western U.S., Canada and Mexico, to receive funds for an ongoing research study of burrowing owls.

"The overarching goal is to find out why the number of burrowing owls is decreasing and how many are out there," said Carl Rudeen, 366th Civil Engineer Squadron environmental flight wildlife biologist.



MOUNTAIN HOME AIR FORCE BASE, Idaho -- Stacey Hollis, a biological technician from the University of Arizona, removes a burrowing owl from a trap here May 4. In its third year, Mountain Home was selected along with 29 other military installations to take part in a research study on burrowing owls. As their range and numbers decrease, researchers are taking an active role to better understand what is happening to the diminishing species. (U.S. Air Force photo/Carl Rudeen)

Burrowing owls are identified as a candidate species -- which may warrant official listing as threatened or endangered -- by the U.S. Fish and Wildlife Service with many states considering them a "species of special concern." They are considered endangered in Canada.

As their range and numbers decrease, researchers are taking an active role to figure out what's happening and what can be done to help, explained Mr. Rudeen. While the DOD-funded research has been ongoing for two years, this will be Mountain Home's first year participating in the program.

Researchers from the university have visited the base three times this year to help capture the owls and train members of the environmental flight research and bird handling procedures according to Mr. Rudeen. Before handling owls, researchers must have a permit from both state and federal governments.

After capturing an owl, researchers place a band supplied by the U.S. Geological Survey around its leg. Each band contains a unique number that can be entered into a database to view its information or add more. The band also contains a phone number to call if the bird is found dead or the person has questions. The database provides information about migration, lifespan and breeding among other things. When researchers find a bird with a band, they can pull up the information to see where it is from.

"If that bird turns up anywhere else, we'll find out about it," said Mr. Rudeen.

Blood samples are also collected from the birds to shed light on other topics concerning parentage and how closely related the owls are to those in other states.

Feather samples can show where the owl grew its feathers using isotope signatures. When an owl grows its feathers, it takes up the nutrients from the area it is in. Those nutrients have a specific isotope signature which can be found in the feathers and traced back to where the nutrients originated from.

General information like wing span, tarsal measurements, weight and if the bird is nesting is also collected along with photographs of the birds.

"I'm really excited to be part of this program," he said. "So far this year, we've captured 98 burrowing owls on the base. There is a very high concentration of owls here, so we handle more owls here than most places."

Burrowing owls inhabit prairie lands in the Western Hemisphere and live in holes abandoned by other animals. Unlike other owls, burrowing owls are active during the day, but are seen more frequently at dusk or dawn as they hunt for food.

The owls here mainly live on the golf course, by the horse stables and around the airfield according to Mr. Rudeen. Gunfighters who find the birds should not interfere with their daily life. People here should take care while driving near bird nesting areas to avoid hitting the owls.

"Drivers have struck and killed three burrowing owls along Bomber Street in the past few weeks" said Angelia Binder, 366th Civil Engineer Squadron. "The same pair of owls returns to the same nest every year to raise a new family, and killing one of them by accident disrupts the natural instincts of their surviving brood."

As researchers continue their work in hopes of saving the diminishing species, others can help by leaving the birds alone, said Mr. Rudeen. Now in its third year, the project will continue on in hopes of achieving its goal to find answers.

For more information or to report a dead bird, call Mr. Rudeen at 828-1785.