

Scientists watch over burrowing owls

By Anna King, Tri-City Herald staff writer, This story was published Tuesday, February 24th, 2004

The swallows may return to Capistrano, but it's burrowing owls that migrate back to the Tri-Cities.

Soon the pint-sized birds will arrive to claim their summer homes, and scientists are preparing to welcome the owls back to their modest dirt burrows in the shrub steppe.

"We are gearing up for another big research season next week," said Courtney Conway, a research biologist for the U.S. Geological Survey.

Next week a biologist working for Conway's study will begin surveying known owl burrows in the Tri-Cities to find out what is most important for raising successful broods of owlets, he said.

Curiously, some of the owls stay all year.

"We found quite a few of them over-wintering even though there was quite a bit of snow," Conway said. "Even though there was snow, they seemed to be able to clear a path to their burrows."

There were about 25, mostly male birds that stayed in the Mid-Columbia, and all of those had a healthy food supply, he added.

"Food is king for these owls. They are trying to eke out a living in the sagebrush, and anywhere there is a higher abundance of insects or animals they are going to do better," Conway said.

The scientists also found a surprise in Pasco this winter.

"Two juveniles were over-wintering with their parents, and that doesn't usually happen," he said.

More owls were found in the Tri-Cities at grain transfer stations or near railroad operations. Conway said spilled grain usually means more rodents, and more rodents means more owls.

Biologists this year first will check to see if the burrows still can be used. Then they will record when owls return to each burrow.

The small birds prefer to live in underground burrows dug and abandoned by animals like ground squirrels and badgers.

Each year in the Tri-Cities many burrows are destroyed. Sometimes the holes collapse or are taken over by another animal, but mostly the destruction of burrows is caused by humans, Conway said.

"The destruction of burrows has been a lot higher in the Tri-Cities than the rest of Central Washington," he said. "The percentage of burrows that are getting destroyed are much greater in the Tri-Cities than in the Moses Lake or Othello area. That's of course because of the rapid growth."

About 20 percent of the burrows were destroyed last year, he said.

"In Moses Lake there was only about 5 percent destruction," Conway said.

The owls are listed as a federal bird of concern by the U.S. Fish and Wildlife Service and could be placed on the federal or state endangered species list if their numbers continue to dwindle.

Usually males return first and prepare their abodes to attract a female. Then the female chooses her residence, and the pair will start nesting.

In about mid-March or early May, the females start to lay clutches of eight to 12 eggs. Each egg is the size of a half dollar.

Owls sometimes mate for life, or at least stay monogamous for a year at a time, Conway said.

"Males don't breed with more than one female per year. As long as the couples produce young, they don't have a high divorce rate," he said, laughing.

The female sits on the eggs in her nest 10 feet underground, while the male protects and feeds her.

"She rarely sees the light of day," Conway said.

And because she sits in the dark, the female's feathers are usually darker than those of her sun-bleached mate.

Using a video probe, the scientists can check on the female and count her eggs.

The owls have a high mortality rate. Usually only about four baby owls survive to independence. Often the owlets are hit by cars because they like to hunt for insects on roads during the night. The owlets are rather defenseless little birds. Their only scare tactic for predators is a rattlesnake-like hissing they make if they feel threatened, or a quick dive back into their burrow.

Later during the summer, the scientists will band adult and juvenile birds to track how many owls there are, how long they live and if they return to the Tri-Cities.

Exactly where the owls go during the winter remains a mystery, Conway said. But they think the owls could live anywhere from Eastern Oregon to southern Texas and California.