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Outdoors Report Ray Sasser

Parasites are prime suspects in quail decline

Research finds that worms are infesting birds at record levels

esearch funded by the Rolling Plains Quail UResearch Foundation have brought parasites under scrutiny as a potential cause for the troubling decline of bobwhite quail in West Texas.

Texas quail have declined an estimated 2.8 percent annually for the last 40 years. The Texas Parks and Wildlife Department's 2011 Rolling Plains quail census was the lowest on record for the region. The census was begun in 1978.

The problem, said Dale

Rollins, Texas AgriLife Wildlife Specialist and director of the Rolling Plains Quail Research Ranch, could be parasitic worms in the eyes and intestines of bobwhite quail. A \$2 million research project is far from being complete, but it's already uncovered quail parasites in record high levels.

"We're not saying parasites are the smoking gun behind the quail decline," Rollins said, "but they are a suspect worthy of greater scrutiny."

Dubbed Operation Idiopathic Decline, eight different research projects are being tackled by Texas Tech, Texas A&M and the Caesar Kleberg Wildlife Research Institute. In

the first comprehensive look at quail disease since the 1920s, scientists took blood and tissue samples from nearly 600 quail and sacrificed a smaller number for complete necropsies.

"About half of the quail we've examined had eve worms," Rollins said. "The average is five worms per bird. The most we've found in one bird's eyes was 53 worms. Basically, all the birds have the cecal worms, and some are harboring more than 400 such worms.

"When you've got as many potential enemies as a quail has, any impairment of your vision is a handicap."

Rollins said eye worms in

Texas quail were detected as far back as the early 1960s, but current studies suggest they have become more severe. Eye worms and cecal worms are both nematodes, he said. The cecal worms may affect a bird's digestive system.

Rick Snipes of Aspermont is president of the foundation's board of directors and owns a Stonewall County ranch groomed for quail hunting. Excellent habitat has not saved the quail on Snipes' ranch.

"These findings are highly disturbing to me and will be to any quail hunter," he said. "Our ranch is managed solely for the benefit of bobwhites, yet we have not shot a bird in two vears, except for research."

Snipes said a red grouse study in Scotland indicated that birds harboring high numbers of cecal worms were more likely to be killed by predators.

"West Texas is the Alamo of bobwhite conservation, and quail hunters are committed to seeking a solution to the quail decline," Snipes said.

Rollins said phase two of the research will test alternatives for attacking parasites. Future projects will focus on ecology of the parasites themselves.

At the January TPWD regulations meeting, Robert Perez, the state's quail program leader, told commissioners that the quail decline was thought to be

caused by habitat fragmentation, habitat change, long-term drought and unknown factors. Quail proponents had sought to shorten what is the nation's longest quail season and reduce the 15-bird daily bag limit.

Commissioners instead postponed any season or baglimit changes until the August meeting, when quail counts may determine what kind of nesting season the birds had. In Snipes' experience, latesummer counts are not necessarily an accurate barometer.

He said his ranch enjoyed perfect weather in 2010 and birds were abundant in July. By September, he said, the quail were gone.