

New strides in bobwhite quail management on the horizon

The bobwhite quail is an iconic symbol of the Great Plains, and Oklahoma has long been known as home to some of the best quail hunting and quail habitat in the nation. But the species is currently in a state of unexplained gradual decline across its range. While Oklahoma remains one of the strongest holdouts of bobwhite quail populations and habitat, wildlife professionals are proactively launching an extensive effort to understand and address what could be a number of contributors to the downward trend in quail populations.

“Quail are dependent on weather and habitat, but there are other issues out there,” said Alan Peoples, chief of wildlife for the Oklahoma Department of Wildlife Conservation.

The downward trend in bobwhite quail populations rangewide has been gradual since the 1960s. The number of quail hunters has declined as well — from 111,000 in 1986 down to 30,000 hunters last year.

Quail decline has been attributed to a number of causes, and there is no shortage of theories blaming everything from diseases and food contamination to habitat loss, fragmentation and predation. But Wildlife Department officials say the issues need to be studied from all angles.

Studies conducted from 1991 to 2000 on the Packsaddle Wildlife Management Areas in northwest Oklahoma yielded some helpful information, such as predation rates and mortality causes of quail fitted with radio tracking devices. But according to Doug Schoeling, upland game bird biologist for the Wildlife Department, an upcoming upland game bird initiative will provide extensive information on a range of matters that could lead to improvements in quail and quail habitat management.

At its March meeting, the Oklahoma Wildlife Conservation Commission heard a presentation from Schoeling on plans for the comprehensive initiative underway to investigate the issues affecting bobwhite quail and other upland birds like the lesser prairie chicken.

As part of the initiative, the Wildlife Department is working with Texas Parks and Wildlife as well Texas A&M and Texas Tech universities on a project called Operation Idiopathic Decline. The role of Wildlife Department biologists will include trapping quail in the fall and sending them to Texas Tech, where extensive research will commence in the areas of disease, parasitism, herbicides, insecticides and other issues.

“We’re also going to work with Oklahoma State University,” Schoeling said. “We’re going to create a long-term, well-designed telemetry study that’s going to look at the dynamics of reproduction, recruitment and the movements of quail.”

The study, which will focus on Packsaddle and Beaver River WMAs, also will examine the effects of predation and hunting on quail.

Schoeling said researchers will study the amounts and lethal affects of aflatoxins in various seeds distributed in wildlife feeders as well as levels present in wild food sources like ragweed, sunflowers and others.

Additionally, researchers will use weather stations on the two WMAs to intensively monitor and collect information on localized weather events. By fitting quail with radio tracking devices, biologists can track their movements in response to weather changes, and they can also look at how weather patterns affect vegetation used by quail.

Intensive quail habitat management also will be applied on Packsaddle and Beaver River WMAs such as strip disking, patch burning and regulated grazing. Quail populations will be closely monitored before and after the application of these management efforts, and their response carefully documented. Additionally, the relationship between the weather, habitat and intensive management efforts will be studied as a whole as they pertain to quail success.

After results are measured, biologists will prioritize the most beneficial efforts for quail and work with landowners to encourage those practices on private land, which makes up the majority of land in the state.

The Wildlife Department also will be working to improve methods for monitoring quail populations on a yearly basis.

“Ground nesting birds and all non-migratory birds are hard to monitor, anyway, so we’re going to look and see if we can find a new and better way to monitor those annual fluctuations in the quail population so we can better inform the hunters out there on an annual basis,” Schoeling said.

Research facilities at Packsaddle and Beaver River WMAs may also be developed to provide on-site research facilities. Other efforts may include field days to showcase quail response to habitat work and involvement of landowners and hunters in monitoring quail populations.

Schoeling also included in his presentation a rundown of efforts underway in management of another important upland bird — the lesser prairie chicken. Along with tracking populations during the spring, the Wildlife Department is searching for new ways to monitor the birds through expanded surveys and aerial studies. Additionally, the Department will be exploring the use of telemetry studies, long-term research to discover the effects of energy development on bird populations, and studies to determine the return on efforts to improve habitat.

The Wildlife Department has developed a voluntary offset program with OG&E to fund lesser prairie chicken habitat restoration, expanded WMAs in important habitat and worked with partners to develop a lesser prairie chicken spatial planning tool to help energy companies avoid development in prime habitat. Partnerships with private landowners, conservation organizations and other state and federal wildlife agencies are benefiting lesser prairie chickens. Additionally, the Department is working to develop the Candidate Conservation Agreement with Assurances. This agreement will offer protection

to landowners who follow prescribed management practices on their property to support lesser prairie chickens in the event the bird is added to the Endangered Species list

Wildlife Department to launch intensive quail population research to address decline. Gradual downward trends in bobwhite quail populations have been attributed to a number of culprits, but officials with the Oklahoma Department of Wildlife Conservation say challenges facing the species need to be addressed intensively through a comprehensive research effort.

At its March meeting, the Oklahoma Wildlife Conservation Commission heard a presentation from Doug Schoeling, upland game bird biologist for the Oklahoma Department of Wildlife Conservation, on plans for a comprehensive upland game bird initiative to investigate the issues affecting bobwhite quail and other upland birds like the lesser prairie chicken.

As part of the initiative, the Wildlife Department will be working with Texas Parks and Wildlife, Texas A&M, Texas Tech and Oklahoma State universities on extensive research projects in the areas of disease, parasitism, herbicides, insecticides and in the development of a long-term, well-designed telemetry study to explore the dynamics of reproduction, recruitment and the movements of quail.

According to Schoeling, everything from diseases and food contamination to habitat loss, fragmentation, predation, habitat responses to weather and management efforts will be studied extensively.

“We are going to look at things like aflatoxins, coccidiosis, West Nile virus, and all of the other ‘black box’ diseases,” Schoeling said. “But we will always have weather running in the background.”

Intensive quail management efforts also will be applied on Packsaddle and Beaver River Wildlife Management Areas in northwest Oklahoma, and quail populations will be closely monitored and documented. The efforts that prove the most beneficial for quail will be prioritized, and biologists will work with landowners to encourage those practices on private land, which makes up the majority of land in the state.

The Wildlife Department also will be working to improve methods for monitoring quail populations on a yearly basis, and research facilities at Packsaddle and Beaver River WMAs may also be developed to provide on-site research facilities. Other efforts may include field days to showcase quail response to habitat work and involvement of landowners and hunters in monitoring quail populations.

Schoeling also included in his presentation a rundown of efforts underway in management of another important upland bird — the lesser prairie chicken. Along with tracking populations during the spring, the Wildlife Department is searching for new ways to monitor the birds through expanded surveys and aerial studies. Additionally, the Department will be exploring the use of telemetry studies, long-term research to discover the effects of energy development on bird populations, and studies to determine the return on efforts to improve habitat.