This little piggy had tularemia…

Along with the damage or destruction they cause, feral hogs also sometimes carry diseases that can affect animals and humans. The three diseases of greatest concern related to feral hogs in Texas are swine brucellosis, psuedorabies and tularemia, but the animals can be vectors for other diseases too. (Texas AgriLife Extension Service photo)

COLLEGE STATION – Along with being upset over damage caused by feral hogs, landowners in the Plum Creek Watershed and elsewhere in Texas are concerned about disease from the pervasive pest, according to Texas AgriLife Extension Service experts.

“Residents of the Plum Creek Watershed area of Hays, Caldwell and Travis counties have expressed concern about diseases feral hogs may transmit to other animals or humans,” said Jared Timmons, an AgriLife Extension assistant addressing feral hog issues in those counties.

Timmons, whose work supports the Plum Creek Watershed Partnership, said several area residents have had property damaged by feral hogs and that the partnership has identified these animals as potential contributors to non-point source bacteria and nutrient pollution of that watershed.

“But another negative aspect of feral hogs is that they may carry bacteria and viruses that can be transmitted to other animals and possibly even humans,” he said. “This makes them more than just a destructive nuisance — they’re a potential health concern.”

Dr. Jim Cathey, an AgriLife Extension specialist in wildlife ecology, said the three diseases people should have the greatest cause for concern about relative to feral hogs in Texas are swine brucellosis, psuedorabies and tularemia, but that the animals may harbor other diseases as well.

Cathey said swine brucellosis, Brucella suis, is a bacterium transmitted among feral hog populations through breeding and through ingestion of the bacteria.

“When humans contract swine brucellosis it is called undulant fever because body temperatures rise and fall with flu-like symptoms. Untreated cases can result in severe orchitis, arthritis and bacterial meningitis,” he said. “In pigs, symptoms include miscarriages, lameness, arthritis, abscesses and infertility. It can even lead to death in pigs contracting the disease.”

In the recent past, there have been over 40 identifications of this bacterium in cattle in Texas, which will cause them to falsely test positive for bovine brucellosis, he added.

“False positives due to exposure to swine brucellosis from feral swine will result in quarantine of the cattle herd of origin and unnecessary economic lose to the owner,” Cathey said.

Tests for Brucella abortus, the cause of bovine brucellosis, are required upon change of ownership by the U.S. Department of Agriculture and the Texas Animal Health Commission.

Cathey said it is extremely rare for humans to contract pseudorabies, also known as Herpesvirus suis, from feral hogs, but that domestic livestock such as sheep and cattle, as well as some wildlife, can be affected.

“Though some of its symptoms are similar to rabies, this disease is not, in fact, rabies. It is spread by nose-to-nose or sexual contact, as well as by ingestion or inhalation of the virus.”

Cathey said symptoms of pseudorabies in feral hogs include miscarriage, mortality among piglets, and coughing and fever among the adults.
“The common name for pseudorabies is ‘mad itch,’” he said. “In cattle and dogs, intense itching and incessant scratching and biting of the skin may occur. There also may be other neurological symptoms. In most cases, the eventual outcome for these animals will be death.”

Tularemia, Francisella tularensis, is commonly known as rabbit fever. It is a disease feral hogs in Texas more recently have been discovered to carry and transmit. Researchers at Texas Tech University tested 130 feral hogs and found that 50 percent of tested hogs in Crosby County and 15 percent in Bell and Coryell counties showed past exposure or were currently infected with tularemia.

“Humans contract the disease by direct contact through a wound, eating infected meat, and by ticks and biting flies that harbor the disease,” Cathey said. “When humans contract tularemia, flu-like symptoms such as fever, aches and chills occur, along with swollen lymph nodes. Severe cases can result in pneumonia, blood infections or meningitis.”

The tularemia bacterium can survive for weeks in wet environments, he added.

Other diseases potentially caused or carried by feral swine include many infectious or parasitic diseases transmitted by fecal material, said Dr. Don Davis, Texas AgriLife Research specialist in parasitic and infectious diseases of wildlife at the College of Veterinary Medicine at Texas A&M University.

“In many circumstances, traditional livestock, exotic game and white-tailed deer are fed supplements such as protein cubes, pellets or corn,” Davis said. “If these supplements are either fed on the ground or in places where feral swine have also been present, then the possibility of fecal contamination of the food is a real possibility.”

Davis added that bacterial diseases such as swine brucellosis and tularemia are not generally spread this way, but diseases such as salmonellosis and foot rot, as well as enteric bacteria, viruses and parasites, are commonly transmitted by this route.

“But one disease feral hogs do not carry is what has become commonly referred to as swine flu,” he said. “That’s a misnomer, as pigs – either wild or domestic – do not get this disease.”

“Although feral hog disease issues come up, water quality is a focal point for the Plum Creek Watershed Protection Plan,” said Timmons. “These animals also contribute to many problems in the area, including crop and property damage, soil erosion and pollution. But it’s important that landowners be alert to any potential disease-related issues with them as well.”

Timmons added that hunters who come in contact with feral hogs may risk exposure to swine brucellosis, tularemia and other diseases.

“Feral hogs that show signs of illness should not make it onto the menu,” he said. “And to further reduce chances of exposure, a double set of rubber or plastic gloves should be worn while processing and handling meat from feral hogs. Likewise, shield your eyes with glasses, wash your hands often with soap and warm water, and clean tools and surfaces with a dilute bleach solution.”

Feral hogs, however, can make great table fare when common-sense practices are followed, Timmons said, adding that when cooking feral hog meat it’s best to use a meat thermometer to ensure it reaches a minimum internal temperature of 160 degrees.

“To hone your knowledge of feral hogs, several publications were developed by Texas AgriLife Extension Service and can be downloaded at no charge by going to the Plum Creek Watershed Partnership website,” he added. These publications, which address feral hog signs, trapping and capture methods, as well as other related publications, can be found at http://plumcreek.tamu.edu/feralhogs.

“The site also has an online tool for reporting feral hog sightings or control measures,” he added. “There’s one report for cooperating landowners and another for use by the general public.”

For more information on feral hogs in the Plum Creek Watershed area and for technical assistance, contact Timmons at 254-485-4886 or jbtimmons@ag.tamu.edu.

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