

Canadian program investigates dairy cattle disease

The University of Prince Edward Island Atlantic Veterinary College launched a program to battle Johne's disease in its region this spring.

Dairy health specialists from the college have partnered with the four dairy boards of Atlantic Canada—the Dairy Farmers of Nova Scotia, Prince Edward Island, New Brunswick, and Newfoundland and Labrador—to create the Atlantic Johne's Disease Initiative. The program strategy was developed by the AVC's Maritime Quality Milk in conjunction with a team of veterinarians from around the region. Its goal is to sustainably reduce the prevalence of the disease in infected herds and prevent its spread from herd to herd.

The three-year research program will cost \$1.1 million, with the expense shared by the federal government, the four Atlantic Canada dairy boards, and Maritime Quality Milk.

The AJDI has three main activities: herd testing, risk assessment by program-certified veterinarians, and selective cow testing. These procedures are designed to strategically, and in a cost-efficient manner, reduce the impact of Johne's disease on the regional dairy industry by decreasing the number of existing infections and reducing the development of new infections. Laboratory support



for the program is provided by the MQM Johne's research laboratory at AVC.

Participation in the program is voluntary. Resources will be made available to assist herds that have the disease to decrease the overall prevalence of infection on the farm and the likelihood of spread to other herds, according to a UPEI press release. Additionally, test-negative herds will be provided with management plans to maintain their status. Details on the program are available at www.atlanticjohnes.ca.

Bats, from 169

Bats" lays out a coordinated national management strategy for investigating the cause of the syndrome and finding ways of preventing the disease from spreading.

Since the syndrome was first documented near Albany, N.Y., in 2006, the service has been heading up a national

lion in funding in support of ongoing research looking for methods to control or cure the disease.

In addition to research, the national response has also developed decontamination protocols to reduce the transmission of the fungus, surveillance strategies, and technical diagnostic procedures.

Little is known about how the disease is spreading so quickly among bat colonies. The government has closed numerous hibernacula to prevent humans from inadvertently carrying the fungus to other caves.

Hibernating bats typically have only one offspring per year, so population growth depends on high rates of adult survival. These naturally low reproductive rates, combined with the high mortality rate observed in populations with white-nose syndrome, will likely prevent affected bat populations from recovering quickly.

Ecologists and natural resource managers worry about the broader impact of WNS, considering how essential bats are to healthy ecosystems and agricultural systems. An analysis published in the April 1 issue of the journal *Science* showed that pest-control services provided by insect-eating bats save the U.S. agricultural industry \$3.7 billion annually.

The U.S. Fish and Wildlife Service plan for dealing with white-nose syndrome is available online at www.fws.gov/WhiteNoseSyndrome/ along with maps and additional information about the disease.

Photo by Ann Froeschauer/USFWS



Bat remains are now a common sight in caves throughout eastern North America on account of the white-nose syndrome epizootic that has killed more than a million bats since 2006.

response that now includes more than 100 state and federal agencies, tribes, organizations, and individuals. Interior Department agencies have invested more than \$10.8 million in this effort since 2007, including more than \$3 mil-