

Fish and Wildlife Disease

Late in August 1999, an encephalitis outbreak occurred in New York City. Within weeks the mosquito-borne disease spread to several counties in New York, Connecticut, and New Jersey. Dozens of people were infected. Seven died.

Biologists from the USGS National Wildlife Health Center in Madison, Wisconsin, soon identified crows and other birds as the natural host and carrier for the virus. The deadly virus was identified as the West Nile variety, never before found in the United States. Although cold weather removed the immediate threat of mosquitoes infecting people, USGS scientists continued to monitor the spread of the virus in bird populations. As a result of these efforts, scientists discovered the virus in 18 native

bird species in New York, New Jersey, Connecticut, and Maryland.

The most important product of the proposed increase will be detailed information about the geographic distribution of the West Nile virus in bird populations of the East and Gulf coast states. With better geographic information, public health agencies will be able to anticipate where the disease is likely to occur, quickly test diseased birds, and mitigate the impacts of the deadly encephalitis disease on humans.

Brain lesions in birds (avian vacuolar myelinopathy or AVM) have been a growing concern since they were first diagnosed in 1994. Originally diagnosed in bald eagles and coots in Arkansas, the

syndrome has been detected in other birds, especially ducks, and in other Southeastern States. With the proposed funding for new research, USGS will better understand wildlife diseases such as AVM that cause brain lesions in bald eagles and ducks. The USGS will increase its grant to the Southeastern Cooperative Wildlife Disease Study to assist with both the West Nile virus and brain lesion projects.

The USGS will study other fish and aquatic diseases and give State and Federal wildlife managers the means to stop the spread of disease in wild and endangered fish populations. USGS will develop detection systems for infectious salmon anemia, a disease of Atlantic salmon. The detection systems will help monitor, contain, and control the virus' potentially devastating impact. USGS will enlarge its study of fungal diseases in Chesapeake Bay fish.

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| | (Dollars in Thousands) |
| Biological Research | |
| Biological Research and Monitoring | +\$ 1,000 |



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