

Standard Operating Procedure

Natural Resource Branch

Shenandoah National Park

Reporting, Handling, and Processing Dead Birds Suspected of Having West Nile Virus

Introduction: West Nile Virus (WNV) is an arbovirus (a disease transmitted by arthropods/mosquitoes) that is normally found in birds. It is not native to North America but was first reported here in 1999. WNV can be transmitted to the mosquitoes that feed on infected birds. Over 100 different species of birds have contracted the virus and over 29 species of mosquitoes have tested positive for WNV. Humans and horses may subsequently become infected with WNV through the bite of an infected mosquito. WNV can be fatal in humans, horses, and other mammalian species. While human deaths are possible, it should be noted that most bites from mosquitoes do not lead to WNV infection and most people who are infected do not develop any type of illness.

In addition to public health concerns related to WNV, monitoring for the presence of WNV is important for the protection of park employees, to provide current information to the public, and to be able to address resource management issues that may arise.

Monitoring Background: One important element of monitoring for WNV is tracking its presence and geographic distribution in the environment. Environmental monitoring is used to trigger warnings to the public but is also important to the development of improved understanding of the ecology of the virus. Environmental monitoring also provides insight into the management of the virus as a non-native element of natural communities.

Crows, ravens, blue jays, hawks, and owls have been selected as sentinel species because they appear to be more susceptible to WNV.

What to Watch For: Park staff should **watch for dead crows, ravens, blue jays, hawks, and owls** that have **died for reasons that are not obvious**. The most likely obvious cause of death will be a traumatic injury probably caused by a motor vehicle but trauma may also result from collision with towers and poles and overhead telephone and power lines. Major storms may also cause deaths of birds.

What to Do if You Find a Bird Carcass AND the Cause of Death is Not Obvious:

1. In most cases, leave the carcass where it is but take note of its condition. If the eyes are sunken or maggots are present, the bird is too decomposed for testing. If it appears that the death has occurred recently (within the past 24 hours) take detailed notes of its location. If the carcass is on a roadway and likely to be run over, move it to the road shoulder. Use a shovel or gloved hand (latex surgical gloves are preferable) to move the carcass.

2. Call or leave a voicemail message with Rolf Gubler at (540) 999-3291 and provide him with the details of the find. If you are unable to reach Rolf, contact Gordon Olson at (540)999-3497.
3. Rolf or Gordon will instruct you to contact the appropriate County Environmental Health Department via telephone if the carcass is fresh enough for testing. If you are unable to reach Rolf or Gordon, leave a message for them and go ahead and contact the appropriate Health Department.

Page	(540) 743-6528
Warren	(540) 635-3159
Rappahannock	(540) 347-6363
Madison	(540) 347-6363
Rockingham	(540) 574-5200
Augusta	(540) 332-7830
Greene	(434) 972-6259
Albemarle	(434) 972-6259

The county health office will want information regarding who is reporting the bird, how to contact that individual, the location of the bird, its species, and a description of the condition of the bird.

Personnel from the appropriate Health Department will determine whether or not the bird will be tested. Once the presence of WNV has been thoroughly documented in a given county, testing of carcasses is suspended. Even if testing is suspended, county officials are still gathering information about bird carcasses.

4. Personnel from the Health Department may come to the park to pick up the bird or they may request that you deliver it to them. If you are to deliver it to them, use a shovel to pick it up, wear gloves (latex surgical gloves are preferable), and transport the carcass in a plastic bag or box. Wash your hands and the shovel thoroughly with hot, soapy water after handling the carcass.
5. Request that the Health Department send a copy of their report, including test findings, to the park to the attention of Rolf Gubler or Gordon Olson.

To dispose of a dead bird, please take the following steps:

- wear gloves and minimize handling time
- place dead bird in two separate plastic bags (double bag it)
- tie bags securely and place in trash receptacle or bury it at least 2' deep
- wash your hands thoroughly afterwards

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Branch of Natural Resources
Division of Natural and Cultural Resources
Shenandoah National Park