

THE WILDLIFE REHABILITATORS NETWORK OF BC

Handy Facts on West Nile Virus

by Elizabeth Thunstrom

(Article originally printed in Wingspan - Summer 2003, produced by Wild Bird Trust of BC)

Diseases that are transferable between humans and animals (zoonoses) are increasingly in the news. West Nile Virus, which originated in Africa, was identified in birds in New York in 1999. Since then, it has spread rapidly across most of North America. It is anticipated that it will arrive in BC in summer 2003. With the rapid spread of the virus, humans and animals have inadequate time to develop immunity. First human cases in Canada occurred in 2002.

To date, over 150 species of birds and mammals have been found to carry the disease. It is spread largely by mosquitoes, and possibly other bloodsucking parasites, which become infected from biting an infected bird. It may also be spread through bird feces and body fluids. Raptors may become infected through eating infected prey. Birds of the corvid family — crows, jays and ravens — appear to be the most susceptible to the virus and current monitoring is being done by testing dead crows. In BC, monitoring by Regional Health authorities began May 1, 2003.

Birds may carry the virus without exhibiting definitive clinical signs; they may show lethargy, fever, and neurological symptoms, but accurate diagnosis can only be made post-mortem in a laboratory. Some birds apparently recover from the virus, but crows usually die from it within a 24 hour period. Treatments have not been found to be effective. Vaccines are available for horses, but have inconsistent effectiveness in bird species.

In humans, the virus manifests in flu-like symptoms which occur most commonly in late July and August as a new generation of mosquitoes emerges. Most people recover without problems, but a few develop meningitis or encephalitis which can be fatal. Horses are very sensitive and likely to develop encephalitis. There are many questions unresolved at the present time about routes of infection, species of mosquitoes carrying the virus, potential for overwintering and the effects of climate. A crow in Ontario tested positive for West Nile in spring 2003, suggesting the virus may over winter in infected birds and mosquitoes.

It is important that information about West Nile Virus is kept current and factual. A few simple precautions can be taken to minimize the chances of infection:

1. Limit standing water sources around home and business properties; old tires, empty cans and water barrels can all provide breeding grounds for mosquitoes.
2. Keep goldfish in garden ponds to eat mosquito larvae.
3. Wear light, long sleeved shirts if out at dusk or dawn or in forested areas; wear long pants, not shorts.
4. Use a mosquito repellent; burn a coil or citronella candle on porch or patio.
5. Install screens on doors and windows.
6. If you find a dead bird, do not handle it without hand covering. Pick it up with a plastic bag, then double bag for disposal. The SPCA will dispose of dead birds brought to them. If you have questions, call your local health department, SPCA or wildlife rehabilitation centre.

7. Do not pick up fledgling birds — fully feathered youngsters. Crow fledglings, for example, are normally on the ground for 5-7 days before their flight muscles are strong enough to give them "lift"; robins and starlings are flighted within 24 hours or less. During this time, they are fed and protected by their parents. They do not need human assistance or intervention unless injured. If the fledgling is on a road or driveway, it can be gently moved or herded to a safer site where the parents will continue to care for it. Keep cats inside. Young crows have bright blue eyes, distinguishing them from adults.
8. If there are problems with the adult birds attacking, there are a number of ways to handle this. Call a wildlife rehabilitator for suggestions. Every year, many healthy young birds are unnecessarily picked up by well-meaning people who are not aware of their natural development and think they are injured because they are unable to fly. Healthy birds do not belong in care where they may pick up infections from sick animals.

Prevention of mosquito bites and common sense when handling injured or dead birds reduces personal risk of infection and is the most effective method to date in dealing with West Nile Virus. Research continues, but the long-term impact on native bird populations is unknown. Abundant species may recover following reduction by disease, but rare or endangered species may not.