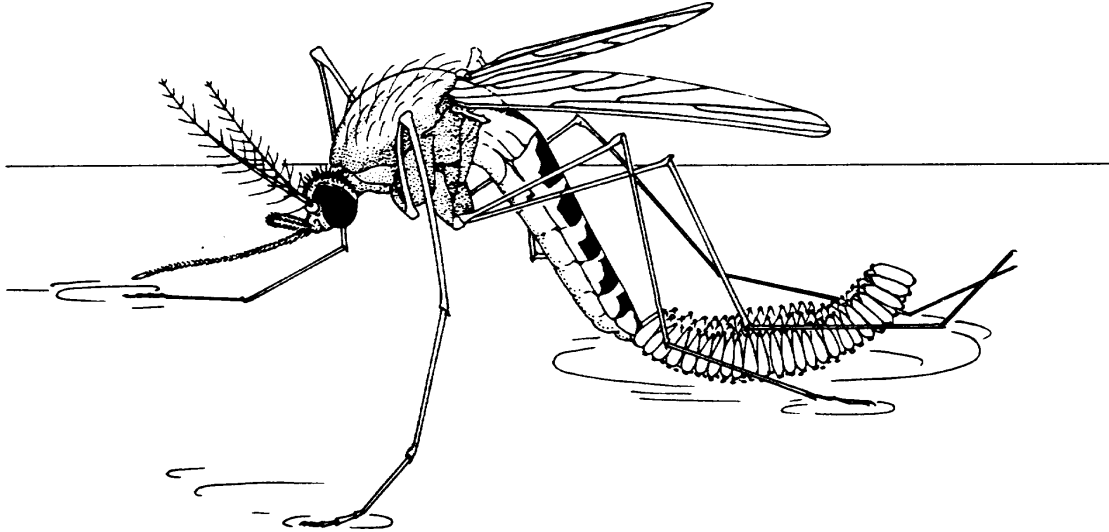




West Nile Virus



What's the "Buzz"?

The Everglades are well-known for harboring a healthy population of mosquitoes. They are most abundant during our wet, warm summers, but can be found any time of the year. Although they are a vital link in the vast Everglades ecosystem, mosquitoes are best known for the annoyance that they cause most people. Recently, the spread of the West Nile Virus has given rise to a renewed interest in mosquito-borne diseases. During your time visiting the park, it is important to be familiar with the facts about West Nile...

The West Nile Virus

Native to Africa – Rare in the States

West Nile Virus is rare in the United States. In Africa, Eastern Europe, West Asia, and the Middle East it is commonly found in humans, birds, mammals and reptiles. Until 1999 it was unknown in the Western Hemisphere. The expansion of cases of West Nile virus in the United States in recent years indicates that it is now established along the Eastern seaboard.

Transmitted primarily by the bites of infected mosquitoes, the virus has been known to infect

a variety of wildlife including horses, cats, bats, chipmunks, skunks, squirrels, and domestic rabbits. Still, there is no documented evidence of person-to-person or animal-to-person transmission of West Nile Virus.

Human infections can result in a swelling of the brain, a condition known as "encephalitis". However, studies have shown that normally only a small percentage of humans infected with the virus will show symptoms of disease, and even fewer will develop any serious complications.

Symptoms & Treatment

Flu-like Symptoms Are Usually Mild

The incubation period for the West Nile Virus is usually 3 to 15 days. Most infections are mild, and symptoms include fever, headache, and body aches, occasionally with skin rash and swollen lymph glands. Persons older than 50 years have the highest risk of developing severe symptoms. Severe infections may be marked by high fever, headache, neck stiffness, stupor, coma, tremors, disorientation, convulsions, muscle weakness, paralysis, and rarely death.

Currently, there are no vaccines, treatments, medications, or cures for West Nile Virus. However, the symptoms and complications of the disease can be treated. More severe cases may require hospitalization and/or good nursing care.

Should I Worry?

Few Become Severely Ill

Human infections resulting from the West Nile Virus are very rare. Studies have shown that only a small percentage of humans infected with the virus will show symptoms of disease and even fewer will develop any serious complications. The Center for Disease Control and Prevention reports that less than 1% of those infected with West Nile Virus will develop severe illness.

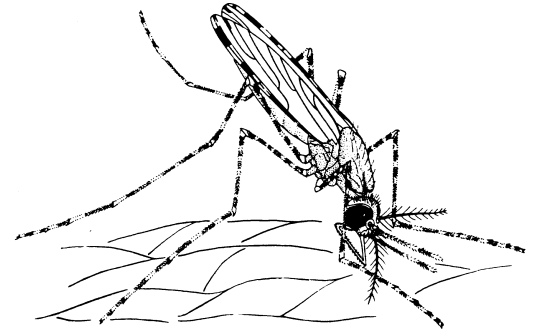
The disease caused by West Nile Virus is very similar to St. Louis encephalitis, but is generally milder. Incidents of severe illness are highest among the elderly.



Who's to Blame?

It's the Female Mosquitoes

Here's a chilling fact: over 40 different species of mosquitoes can be found in south Florida. Fortunately you don't have to worry about most of them! Most species do not bite people, but of those that do, it is only the female that requires a blood meal for breeding. The species most commonly associated with West Nile virus is *Culex pipiens*, but it is believed that several species of mosquitoes can carry the virus, so taking precautions against all mosquito bites makes sense.



Other Diseases?

Malaria Not Seen Since 1948

Mosquitoes have been associated with diseases worldwide, and South Florida's historic communities endured their share of plagues. Many of the area's earliest cities were situated in what would later be defined as the "malaria belt". Seasonal onsets of "yellow jack" (yellow fever) were a dreaded occurrence. Even the threat of Dengue fever, common around the Caribbean posed a serious concern.

With the advent of vaccines, quarantines, and eradication programs, most of these earlier threats have subsided. The last known transmission of malaria in Florida was in 1948, and yellow fever has not been seen here since 1905. Still, other mosquito-borne diseases, like St. Louis encephalitis, yield occasional outbreaks in Florida. So play it safe, and always take precautions against mosquitoes whenever you are outdoors.

How Can I Protect Myself?

During our dry, mild winters, mosquitoes are seldom seen outside of the mangrove swamps. But summers bring daily torrential rains, and hot humid

weather — perfect conditions for breeding mosquitoes! Visitors during this wet season will need to take extra precautions to avoid mosquitoes:

Do

- Wear protective clothing. Dark colors are more attractive to mosquitoes, so light, long-sleeve shirts and trousers are helpful.
- Apply mosquito repellent liberally before embarking on any trails. Repellent is available for sale at all stores in the park. Be sure to follow the manufacturer's DIRECTIONS FOR USE, as printed on the product.
- Walk only on paved areas. Mosquitoes take refuge from the elements in grasses.
- Enjoy open, sunny, and breezy areas.

Avoid

- Rolling down your windows or opening doors when stopping along roadsides to observe wildlife.
- Wearing colognes or perfumes. These pleasant scents can attract more than attention!
- Standing beneath trees or in the shade of buildings where mosquitoes gather!
- Leaving doors open longer than necessary. A speedy entry or exit from a car, hotel, or restroom is a must.
- Going outdoors during dawn, dusk or early evening, when mosquitoes are most severe.



So Who Needs Mosquitoes?

The Everglades Do!

Though tiny, these flying hypodermic needles appear in such numbers, that they are a significant part of the Everglades food web. Eggs that have been laid throughout the winter hatch with the first summer rains. The larvae are born in stagnant pools of both fresh and brackish water where many are consumed by a bevy of fish - most notably *Gambusia*. In turn, these tiny "mosquito fish" will become the prey of many ecologically and commercially important species of wildlife.

Adult mosquitoes typically have life spans of only about one month. During that time, dragonflies, birds, amphibians and reptiles eagerly pursue them as delectable prey. Male mosquitoes that survive this gauntlet function as pollinators for various plants, while females will seek out the precious bellyful of blood that will allow her eggs to develop. Should you be the unwilling donor in this process, you too will become part of the Everglades food web!

