

- Raised and stocked more than 150,000 fish that eat mosquito larvae – with another 400,000 fish to be raised and stocked statewide over the course of the summer.
- Purchased four distribution tanks to assist in the transport of mosquito-eating fish throughout the state.
- Purchased five holding tanks that temporarily hold mosquito-eating fish to assist in counties in their distribution of the fish.

Aedes aegypti is the mosquito most known for carrying the Zika virus. It is found in tropical climates and is unable to survive New Jersey's winter conditions.

Zika is a viral infection that is usually spread by the bite of an infected *Aedes* mosquito, which also spreads dengue and chikungunya. Outbreaks typically occur in tropical Africa and southeast Asia. In May 2015, Brazil reported the first outbreak of Zika in the Americas. Zika is now present in Central and South America, and the Caribbean. To date, there has been no local transmission in the continental United States.

About one in five people develop symptoms and infection is usually mild. The most common symptoms are fever, rash, joint pain or red eyes. The biggest concern is for pregnant women because Zika can cause birth defects.

“As mosquito season continues in New Jersey and families travel this summer, residents should protect themselves from mosquito bites wherever they go,” Health Commissioner Cathleen Bennett said. “It is important to apply EPA-registered insect repellent, use screen and air conditioning, wear long sleeves and pants, and stay informed.”

The federal Centers for Disease Control and Prevention is investigating the extent to which the *Aedes albopictus* – also known as the Asian tiger mosquito, which is found in New Jersey – can spread Zika. In April, the Pan American Health Organization and World Health Organization reported that Mexico had identified Asian tiger mosquitos carrying Zika.

New Jersey's 21 county mosquito control agencies employ a variety of methods for mosquito control, including aerial spraying, application of approved insecticides, water management programs, public awareness campaigns and use of natural predators, such as fish that eat mosquitos and their larvae.

The use of larvae-eating fish, also known as biocontrol, is common in New Jersey. Since its inception in 1991, the Division of Fish and Wildlife's Hayford Fish Hatchery has stocked more than 4.4 million mosquitofish in New Jersey.

Counties stock the fish in places of the greatest attraction to the 63 varieties of mosquitoes which are native to the state. This summer, in response to concerns about Zika and mosquito-transmitted viruses, the hatchery is raising and distributing more than 500,000 fish, more than double a normal season.

“Our fish program has been a key component of mosquito control for years and their usefulness is only increasing as the threats increase,” said Division of Fish & Wildlife Director Dave Chanda. “These fish help control the mosquito population by eating their young and preventing them from growing, biting and most importantly, reproducing.”

Five breeds of mosquito-eating fish are bred at Hackettstown for mosquito control; the fathead minnow (*Pimephales promelas*), the freshwater killifish (*Fundulus diaphanus*), the pumpkinseed sunfish (*Lepomis gibbosus*), the bluegill sunfish (*Lepomis macrochirus*) and the *Gambusia affinis*, also known as the mosquitofish, for biological control. The fish are raised at the Hayford Hatchery and distributed, at no charge, to county mosquito control agencies.

The first four fish species are native to New Jersey, but the *Gambusia* originates from Central and South America. They are placed in water bodies with no resident fish, and no natural or manmade water outlets. They are not stocked in lakes or ponds, but in standing water sources which cannot be drained.

“We are ramping up mosquitofish production as an extra measure of safety for this year to address not only the possible threat of Zika, but to combat the real and annual threats posed by other virus-carrying mosquitos in our state,” said Hackettstown Hatchery Superintendent Craig Lemon.

DEP encourages residents, business owners and contractors to follow these steps to help reduce mosquito populations on their properties:

- At least once or twice a week, empty water from flower pots, pet food and water dishes, birdbaths, swimming pool covers, buckets, barrels and cans.
- Check for clogged rain gutters and clean them out. Downspout elbows can also hold small amounts of water that can serve as breeding grounds for mosquitos.
- Remove discarded tires, and other items that could collect water.
- Be sure to check for containers or trash in places that may be hard to see, such as under bushes or under your home.

For more information on Zika and how DEP is addressing the potential threat please visit: www.nj.gov/dep/mosquito/docs/zika-fact-sheet.pdf or www.nj.gov/health/cd/documents/faq/zika_faq.pdf

For a podcast featuring a discussion of mosquito control and the Zika virus with DEP Deputy Commissioner David Glass and Dr. Arturo Brito from the state Department of Health, visit: www.nj.gov/dep/podcast/

For information on the State’s Mosquito Control Commission, please visit: www.nj.gov/dep/mosquito/index.html

For more information on the DEP’s Charles O. Hayford State Fish Hatchery in Hackettstown please visit: www.state.nj.us/dep/fgw/hacktown.htm

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