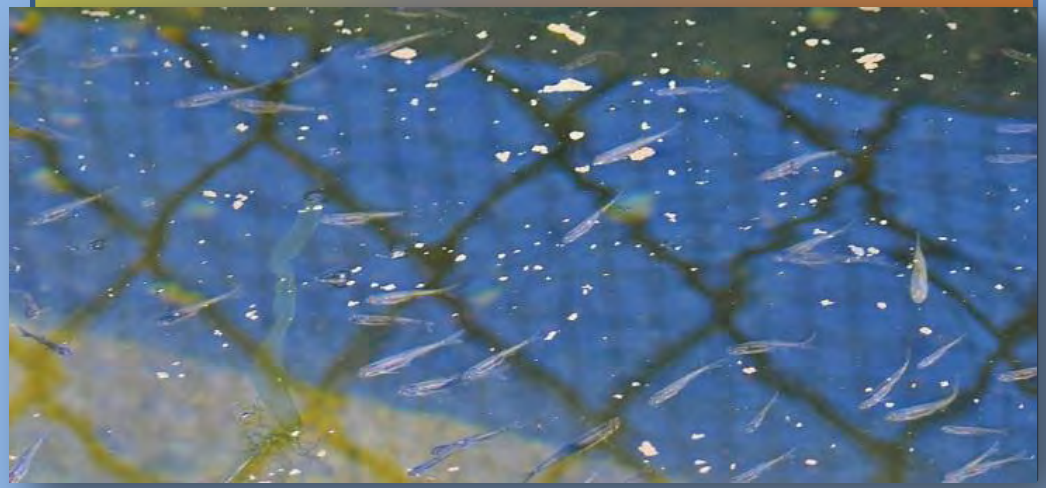
Neosho National Fish Hatchery NEWSLETTER

July and August 2015

Front Page News: Breeding Shiners!

Top photo: adult Topeka shiners (note the breeding colors – the reddish fins)

Bottom photo: some of the thousands of maturing fry



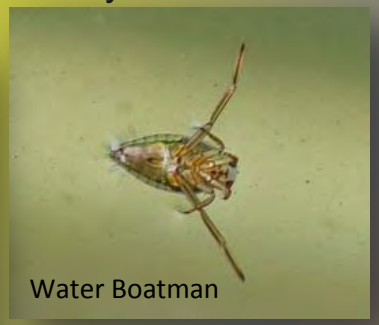
Visitors love our temporary tattoos – newly designed with fresh colors and educational messages!

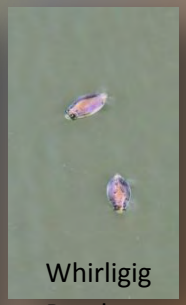
Here's a few of our recent feathered visitors:

Neosho National Fish Hatchery NEWSLETTER

Summer is a great time to admire the great variety of insect life around the hatchery:


Mayfly


Water Boatman


Whirligig Beetles


Cicada


Praying mantis


Ferocious Waterbug


Ferocious Waterbug – male with eggs attached on its back


Water Scorpion

Some of them are quite stunning!

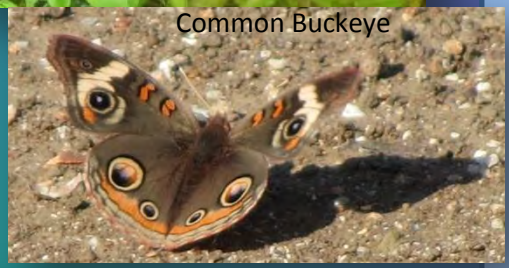

Twelve-spotted skimmer


Blue Dasher


Ebony Jewelwing - female


Ebony Jewelwing - male


Eastern Tailed Blue


Common Buckeye


Spicebush Swallowtail


Great Spangled Fritillary

Neosho National Fish Hatchery NEWSLETTER

Summertime means a lot of maintenance and projects – such as emptying and cleaning the visitor center aquariums as well as emptying and disking the ponds.

Here's a different perspective!

Empty and getting cleaned

Time to fill them back up!

Unusual pond activity!

Neosho National Fish Hatchery NEWSLETTER

Summer means lots of baby pallid sturgeon. We are using this year's young to help study the effects of well water versus spring water in hatching and rearing them.

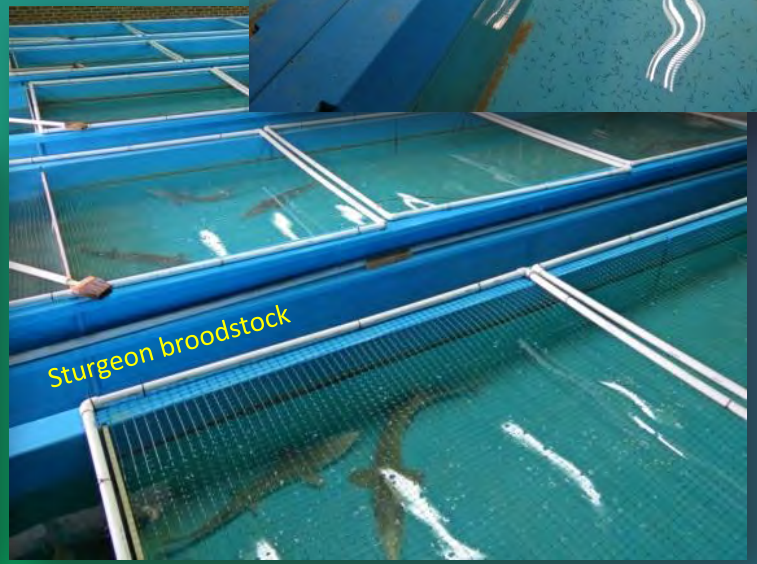

Sturgeon hatching setup


Tiny newly-hatched sturgeon


Brine Shrimp hatching apparatus


Larval pallid sturgeon


Sturgeon hatching setup


Sturgeon broodstock

Neosho National Fish Hatchery NEWSLETTER


Monarch

Monarch butterflies (*Danaus plexippus*) are the most beautiful of all butterflies, some say, and are considered the “king” of the butterflies, hence the name “monarch”. These butterflies go through four stages during one life cycle, and through four generations in one year. The four stages of the monarch life cycle are the egg, the larvae (caterpillar), the pupa (chrysalis), and the adult butterfly. The four generations are actually four different animals going through these four stages during one year until it is time to start over again with stage one and generation one.

We've planted native flowers at the hatchery and have watched for these beautiful insects. After months of waiting and watching, finally in August they came. These handsome monarchs are third generation insects, ones that will be flying around for 2-6 weeks until they die. They will look to breed and lay eggs that will hatch in September sometime. That will start the fourth generation which will live longer and migrate to warmer climates like Mexico and California and will live for six to eight months until it is time to start the whole process over again.


Monarch

We were quite happy to see these beautiful creatures flying around our wetland garden. It is a big priority for the U.S. Fish & Wildlife Service to provide for their habitat across the nation, and we certainly want to contribute our portion. North American monarch butterflies are in trouble. Threats, including loss of milkweed habitat needed to lay their eggs and for their caterpillars to eat, are having a devastating impact on their populations and the migration phenomenon. Unless we act now to help the Monarch, this amazing animal could disappear in our lifetime.


Female Monarch

A few days before we saw our first monarch, this little fella showed up. But it was the wrong butterfly. This is the Viceroy (*Limenitis archippus*), a mimic of the Monarch, and can be distinguished by its smaller size and the postmedian black line that runs across the veins on the hindwing. Thankfully the real McCoy came along before too much longer!


Viceroy

Neosho National Fish Hatchery NEWSLETTER

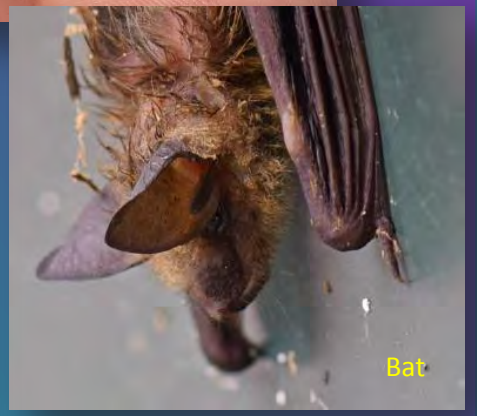
Summertime is the perfect time to find herptiles around the hatchery – we have scads of toads and frogs that breed in the ponds. We also had a bat that "hung out" on our visitor center for a night.

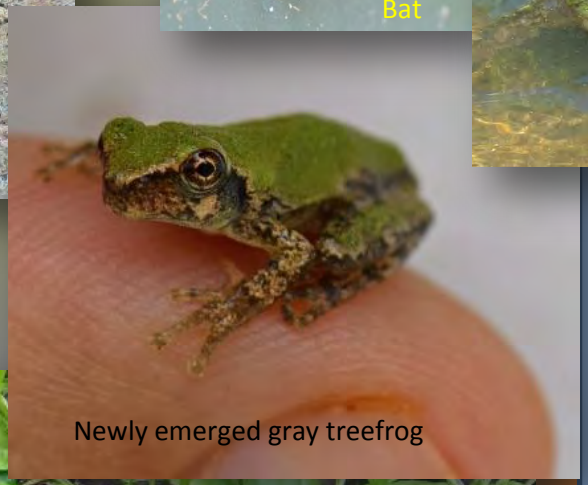

Toadlet


Bat


Common snapping turtle


Leech


Bat


Newly emerged gray treefrog


Plain-bellied Watersnake

Neosho National Fish Hatchery NEWSLETTER

Our managers have been going over the pond layout recently - looking forward to upgrading three of them. Coming here from the Bloomington MN regional office to help lead this big project was Carol Fix. Carol is a Civil Engineer and has worked on a large variety of engineering/construction projects such as water control structures, auto tour routes, bridges, rehabilitation of fish rearing ponds, storage buildings, maintenance buildings, and headquarters/visitor centers. She joined the U.S. Fish & Wildlife Service in 1991 after spending seven years with the Corps of Engineers. She has helped us many other times in the past and with her help the ponds will be better than ever.

(left to right) David Hendrix, Roderick May, Carol Fix

The Final Word, from hatchery manager David Hendrix.

Male Monarch

Hi Everyone ☺,

I want to give you a quick update on the Topeka shiner (*Notropis topeka*) Propagation Program here at the Neosho National Fish Hatchery. This is our first year propagating Topeka shiners and thus far, we have been overwhelmed by the results. We had no idea the degree of success we would have during our first year, but, with several spawns occurring resulting in lots of fry on hand, the staff is very pleased. A big thank you goes out to my staff and the wonderful support received from the Lost Valley State Fish Hatchery. We don't believe in re-inventing the wheel, but in trying to improve the wheel. Lost Valley's hard work over the last few years breeding these federally endangered fish allowed us that luxury. Please stop by whenever you have an opportunity and allow us to converse with you about the Topeka shiner and all our other great projects.

Take Care Until Next Time ☺ !!!!!!

Newsletter and photos by Bruce Hallman, Environmental Education Specialist

"like" us on facebook