

Shrimp in the Mon!

by Rachael Kolesar, West Mifflin High School student

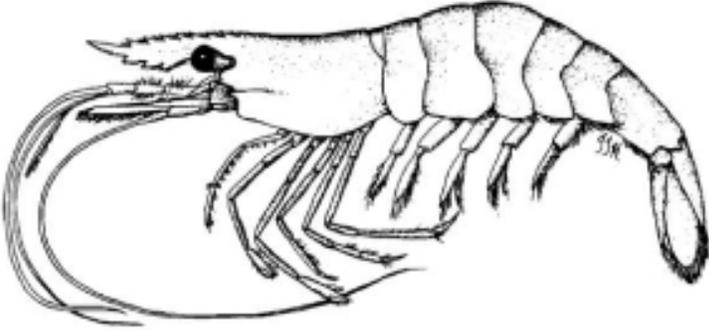
About two years ago, there was an interesting discovery in the Monongahela River. Scientists were trawling a 40-mile stretch of the bottom of the river and found something they didn't expect – shrimp! Now don't call Wholey's* just yet, because this isn't the jumbo shrimp you eat all the time. This is the smaller cousin called *Palaeomonetes kadiakensis* or more simply, grass shrimp.

Grass shrimp are native to the Mississippi River Basin, and are a sign of good water health. Since the Mon hasn't ever been trawled, it is hard to say how long the shrimp have been here. They believe they are newcomers, and haven't been seen this far north in a long time. Grass shrimp were found in Erie in 1967 by Ed Masteller, a biologist specializing in benthic communities.

Biologists are trying to figure out how exactly the shrimp got to Pennsylvania. They could have hitched a ride in the ballast water of a boat that was in the Gulf of Mexico, where the shrimp are more at home. They also could have swum or drifted up on their own. Grass shrimp are more common in brackish water. However, the temperature and habitat of the Monongahela River are suitable for them. They also love a river with a lot of sediment which the Mon certainly has. They can obviously handle the heavy metals from the industrial past of the river; they wouldn't be reproducing if they couldn't.

No matter how the shrimp got to the river, they raise a lot of other questions. This leads to a lot of research and shows that other new aquatic life can live in the river. This also shows the growing health of the river from the numerous steel mills of Pittsburgh's past.

*Wholey's is a fresh fish market in Pittsburgh. Source: "Shrimp -- that's right, shrimp! – found in Monongahela River" by Deborah Weisberg, Post-Gazette, August 23, 2006
<http://www.post-gazette.com/pg/06235/715487-113.stm>
See last page of newsletter for a shrimp word search!



Above: grass shrimp
 From: http://www.nwrc.usgs.gov/wdb/pub/species_profiles/82_11-035.pdf

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Creek Connections teacher, Mrs. Amy Baer, at Gateway Middle School was presented with an Earth Friend award. Mrs. Baer advises a “Trash to Treasure” Club at Gateway. Mrs. Baer and the club were featured in a WTAE news spot. Congratulations to Mrs. Baer and her students! Find out more about their club by going to this link: http://images.ibsys.com/pit-structure/images/sponsors/sony/amy_baer.pdf

To nominate someone you know go to:<http://www.thepittsburghchannel.com/sponsors/17614004/detail.html>

Your Choice

by Justin Hindman, West Mifflin HS student

As I go through life,
the most beautiful sight,
is seeing a stream flow.

As it flows for miles and yards,
it has a wide variety, like a deck of cards,
the stream shines with a beautiful glare.

Which is now so, so fresh,
soon population and pollution will destroy it,
like hands on a nest
organisms are o so diverse.

But only you can stop this cause,
by simply helping out, putting your life on
pause,
it's up to you.

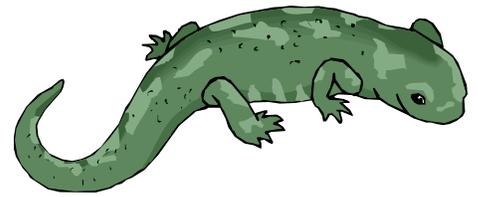
Testing Tip

By Zachary Piso, Allegheny College Student

So, you've been giving nitrate testing a try, and to your delight, the chemicals you are using turned the water bright colors! Now while it may look like Kool-Aid, do not drink it—this may sound obvious, but some students have given it a try. Once you've gotten that important restraint down, you might notice that the color of your sample isn't what the test kit expected. While you were looking for a pinkish red hue, the chemicals turned your sample into a transparent orange. Unfortunately, you have to stop; something in your water other than the nitrates you were testing for is reacting with the chemical and your data won't be accurate. Record that you observed the orange color, but don't record a value. But if you are starting with a shade of red, get ready to continue the directions to obtain the amount of nitrates in your sample.

The Dusky Salamander

By Brittany Fagan, West Mifflin High School student



Have you ever heard of the northern dusky salamander? This animal has many physical characteristics. They are normally stout in variable colors. Their back legs are longer than their front legs. They have a broad yellowish-gray, tan or brown stripe which runs from head to tail. They do have spots but they tend to fade as they age. Their belly is whitish or gray and is mottled with darker gray. They have a flattened ridge on the upper edge of the tail. The adults are 7-14 cm.

These salamanders are normally found by limestone, rocky streams, hillside springs or spring seepages. They are in wooded or partially wooded habitats, under flat rocks, logs or other debris. Do you think that you could go and find one of these with all of this information?

<http://herpcenter.ipfw.edu/index.htm?http://herpcenter.ipfw.edu/outreach/MWsalamanders.htm&2>



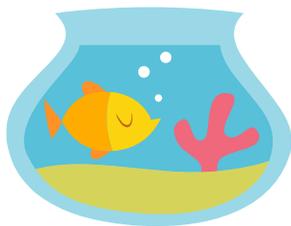
Above: dusky salamander in its natural habitat.



Above: photo showing spots on a younger dusky.



Above: Catching a dusky. NOTE: be sure your hands are free of lotion and soap. Its always best to use a clean container to capture and observe salamanders to minimize their harm.



Feature Creature

By Amy Kerschner, Allegheny College Student

I am an olive and gold colored fish with a white belly, large mouth, and sharp teeth. I am a member of the perch family. My name comes from my eyes that are able to reflect light, which allows me to see well in dark places. I look for my food during the night, which means that I am nocturnal, and can usually be found lurking around the bottom of a stream. I mostly like to eat small fish, but my diet also includes crayfish, minnows, leeches, and earthworms. I am native to Lake Erie and the Ohio River and reach a maximum length of 3 feet long! If you like to eat fish, you may think that I taste good. Do you know who I am? See last page for answer.



SHRIMP IN THE MON!

T H O S B B V K B R X P O S G D Y S E D
 I S B M U H T L A E H R E T A W D J M
 F I I Q S D Q A S I C T E N U W K K K O
 C Q N G A J S E S T R T M X B S G R L N
 J I L B O R O V V B G S P R M A C O Q O
 Q P A I T L T C K G U A Z L Y G D J P N
 L V R C K N O Y L D L P Q X D S M T I G
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 Y G J I T I U W B Y L S Z Q E T G Y H
 F O P A C H G X A X O A Q Y S T N R Z E
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 A C H Z V A M U S G M T D E S U U S N
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 T M U T E C L N E T O I E R O W R I T R
 B J F I W G E K G K R O E K W G D M J B
 X O E J W H O L E Y S C I D G Z R P D R

GULF OF MEXICO	BIOLOGIST	MONONGAHELA RIVER	WHOLEYS
TRAWLED	INDUSTRIAL PAST	WATER HEALTH	SEDIMENT
GRASS SHRIMP			

FEATURE CREATURE ANSWER:
 This issue's Feature Creature (pg. 3) is a walleye, *Stizostedion vitreum vitreum*.

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