With April soon approaching and the upcoming symposium in mind, Mr. Dobi’s Advanced Biology class at Fort LeBoeuf is ready for the challenge. With all of the information we have collected over the course of this class we were able to complete our independent projects. Because this Biology class is only offered first semester we must prepare now for the symposium. Each week chemical tests were performed on the water from our testing site of French Creek, and then we went over our results in class. Also, at the beginning of the year, had an Allegheny student come in and talk to our class. Sometimes she would inform us of an issue with French Creek or other times she would bring an activity for us to do. The most exciting activity was classifying live macro invertebrates from French Creek into their correct Group (Group I, II, or III). With the use of this information and the information we learned from our class, our projects turned out amazing!

To get a clearer understanding of the importance and beauty of French Creek, Mr. Dobi assigned these projects. Along with a partner, we were asked to choose a specific topic related to French Creek. After researching and experimenting, we displayed our results on a tri-fold display board. This was the most expressive part of the project. It allowed the students to show off their creative side! All different techniques were used to display group results.

All topics of French Creek were covered. Stephanie Cole and Nicole Englert chose to do their project on “Pools Vs. Riffles”. Their project included the feeding habits and movement types of the different macros found in either the pools or riffles. They also included information about how Dissolved Oxygen and Temperature vary in different parts of the stream, and how the macros living in them are effected.

Another group, Josh Rosenthal and Tyler Babcock, investigated the living conditions that fish can tolerate. To see which water type should provide the most livable conditions the boys measured the Dissolved Oxygen of each solution. After making their predictions based on

"-Continued on page 2."
the Dissolved Oxygen, they placed a goldfish in the type of water being tested for 15 seconds and counted how many times its gills flapped. The types of water that were tested included flavored water, mineral water, tonic water, tap water, distilled water and aquarium water. Which do you believe would be best for a fish to survive in? If you guessed aquarium water you were correct!

There were many, many more fantastic projects that were done. Other topics that were covered are Riparian Zones, Amphibians and Reptiles of French Creek and Mammals of French Creek. All the projects that were completed provided very interesting information, that we all learned from. To see the outcomes of all of these projects you’ll have to wait until April. See you at the Symposium!

Feature Creature

By Carrie Kean, Allegheny College Student

I’m mostly gray, with a grizzled effect due to long guard hairs that have a black band ending in a white tip. A white stripe from my nose leads between my eyes and back over my head, ending between my shoulders. My Lower legs and feet are black in color. I have five toes on each foot and four of the toes on my front feet have exceptionally long claws. I walk on my toes with a characteristic rolling gait. I’m mostly a nocturnal creature, but have been known to be active during daylight in quiet areas. I have an excellent sense of hearing and smell, which serves in locating food, which is usually rodents in underground dens. My den also has several entrances. Especially during extended winter, I do sleep for extended periods of time in northern states. I have been known to plug the exit holes of my prey species before I tunnel underground to capture my prey. My long claws serve to loosen the soil 6 to 8 feet backwards. I live in an underground den with tunnels 6 to 8 feet deep and 20 to 30 feet long. I do not hibernate like bears during winter, but I do sleep for extended periods of cold weather and deep snow. My species is the most carnivorous out of all the other species of my kind. I dig out chipmunks, ground hogs, ground squirrels, mice and rabbits; I will also eat carrion and invertebrates. The condition of my claws are important. I sharpen my long claws by scratching them on trees or posts. I’m considered to be old at 12 years of age. Who am I? Answer on Page 4.

Source: http://badgerinfo.com/americanbadger.html
Jamestown Elementary Investigates Leaf Packs

By Mark Brenixer, Jamestown Elementary 6th grader

We, the Jamestown Elementary School sixth grade students, went to Sugar Run stream to gather our leaf packs. They had been anchored in the water for a month. We brought the leaf packs back to our school. We examined the critters in the wet leaves. We found macroinvertebrates such as the threadworm, crane fly larva, midge larva, Dobson fly larva, and horse fly larva. We decorated a Christmas tree by decorating pieces of paper with drawings of these critters you can see with your eye.

Your Teachers Are Students

By Laura Branby, Creek Connections Pittsburgh Field Educator

It was a GREEN day for teachers at Boy Scout Camp Guyasuta (near Pittsburgh) in late February. Creek Connections hosted the teacher workshop “GREEN... More Than Just a Color,” turning your teachers into students. They learned about “green” buildings, “green” roofs, stormwater management, integrated pest management (IPM) and RiverQuest’s new “green” boat. “Green” living is a way of lessening your impact on the environment by adapting the way you do things and the materials that you use.

Pittsburgh is greening up all over. Green buildings and green roofs are popping up all over the area. Indigo Raffel of CCI Consultants (www.ccicenter.org - they encourage responsible energy usage in homes and buildings) reviewed green building basics and introduced teachers to LEED-certified green buildings in the Pittsburgh area.

With green building knowledge in their heads, the teachers closely examined the Silver LEED-certified McGinnis Education Center. Ranger Mike Daniher, Boy Scout Camp Guyasuta director, and his new education center hosted the color-coordinated workshop. Ranger Mike oversaw the planning and building of the center and conducted an excellent tour through both the facility (conference room and dormitory) and the process.

Green buildings aren’t the only environmental news in the area. Green roofs are “sprouting up” all over Pittsburgh. Janie French, 3 Rivers Wet Weather (www.3riverswetweather.org), outlined the basics of Green roofs, identified a few local green roofs (CMU’s Hammerschlag Hall, Giant Eagle’s Shadyside store and the new entrance to Phipps Conservatory). Green roofs play a large part in stormwater management, which was also presented by Janie. Stormwater management is a hot topic for 3 Rivers Wet Weather as they attack the problem of Combined Sewer Overflow (CSO) in the city of Pittsburgh.

The green day continued as we crossed the Highland Park Bridge to the Pittsburgh Zoo & PPG Aquarium (www.pittsburghzoo.org). The focus at the zoo was Integrated Pest Management (IPM), a green way to control unwanted (pest) insects in gardens. The teachers (students) were humbled in the aquarium. They realized that they walked through the beautiful tropical garden and never considered that someone’s entire job focused on the care and keeping of those plants. Zoo horticulturists Frank Pizzi, Susan Pierce, and Glen Zugahar highlighted their efforts to care for both indoor and outdoor gardens in a “green” manner. Teachers went away with knowledge for caring for their schoolyard gardens and they’ll never overlook the plants at the zoo again! The next time you visit the Pittsburgh Zoo & PPG Aquarium, stop at the pollinator habitats that flank the zoo entrance. They’re an amazing success story for the horticulture staff.

RiverQuest (www.riverquest.org) is anxiously awaiting the arrival of their new green boat. How did they fit into our green day? The new boat, Explorer, is built with green materials as well as a propulsion system that uses biodiesel (sustainable) fuel. The arrival of this boat will allow RiverQuest to add green-focused educational trips to their current offerings. Teachers can take their classes onboard for a great educational experience on Pittsburgh’s three rivers.

Thanks to our fantastic speakers for an illuminating workshop. Now that Creek Connections has painted teachers GREEN, we turn our focus to Fly Fishing, Fly Tying and the Creek Food Chain... our summer teacher workshop. Hope to see you there!!
Mrs. Bires’ students at Hermitage brave the frigid January temperatures to train on the use of the Creek Connections Water Chemistry Testing Kits.

FEATURE CREATURE ANSWER:
This issue’s Feature Creature (pg. 2) is an American badger, *Taxidea taxus*.