

A New Year with New Possibilities

For the past four years of this school the goal has been to teach students using a natural environment. Of those four years I've been around for the past three. I've seen a lot of changes throughout my time here. What started out as a simple idea has been further shaped and molded into an ever evolving and improving environment.

This year has taken a little longer to get off the ground than in the past. Not to say that that's a bad thing though. Of the High School's twenty two students eleven of them are new to the high school.

This year the staff have invested in two new online programs to assist in writing and math respectively. The writing program, Write to Learn, uses a program created by both English Professors and psychologists to auto correct an assortment of different kinds of Essays. The new math program we use is called ALEKS; this program was created using a twenty-million dollar grant from the government. You can read more about this program on pg 15.

As for structural improvements the school has come a long way in just four short years. As you may or may not now there is a cabin out behind our school hidden in the woods. It is our goal to turn this cabin into a museum detailing the life of an eighteenth century trapper.

We are currently accepting donations in the forms of historic items for this cabin. You can read more on page 6. In addition to the "Trappers Cabin" a garage was built beside our school last year, during our time last year a few students built shelving and placed counters to make storage easier. This year another group of students have decided to take it one step farther and add electrical power and additional shelving to the building.

Since we are located on the Beaver Creek Reserve property we have the option of being able to do some very unique projects along with the Beaver Creek Staff. One of these projects consists of mapping out and constructing new trails on a plot of land donated a few years ago. This will give students real hands on experience working with GPS and GIS mapping program. Not to mention giving community members a brand new trail.

Finally, the Small Mammal Project has been my "pet project" for the past three years at this school. Sadly I will be leaving this coming January and as such have the privilege to hand the

reins of this project to my former classmates. You can read more about the first phase of this project on page 11. Phases two and three will soon be starting up and I'm sure that you will be able to read about the students new experiences with them in the upcoming newsletter.

As with every new school year here there's always changes waiting around the corner, and this year is no different. The students have all been hard at work designing new projects or expanding on past ones. I'm sure you all will find yourselves as excited about this new year as we are once you read about all the projects we have going on.

-Michael Kortness

12th Grade

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Wascawwy Wabbits



A live trap after being covered to blend in with it's surrounding.

Capturing rabbits to relocate is a tough task. We have to first put out traps with some food in them and actually trap a rabbit. After we have one captured we can put a radio collar on

it. After that we let them go and later we will find the place where they den using radio telemetry. Finally we may catch them again and see if they will return to the same place.

Dan W., Sam W., and I as a group have been learning about Cottontail Rabbits. We have to first learn a lot about Cottontail Rabbits before we start

trapping them and putting radio collars on them. I have learned facts about rabbits that are pretty interesting. They weigh up to 2-4 pounds and they have very gray fur. Like the snowshoe rabbit the cottontail does not change the color of their fur during the winter. We also had to learn about where they like to live and what they might eat to make it easier to get them into one of our traps.

The first thing we had to do was pin point spots that we wanted to put the traps. After we did that we have to do something similar to a deer drive and look for any evidence of rabbits: poop, tracks, bed area etc. As soon as you find spots to put traps,

make sure your traps are clean and they work. As we start putting out the traps I have found out some cool bait that you can use: carrots, green plants, apples; and I found out that you can sprinkle a little vanilla in the bait to attract them. So once we have baited the cages and have put them in right spot we are ready.

Now we keep going out everyday day or two to check the traps until we have a collar on one to track. I'm anxiously waiting for the day we actually get to collar a rabbit so we can track it using radio telemetry.

-Calvin Johnson
9th Grade

Marg graduated last year and the chair that Jordan sat in everyday was empty...

Marg-ing

For the last three years, as I am sure many of you know, Jordan Marg was the Video Producer of Wildlands yearly video and his own video projects. The Wildlands video contained projects that happened

over the year at our school. Marg graduated last year and the chair that Jordan sat in everyday was empty. I had talked to Mr. Tweed about making a video project of my own. We agreed that I could be the new video producer for our

school.

I started off with viewing some tutorial discs to get used to our editing program, Final Cut Pro 5.1. It was confusing at first but in a few short days I began to understand the basics. Then I started on my own project making a video

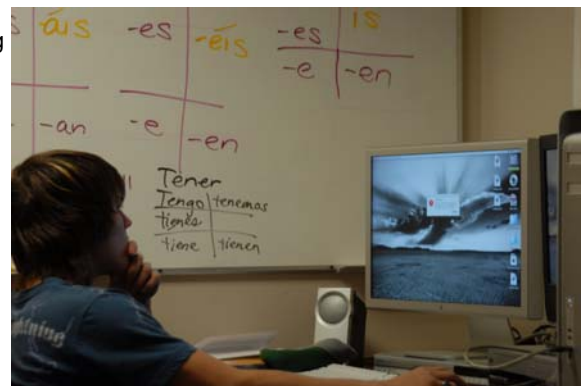
about my dearly loved friend Nick Lewis Schmidt whom we tragically lost last year. My plan is to make a fairly simple slideshow of pictures and home videos on one DVD.

of the year I hope to have a complete Wildlands video, consisting of major projects from this school year.

-Aaron Forde
10th Grade

Some more of the

projects that Marg did were making the yearly Wildlands student poster and filming the projects. Those were some of the computer technology projects that I have done earlier this year. Mrs. Seubert helped me with making the poster by showing me how to use Adobe Photoshop and Mr. Tweed is helping me with taking quality footage. By the end



...downloading it for further editing in the Final Cut Pro program.



Aaron Forde (10th Grade), checks on the quality of some footage he just captured before...

Serious Business

What is the population of deer on the Beaver Creek Reserve? That is the question that students at Wildlands tried to answer with the Deer Survey Project. The students calculated the deer population using Cuddybacks (trail cameras that are triggered to take pictures when they sense motion) and comparing buck-to-doe and doe-to-fawn ratios.

All of the high school students were involved, and they were grouped into 7 teams of 3 or 4 people. Each team had a spot on the Beaver Creek Reserve Property where they put out a pile of corn on each school day. Monday through Thursday they put out one scoop of corn (a scoop is one gallon), and Friday two scoops were put out because of the upcoming weekend.

For the first week of the project all that the students did was put out

corn to attract deer to their spots, but then they set up the trail cameras to get pictures of the deer that ate the corn. Each team had two memory cards for their cameras. Every other day the memory card that was in the camera would be pulled out and the other one was put in. Once the team returned to school they viewed and downloaded the pictures that were saved on the memory card with their computers.

After the trail cameras had been taking pictures for a few weeks the teams had to figure out which pictures were of the same deer (body characteristics of the deer were examined to determine this). They then had to figure out the buck-to-doe and doe-to-fawn ratios as well as the number of deer per square mile. The total population turned out to be 112 deer. There were 14

bucks and 228 does. The buck-to-doe ratio was 1:4 and the doe-to-fawn ratio was 1:2. There were 102 deer per square mile.

This project had been done last year, too. One of the reasons this project was done again was to see if the method gave the students consistent, similar results of the deer population total so that they could find out if it really worked. Last years' results were 15 bucks, 44 does, and 38 deer per square mile. Since a couple of these numbers are so drastically different from this years' numbers; more deer surveys are needed to see if the method works.

-Asher Velin
10th Grade



A buck picture taken by one of our Cuddybacks at the sixth of our seven locations

A Bug's Life

Have you ever wondered what kinds of bugs there are or how many different species of insects there are in around your area? Now yes, there are the insects that you see pretty much everyday in the fall, like the Asian Beetles or the many box-elder bugs. But, there are also the insects that you rarely see in the fall, like caterpillars and butterflies. For this project, I am planning on collecting different types of insects for a fall insect collection.

I plan on using various methods for collecting the insects. Some examples of traps for collecting that I will use are nets, bait traps, and a berlese funnel. Nets seem to be a

common way to collect insects. Bait traps use different types of baits in order to attract and trap the insects.

You can also use light traps, a sifter (it is like a berlese funnel), and an aspirator to collect bugs. Light traps are what they sound like; you would use light in order to shock them. Aspirators are used for collecting small, delicate or active insects from under rocks or bark, or for removing them from your collecting net. However, I do not plan on using these kinds of traps for catching insects for my collection.

The insects I plan on keeping for my collection are anything except moths and butterflies. I

only need to keep one of each species for my collection.

I'm planning on using the bugs I catch for a collection display. Besides collecting the insects and putting them into a display case, I am also going to learn as much as I can about each species that I catch. When I am all done I plan on putting my display in the Nature Center at Beaver Creek Reserve for all to view.

-Brandon Felton
11th Grade



An Orb Weaver, just one of the many bugs captured by Brandon Felton (11th Grade)

"...insects that you rarely see in the fall, like caterpillars and butterflies..."

Analyzing Radioactive Isotopes



The Geiger counter used in Max McCormick's and Devin Sprinkle's (both 10th Grade) Radiation Tests.

This year Devin Sprinkle and I are going to be working with low-level radioactive isotopes. We will be testing to see how much the strength of radiation is changed by distance. We will also be testing them to see what kind of shield works best; whether it's paper, cardboard, or metal. Another test that we will be doing is testing how much radiation is already in a room that is 10ft by 10ft. For all of these tests we use a Geiger counter (radiation sensor) and Logger Pro. Software.

The first test we intend to run will determine the affects of different types of shielding on radiation. We will be doing this by taking one of the isotopes and placing it in front of the counter without the shield and have the machine run for thirty seconds. Then add the paper shield and have it run for another thirty seconds. After that we will test with the cardboard and then the aluminum shield. Once we

have completed the tests, we will analyze the data to see which type of shield works best; either the paper or the aluminum.

The second test that we intend to do will test the amount of fallout radiation (radiation that is in the atmosphere) in a relatively small room. We will do this by placing a balloon charged with static electricity in the room, tied to a weight so it doesn't touch anything in the room, and leave it for an hour and a half, during which it will collect any radiation in the room. After this is done, we will deflate the balloon and roll it up, and place it in front of the Geiger counter and have it run for sixty seconds. When we have completed the test, we will analyze the data to see whether or not the balloon absorbed more radiation than was detected before the balloon was placed in front of the sensor.

The third test we plan to do will test the strength of the radiation

compared to distance. This will be done by taking an isotope, probably strontium 90, and putting it on a meter stick in front of the Geiger counter. We will have the isotope one centimeter from the sensor, and have it run for thirty seconds, then move it one centimeter away and run the sensor again. We will do this until we have used the entire meter stick. We will then analyze the data to see how much distance has affected the strength of the radiation.

After we have done all of the tests and analyzed the data and written the results, we will write a small paper which will have our procedure, our results, and a list of materials and isotopes we used. We plan to have this paper on the Wildlands website.

-Max McCormick
10th Grade

"...the students of Wildlands saw hundreds of animals from tropical, oceanic, and northern climates..."

Lions, and Tigers, and Bears oh my!

On November 19, the students of Wildlands saw hundreds of animals from tropical, oceanic, and northern climates. No, we didn't have to travel thousands of miles, and no, we didn't have to trek to different continents. We toured the Minnesota Zoo after



The ring-tailed lemur is just one of the exotic species found at the Minnesota Zoo.

about 100 miles on the road.

The middle school had projects that

they were to complete at the Minnesota Zoo. After an hour or so, our projects were done and we walked to the IMAX Theater to watch a movie titled Whales and Dolphins.

The group thought the movie was disappointing because the 3-D glasses made our eyes dizzy and there was not any action in it. We did have an enjoyable time at the animal part of the zoo however. After the IMAX, we could browse around for an hour before we rode on the monorail.

The monorail was pleasurable not only because we had a good

tour guide but also because we saw many larger animals that we could not have found inside the zoo; for example the lions, tigers, and bears.

All in all, I believe it was a good trip. Traveling to different continents to see animals might be for some people, but I enjoy a relaxing saunter through the zoo.

-Joe "Billy" Konzen
8th Grade

How to Throw a Throw Net

Have you ever heard of a cast net before? It is a throw able net to catch fish. I will do my best tell you how to throw one, some history behind the cast net, and tell you about some of the things that I have caught using a cast net.

First thing: how you throw a cast net is kind of hard when first starting out. Alright, on the net there should be a round piece of plastic. Hold the plastic piece and the net should straighten so it hangs the long way down. Ok, now grab a piece of lead that is closest to you and throw it over your shoulder, swing the net forward, and let go! Hopefully you will catch a fish or two. If it doesn't work the first time try, try again. Good luck!!

Cast nets have been around for about 3 thousand years, wow! The newer nets are made of monofilament line just like fishing lines, but in the old days they were made of cotton. The one thing that has always stayed the same is the lead weights

on the bottom.

I guess I have time to tell you a little of what I have caught with a cast net. In school here I am doing a project on minnows on the Eau Claire River. I go out and throw the net and if I catch minnows I take them back to the school. At school I measure their length and I have to identify each one. Each fish takes about 1 minute to identify and measure, but times that by 60 fish and that is a hour. But I have caught more than minnows with the cast net including Walleye, Red horse, and some suckers.

I hope you will remember about how to throw a cast net, some history, and how I am using it for school. Good luck if you have never used a cast net before, and remember it will take a lot of practice to get the throw just right. Have a good time, oh, and you probably will get soaked, so I recommend using it on a hot day!

-Dan Wiersgalla
9th Grade



Dan Wiersgalla (9th Grade) demonstrates how to throw a net.



C++ - Not Just Above Average Programming

Do you know what C++ means or what it is? Not many people do.

Well C++ is used to program videogames and other windows programs and it also runs off the DOS operating system.

C++ is a library full of different commands and combinations of numbers and letters.

For example
`{Character::Character () {x = 0;y = 0;visible = true;dead = false;}` This command will allow the programmer to store his or her character on some type

of memory unit.

C++ coding is based on the dos system. The dos system is the backbone of a windows computer; every thing that is done on a computer runs through this system.

If you have played or watched any videogames they were most likely programmed using C++ or, for older videogames, were most likely programmed in C.

C++ is a simple but powerful system. It takes time to learn C++ code, but when you do

finally learn it, the result will be worth the time spent working on it. The reason I bring up C++ coding and all of the confusing stuff that follows it is because a pair of Wildlands students have taken an interest in learning it and how to design a videogame and code in C++.

Hopefully in time these students will be able to design a basic videogame and learn more about coding in C++.

-Devin Sprinkle
10th Grade

"The dos system is the backbone of a windows computer..."

Passport to the World

Wildlands passport is a presentation that everyone in the high school has to do. Each person picks a place; country, city, county, etc., that is not in the United States to present information to the class. We each have a day that we are assigned to present our passport.

There is a list of the things that you need to include in your passport presentation. A few requirements are the type and name of place you are virtually going to, location: longitude and latitude, climate, past and present leaders: figures of power,

friend or foe of U.S., major resources: exports and imports; among other things.

We are using Google Earth to show our presentations. Google Earth is a computer program that shows Earth as a globe by the superimposition of images that is collected by satellite imagery, aerial photography and a computer program, GIS, over a 3D globe. It also includes pictures and interesting facts about each place.

I have learned a lot from the Wildlands Passport presentations. I learned about a few other countries

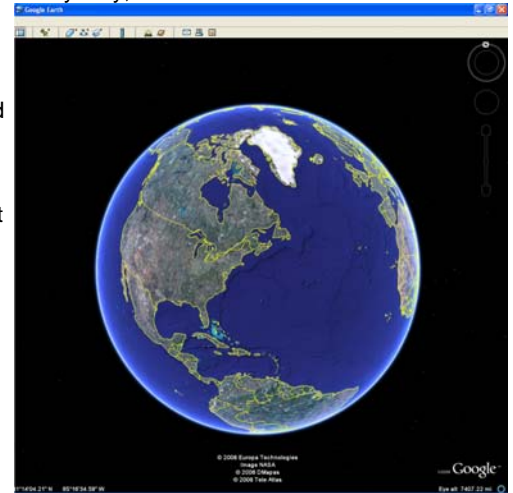
and cities, including their location and interesting facts about them. A few of my favorite places that we went to and learned about were Sydney, Australia and Zagreb, Croatia.

If you've never experimented with Google Earth I would suggest downloading the program. You might see the world from a completely different view.

-Derrick
Lewellan

11th

Grade



Creating a Historical Museum

Students have begun the planning process for remodeling the cabin for use as a living history museum. The theme for this living history project is "The Trapper's Cabin". Research into early life in Wisconsin and the fur trade will lead to the development of a model trapper's cabin. As the project moves along students will be researching 1800's technologies, lifestyles, tools, equipment, and all the items needed for life in the backwoods as a trapper.

The cabin will undergo a facelift and end up a useful, hands-on display of life in the frontier days of Northern Wisconsin. As this project develops throughout the winter months Wildlands students will be looking for items to furnish the cabin. If you have any old artifacts related to the early settlement of Wisconsin that you would be willing to part with

and donate to the museum project we would be very grateful. Wildlands School Inc. is a 501(c)3 tax deductible non-profit organization, and any donations will receive a receipt for your tax use. Here is a partial list of what we are looking for during phase one of the Trapper's Cabin project.

- Old Cast Iron Wood Cook-stove
- Old Rugs/Blankets
- Kerosene lanterns- Washboards, Tea Kettles, Mugs
- Cast Iron Pots and Pans
- Antique Bow Saws, Hatchets, and Axes
- Old Baking Dishes
- Native American Artifacts
- Cedar Shank Shingles
- Antique Traps
- Antique Tools
- Old dusty Books/Journals

- Old Barn Boards
- Any Furs, Antlers, or Mounts
- Wooden Snowshoes
- Old Muskets/Muzzle Loaders

-Paul Tweed
Senior Educator



An example sketch of a few of the items we are looking for.



The "Trappers Cabin" will hopefully be an excellent showcase of frontier life.

Special thanks to our school supporters

- Charter Bank Eau Claire
- Mega Pick and Save
- Scott and Deborah Humrickhouse
- Ted and Jan Tweed
- Terry and Susan Miller
- Walter's Buildings, John Kelly
- Chuck Forseth
- Tom Crow
- Rick Koziel
- Herb Comstock
- Robin Walsh
- Ken Frost
- Gary Speich
- Mary Beth Wold at Dean and Associates
- Paul and Joni Holmes
- The Beaver Creek Staff
- Lake Eau Claire Association

**With a donation of \$50
or more your name
can be here too**



Honey Sale



Once again we are selling 100% natural honey. This is home-made, raw, organic Apple Blossom Honey that is made right here in Fall Creek by the Miller Family! Profits from the Honey sale benefit Wildlands Student Activities. Sale ends December 22, 2008.

Jars of Honey are available in two sizes :

- 8 oz: \$5.00
- 16 oz: \$7.00



If you would like an order of honey please cut and fill out this form and mail it to:

Wildlands School
E19320 Bartig Road
Augusta, WI 54722

First and Last Name	Full Address	Phone #	Qty/Size
			/
			/
			/

Musky Telepathy, I mean Telemetry



Jordan Miller (12th Grade) holding a freshly caught 4 1/2 pound small mouth bass.

"The project is still in full swing, and we both are looking forward to learning more about the behavior of muskies..."



Nick Perkovich holding his brand new 40 inch musky.

Ever since we were young boys we've always loved the rush of excitement that came as a package deal whenever a fish was landed. Large or small the excitement was always present. From our first casts (which probably found their way into a tree branch) until now, we've always enjoyed the thrill whether we were fishing or catching.

Because of our passion for fishing we've decided to take up a project involving the capture and recapture of muskies on Lake Eau Claire. From the beginning, we were both aware of the extreme difficulty that we would face. Our plan was to successfully catch, tag, and release five muskies and track them over the course of this year. Knowing the odds were against us we planned everything carefully and to a "T".

We both did a lot of research on Radio Telemetry and how it works. Learning from mistakes made by others before we made our own, and also reading up on the popular do's and don'ts of Radio Telemetry. Thanks to the internet we learned a lot about the discrete formula and pattern in which the tagging process should be handled. Once we felt like we knew the ropes pretty well we started to focus on the more important details of Radio Telemetry.

Years ago, people used to imbed the transmitter under the skin of the fish and then sew it back up to ensure that the transmitter wouldn't get bumped or tampered with. Now a days, the transmitter can be securely fastened

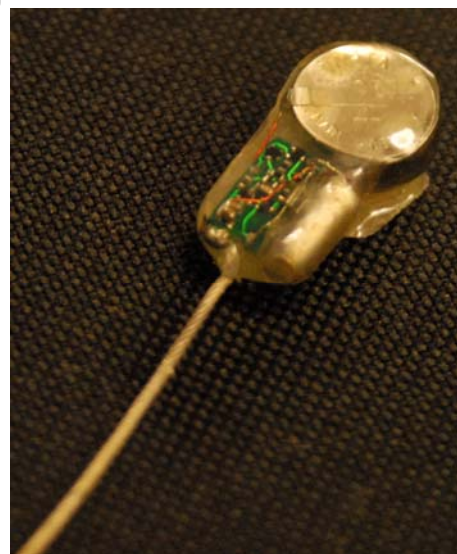
directly to the dorsal fin of the fish using small wires and fasteners. The transmitter doesn't harm the fish in any way, and only adds about 5.2 grams to the overall weight of the fish; meaning that the fish doesn't even recognize anything different once the transmitter is attached.

The transmitter that we use is an extremely small circuit board with diminutive wires and components almost too small for the naked eye to distinguish. Apart from the circuit board is a small watch-like battery that powers the transmitter for up to nine months; long enough to track the fish and learn more about its home range and also to collect the important data used in the project. To obtain a signal we need an antenna and receiver box. The antenna is a very large tool that looks very close to the TV antenna many people have on their rooftops. We can get the signal of the transmitter by holding the antenna almost completely parallel to the water and slowly moving it in a circular pattern until the signal can be received. The antenna plugs into the receiver box which basically lets off a beeping sound once it picks up a signal. As we get closer to the transmitter, (and hopefully the fish attached to it) the beeping will pick up in speed and in pitch. Once we get within a

range of 20 or 30 yards we flick the attenuator switch off which makes it easier to estimate the distance between us and the transmitter.

The project is still in full swing, and we both are looking forward to learning more about the behavior of muskies and their travel patterns. We plan on tracking them throughout the winter. And look forward to trying our hands out on ice fishing for muskies. Hoping that someday somewhere, on Lake Eau Claire a fisherman just might land one of our fish, and safely return our \$180.00 transmitter back to the school.

- Jordan Miller
12th Grade
-Nick Perkovich
12th Grade



This transmitter can be placed on the fish's dorsal fin.

Minnow Studies

Dan, Cal, and I are working on finding all of the different species of minnows in the Eau Claire River. We are catching the minnows with a minnow sane which is a 12 foot net with floats at the top and weights at the bottom. We are also trying to catch minnows in other streams to see if there are different kinds, but we have not caught any yet.

We are identifying different Shiner minnows to see what species of Shiner they are. We measured all of the Shiners in centimeters to see how many are small and how many are big compared

to the average size Shiner. We measured 182 minnows and the average length was 56.7 cm. The middle size length was 58 cm and the most common length was 50 cm.

The data we collected on the population of minnows seems to follow the same size and trend or pattern as that of game fish. That means we can do a comparable study on the minnows and it should give us an accurate example of the game fish.

My group is doing some fishing in other rivers

to see if we can catch different minnows, but no such luck so far. When we catch more we will do the same measurement test we did last time and hopefully get the same pattern as last time.

-Sam Wold
9th Grade



The Common Shiner (Above) is just one of the dozens of species being studied. Picture from DNR website.

The Comeback Kid

Last winter I decided I wanted to return to Wildlands for the 2008-09 school year. I had gone to Wildlands in the eighth grade, but that was Middle School. I was nervous about returning to the male dominated school my junior year, but I really wanted at least one more year of nature based learning. A very nice girl introduced herself as Molly Hurt (12th grade) as we walked into the school. It was odd to learn that she was going to be the only other girl I would see in the high school. However, It was great to see all of my old friends again. Some of them had changed very little, but others were like new people.

The kids in this school seem to me to be a lot friendlier than the ones at a public school. In a normal school you don't ever get the chance to learn everyone well. At Wildlands everyone seems to talk to everyone. There aren't huge fights and for the most part we all have respect for one another.

I felt like a new student again because I forgot where many things were; for example, I could not find the meter sticks anywhere. I thought that I would go back into the mind set I had been in the first year here when it had seemed like I had known everything there was to know about Wildlands back then. Also a few things had changed. Mostly the change was because I was no longer in the middle school.

It was awesome not hearing a bell the whole day long. I really enjoyed that we could take our own time to do things without worrying that the class hour would change. I never was too fond of having to follow a bell schedule. The freedom this school brings is a welcome change.

My first impression of the school has stayed. My first thought is that it was going to be an

interesting and fun year and so far it has been. There is never a dull moment here and I don't think that there ever will be. I'm so happy that I made the decision to come back!

-Megan Raether
11th Grade

"...I really wanted at least one more year of nature based learning..."



Megan Raether (8th grade) on the left and Megan Raether (11th grade) on the right.

The Real Batman



The portable Anabat SD1 or Bat Detector system.

"...they are helping the DNR and the world to learn more about these night flyers..."



A handheld computer with GPS attachment.

Some of you veteran newsletter readers might recall how I was looking into the Bat Project last spring, but since the year was ending it never really started. Instead we are running it this year with a slightly different twist; rather than being my solo project, we are now doing it as a class. Here is the basic idea: the participating high school students take home the equipment and use it to find bats around their neighborhood. Then they bring it back and download the information they gathered to a computer, which is then sent via the internet to the Department of Natural Resources (DNR). As I said before, the project is now being completed as a group, but since it was my project to start with I, the Batman, am now leading it.

Here's the project in more detail: the Beaver Creek Reserve recently purchased two bat detectors: a permanent station to use on the reserve, and a portable device for public use. The idea is to find which species of bat are in the area, and then to submit that data to the DNR. In the picture (Upper Left) you will see the portable Anabat SD1, or more commonly referred to as the Bat Detector. All bats use echolocation, which are high pitched sounds emitted by the bat that echo off of surrounding objects back to the animals ears. The bat can tell by the delay time and the pitch where things are, whether it's a tree branch or a juicy bug and avoid or attack them respectively. This detector picks up the high pitched calls made by bats using echolocation and can transmit them to a lower

frequency, thus enabling the user to hear if he/she has a bat in the immediate area. The Bat Detector will then transfer the calls it is receiving to a PDA mounted on top, where they will be safely recorded.

Each species of bat has its own frequency range and pattern of calls that can be used to identify which species it is. After collecting data, students can use the software on their computers to scroll through each recording at intervals up to a hundredth of a second to analyze the data. Why would we analyze that small of a time measurement? Because bats using echolocation will call up to 10-15 times in every second.

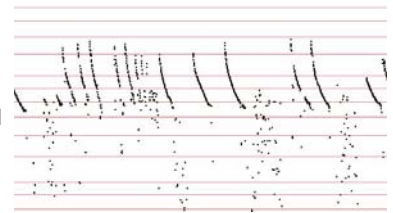
Students who bring home the bat detector have to follow a certain procedure so the data can be consistent. First of all, students are required to start collecting data half an hour after sunset, which is supposed to be the best time to find bats. But before they start collecting, they must already have picked a route to walk on. This route can take them anywhere from rural or farmland areas to woods or lakes, as long as they are moving and recording for at least one hour.

Finally, why are we doing this project? Beaver Creek Reserve has now become the first bat monitoring station in Western Wisconsin, of which there are only six in the whole state. All the information gathered at these stations goes straight to the DNR, because not a lot is known about bats and where they live. These sta-

tions and their equipment are designed to help us (and the DNR) find out that information. When citizens take out the detecting equipment and gather an hour's worth of data around their neighborhood, they are helping the DNR and the world to learn more about these night flyers. And this is just the kind of project students at Wildlands enjoy.

-Sam "The Batman" Larson

10th Grade



An as of yet unknown species of bat after being recorded and downloaded into the bat survey program.



Sam Larson (10th Grade) Surveying bats in his area.

Some Small Mammal Information.

Wildlands is performing a Small Mammal Project. The project consists of going to fields and taking data of what kind of small mammals are captured. This project also allows us to collect data on the average sizes of the animals captured.

In small groups of two to four people we set out as trapping teams. When we caught the animals we put them in a cage so we could take data of their size and species. We are trying to find statistics of small mammals in different areas. So far we went to an old farm land, field, and then to a prairie. We have caught quite a few small mammals, but are hoping to increase our data numbers in the spring again.

Most of the mammals we have data on are voles and jumping mice. We have also caught a very rare species of vole; the prairie vole is an amazing find.

Shrews are the most vulnerable mammals we can catch. They are the smallest carnivore in the USA. Because of this, they need to eat equivalent to their body weight in food every day. Shrews can also die from sudden loud noises. We have to be very careful caring for this fragile mammal. We haven't caught very many shrews we can't really tell why but it would be good if we could get more so we can get more data on these very sensitive mammals.

These animals may carry diseases so we have to be very careful with handling

them. Doing this slows the data collection process down, but it's better than getting sick. We've found it very difficult to get the exact measurements because they are constantly moving around, but understandably so.



These Jumping mice or *Zapus hudsonius* can be either meadow or woodland, two subspecies found in Wisconsin.

The project has been going well, but it would be better if we had more species of animals to collect data from. Even though these animals may be considered pests to most people, we can still learn from them and use them for research.

-Alex Gajewsky

9th Grade

"...It was fun being a part of the "Small Mammals Project" ..."

A New Small Mammal Team

During the first week of school at Wildlands there were sign-up sheets put up for the high school students to become involved in the "Small Mammals Project." This project consists of three main jobs: trapping, hair analysis, and DNA analysis.

I signed up for the trapping part of this project. A trapper's job was to set up baited live traps to try and capture small mammals such as mice, shrews, and voles. We used peanut butter "sandwiches" for bait. These "sandwiches" consisted of peanut butter spread in between paper towel. They were then cut into about 1 inch squares. We also had cotton balls in the traps so if we were to catch anything they could use it as bedding and would not freeze to death overnight. We checked our

traps every day for three straight school weeks. If the trappers captured any little critters they tried to identify them. They measured and recorded information such as their total body length, tail length, hind foot length, ear length, and their weight. If we didn't know what species they were after going through those procedures we would then look at specific markings such as tubercles, which are wart like spots on their hind feet. We could also look at their teeth, but that was only if they were dead. We took these measurements so we would have a definite identification of all the small mammals that we caught.

We started trapping on Tuesday, September 9th and stopped trapping on Friday, September 26th. We first trapped in Mr. Tweed's fields. After that

we trapped in the Henke Farm property prairie and in a different habitat next to a creek. We caught lots of small mammals during this project. We caught jumping mice, peromyscus, shrews, and voles. We decided to keep a couple of each of the species of small mammals and put them in cages in the back room of the Wildlands building. We did this so we could look at them and also so we could get information from them if it was needed. It was fun being a part of the "Small Mammals Project."

-Brett Lewellan

9th Grade



Brett Lewellan and Calvin Johnson (Both 9th grade) preparing to study a newly caught small mammal.

Schedule of Events

- 15 — Visit from the Urban Ecology Center. Student presentations from 10-11:30 a.m.
- 19 — Fleece Blanket Donations due
- 22 — Cookie Baking, End of Honey Sale



- 24-31 — No School, Christmas Break



Schedule of Events

- 1 & 2 — No School, Christmas Break
- 7 — Bowling at Wagner's Lanes 9am to 11am, Early Release



- 22 — End of First Semester, Afton Alps school ski trip



- 23 — No School—Teacher work day

DECEMBER 2008

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			



JANUARY 2009

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31



Second Indochina War

One of the great things about Wildlands is that we're allowed to do projects on subjects that we choose and, not just what we're instructed to do. It's a great way to learn more about things that interest us. For my first project this year, I chose to research the Vietnam War. I chose this because I'm interested in history, and because I did a project on it a few years ago, but I didn't get much out of it and have been interested in it ever since.

This time, even though I'm not very far into it, I've already learned a lot more about what the US did, and those involved. Most of my research so far has been about what we did to aid the French before we were fully involved with the war, and I've found a lot of really interesting things.

One of the most intriguing things I've found so far is the 'Domino Ef-

fect,' introduced by President Eisenhower on January 20, 1953. He claimed that if any one nation in South East Asia fell to communism, all of them would fall to communism, like a set of dominoes. And as it turns out, the spring after we left Vietnam, Cambodia and Laos were over-run by Communist forces.

Another really cool thing that I've found was that the first (and only) South Vietnamese presidential election was rigged by U.S. Colonel Lansdale so that Bao Dai, the French appointed president of South Vietnam would lose, and Ngo Dinh Diem would win. One thing he did, was make all the ballots for Ngo Dinh Diem red, and all the ballots for Bao Dai green. He based this on the Vietnamese belief that red represents bad luck, and green represents good luck. Bao Dai was defeated and then went into exile in France for the last 40 years of his life. Ngo Dinh Diem

built his administration up of friends and family members. He and his brother, Nhu Dinh Diem, were assassinated by General Minh. The leadership of South Vietnam was then handed back and forth between South Vietnamese Generals who constantly overthrew each other.

I've collected a lot of information about what was going on before America was completely involved, several political figures from Vietnam and America, and what they did during that time period.

I'm not sure what I'll do when I'm done with this project. Maybe another history project.

-Riley McCormick

9th Grade



A map of Vietnam at the time of the war, (Taken from Wikipedia.org)

Back down to Lowes Creek

What do you get when you put together educational tree identification and healthy exercise on bikes? The 2008 Lowe's Creek Scavenger Hunt! On September 5th the High School students headed out to Lowe's Creek County Park for their competitive outdoor activity. In this piece, I'll focus mainly on the beneficial aspects of the trip, although it was really fun.

First of all, we got lots of exercise on the trip. The trails can be very steep, narrow or out in the sun, all factors that can make it a testing experience. Physical health is largely achieved by regularly exerting your muscular

system. Alongside the exercise, we identified several tree species in the park, taking a leaf from each. This is a benefit not only to those who are considering a future in horticulture, it's also a good way to learn more about the natural world. The students split into groups which provided some team-building. Fresh air is always a good thing when you're sitting indoors all day practicing the scientific method or solving math problems.

The trip was an overall success and students harvested several metaphorical fruits from the experience. So, what do you get when you combine

tree identification and physical exercise? You get a unique and fun experience, unrivaled in terms of fun by biking indoors and engrossing yourself in raw knowledge.

-Josiah Wahl

10th Grade



"You get a unique and fun experience, unrivaled in terms of fun..."

Issac Nitz (9th grade) leads the group as they look for the next tree on their list.

Deer Baiting



An example of a bait pile from flickr.com.

Baiting is a good way to attract deer if there is little other food source. Baiting deer also helps when hunting; it brings the deer closer to your tree stand for a clean shot. After doing a little research, I have become very interested in the topic of baiting deer.

The thought of baiting deer for hunting opens a controversial door. Some people think that the baiting of deer transmits diseases. Some people and hunters believe that it is unethical, and some people feel that hunters that use bait have an advantage over the hunters that use traditional methods.

According to McCaffrey, in the 1800s baiting deer was first introduced. In 1991, Wisconsin limited the amount of deer bait to 10 gallons at a time. And, a recent survey found that only 13% to 16% of gun deer hunters used bait (McCaffrey, 2000).

Regardless of what I think or believe about baiting deer, I am curious if the deer even have a preference for bait. Is it worth the extra money to buy the latest and greatest bait? I have designed a project where I will try to find out what deer prefer more: man made or natural types of bait.

For this project, I

will take a cuddy back (a camera that you hang on a tree that takes pictures when it senses movement) and set 3 to 6 different types of bait in front of the camera. The pictures taken will allow me to see what type of bait the deer prefer. Then I'll also be able to tell if the deer prefer the commercial brands over natural corn and apples.

My results will be helpful for my personal use while hunting, and I'll be sure to report back to you.

-Isaac Nitz

9th Grade

Source: McCaffrey, K. 2000. *Deer Baiting and Feeding Issue*.
<http://wideerhunters.org/articles/bfhalfgal.pdf>.

"...I could not wait for all of the new adventures that I would be able to embark on at Wildlands..."

First Impression of Wildlands

Having been home schooled all of my life I was very excited upon receiving the acceptance letter to Wildlands School. The idea of sitting in a classroom with other students and having a teacher instruct the class was very appealing to me. I could not wait for all of the new adventures that I would be able to embark on at Wildlands; as well as all of the learning that would take place on the adventures.

My first day at Wildlands involved meeting new people, getting to know the teachers, and finding my way around the school. Mr. Tweed, who is a teacher at Wildlands, promptly split everyone up into small groups upon arrival and gave a task in which we needed to complete by the end of the day. I was put into a group with Isaac Nitz, who is in 9th grade, and Asher Velin, who is in 10th grade. We were told that we needed to try to prove or disprove the theory that moss grows

only on the north side of trees. However, we were not told how or what to do to conduct our research. The whole research project relied solely on our knowledge of trees, moss, and scientific procedures. After several hours of collecting data and analyzing it, each group presented their data to the rest of the class. Needless to say, everyone performed the experiment in many different ways. It was interesting to find that the majority of groups had disproved the theory.

The whole point of the activity was to introduce everyone to the way Wildlands functions. As students, we are expected to come up with project ideas in subject areas that we are interested in, and then research our interest areas, find the answer to a question we have, or fill that learning curiosity. Given this criteria, the ideas and projects that the students can come up with are limitless. We are also able to go on many explo-

rations to research particular interests. For instance, we explored tree identification and analysis by going mountain biking on the Lowes Creek trails. We were able to learn many new things about nature, trees, and identification techniques by having fun and exercising!

I, for one, love the hands-on learning that Wildlands provides. Every school day I look forward to all of the new information I am going to be taught or that I can discover on my own. Wildlands has definitely been very beneficial to my education. I have learned more than I ever thought possible and it has only been about a month since I started. I also have made some awesome friends and hope for them to be long lasting. I truly look forward to continuing in the numerous opportunities available to enhance my knowledge in every aspect of my education!

-Molly Hurt

12th Grade



Molly Hurt (12th Grade).

ALEKS—The New Kid in Class

ALEKS is the new math program that Wildlands School is using this year. The ALEKS program was started by researchers in New York and California thanks to a twenty million dollar grant by the national science foundation. The ALEKS program; has many different levels, in fact it covers grades k-12 and it varies from kindergarten math to calculus.

The first thing you do on ALEKS is you take an assessment which is about twenty five questions long. When you are done with the assessment it has an idea what you know and what you need to learn. It then creates a pie graph for you that is labeled in different categories of math and will tell you how much of each slice of pie you

have completed. For example one slice for me is for arithmetic readiness. In that subject I have forty six of forty eight subjects covered.

The way you get a slice done is by solving questions in the slice for subject. If you don't get how to do the problem they have a button that is labeled "explain" and it will show step by step how to do the problem.

Every so often the computer will assign you an assessment much like your first one. When you get done it will show your improvement since your last assessment and about how many weeks it will take you to finish your course.

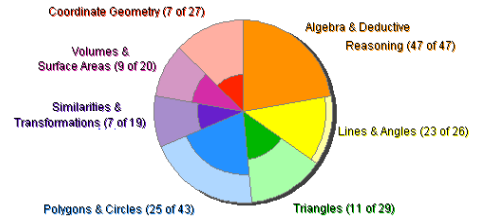
The nice thing

about ALEKS is that you get to work at your own pace so there is no need to hurry up and get your math done the minute before it is due, like I would have done last year.

I did not like ALEKS very much at first. It seemed really hard when I took the first assessment. After that I started working on the pie and it was like, oh I already know some of this stuff, but of course most of it I will have to learn. I think with this new program I will do better in math than I ever have before. Math is one of the things I have always struggled at and I always hated it until now.

-Nick Schimtt

10th Grade



A graph for the geometry class, The Darker portion is the percent of the subject completed.

The Kind of Great Expedition.

Ladies, have you ever gone canoeing and camping with seventeen boy's, three men, and only one other girl? Well I have.

It was a day of uncertainty as we set out on the E.C. river wondering if we'd tip our boat, or wondering if we'd make it. Hoping perhaps some of the boys would get lost (wet would work too). The chilling water of the river had a mind of its own, occasionally rising up to splash someone.

Navigating, well, we hit the rapids hard, but missed the Big Falls... ahhhhhhh! Ok, so we didn't even get close to Big Falls but we did portage. It wasn't easy but we did it, carrying those heavy canoes over hills and down rocky paths. Out of all the heavy canoes I got the kayak, hee hee hee.

We canoed on toward Joey Konzen's house (8th grade) knowing that we weren't that far from their beach. Finally, we arrived at the Konzen's beach, happy to be on land. After we got the things from the bus parked in the Konzen's driveway, only a five minute walk from the beach, we set up our tents and made supper.

There were two people to a group, so one person made supper and the other made breakfast. Moriah and I, the only girls on the trip, were fortunate enough to be in the same group. Many of the boys were cooking meaty items for supper, but we had pudgy pie pizzas. Delicious!

When the trip was over, we realized that one of the toughest parts was getting the canoes up to

the bus, but we did it. I think we worked well together. And it was nice having all of those boys to help with the heavy lifting.

I think that it was a great class trip and hope to do it again. It was a great experience and I learned a lot, like how to get the canoe down rapids without tipping and how to prepare a meal for me and someone else with out burning it. I also learned that being among all of those boys isn't as bad as I originally thought it would be. All in all I had a great time.

-Mikayla Larson

7th Grade

"I think with this new program I will do better in math than I ever have before."



Mikayla Larson and Moriah Vleck (Both 7th grade) prepare their breakfast for the morning.

A learning community based in the natural world



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