

2010-2011 Wildlands School Students



Ted and Jan Tweed

Joe, Kris & Nick Perkovich

The Plewa-Cummins Family

Mike, Ann, Erin, and Stephanie Arneson

BIO-RAD



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WILDLANDS SCHOOL DISTRICT OF AUGUSTA AUGUSTA HIGH SCHOOL AUGUSTA, WI 54722

Wildlands SCHOOL

Expanding Wildlands School

It is April 20, 2011 at 9:44 am, and it is snowing. The picnic table has an inch or two of wet, slushy snow on it and the students are working on all the projects that need to be done now that spring is here and the weather is nice. Oh wait, this is Wisconsin, perhaps we should wait an hour or two or maybe a day for the warm weather. The 2010-11 school year has flown by. Wildlands students enjoyed a great year and both the middle and high school groups have been very busy. After six years, Wildlands is running at full capacity and all the students are doing very well. On the Wisconsin Knowledge and Concepts

Examination our students had over 90% of all scores in all subject areas (all grades tested) in the proficient and advanced categories. With all the great things happening at Wildlands, it seems more and more families are applying for admission every year.

Wildlands had over 50 applicants for spots during the February open enrollment period. At our current enrollment of 40, only 9 spots are available for next year. With this high demand facing us for yet another enrollment period, the Wildland's team and Governance Board decided to take a leap into the future and expand the enrollment for the 2011-12 school year. Next year Wild-

lands will increase enrollment to 60 students. This means each grade level will have approximately 10 students. It also means we will be eliminating the bottle neck at 9th grade for students wishing to continue on from the middle to high school groups.

(Continued on page 6)



Bear Population Survey

This year we plan to survey bear population using trail cameras, which are cameras triggered by the movement of an animal or person. Some of the things needed for this project to take place are: the trail cameras, bait to bring the bear into the camera sight, and big enough sites to survey. We will be surveying 700 acres of land at Beaver Creek Reserve with 7 camera and bait sites.

The bear population survey will help us achieve a better understanding of how many bears there are on the surrounding land. Memory cards in the Cuddy Back Cameras will hold pictures of the bear until the cards are changed. After we collect the pictures, we will print them and determine the different bears in the pictures. Finally, we will run calculations to discover the number of bears in the Beaver Creek area.

For the survey area, we will lay a grid over a map of the Beaver Creek Reserve land. The grid is made up of north, south, east, and west lines that form boxes over the map. At 7 different intersections of the lines, we will place a Cuddy Back Camera. We are hoping that one bait pile will bring in bears from 100 acres so we will only need 7 cameras to do a 700 acre survey.



The bait we plan to use is anything sweet. In the past we have used cake mix, marshmallows, rice

crispy treats and old cooking grease. When baiting the bear, we need to first pick a spot. We will build a bait pile out of logs which are about 4 to 5 feet long. After we pour the bait on the ground, the logs will go over the bait to keep smaller animals from eating it.

At the end of this bear survey, we expect to have a better understanding of how many bears are on our 700 acre search area, and how to do population surveys in general.

-Isaac Nitz, 11th grade



What's Going On At Wildlands?

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Radio Telemetry Pheasant Project Update

As some of you may have read in our last newsletter, Esau Casetta, Jackson Forseth, and myself are doing a project involving pheasants and radio telemetry. We bought farm raised rooster pheasants from a game farm, put a radio collar around



their necks, and released them into the wild. The idea was to use radio telemetry equipment to track the pheasants' range and to discover, on average, how long a farm raised pheasant would last in the wild.

Through our research, we found that the pheasants didn't appear to travel far and the average lifespan for the farm raised rooster pheasants in the wild, was right around a week. We decided it would be a interesting idea to try and catch a wild pheasant, collar it, and release it in the same area as the others, and compare the data. We decided to use a small mammal live trap with corn in it as bait. We set a few traps out on land near Eau Claire and after a couple of weeks without catching anything, we were started to wonder if we ever would.

On Monday, February 14th our hard work finally paid off. We managed to catch a wild pheasant in one of the live traps. The next morning Esau Casetta, Jack Forseth, and Mr. Forseth placed the radio telemetry collar on the pheasant. After collaring the bird, Esau and Jack drove out to Oak Knoll Road on the south side of County Road SS to release the bird, where the three farm-raised pheasants were released earlier in the year. We tracked the bird for the rest of the week, wondering if it would survive the weekend.

On Monday the 21st we had a snow day, so we weren't able to track the pheasant at all. By Tuesday morning we were out in the field again looking for the pheasant. We still had a live beep coming from the collar, so we figured the bird was alive and nearby. On our way back to school, Jack said, "We just passed the pheasant!" It was near the side of the road. We turned the car around, and wouldn't you know it, there it was. It was next to the edge of the woods, near the road, not 75 yards from where we released him. After standing there, gawking around for a few seconds, the pheasant flew a short distance into the woods and disappeared.



The next morning, we returned to search for our pheasant again. We decided to begin our search near the place we released him. Using the receiver box and antenna, we were able to zone in on the bird's location. We received live beeps from the

radio collar and from the signal strength we knew the bird was close by. We trudged through the snow with the signal getting stronger and stronger as we went. Without having gone too far, Esau spotted the bird up ahead. It appeared to be just a branch sticking up out of the snow, but as we got closer, we could tell it was in fact a dead pheasant.



The pheasant had been killed, not 100 yards to the west of where we released it. We saw wing imprints in the snow along with a bunch of feathers. Since there didn't appear to be any other tracks in the area, we figured some kind of predatory bird had killed and eaten the pheasant.

The predatory bird must have been soaring above the area or perched in a tree, when it saw the unsuspecting pheasant, and decided it was lunch time. We took some pictures of the site and then headed back to school to share what we had found.

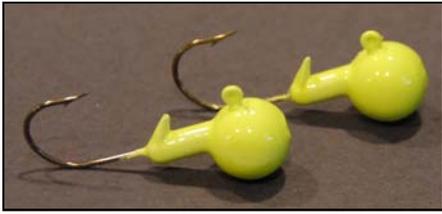


The wild pheasant survived for just over a week, just as the farm raised pheasants we had released earlier in the school year did. We are currently working on the mapping part of this project. For the mapping part of our activity, we are marking where we released the birds and the location of each bird every time we went out to triangulate their position using the radio telemetry equipment. We also marked the places where we found each of the pheasants dead. Esau, Jack, and I hope to finish our project sometime in the near future.

-Brett Lewallen,
11th grade



The Business of Making Baits



At Wildlands we have incredible opportunities to do whatever interests us. Tyler and I wanted to make fishing baits, which we would take great pride in using when we fish. We ordered supplies to make soft baits for bass fishing, but later decided to make jigs instead. We figured making jigs would be easier and more cost effective.

Before we could start the project and even think about ordering supplies, we had to talk to our teacher to get project approval. Our project idea was to make jig heads to sell as a business. At first, our teachers weren't going to let us start the project because it involved lead and it's not the best to breathe in. After more talk, they agreed to let us start the project only if we made the jigs outside and wrote multiple papers and a business plan for the company. We made a business plan which has all the

costs and prices for the baits, along with other details about the business.

When we first started to make the jigs, we had lots of lures that were all deformed and didn't look good. Making adjustments to the process of production, we improved the outcome of our finished jigs. We made the baits by first heating lead. Once the lead is heated to a liquid, we pour the lead into a cold, metal mold. Once it goes into the mold, almost immediately it is cooled down to handling temperature. There is always a big piece of extra lead on the top of the jig head that needs to be removed with pliers. After the bait is all clean, and the extra lead has been removed, then it is ready to be painted.

The paint is really sweet! It is called powder paint. All you have to do is heat the lure with a butane torch and swirl it into the paint. The powder paint will heat up on the jig and melt to the bait, creating a hard shell over the jig head. The paint will protect the bait so that when one is jigging it on top of rocks it will stay colored.

Tyler and I made many jigs, packaged them up, and made a awesome display board for

them. We wanted to find a place to sell our baits, but before we could do that Mr. Tweed helped us figure out a formula for pricing our jigs. After they were all priced, we went and talked to the owner of Fall Mart in Fall Creek. We were very excited when he told us we could sell our baits there.

Now you can find our hand made baits at the Fall Mart in Fall Creek, or at Wiersgalla Company in Eau Claire.

-Dan Wiersgalla, 11th grade



Track Tube Factory

My sister, Rebekah, Isaac, and I, are making track tubes to be used in upcoming projects this spring and in the future. Track tubes are used to find out what types of small mammals live in a certain area without hurting them.

To make the track tubes, we cut two ten-foot gutters into ten different parts each measuring one foot long. Then we cut plexi glass into strips that fit into the gutters. After that, we cut PVC pipe into sections about 1½ inches long. Cutting each piece in half, they now looked like little troughs. Next, we epoxy the troughs to the middle of the plexi glass strips. After the epoxy was dry we took charcoal spray and sprayed the ends of the plexi glass strips about one inch in from the end. Next we took contact paper, cut it to fit in between the trough and the charcoal spray, then we taped it in sticky side up. After that we filled the troughs with peanut butter. The last step was to Velcro the plexi glass into the gutter pieces and we were ready to start!

You may be wondering how we can collect data from that. Well you see, when a small mammal, such as a mouse or mole, walks in to taste the peanut butter they walk across the charcoal which cakes onto their feet so when they walk across the contact paper they leave their foot prints. Bingo! We can identify what types of small mammals live in that certain area without hurting them. This is perfect for all sorts of different projects involving small mammals.

-Abby Wood, 9th grade



Abby and Rebekah pose with their completed track tubes.



Track tubes are placed on the ground and then marked with a white flag so that they can be found again.



The inside view of a track tube.

Busy as a *Honey Bee*

Everyone knows of the honey bees incredible talent for producing honey, but did you know they can communicate through dance, see color, and use the sun, gravity and the polarization in the sky to discern direction? All of these hidden skills is why I have always had a great fascination for the little creatures. Naturally, researching honey bees in a hands on, in depth way has become my favorite school project.

Before I could keep bees, I needed some background information on not only honey bees themselves but also bee keeping. Informative books and assisting beekeepers made me well versed on both subjects.

My sophomore year, I built an observation hive and kept honey bees in it that summer. The goal for that project was to put the honey bees in a situation where they would

have to raise their own queen. Unfortunately, this project did not turn out quite the way I had anticipated, but I still gained knowledge that will prove helpful in the next stage of my proposal.

This year, my honey bee project is building two top bar hives, and keeping Carnolian honey bees in one hive and Italian honey bees in the other and conducting a comparison study on the two. Some of the aspects I am going to compare are honey production, brood size, life span, and so on.

Once the order for the bees, and equipment had been placed, the next step in this activity was to build the cedar-top bar hives. This was quite a learning experience for everyone involved, but

in the end we all agreed that it turned out wonderfully.

On a bright, sunny day in the second week of April, the bees arrived. My helpers and I loaded up the equipment and made our way to my house where the bees will be living this summer. Dressed in attractive white bee suits, my beekeeper friend, Sharon Bussard, (who has been mentoring me through this whole project) and I, got the bees comfortably situated in their new homes.

I love walking into my back yard and seeing and hearing the bees buzzing around happily. I am quite sure that this project will keep me "busy as a *honey bee!*"

-Maddie Black, 11th grade



My honey bees came from California in a box like this. Besides bees, the box contained a jar full of sugar water and a separate box for the queen. To get the bees out, I pulled out the can, took out the queen and shook the bees into the hive.

Wildlands Video Production Update

Check us out on YouTube:
www.youtube.com/WildlandSchoolVideo

Students at Wildlands School are working hard to make videos of how to perform the many different procedures required to successfully complete a project. Generally, one video is made for each aspect of a project. For example, videos about a water analysis activity may include footage about sampling methods, how to analyze the samples, and what the collected data means. However, many times there is another side to projects here at Wildlands School: working with computer programs.

Many of the programs used at Wildlands School will require video tutorials. Of course, the problem many run into making videos about how to use a program is getting footage of the program in use. Since a camcorder can't be used to film a program in use, how else can one get footage? Fortunately, this will not be a problem for Wildlands students thanks to Adobe Captivate 5, a great program which records any activity on the screen with great video quality. This program has another very handy feature: it will automatically add text boxes on the video that note which buttons are being clicked. The text in the boxes is very easy to edit and the boxes can also be added and removed manually. These features make the program ideal for making program tutorials.

So far, a tutorial video has been made about how to use Project Foundry, an online resource used here at Wildlands to keep track of students' projects and credits. Currently, there are tutorials about Google Sites and ArcGIS 9 in progress. All the videos are looking great so far and should be very helpful to others who use these programs. Many other programs still need tutorials, so Adobe Captivate will be used extensively by Wildlands students for quite some time.

- Asher Velin, 12th grade

Middle School War Projects

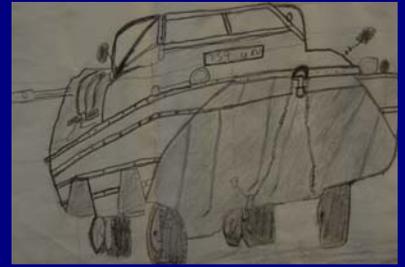
Wildlands Middle School students have been busy learning about wars, particularly World War II. Some of the projects they have been working on to earn points towards their finished project include diagrams, model planes, skits, sketches, piñatas, and poster boards displays. They are also examining artifacts, baking hard tack, and enjoying a visit from WWII veteran Diz Kronenberg. Another part of the Middle School students war project was to read books set in the WWII era, and then using HD video cameras, iMovie, and their acting abilities to capture scenes from the books. The books they read included: *Twenty and Ten* by Claire Huchet Bishop, *The Upstairs Room* by Johanna Reiss, *Four Perfect Pebbles* by Lila Perl and Marion Blumenthal Lazan, and *Friedrich* by Hans Peter Richter. The conclusion to the Middle School war project was an open house. Parents and grandparents came from miles around to admire the students informative posters, play performances, power points, sketches, artifacts, and dioramas. The open house was enjoyed by everyone and it was a good ending to an extensive project.



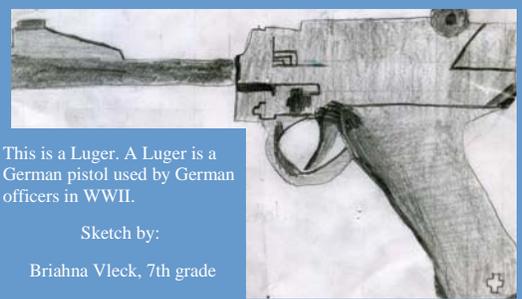
This knife was a part of the Hitler Youth uniform. It was used many of tasks, including cutting the women's hair.

Sketch by: Karina Larson, 7th grade

This is a DUKW. It is an amphibious vehicle used mostly during WWII.



Sketch by: Noah Plewa, 8th grade



This is a Luger. A Luger is a German pistol used by German officers in WWII.

Sketch by: Briahna Vleck, 7th grade

This is a Revolutionary War cannon. It was used by both the British and Americans.



Sketch by: Helen Black, 7th grade

A Work of Art



When you walk into Wildlands School, look over the fish tanks and there you will find a spectacular Wildlands logo. Middle school students, Helen B., Karina L., and Maryann V. created this colorful sign with help from the rest of the Wildlands family. To make the sign, they arranged tiles on a plywood base and numbered the backs of all the tiles. They then printed out a Wildlands School logo and cut out the inside of the letters to use as a stencil. Using a permanent marker, the girls traced the logo onto the tiles. Now it was time to let the students

and teachers go crazy with decorating the tiles. After letting the tiles dry for 48 hours, the girls used tile adhesive to secure the tiles to the plywood. With some help, the girls built and stained a wooden frame, put it around the logo sign, and hung it up for all to see. Not only were the three girls proud, but the whole school takes pride in the logo they all helped design.

Expanding Wildlands School

(Continuation from page 1)

As we move forward with expansion plans, we are addressing many issues. One is staff. The Augusta School Board and Administration have both expressed support for this plan and have approved the hiring of an additional staff member. We have also worked with the Beaver Creek Reserve staff and Friends of Beaver Creek Board to secure more space for our additional students. For a temporary period of two years, we will be renting space in the Hobbs Observatory for one group of students. Temporary means we are also kicking off a plan to raise funds for the expansion of the Citizen Science Center. The goal is to raise the dollars required to add on a new wing to the CSC building and by the fall of 2013 have all the students back in one building. This would move Wildlands to a more permanent 60 student enrollment with four staff.

Many new issues will be arising due to an expanded enrollment. The staff

is working on these this spring and will continue to develop new and better ways to manage the school and serve our students at the new enrollment level. We are confident this move will make Wildlands a better place for students. Since opening in 2005, the school has already experienced many changes. The addition of the 9th-10th grade group in 2007 changed the way the high school was structured. This has been a very positive change, and now we have the opportunity to really develop each group (7-8, 9-10, 11-12) to their fullest potential. The addition of a new staff member (yet to be determined) will really help our 9-10 students bridge the gap from the middle school project environment to the more fully independent 11-12 group.

Wildlands is changing. We all know that change can be a rough road sometimes, but we also know that with change comes new opportunity. The staff at Wildlands is very excited

to embrace this opportunity and work to make it the best for all students who choose the Wildlands path. A general meeting for all parents is being held on April 26th at 7:00 pm to talk more about these changes and answer questions. The meeting will be held in the middle school room at Wildlands.

-Paul Tweed



Students work to control a prairie burn as part of the wetland restoration project.

A Second Grade Day at the Lab

The Augusta second graders enjoyed a day at the lab, where they learned about the different states of matter the Wildlands way! The high school students developed and lead the second graders in a series of hands on activities to teach them the basic of solids, liquids and gasses. Activities included making ice cream, experimenting with dry ice, playing with non-newtonian fluid and making Jell-O.



Eat Food– Support Wildlands School

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Come to Burrachos enjoy a delicious meal and help support Wildlands School at the same time



When: May 5th

Time: Between 5-9pm

What: Bring this in when you order and 15% of your purchase will be donated to Wildlands School



Bring this sheet into the Eau Claire



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April 18-19, Wildlands High School students visited the Mead Wildlife Center to learn about wetlands, stayed at the Boston School Forest in Stevens Point, and woke up at 3:30 am to observe the mating habits of the Prairie Chicken.



Prairie Chickens are an endangered species in Wisconsin.



These are the blinds that we watched the drumming dance of the Prairie Chicken from.

Wildlands Supporters

Special thanks to the following individuals, families, and organizations whose generous contributions help make Wildlands School successful year after year.

- Charlene and Shawn Ryan
- Christine Giber and Scot Nelson
- Jim and Sandy Casetta
- Jodi and George Wood
- Kate and Eric Hartkopf
- Mark and Sue Barton
- Marty and Diane Degenhardt
- Paul and Joni Homes
- Peter Forseth
- Sandy and Keith Hug
- The William Spraezt Family

Wildlands Newsletter Staff:
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Junior Senior Editor— The Sam Larson

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Your donation to Wildlands School will provide students with up-to-date research equipment, support field work opportunities, fund local fieldtrips, or support our senior scholarships. Anyway you look at it, the money directly helps our students.

Thank you for your support!

Mail this section with your donation to:

Wildlands School * E19320 Bartig Road * Augusta, WI 54722

Wildlands needs your support.

Wildlands has established a 501c(3) non-profit organization to support student research and activities. If you would like to help us provide students with unique learning opportunities please use the form below. All donations are tax deductible.

Benefits of supporting Wildlands:

1. With a donation of \$50.00 or more, you will be recognized as a contributor in our Wildlands' Newsletter.
2. With a donation of \$500.00 or more, you will be recognized on our Wildlands' Equipment Trailer as a Major Contributor.

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