Conservation Corner for February 7, 2017

Agriculture and Natural Resources Education Opportunities for Middle and High School Students

By Jodi DeHate Wexford Conservation District

Where can you find a class to teach you about farming, conservation, wildlife management, ecosystems, and leadership skills? Area students have a unique class they can attend at the Wexford-Missaukee Career Technical Center (CTC): Agriscience and Natural Resources. This class offers a plethora of topics to many students. On a smaller scale, Northern Michigan Christian School in McBain offers an Ag class for its middle and high school students.

CTC Curriculum and Projects

CTC teacher, Mark Johnson and paraprofessionals Kristin Sikkema and Janette Stoinski are the busy and dynamic people behind the Agriscience and Natural Resources class. The topics this class covers are varied: plant science, alternative energy, forestry, ecosystem studies, wildlife management, soil science, water resources, laboratory science, along with current issues in agriculture. Students in the Wexford-Missaukee Intermediate School District are given preference to be able to join the class first. When space is available, the class also enrolls students from out of the ISD from as far away as Brethren, Bear Lake, and Grayling.

Agricultural education is a three-pronged approach that are integrated within the Agriscience class. The three prongs are:

- Instruction inquiry based instruction and learning
- Supervised Agricultural Experience program experiential, service, or work based programs
- FFA which develops leadership and interpersonal skills

As a former teacher myself, this is a really robust curriculum and learning model.

Being part of this class means automatic enrollment in FFA. What is FFA? The official name used to be Future Farmers of America. The name was changed in 1988 to be simply FFA because the organization is more than just preparing people for production farming. There are a host of things that FFA helps students learn more about including opportunities for competitions, travel to conventions, and scholarships. The CTC's Agriscience class is the only FFA chapter in a five to six county region.

Another cool feature about being a FFA member and really part of this class is that the student receives six free credits to Michigan State University! How awesome is that?! Currently there are three freshman at MSU who took advantage of those credits. One is studying horticulture, another is in the fisheries and wildlife program, and another is taking agriculture business.

As part of the Agriscience and Natural Resource Class students must do projects that benefit natural resources and/or the community. A listing of recent projects includes:

- Monitoring a stream within Wexford County with Laura Quist, Missaukee Conservation District Educator
- Building access stairs for the Cadillac Are Land Conservancy at the Oliver property in Harrietta
- Building a deer blind built for an auction benefitting the Osceola Community Foundation

During the coming spring term, the students will be partnering with the Wexford Conservation District by building 10 boot brush stations for the North Country Cooperative Invasive Species Management Area which operates in our region. The boot brush stations will enable hikers and other trail users to quickly and easily brush soil from their footwear before entering the trails. This simple procedure has been shown to help prevent the spread of invasive species. The stations will include photographs of invasive species to be on the lookout for.

But I don't want to be a farmer

The class at CTC is much more than being a farmer. This class is for anyone that is interested in the outdoors really. If a student is interested in anything to do with natural resources such as forestry, wildlife management, fishery management, or a number of other subjects. This class explores all of those possibilities.

Yet, if a student is interested in agricultural topics such as animal care, agronomy, agriculture business, greenhouse management, soil science, Christmas tree production, landscaping, technology in production equipment, or anything related to Agriculture, then it's worth a look at this class.

Farmers are only 1% of the population. However, according to the Michigan Department of Agriculture and Rural Development, agricultural-related jobs account for 22% of all jobs in Michigan. Nationwide, the USDA's Economic Research Service states that 10% of our workforce is employed by agriculture and its related industries. The need for qualified people to fill that large amount of jobs in our country is growing. There are not enough qualified individuals that can do some of these very specialized jobs. Students in grades 8 through 10 will have the chance to explore careers related to in agriculture and natural resources through an evening class being offered at the CTC. The class will begin the first week of March, and run for nine weeks, and will meet from 6:00 to 8:00 p.m. at CTC. There is no cost to attend, but students need to provide their own transportation. Field trips are included as part of the program. Contact the program at (231) 876-2239 to enroll, or email the instructor, Mark Johnson, at mark.johnson@wmisd.org

Another program in the area

Northern Michigan Christian School in McBain has had an agriculture program for about five years. The class is open to high school and middle school students. The school has a hoop house and about an acre of ground used for the class.

Over the years, the instructors Dirk Walhout, now superintendent of NMC, and Nichole Witbeck have refined the program through trial and error and through the needs and wants of the students and school. Right now, the middle school group is growing herbs to dry, sell, and market in

various products. The students learn about not just growing the plants, but also how to be a sustainable business.

In recent past, the high school class was growing micro greens to sell and market to local businesses. Other projects included raising livestock off campus at nearby farms to ultimately feed the students at school, composting school lunch waste, vermicomposting, and growing via season extension techniques. Both classes focus mainly on agriculture and business related to agriculture, but they do partner with the science class to work on projects such as stream monitoring and other science related topics.

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These local students were among the nearly 63,000 FFA members and guests from across the country who attended the national FFA convention in Indianapolis in October 2016. Attendees participated in general sessions, competitive events, educational tours, leadership workshops, an expo, volunteer activities, and more. The FFA convention is one of the largest annual student conventions in the world.



Wreath making is one of the several agribusiness enterprises that students in the Career Technical Center's agriscience program get involved with. Students in this photo have just finished harvesting the greens they will use to assemble the wreaths.



The stairs that these students Career Technical Center's agriscience students are constructing will enable trail users to walk down the slope without causing erosion.



Middle school students at Northern Michigan Christian School show off their herb growing skills. The herbs will be added to soap that they make. Left to right: Ally Krick, Katie Witbeck, Megan Bennett, Maggie Yount.