



# EarthBeat

EMBRACING NATURE • ENGAGING MINDS



## Our Mission...

To inspire learners of all ages to embrace nature, to engage their minds, and to acquire an awareness of responsible stewardship for our planet."

## To The Fringed Gentian

*Thou blossom bright  
with autumn dew,  
And colored with the  
heaven's own blue,  
That openest when  
the quiet light  
Succeeds the keen  
and frosty night.*

*Thou comest not  
when violets lean  
O'er wandering brooks  
and springs unseen,  
Or columbines,  
in purple dressed,  
Nod o'er the ground-  
bird's hidden nest.*

*Thou waitest late  
and com'st alone,  
When woods are bare  
and birds are flown,  
And frosts and  
shortening days portend  
The aged year  
is near his end.*

*Then doth thy sweet  
and quiet eye  
Look through its fringes  
to the sky,  
Blue – blue as if  
that sky let fall  
A flower from its  
cerulean wall.*

*I would that thus,  
when I shall see  
The hour of death  
draw near to me,  
Hope, blossoming  
within my heart,  
May look to heaven  
as I depart.*

-William Cullen Bryant, 1832

## Elusive Fall Elegance

*Fall is an incredible time of year. Students are back in school to begin another exciting year of learning, leaves on the trees are beginning to change into their magnificent technicolors, the days are getting shorter and the nights are becoming cooler. With all of this change comes another beauty and wonder of fall – wildflowers!*

Although most wildflowers emerge and bloom in early spring and throughout summer, there are a very select few that bloom in the shorter days of fall. One of these unique beauties and one of the last to bloom before the frost is the **Fringed Gentian** (*Gentiana crinita*), which can be seen here at the Ebersole Center and in select areas throughout Michigan from late August and early September through November.

These vibrant flowers grow in several areas around the Ebersole Center, however they are most concentrated in the bog and fen areas around Jackson Lake. Their height ranges from 1-3 feet tall and the flowers are found at the end of the solitary, leafless stalks. The 2 inch flowers of the Fringed Gentian are an iridescent bluish purple and have four finely fringed petals, hence the name. The flowers of this little beauty only fully open on sunny days. During cloudy, rainy days and at night, the flowers close to protect their precious cargo of pollen and nectar. The Fringed Gentian is a biennial herb that reproduces only by seeds and lives 1-2 years total. This makes the plant fairly elusive because they don't always appear in the same places year after year. First year plants are quite small, flowerless and grow near ground level. The plant only produces flowers in it's second year of life. This plant's short lived, but exquisite beauty has been the focal point and held the attention of many artists and poets for hundreds of years. If you keep your eyes open in and around meadows and wet wood habitats, you just might be lucky to see some of these little gems in your neck of the woods too!

## New Low Ropes Addition to Challenge Course

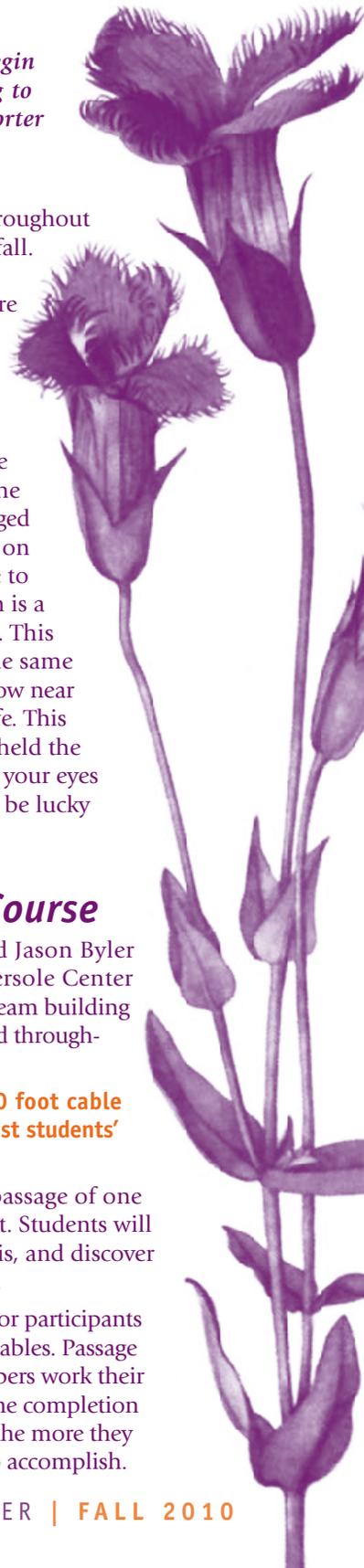


This summer Naturalists Tom Stone and Jason Byler added a new activity to the popular Ebersole Center Challenge Course. The course focuses on team building for students in grades six and up and is used throughout the school year.

**The Ropes Challenge now includes a 100 foot cable walking and balancing section that will test students' patience and physical stamina as well.**

With the natural slack of the cable, the passage of one person across the 100 foot rope is difficult. Students will often try it alone and realize how hard it is, and discover that to succeed they must work as a team.

The key to this team building initiative is for participants to support each other as they traverse the cables. Passage is a challenge, but becomes easier as members work their way together as a team to the end. Upon the completion of this initiative, participants discuss how the more they worked *together* the more they were able to accomplish.





## Arlie "Butch" Syers Retires

On September 1, 2010 after over 33 years of dedicated service, Ebersole Center said farewell to its longest-working employee, Arlie "Butch" Syers Jr.

Butch's job description was "handyperson" but he did much more than keep Ebersole clean and in tip-top shape. Much time was spent mowing the grounds, fixing boardwalks, keeping trails clear, removing snow, trying to keep machinery working, and cleaning, cleaning, cleaning! Always willing to help groups and staff with whatever was needed made Butch a very popular guy. For years Butch would come back in the evenings after working all day to do hayrides for visiting groups. As a bus driver he made many trips to Lake Michigan and other destinations. Butch wore so many hats that it is impossible to list everything that he has done or helped with over the years.

Butch grew up around the corner roaming the undeveloped property that would eventually become the Ebersole Center. Little did he know that all the hunting and fishing he did in the area would prepare him for working at Ebersole. In 1977 when the Center officially opened, Butch was hired as a C.E.T.A. worker and eventually became a fulltime employee of the Lansing School District.

In the early 80's, Butch met his wife Amy when she was hired as the Cook/Baker. Together they have three grown children, Stephanie, Sarah, and John. Butch's dedication to the Center didn't stop with just him, but extended to his family. His dad, Arlie Sr. spent many hours volunteering at Ebersole and then subbing as a custodian and food service worker, and Butch's sister Pat Louwenaar is the current Cook/Baker.

Butch's retirement has been bittersweet for his Ebersole family. We are happy for him and wish him only the best, but we are all sad to see him go. So Butch, enjoy your retirement, fishing, hunting, and spending time with your family, and stop in and see us sometime, we miss you!

If you'd like to send cards and letters to Butch, please send in care of the Ebersole Center and we will gladly pass them.

## Magical Monarchs

One of the most familiar butterflies that you will see flying around pastures, woody areas, marshes and gardens in late summer and early fall is the Monarch (*Danaus plexippus*).



These orange and black wonders begin their life cycle as a tiny **egg** about the size of a period on a written page. The female lays her conical shaped eggs one at a time, on the underside of the leaf of blossoms of milkweed plants. Depending on temperature, the eggs take from four to twelve days to develop and hatch into the next stage of life; the **larva or caterpillar**. Over the next ten to fourteen days, the tiny caterpillar will eat dozens of leaves from the plant where it was hatched. As the caterpillar eats it continues to grow longer and fatter. The caterpillar's "skin" or cuticle is like a shell, and does not grow along with the caterpillar, so as the caterpillar eats more and grows bigger it outgrows its skin and must shed it or molt. The caterpillar does a little dance where it shakes and wiggles and then squeezes, pushes and tugs at its tight, old "skin" and it comes off. The final step in the molting process occurs when the caterpillar rubs off its face "mask", which has also become too small and tight. The caterpillar turns around and eats the "skin" it has just shed, which is loaded with vitamins and nutrients that the caterpillar needs to grow big and strong for its next stage of metamorphosis. The Monarch caterpillar will go through this molting process about four times. When fully grown the yellow, black and white striped caterpillar will be about two inches long.

The next stage of the life of the Monarch is the **chrysalis or pupa** phase. The fully grown caterpillar attaches itself head down by a dot of silk, sheds its skin for the last time and over the next couple of hours forms into a chrysalis. The chrysalis resembles a waxy, jade vase and becomes increasingly transparent as the process progresses. The caterpillar completes the miraculous transformation into a beautiful adult butterfly in about two weeks.

When the **adult butterfly** emerges from its chrysalis, it spreads its 2¾-4 inch wings so they can dry in the sun. After an hour or so, the Monarch takes its maiden voyage and begins to look for food. Monarchs, like all butterflies, can only sip liquid food using their proboscis, which is a long tube-like structure similar to a straw. Monarchs drink nectar from many different flowers including milkweed, dogbane, red clover, thistle, lantana, lilac and goldenrod to name a few. Monarchs are considered "poisonous" to birds and other predators because the juice of the milkweed they feed on is unpalatable and can make other animals sick if they ingest one of these flying beauties.

Monarchs can produce 3-4 broods of offspring per year, and adults generally only live 2-6 weeks. The difference between the sexes can be seen easily if you know what you are looking for. Only males have scent glands that are marked by a spot of dark scales in the center of their hind wings. Females have slightly broader black veins on their wings. Butterfly wings are very fragile and are made up of thousands of tiny scales, much like fish scales, which give butterflies their beautiful color and patterns.

The last generation of Monarchs for the year hatch in September or October. These special Monarchs don't die in 2-6 weeks like previous adult Monarchs, but instead migrate thousands of miles to overwinter in milder climates — the longest migration of any insect. During the fall, thousands of Monarchs can be seen flying to their wintering grounds. In fact, Monarchs at Mexican wintering sites have been known to number in the millions. These overwintering Monarchs can live from 6-9 months. When the weather begins to change these winter visitors begin to migrate north, mate and lay eggs, and the cycle of life of these amazing insects begin again with the next generation.



## What You Should Know about Pesticides

It is common knowledge that many fruits and vegetables sold at supermarkets are grown with the aid of chemical pesticides. These chemicals make it easier for farmers to harvest large quantities of visually appealing produce. While most of us acknowledge that farmers use toxic chemicals, we completely disregard the potentially dangerous pesticides we use around our own homes.

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**Pesticides are substances used to repel, control, or reduce harmful organisms or pests. While many of these products are safe, it is very important to read and follow the label.**

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Most people do not think of household cleaners as pesticides, but by definition, they are. Most cleaners contain disinfectants and fungicides designed to kill bacteria, viruses and fungi. These cleaners can do their job very efficiently and safely when used properly, however when misused, they can cause injury, sickness, or even death to other organisms including pets, insects, fish, and even humans.

Humans usually do not like insects in or around their homes, so insecticides are commonly used to eradicate fleas, ticks, moths, bees, wasps, ants, roaches and mosquitoes. Common alternatives to chemical flea and tick treatments include garlic, various herbs, and brewer's yeast. Some companies are now marketing treatments containing natural insecticides called pyrethrins to combat fleas and ticks. Pyrethrins are derived from the chrysanthemum plant, but even though they are natural, they can still be toxic to pets if used improperly.

Many people keep moth balls in their homes to repel moths and other insects. Most insects will avoid the smell of moth balls, but prolonged breathing of moth ball vapors by humans can cause eye, nose and throat irritation, respiratory problems, vertigo, confusion, headache, nausea and vomiting. Ingesting moth balls can cause liver and kidney problems and even death in humans and other animals. There are many safe alternatives to using mothballs including storing clothing in a sealed container containing aromatic cedar wood shavings or pieces of cedar wood or by adding lavender essential oil to cedar shavings.

## News and Notes

### A Sweet Way to Support Ebersole – Honey!

The Ebersole Foundation has been given a wonderful gift from one of Ebersole Center's own naturalists, Jason Byler. Jason has bees. And bees make honey. It turns out that this was a bumper harvest for Jason's bees and he has generously donated the honey to the Ebersole Foundation to use as a fundraiser. He has packaged it in one pound (18 available) and two pound (14 available) containers for us. We are asking for donations for the honey and will use the proceeds for scholarships for Lansing School District students. We are suggesting a donation of \$25 for one pound and \$50 for two pounds. I know this sounds like a lot for honey, but the entire amount of your contribution is tax deductible, and this is a cause that we know you support. So please get your orders in quickly so you can be assured of getting some all natural Ebersole honey. Remember, honey is one of the only foods that never spoils, so you don't have to use it quickly.



*Please send your contact/delivery information and donations for honey to:*

**Bob Harris | 1005 Arlington Drive | Lansing, MI 48917**

For those of you who don't know him, Jason has been one of Ebersole Center's two naturalists for the past 5+ years. He and the other staff at the Center have given generously of their time and talent to support the Center, and are true stars with the kids. They are huge assets to the Center and the Foundation, giving and working well beyond job requirements and expectations. Thank you, Jason for the honey and to the rest of the staff, too, for all that they do. Let's show our appreciation by donating to the "honey" fund as a thank you to the staff for their contributions and hard work.

### Long-term Planning for Ebersole Center

The Ebersole Foundation Board is continuing to work on a long-term plan for the Center to assure that it remains a first-class education facility. We have had tremendous challenges these past few months as the Lansing School District tries to balance its budget in these tough economic times. We have tried to make it abundantly clear to the Lansing Board of Education that the Ebersole Center is an asset too valuable to lose. Environmental Education is more critical today than at any time in the past, and the Center provides the district with a fantastic venue for hands-on education. I urge you to help us in any way you can with political support, financial support, or through your continued use of the facility. We need you now more than ever, and thank you very much for your ongoing support.



Bob Harris, President  
Ebersole Advisory and Foundation Board



The pest control chemicals we use in our yards and gardens tend to be the most toxic and harmful to the environment. The Pesticide "Carbaryl" which is marketed by the brand name "Sevin" is a broad spectrum insecticide. This means it can be used to kill a variety of insect pests. One problem with Sevin is that it is extremely toxic to all insects, even those you don't intend to kill. Honeybees have been known to inadvertently carry sevin back to their hives where it can kill entire colonies. Recent studies

have also found that Sevin may contribute to birth defects, learning disabilities, and reproductive problems in mammals.

As humans, we depend on many different methods to control harmful pests. Many natural and biological controls are now available as alternatives to toxic chemicals; however, pesticides still play an important role in this control. Whenever these chemicals are used, it is very important to accurately follow the label directions. Misuse could harm you, your family or the environment.



## EBERSOLE CENTER

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### Support Ebersole Online

The Ebersole Center has been saddened by the recent loss of one it's long time substitutes, supporters and volunteers. Butch Syers' father, Arlie Syers Sr., passed away on July 23, 2010. Mr. Syers was a life long resident of the Wayland area and was very knowledgeable about the Ebersole Center land and it's history. He will be missed by all who knew and loved him. Our condolences to his family and friends for their tremendous loss. Letters of sympathy can be sent to the Ebersole Center and they will be passed on to the family.

### Heart-felt Condolences

A big thanks to all of those who donate items to the Ebersole Center. Our most recent donor is Doug Patterson from DeWitt, who generously donated three pairs of cross country skis, boots and poles for our winter programs.

### Generous Donations

Printed on recycled paper. 

Stay focused  
Be "hoo" you are  
Trust in a wise friend  
Live off the land  
Glide through the  
dark times  
Be observant  
Life's a hoot!



## T!dB!ts