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- 👍 Cadillac Area Health Coalition
- 👍 District Health Department #10
- 👍 Master Gardeners of Missaukee and Wexford Counties
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- 👍 Lake City Redi-mix
- 👍 Missaukee Area Community Foundation
- 👍 Wildflower Association of Michigan
- 👍 Dutchman Tree Farms
- 👍 B.G. Trees
- 👍 Jessica Davidson - Butterfly Sign
- 👍 Gordon Food Service
- 👍 Missaukee MSU Extension
- 👍 Missaukee County Sheriff Department
- 👍 Heather Dexter & Wexford/Missaukee ISD Agri Science and Natural Resources Class
- 👍 Al Kushion & McBain High School Ecology Class
- 👍 Matt Brown - Eagle Scout Project
- 👍 Quinn Mobile Saw Works, LLC
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- 👍 Tim Lequier, NRCS Soil Conservationist
- 👍 Jim Williams, NRCS District Conservationist
- 👍 Missaukee Conservation District Directors

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Missaukee Conservation District
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**The
N.E.W.
(Nature's Exciting Wonders)
Missaukee
Fitness
Trail &
Native
Gardens
Established 2005**

1. Ground ivy (also called Creeping Charlie) is a European perennial evergreen. It is found in moist shady areas, along paths, and around hedges. It is most common throughout the northeastern and north-central United States but also found in the southern states. Ground ivy is a member of the mint family, has square stems, and emits a mint like odor when bruised or mowed. Ground ivy was intentionally brought to North America by European settlers and its medicinal qualities have been known since the days of ancient Greece and Rome. It was long considered a panacea (cure-all) and was known for its high vitamin C content. It was one of the principal plants used by the early Saxons to clarify their beers, before hops had been introduced. It is sometimes used as a groundcover but today most landscapers consider it a lawn weed and try to get rid of it.
2. Red pine (*Pinus resinosa*) is one of the most widely planted trees in Michigan. It is a native species and is long lived, fast growing, and suited to Michigan's dry sandy soils. It is easily identified by its red flaky bark and needles in clusters of two. Is often planted for timber because of its many uses and fast growth. Primary uses are structural timber and pulpwood; also suitable for poles, piling, mining timbers, and railroad ties because it is easily penetrated by preservatives. Trees are planted in rows to maximize planting space and for ease of management. Songbirds, mice, and chipmunks feed on seeds. White-tailed deer and snowshoe hares will browse seedlings if preferred food is lacking. Sometimes incorrectly called Norway pine even though it does not grow in Norway. It is said to have received the name from the town of Norway, Maine.
3. The genus *Quercus* (the oaks) comprises over 400 trees and shrubs that range from the edge of the boreal forest to the tropics. The oaks are divided into two groups. White oaks have leaves with rounded lobes. Their acorns mature in the autumn of the

Recycling & Reuse Opportunities

- #1 & #2 plastic, boat & shrink wrap, cardboard, cell phones, egg cartons, junk mail, large appliances, metals, newspaper, office paper, plastic shopping bags, printer ink cartridges,**
Missaukee County Recycling Center
6240 W. Sanborn Road, Lake City 839.7193
- Ammunition or Explosives**
Call Missaukee County Sheriff's Department 839.4338
- Building Materials**, if in good condition
Habitat Restore, 7953 E. 34 Road, Cadillac 775.8661
- Car Batteries**
J&H Auto Parts, 2671 S. LaChance Road, Lake City 775.7506
- Cell Phones**
Missaukee Conservation District & Missaukee Co. Recycling Center
6180 W. Sanborn Road, Suite 3, Lake City 839.7193
- CFL Light Bulbs**
The Home Depot, 3786 S. US 131, Cadillac 775.2776
- Clothing & Household Goods**, in good condition
Just as Nice Thrift Store, 3728 S. Morey Road, Lake City 839.5683
New For You Resale, 2070 S. Morey Road, Lake City 839.7885
- Computers**
Goodwill, 2025 N. Mitchell, Cadillac 775.1311
- Fire Extinguishers**
Lake Missaukee Area Fire Department
115 First Street, Lake City 839.2827
- Motor Oil**
Root's Repair, 1551 S. Morey Road , Lake City 839.3202
- Packing Materials**
Styrofoam peanuts, bubble wrap, boxes, etc.
UPS Store, 3970 Business US 131, Cadillac 876.1700
- Printer Ink Cartridges & Old Cell Phones**
Missaukee Conservation District & Missaukee Co. Recycling Center
6180 W. Sanborn Road, Suite 3, Lake City 839.7193
- Rechargeable Batteries**
The Home Depot, 3786 S. US 131, Cadillac 775.2776
- Scrap Metal**
J&H Auto Parts, 2671 S. LaChance Road, Lake City 775.7506

Native Wildflower Seed Available

For every \$5 donated to Missaukee Conservation District, you may select one packet of seed collected from the Missaukee County Offices Native Gardens. Each packet will cover a minimum of 50 square feet.

Your choices are:

Bee Balm	Mountain Mint
Black Eyed Susan	New England Aster
Blue Flag Iris	Nodding Wild Onion
Cardinal Flower	Ox-eye Sunflower
Columbine	Penstemon
Culver's Root	Purple Coneflower
Giant Ironweed	Rattlesnake Master
Great Blue Lobelia	Smooth Blue Aster
Green Headed Cone-flower	Swamp Milkweed
Harebells	Switchgrass
Lance-leaved Coreopsis	Tall Cinquefoil
Liatis	Tufted Hair Grass
Lavender Hyssop	Wild Senna
Lupine	

For complete descriptions, log onto
www.missaukeecd.org.

Orders can be placed in person, by phone or through the mail.

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first season and are relatively sweet. Red oaks have tipped lobes. Their acorns mature in the second season and are typically bitter. Twelve species are native to Michigan including this white oak (*Quercus alba*).

Oaks are extremely popular because of their versatility. They can grow on dry, sandy, upland sites that some other trees cannot tolerate. Oaks are frequently planted as lawn or shade trees because of their large crown. The wood is very heavy, strong, and close grained and is often used to make furniture, flooring, wine casks, interior trim and barrels. Acorns are an important food source for birds, squirrels, and other animals. Native Americans once extensively used acorns for bread purposes. Oaks are long lived and can survive 500 to 600 years.

4. Windbreaks are linear plantings of single or multiple rows of trees or shrubs established for environmental purposes. These purposes include reducing erosion, managing snow, protecting growing plants, reducing noise and energy costs and improving aesthetics. Windbreaks are beneficial to wildlife by providing travel lanes, nesting sites, browse, food, and escape cover for many wildlife species. Evergreen species are preferred for windbreaks since they do not lose their leaves in the winter. These conifers were planted primarily to serve as a visual barrier and improve aesthetics but as you can see will provide many other benefits. For our spring tree sale we sell many trees and shrubs that make excellent windbreaks. Please ask us how we can help you with your windbreak planting!
5. Michigan was once home to wildlife rich native grasslands. Prairie ecosystems that include native grasses (big bluestem, little bluestem, Indian grass, switch grass) and forbs offer some of the highest quality nesting habitat to grassland birds. Native grasses provide excellent cover growing several feet tall and are an excellent seed source for the meadowlark, sharptail grouse,

dickcissel, sedge wren, killdeer, mourning dove, robin, bobolink, sparrows, longspurs and many others.

Sweet grass is important to Native Americans. It is considered a sacred plant that is used for purifying ceremonies, medicinal purposes, and for basket weaving.

Native forbs were also important; butterfly weed was used to produce a crude sugar and poultice for sores, jack-in-the-pulpit was used to make a medicine for sore eyes and the berries for red dye, and dogbane was used to make bowstrings, fishing line, and baskets. The Missaukee Conservation District supports the eradication of invasive species and the propagation of native wildlife friendly species.

6. Animals need cover, brooding cover, water, and food, such as the blueberries, strawberries, and raspberries you see before you. Unfortunately, to get from one location to the next animals must often cross roads like Sanborn behind you. Animals had not previously encountered two-ton metal objects racing across the landscape, and thus haven't evolved appropriate instincts for dealing with them. Higher vehicle speeds, heavier traffic, and wider roads definitely make crossings more treacherous. We know that roads fragment habitat, disrupt migration corridors, and expose sensitive species to a deadly array of hazards. For rare or isolated populations, vehicle collisions can be a matter of life or death—not just at the individual level but also for entire species. Of our nation's large mammals, Florida panthers hover nearest extinction. During the early 1980s, the panthers suffered nine roadkills—at that time it was half their entire population. Woodland caribou survive as a single herd of 50 diehards in northern Idaho and southern British Columbia. The U.S. Forest Service blames roadkills, not habitat loss, as the greatest threat to their survival. While deer in Michigan are not endangered there is one killed by a motor vehicle approximately every ten minutes. In an insurance claims statistics study

the shaded forest floor. As the original pine and oak trees died and fell, the spaces they left in the forest canopy were filled by beeches and maples growing up from below. In this example, beech-maple forest is the “climax community”. The “climax community” is an association of plants and animals that will remain stable until disturbed by an outside force such as fire, wind, disease, or human activity. Biologists use this understanding of succession to manage wildlife populations. For example, endangered Kirtland's warbler will only nest in stands of young jack pine trees. Periodic wildfires once maintained this habitat, but when humans suppressed fires, Kirtland's warblers had nowhere to nest and nearly became extinct. Today, in Kirtland's warbler habitat areas, managers use clearcutting and prescribed burning to prevent succession from occurring—to maintain the young jack pine habitat that the warblers and other kinds of wildlife need to survive. As you walk through the grassy open area, the shrubby/oak area, and the mature stand of conifers be sure to recognize the differences in the types of plants and animals.

2012 Tires, Electronics

When: Saturday, September 22, 2012

Time: 9:00 am - 1:00 pm

Where: Missaukee County Road Commission
1199 N. Morey Road
Lake City, MI 49651

For more information, call 231.839.7193, or
log onto www.missaukeecd.org for additional information.

Limit of 7 tires free per household.

Electronics, if not disposed of properly, can cause environmental damage by contaminating ground and surface waters, threatening human health and wildlife.

laying eggs because it is an excellent nutrition source for the larvae. A butterfly garden is an easy way to beautify the landscape with native plants and help create butterfly habitat as many natural habitats have been lost to urbanization and land development. Planting native plants that provide an excellent food source and bloom at different times of the year will create a long summer full of blooms and butterflies. Stop by our office and inquire about butterfly gardening, butterfly books and native plant sale. The butterfly sign was designed and made by Jessica Davidson.

9. Notice the shape of the trail you are walking on where the petal shaped gardens have been placed. The trail is in the form of an emerging fiddle head fern, hence the name Fern Garden. Do you have the vision? A stroll around the end will bring you to a bench if you need to sit for a minute.

Petal gardens are planted with birds and butterflies in mind. Watch for yellow finches. They are here frequently feeding on seed heads from various coneflowers, coreopsis and ox-eye sunflower.

10. The term *succession* refers to the predictable changes that occur in the plants and animals that live in an area over time. Northern Michigan was once covered by vast forests of white pine. When the timber was harvested it brought major changes to the kinds of plants and wildlife that could live here. In the next few years, annual weeds, grasses, and wildflowers grew creating habitat for mice, meadowlarks, and other open-field wildlife. Eventually, shrubs and small trees invaded the grassy fields. As these new plants grew, their leaves and outstretched branches shaded out the grasses creating a different kind of habitat. Chipmunks and robins were among the animals attracted to this new habitat. Over time, pine and oak trees grew tall and shaded out most of the shrubs, creating forest habitat preferred by squirrels and wild turkeys. Beech and maple seedlings grew in

conducted in 2004-2005 Michigan was second in the nation in car-deer accidents.

7. Rain gardens are designed to collect water run off from rain and snow melt. The standing water then slowly drains into the ground while native plants with very deep root systems absorb large quantities of water filtering it before it enters lakes, rivers and even our drinking water.

Native plants are great helpers for protecting water quality in your neighborhood. The deep roots of many established native plants increase the ability of soil to hold water. For example, Blue False Indigo, *Baptisia australis*, grows only 3-5 feet tall, but the roots may go down 25 feet! These fantastic roots create deep channels in the soil for rain to soak into. Some of the roots die each year, and new roots grow. The decomposing roots enrich soil, making it more fertile and absorbent. The root systems also hold soil together and help prevent erosion.

Contact Missaukee Conservation District for more information about installing your own rain garden.

8. The monarch butterfly is a favorite in Michigan and is as durable as it is beautiful. In the late summer a new group of monarchs emerge from their pupae and migrate 2,000 miles to Central Mexico to over winter. When the weather in the U.S. warms up enough to reproduce they start on their migratory route north with females laying eggs along the way. The migratory monarchs give way to a new generation that keeps traveling north throughout the summer. There may be three generations of monarchs in a single summer with each generation living two to five weeks. In late summer a new group of migratory monarchs emerge. Milkweed is the key to monarch's migration. A native plant with purple flowers, the milkweed is sought out by these beautiful orange and black butterflies for

The N.E.W. (Nature's Exciting Wonders) Missaukee Fitness Trail Your Local Path To Healthy Living

If you weigh 140 pounds

Walk 1 outside lap in 15 minutes, you will burn 79 calories

If you weigh 180 pounds

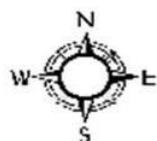
Walk 1 outside lap in 20 minutes, you will burn 90 calories

If you weigh 200 pounds

Walk 1 outside lap in 20 minutes, you will burn 100 calories

1 outside lap = .8 mile

(Follow dotted line)



Legend

- Outdoor Classroom
- B Bench
- △ Interpretive Markers

Recycling Center

