Frequently Asked Questions Caledonia Community Schools- Natural Areas

Q- Why are there all of those weeds in front of the high school?

This is a natural area. When Caledonia High School was built in 2002 the plan set the school back from Kraft Ave. This buffer area between the school and Kraft was planted intentionally with native grasses and wildflowers. The term "weed" is used to describe any type of plant that is not wanted, so in the case of the plants in front of the high school, many of them are desired, purposeful, and beneficial.

Q- What is a prairie habitat?

A prairie habitat is a landscape dominated by grasses and wildflowers. These native plants used to reign dominant throughout midwest prairie habitats but with the introduction of invasive non-native plants and the <u>popularity of monoculture grass lawns</u> many of these native plants are under threat. This area in front of the school holds a high diversity of plants leading to blooms that can be found throughout the growing season by different plants.

Q- How is this area beneficial?

Environmental- We strive to manage a native habitat. As development removes habitat in many areas of our planet, including our own community, CHS's prairie habitat provides a refuge for many plants and animals. As we continue to promote native plants, we hope to attract birds, amphibians, bees, monarchs, and other pollinators. Any habitat that is diverse with species is more flexible and adaptable to environmental and biological changes. Monocultures (our lawns) are more susceptible to diseases, while a diverse habitat is more resistant to issues such as this. Native habitats also use fewer resources (gas, water, chemicals) and provide a better site for the retention of stormwater run off protecting the whole community watershed.

Educational- The environmental impact at the high school is just the start. When students and community members learn the benefits of native gardens people can set aside sections of their own gardens/yards to create green spaces and the impacts become exponential.

Economic- We don't take care of the environment so that we can save money, but when they coincide, it's great news! Natural areas management isn't free but it does relieve the burden of weekly mowing, oil, gas, fertilizer, and water associated with it.

Q- How does this relate to the monarch butterfly?

Many people are familiar with the Monarch Butterfly and know how to identify it, but most don't understand the full story. The Monarch Butterflies that we observe in Michigan are part of a group that over winter each year in the mountains of central Mexico. Once spring starts, the Monarchs start heading north. The butterfly may take 3-4 generations to make it north to Michigan or even Canada. Each stop along its path, the adults only lay their eggs on milkweed plants as that is the only food source for the larvae/caterpillar. Towards the end of the growing season, the last generation will make its final trip back to central Mexico in one generation. This single butterfly will complete it's migration of 3000 miles. Traveling both directions, the adult butterflies will take advantage of milkweed and other flowering plants as a source of nectar to provide energy.

Q- How do classes use this area?

The Environmental Science Class uses this area often for class to work on identifying plants and animals. The students in this class also take an active role in management of invasive species. Seeing things in person and getting hands on makes it much easier to learn than looking at the pictures in a book. Biology classes sometimes will use this area to do population studies and when working in our ecology unit. Both the prairie habitat and the forest habitat are used.

Q- Is the community allowed to use this area?

Yes! Please take the time to hike around this area and take in the diversity of flora and fauna that exists on CCS property. You'll find a multitude of trails you can take to explore this area. It is hard to visit without seeing something new!

Q- Are there any maps of the areas?

Yes! Please <u>click here</u>, to find more information about the areas. We are also tracking invasive species.

Q- What are some of the preferred species in the habitat?

Please check out our <u>species inventory list</u> to see the list of species that have been recorded by students and staff on the site.

Q- Does a natural area mean there is no human management?

No. This area is under active management. Our goal is to reduce invasive specie populations while also trying to help encourage the native species to flourish. We currently do this through mechanical pulling of invasives, and collection seeds that we can raise and redistribute. We are also doing a 1 team/year brush hog mowing of the area in late May/early June which can help stunt the growth of many of the invasive cool season grasses while giving a boost to our native warm season grasses.

Q- What is an invasive plant? or what is a non-native specie?

These two terms are different, and it is important to understand the differences. An invasive specie is any type of specie that invades, dominates, or takes over an area not allowing other species to live. With plants, this can turn into a monoculture. The problem with a monoculture is that with one or very few species present, there are only a select number of insects, birds, or other organisms that will find that habitat beneficial and the overall species diversity decreases. With limited diversity of plants, there is also less time that blooms of these plants are present, meaning less habitat for pollinators (birds, bees, insects). In a diverse habitat, new plants are constantly blooming throughout the growing season, always providing nectar for pollinators. Check out this graphic, featured in National Geographic, that shows how this plays out in Yellowstone National Park.

Q.- What's behind the high school?

Behind the school, there is a mature forest habitat containing a diverse section of hardwoods. This is a mature Beech-Maple forest that also contains a number of other tree species as well. In the past 15 years the emerald ash-borer has killed many of the ash trees, but many new saplings are filling in those niches now. You may find trails that go through the woods to explore this area.