

Plastic in the Ocean.



The Issue:
People throw rings of plastic (or plastic in general) into the ocean and these plastics get caught on animals and can prevent them from either breathing or eating.

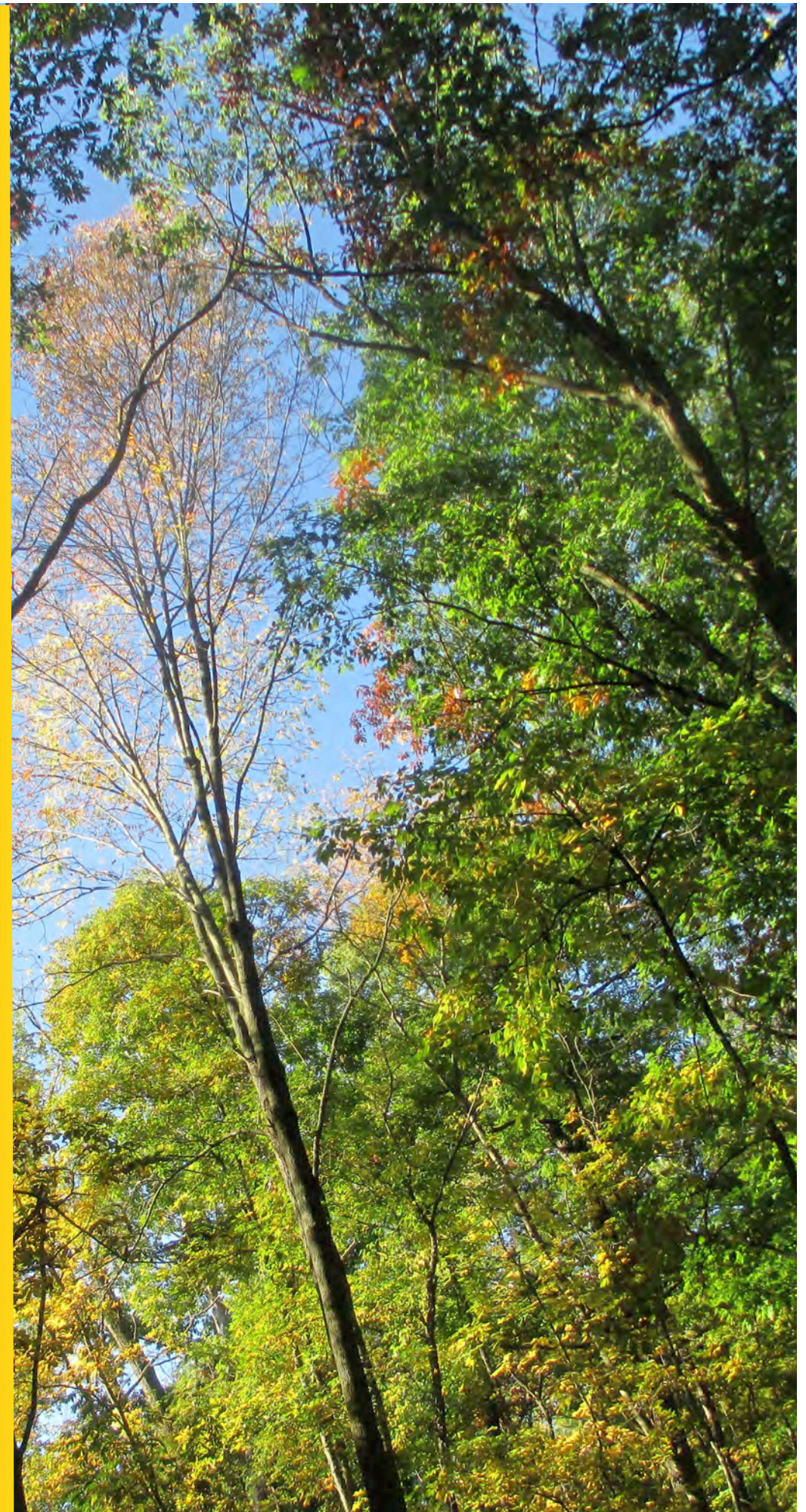
Help the animals!

Instead of throwing the plastic into the animals' habitats, we should recycle it. Before recycling the plastic, we should all clip the edges of all rings in case they do ~~end~~ up in the ocean. With the plastic already sitting in the ocean and on the animals, we should all help by taking the plastic off the animals and away from their habitats to prevent further damage.



Alanna McDuffie
Academic 1

Canterence

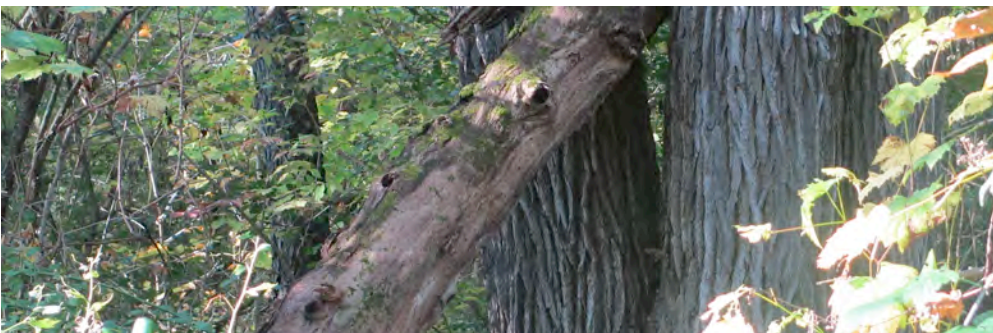




The North Pole
 No matter where you are in the world, moss will always grow on the north side of the tree or log. Moss does not have roots, but are merely anchored to the rock or log. This plant usually grows where there is the most moisture. (Got Moss?) Picture by: Alanna McDuffie

Keep your face to the sunshine and you cannot see a shadow
-Helen Keller

Falling Down
 There are many reasons for why trees fall from their place. Animals may require the nutrients the tree is hiding away under its trunk and push or chew their way to them. Earthquakes, when occurring, causes the roots to lose their hold on the ground and the tree "slips" and falls down. Some are as lucky and get caught on another tree or shrub and can still obtain nutrients from a few roots that are still attached to the ground while others are fully out of the ground, unable to retrieve any nutrients. Picture by Alanna McDuffie



The Prairie:
 A vast emptiness
 as far as the eye can see.
 Nature's true beauty.

Prairie Facts

There are more than 400 native species that live in the tall grass prairies of Wisconsin.

The prairie has very nutrient rich soil that is great for farming.

There are 60 different grasses, over 300 different species of flowers, 100+ species of lichen and liverworts, few woody plants, and vast fauna.

In just 5 acres of prairie, there can be over 100 different prairie grasses in that small amount of land.

In the US, prairies use to cover over 142 million acres.

Prairies have been in Wisconsin for about 5,000-6,000 years.

Wisconsin Tall Grass Prairies only cover 0.5% in the entire state.

Plants in the Tall grass Prairie have to have deep roots to anchor the plant to the earth and also allows access to moisture

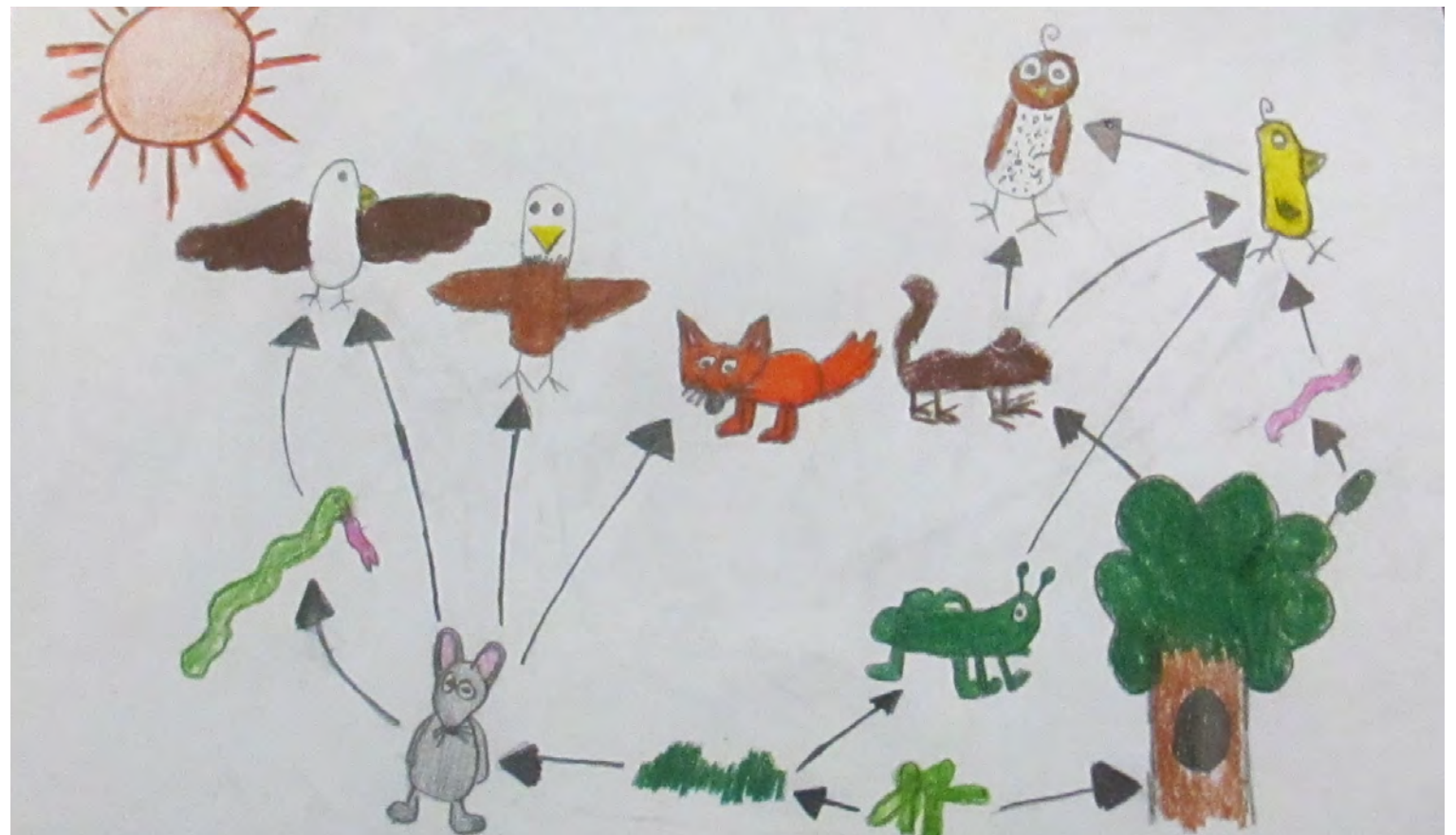
A prairie plant grows from underground and up toward the sky (stem up).

Southeastern Wisconsin's prairies are called sedge meadows and oak savannas.

Wisconsin is on the outer edges of the prairie ecosystems.

Tall Grass Prairies use to cover 31 million acres or 9% of all of Wisconsin's total covered land.

Fires are use to help prairies from becoming a forest and also helps regenerate the soil.



In the Forest
 A food web is used to show what other animals eat. The arrows are a symbol for where the energy from the last consumer is going. Only about 10% of the original energy is used in each trophic level. The remaining 90% of the energy is turned into heat and released into the atmosphere.

Prairies have to be able to support biodiversity, meaning they must be able to hold a lot of life. The Purple Coneflower, uses its bright leaves to attract the pollinators. The deep roots of the plant, because of the little moisture in the prairie, help to maintain a reasonable level for it to survive. The prairie doesn't just support biodiversity in flora though, but also in fauna. The Prairie Dogs have sharp teeth to cut the grass into small enough bites.

Wetlands can be found anywhere from the tundra to the tropics and found in any continent except Antarctica. The temperature of this ecosystem varies from -26°F to 105°F. Not all wetlands are constantly with water, some wetlands are seasonal, meaning that this group of wetlands are only under water for one more more seasons. Four wetlands out of all wetlands contain freshwater: marsh, swamp, ponds, and peat bogs. In the 1800s, there was 221 million acres of wetlands but in 2010, only 104 million acres remaining, 53% was destroyed.

Since the wetlands are mostly water, the plants need to have deep roots to anchor the plant to the solid ground. Peat moss has a unique ability to hold up to 15 times the water of the weight of the plant itself. With this ability, the Peat moss can survive longer than most plants during a dry season. The Alligators have a hard layer of skin that helps protect them from attacks. This animal doesn't have the ability to hold water, so when the dry season starts, they move into a water hole and find food and shelter there.

All three of the ecosystems hold an importance to this world. The wetlands, woodlands, and prairie, are the home to many species that would be extinct, if not for the shelter of the ecosystem it dwells in. Wetlands help us by controlling water to prevent flooding in our towns/cities. We use the woodlands for its timber to create furniture and other items. The prairies are used for farming as well as turning the wildflowers into medicine. Without these ecosystems, we would be without food, our cities would be frequently flooded, and we would not have

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Survival Instinct

Many berries live in the woodlands and even the prairies. When in these harsh environments, the berries need the ability to spread their seeds. Also, some may carry a poisonous quality that can be lethal to us.

Whenever the pressure of our complex city life thins my blood and numbs my brain, I seek relief in the trail; and when I hear the coyote wailing to the yellow dawn, my cares fall from me - I am happy

-Hamlin Garland

WISCONSIN ECOSYSTEMS

In Wisconsin, there are three different ecosystems. An ecosystem is an area of land that has a variation of different species of animals and plants. The three ecosystems that are found in Wisconsin are woodland, prairie, and wetland. Out of the 32 million acres of woodland that existed in Southeastern Wisconsin, 16 million acres have been restored. While the woodlands may have been lucky in restoration, some are not. The prairie once covered 9% of Southeastern Wisconsin but only 0.5% remains. Fifty-percent of the wetlands in Wisconsin had been destroyed.

Southeastern Wisconsin has all 4 seasons during the year: summer, fall, winter, and spring. This part of Wisconsin, in winter, can get to be as cold as -26° fahrenheit while in the summer, can get up to 105° fahrenheit. Precipitation can be from any season, getting an average of 37 inches of rain and 47 inches of snow. Sunlight varies depending on where you are in Southeastern Wisconsin, whether you are under trees and also the time of the year.

The woodlands hold both deciduous and coniferous trees. Deciduous trees have shallow roots due to the layer of ground litter which contains a great amount of nutrients. During the winter, the deciduous trees use a chemical called chlorophyll which allows them to lose their leaves to conserve their moisture. The soil is very well-drained and right, having the help of the ground litter from the leaves that fell last late fall-early winter.

The woodlands hold many plants and animals that make their home in it. Poison Ivy is a very uses chemical compound that acts as an allergic reaction to the human, leaving a rash. The poison ivy's leaves have different shades of green for how old it is, the darker the leaf, if the leaf has a darker shade of green means they are older. The raccoon is an omnivore, meaning it will eat plants (berries), animals (fish), as well as dead animals. Using its nocturnal vision, this animal can hunt at night, raiding trash cans and surprising its victims.

The prairie is a harsh ecosystem due to the lack of water. This ecosystem is vast and empty except for a few trees. Prairies are too wet to be a desert but too dry to bear a forest. Fire is used in a prairie to help regenerate the plants and to also keep the soil fertile for farming and other purposes. Prairies are covered in many different types of grasses, in less than 5 acres of prairie land, there can be about 100 different prairie grasses mixed in. The grass in the prairie is below the soil, so when a fire breaks out in the ecosystem, the plants stay alive and come back in about a year.



Journey to the Center

Animals such as rabbits, snakes, foxes, and other make holes in the ground or tree for shelter. They use their paws to scratch at the ground, creating a hole. When these animals have children, the mothers keep them in the den for shelter until a certain age. Photo by Alanna McDuffie

Look deep into nature, and then you will understand everything better.

-Albert Einstein

Nature does not hurry, yet everything gets accomplished.

- Lao Tzu

The Woodlands:

The leaves are dancing, to a little birdie's song in the cool, fall breeze.

Woodlands Word Buster

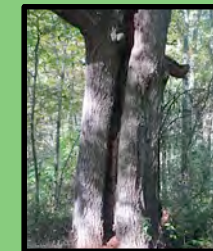
Woodlands are home to many different plants and animals, without them we not lose only the forested areas that we get our wood from, we lose out of the chance to see exciting animals and they go extinct.



Moss always grows on the north side of a tree.

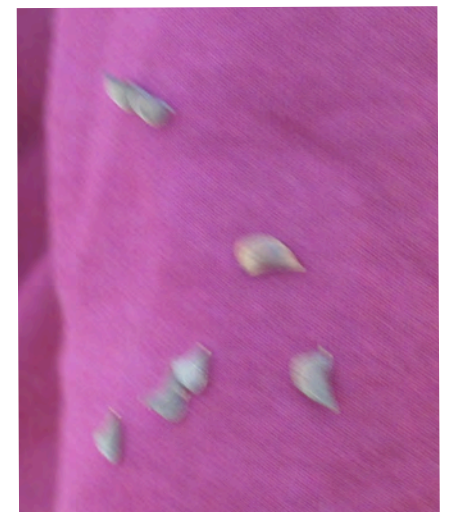


Knots grow naturally in trees but some can be the effect of a bacterial infection.



Lighting that lands in the woods could cut a grown tree in half.

Spreading the Love
In the woodlands, there is a lack of space between the trees. Because of this, the seeds of plants need to be able to travel to continue to growth of the forest. These seeds attach themselves to other objects to help with moving.





Stomach in Knots

Knots on trees can occur during the natural growth cycle of trees. When a limb of a tree is cut down, a knot could be left in its place. Another reason for knots to grow on trees, is a bacterial infection deep inside the core of the tree. Picture by Alanna McDuffie



Plant of the Shore

Lily pads are more commonly known as Water Lilies. Lily pads are attached to the ground by a thin stem. Lily pads that live in tropical areas can bloom in both daylight and night. Photo by Cindy Renaud



Under the Sun

Prairie grasses have the yellowish color from the lack of water in the prairie. Fire doesn't just destroy the prairie, it also help it. Because the roots of prairie grasses and wildflowers are deep within the ground, the fire only destroys the top of it, leaving the roots to regrow and more nutrients from the burned down grass. Only about 1% of prairies still exist today. Photo by Cindy Renaud

The Wetlands:

The stream is flowing,
towards civilization
while the plants filter.

We cannot remember too often that when we observe nature, and especially the ordering of nature, it is always ourselves alone we are observing.

-Georg C. Lichtenberg



Split in Half

When storms occur in the forest, terrible things can happen. Harsh winds and lightning strikes can cause trees to split in 2 and damage the tree. Strong enough winds could case a tree to fall over and hurt the environment..

Test your knowledge: Wetlands Edition

1. Are lily pads floating on top of the water?

A. No
B. Yes

2. Cattails roots can be used to help cuts.

A. True
B.False

3. There are 4 different freshwater wetlands.

A. True
B. False

Answer Key: 1. A
2. A
3. B