# Welcome to Osprey Wilds (WOW) - Introduction Class

Every group will be welcomed to Osprey Wilds with an introductory course in scientific observation and nature exploration. This class will teach students to open their eyes to the wonders of nature through a phenology investigation, and will also include icebreakers and an orientation of Osprey Wilds.

# WILDLIFE

### **Animal Signs**

Animal Signs are clues that paint a picture; a moment in an animal's day. Discover the basics and sign-reading and investigate clues to solve a variety of animal sign mysteries.

## Bird Basics and Beyond

All birds have some basic features in common, but it is their unique design and features that allows them to survive in every habitat on earth. Hike on our birding trail as you learn about bird characteristics, biology, and simple field identification techniques.

#### Creek Creatures (fall & spring only)

There is a magical world of under-water life right in front of us! How we care for our lakes, rivers and streams. has a huge impact on that life. Collect and identify macro-invertebrates (insects) in order to better understand the importance of water quality in this engaging, discovery-based class.

**Creepy Crawly Creatures** (*fall* & spring only) Become herpetologists in this hands-on class! Experience the creepy, crawly, and often misunderstood world of reptiles and amphibians, then go on a "hunt" for frogs, toads and salamanders and try to spot or catch them where they live.

#### Ecosystem Engineers (fall & spring)

Just like human engineers build bridges or skyscrapers, beavers build with trees and create floods to change their environment and create their homes. Engineer your own beaver dam and lodge in this class, explore the physical adaptations of these ingenious mammals, and check out Osprey Wilds' very own beaver colony, dam and lodge!

#### Minnesota Wildlife New!

Native wildlife plays an important role in our ecosystems and daily life. Meet our live animal ambassadors up close to discover more about Minnesota's native wildlife and how they fit into our local environmental through a guided hike.

#### Predator/Prey (grades 4 and up)

For an animal, life and death hinges on their instincts and abilities. Experience life as a hunter, or the hunted, through a high-energy game and become acutely aware of the adaptations and strategies that are necessary for animals to survive in the wild.

**Wolves of the North Woods** (grades 5 and up) Wolves are the North Woods' premier predator, yet they live a fine line between life and death; their survival is determined by their abilities and behaviors. Learn about wolf pack structure, behavior and adaptations using scientific tools and methods, such as radio telemetry.

# ECOLOGY

#### Forests

- **Forest Explorers** (grades K-5, fall & spring only) -Through the death of a tree in the forest, resources are now available for new life to begin. Explore the stages of decomposition. Then, become a forest cycle Detective and search for evidence of our decomposer suspects: fungi, bacteria, and invertebrates.
- Forest Stories (grades 6 and up) Every forest has a story, and that story can shape how to care for and manage a forest ecosystem. Complete a survey of our forest ecosystem and work to discover the story that has made the forest look how it does today.
- **Maple Syruping** (March & April only) For thousands of years, spring warmth has resulted in a sweet treat from the sap of maple trees. Visit our sugar bush, identify and tap a tree, collect sap, &taste delicious pure maple syrup!

#### Landscape Disturbance Stories (grades 8-12 March-December only)

Human-made and natural disturbances change the appearance and composition of a landscape with varying implications. Learn how to "read the landscape" to see the signs of disturbance and succession and learn the stories of the land all around you.

Lake Studies (Limnology) (grades 5 and up) Just like people, all lakes age! Study the aging process of lakes by examining the ecosystems of Grindstone Lake and Windmill Creek. With visual observations and chemical testing, we will determine how "old" Grindstone Lake is and what we can do to keep it and other lakes young and healthy.

## **Renewable Energy S.T.E.M. Class Options**

- Clean Energy Solutions (Grades 4 and up) Renewable energy sources are a growing part of our energy mix, and important part of a sustainable future. How do we get energy from the sun, wind, and water? What are the benefits to the planet and society? Explore multiple renewable energy systems present at Osprey Wilds, then design your own clean, green building!
  - Wind Power (grades 4-8) From the pumping of water, to the milling of grain, to the generation of electricity, the design of windmills and wind turbines has changed over hundreds of years. Analyze windmill blade design through observation and experimentation, and then engineer a functioning windmill.

Wonders of Winter Hike (December – March only) Have you ever wondered how snowflakes form or how plants and animals survive the winter? Through handson activities and exploring winter's conditions, students will learn the process of snowflake and ice formation and discover what happens to plants and animals once the snow falls. Students will also engage in discussion about our changing winters and the impacts reduced snowfall & ice cover has on our native plants, animals and bodies of water.

# A D V E N T U R E

Archery (grades 4 & up)

Over the last thousand years, the purpose of Archery and the equipment has gradually changed and been modernized for hunting and sport. Experience the ancient art of atlat throwing, and then sharpen your skills at the archery range.

**Canoeing** (grades 9 & up; requires 2 adults; fall & spring only) The art of paddling is more than pulling a paddle through the water. Discover the technique of paddling using the forward stroke, pry, draw, c-stroke and j-stroke. Work together in the bow and stern to practice your new skills on beautiful Grindstone Lake!

## Climbing Wall

Whether climbing a real rock face or an indoor wall, there is a challenge for everyone. Experience bouldering and top rope climbing on our indoor rock wall! Teamwork and goal-setting will be emphasized during this challenging sport.

**Snowshoeing** (grades 4 & up; requires 2 adults; winter only) Different cultures have responded in different ways to the necessity of traveling in deep snow. Experience the rich history of this 5,000-year-old North American activity through quiet, snow-covered forests.

Fishing Fundamentals (grades 4 & up; requires 2 adults) Fishing is a popular sport enjoyed by people all over the world. Students will become familiar with different types of fishing equipment, learn how to cast, set up a pole, and safely practice fishing from the shore or through the ice!

High Ropes Course (grades 5 & up; requires 3 adults) The world looks different from a bird's eye view; challenge yourself to climb high (20 or 40 ft options) and to be brave as you soar to new heights. Osprey Wilds' high ropes course also boasts a fun zip-line ride at the end of the course.

#### Orienteering (grades 4 & up)

With only two tools you can navigate an unfamiliar environment. Use a compass and your own two feet to navigate Osprey Wilds' orienteering course using techniques like bearing setting, pacing, leapfrogging, and land-marking to complete the course!

#### Survivor

You can survive three weeks without food, three days without water, three hours without heat, but the first key to survival happens within the first three seconds. Build a shelter and a fire with a team, and recognize that teamwork is also an important factor in survival.

## **Team Building**

- **Total Team** Just as you can't seesaw by yourself, there are many challenges in life that will be easier and more fun with a team. Solve problems and overcome obstacles as a team by striving for improved caring, communication, and cooperation.
- **Challenge Course** (grades 4 & up) 0 Near-ground elements provide opportunities to test participants individually and as a team in this personal growth and teamoriented challenge course.

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## CULTURE & HISTORY

#### Nature Journaling

What does it mean to really see an object in nature? Train your eye to notice things differently as you write and share your observations of the natural world. Let out your inner poet as you explore the woods and prairies of Osprey Wilds.

#### Ojibwe Hike

Ojibwe culture and traditions are a rich part of Minnesota's history. Through exploration, stories, and sensory experiences, students will learn about traditional Ojibwe practices and valuable uses of native Minnesota trees.

#### Beaded Embroidery (Mazinigwaaso) (grades 6 and up)

We invite you to explore Ojibwe culture with us through our Mazinigwaasowin class (Ojibwe for s/he embroiders or beads something). We will investigate natural resources that have been used in traditional embroidery, such as porcupine quills, as well as how the Ojibwe impacted world trade in the region through the fur trade and their beading. You will then get the chance to make and keep your own embroidered craft using seed beads!

## STEWARDSHIP

We have stewardship and career path discovery in the following areas for high school students. Please contact us to learn more.

- Adventure Education and Maintenance •
- Gardening, Grounds, and Trail Maintenance
- Wildlife Care and Husbandry
- Farm Harvesting or Weeding– (May-Oct) •
- Maple Sap Collection (March/April)
- Pulling Garlic Mustard (May)
- Bud Capping White Pines (Sep-Nov)

## NATURALIST CHOICE

## Osprey Wild Card Hike New!

Let our staff of educators take you on a hike around Osprey Wilds' property to learn about a wide array of topics. This hike can take you to areas of Osprey Wilds that most classes do not get to see and can cover topics such as:

- Wildlife
- Forestry
- Ecology
- Fisheries •
- Water Resources
- History .
- Biomes •

Have a request for a specific topic? Let us know when you schedule!

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## NATURALIST-LED EVENING PROGRAMS

#### The Hinckley Fire - Human Error and Heroism

Learn about the human and natural causes of one of the worst wildfires ever in North America. Discuss the conditions that led to this tragedy, as well as sustainable logging practices, the role of fire in the Minnesota forest ecosystem, and human resilience under pressure.

#### **Stargazing Stories**

Throughout history, cultures from around the world have looked at the same stars to make meaning of their lives. Learn about constellations and the myths and legends behind them.

#### Voyageur Rendezvous (grades K-8 only)

The Voyageur fur-trade lasted over 300 years and had a big presence here in Pine County! Meet "live" voyageurs who share stories of their lives during the fur trade era. Students will create skits and dramas to make history come alive.

#### **Pollinators New!**

The web of life, the food chain and our planet's natural systems are totally dependent on these tiny, amazing creatures that fly around, doing the most important job out there - pollinating our plants! Learn about pollinators' incredible characteristics, the role our little friends play in everything from flowers to fruits, and what you can do to help them!

#### Sustainable Foods New!

We all eat food, but do we know how it got to our plate, and if it grown or raised in a way that's good for the Earth? Learn about how important agriculture is to society, the impact it has on our planet, ways we can work with and learn from nature to produce healthy, delicious food and decisions you can make in your own life. You'll also get to know what's growing at Osprey Wilds' regenerative farm!

#### Wolves of Minnesota! New!

Minnesota is the only state in the lower 48 that has continuously had wolves. They are iconic, charismatic, and misunderstood. Learn about the key role wolves play in ecosystems, their pack structure and behaviors, and the fascinating discoveries being made that shed new light on one of human's most captivating friends/ foes.

# Grindstone Lake Hunters: Loons, Eagles & Ospreys New!

Grindstone Lake is home to three incredible avian hunters - loons, bald eagles and ospreys! We will take a look at each of them to discover the amazing physical features and behaviors that make each of them successful in hunting their shared primary food - fish. From our state bird (Common Loon), to our national symbol (Bald Eagle), to Osprey Wilds' mascot (Osprey), each of them have adaptations that make them truly unique and captivating! Trip Tip: Many of our classes can be adapted in both content and standards to meet your specific learning objectives and individual student needs.

More detailed descriptions and academic standards for each class is available by request.

If you have questions about our curriculum, please contact our education team. We will work with you to find the best fit for your students.

# **SELF - LED EVENING ACTIVITIES**

#### Campfire

Gathering together around a campfire ring to a crackling, warm and mesmoring fire is a perfect way to wrap up your group's experience and appreciate the beauty of Osprey Wilds. If you desire s'mores supplies, please indicate so on your Snack Request Form or feel free to bring your own!

#### **Nature Scavenger Hunt**

Become acquainted with Osprey Wilds through a list of activities and challenges. These will test the group's communication skills, cooperation, mathematical skills, and problem solving.

#### Night Hike

See Osprey Wilds in a whole new light – with no lights! Enjoy the evening sounds and night skies with your group by utilizing our trails to open up students' curiosity and maybe get over some fears. Ask your liaisons or any staff member for their favorite trail to hike at night.

#### Invent Your Own!

The possibilities are endless... Please let us know if we can help you brainstorm any other activities.

## \*NEW PROGRAM OFFERINGS\*

We are pilot testing new programs this year, we could use your help! If you are interested in trying out one of our new programs, please email us at schools@ospreywilds.org