Field Guide & Journal
Use this guide to explore the wonderful creatures living on our tribal lands. Keep in mind:
• Always use safety first;
• Never approach a wild animal;
• Never hinder the natural environment;
• Never leave behind trash or garbage;
• Never eat wild fruit, plants or herbs if you do not know EXACTLY what they are.

Download this book online at:
www.llojibwe.org/drm/fieldguide.html

Only when the last tree has been cut down, the last river poisoned and the last fish been caught will we realize money cannot be eaten.
– Cree Indian Proverb

Leech Lake Band of Ojibwe
Division of Resource Management
Environmental Lands Department
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Cass Lake, MN 56633
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Climate Change
Anticipate, Prepare, Adapt

While using your Leech Lake DRM Activity Field Guide, it is important to remember that climate change plays a key role in the future of all species listed throughout the book. Do you know how animals and plants anticipate climate change? Maybe you’ve noticed bears not going into hibernation as early as in the past, which may mean they anticipated warmer fall weather. Have you noticed species of plants or animals preparing for changes in climate? If so, what do you notice? Like maybe squirrel nests are becoming bigger than they ever have, which could indicate they are preparing for colder temperatures. What do you notice about the plants and animals around you and their ability to adapt to changes in their environment? Something common in the winter time is animals using man-made infrastructure for housing and adapting it their needs.

Most likely, you or a family member can identify changes in our environment due to adverse affects in our climate. Climate change means any change in climate such as warming or cooling. What is the difference between “normal climate change” and “abnormal climate change”? Normal climate change is based on scientific research of the Earth’s natural flux of climate change over millions of years. This data includes an average global temperature, as well as, peak record highs and record lows. Abnormal climate change is based on scientific research of the Earth’s man-made impact on climate change over the last 100 years or so (“industrial age”) in comparison to the natural flux over millions of years. This simple information is the easiest to understand. It is also important to note, that no community has all of the answers and all communities will be affected, either directly or indirectly, by abnormal climate changes in the future. So, please take a minute during each activity to reflect on what that particular species might be subjected to over the next 100 years. Recognize there are real concerns about climate change and our natural environment and it’s relation to technological and industrial advances, as well as, related pollution and increases in contamination on our land.

Evidence of abnormal climate change is abundant. Some easily identifiable impacts include: Sea Level Rises, Global Temperature Rise, Warming of Earth’s Oceans, Increased Rate of Shrinking Ice Sheets, Rapid Decreases in Arctic/Antarctic Sea Ice, Loss of Glaciers at alarming rates, Extreme Weather Events, Ocean Acidification, and Decreased Snow Cover, as well as, earlier snow melts worldwide. Normal climate change still exists too, however, historically it has taken place over long periods of time in Earth’s history and it increasingly becomes more difficult to differentiate due to the large amount of abnormal data outweighing all indicators of normal climate changes.
### How to Use the Book

The left page is the species information and identification page. Use this page to help you find the species on the Leech Lake Reservation.

The right page is for you to record your findings.

This white space is for you to draw a picture of what you find. You can also take a picture and tape or glue the image into this section. You may also collect tree leaves or plant parts and tape or glue them here.

Some pages may also include extra tidbits of information.

### Key to Codes

The following codes and information are specific to the Leech Lake Reservation Tribal Lands.

#### Occurrence Codes

You will find an occurrence code for each species in the guide. Please refer to this key as you explore.

- **R** Resident - Resident year round that is now, or is likely to live on Leech Lake Reservation.
- **B** Breed - Species that is now, or is likely to breed on Leech Lake Reservation.
- **M** Migration - Species typically only seen during migration that does not usually breed here.
- **A** Accidental - Rare or accidental visitor.

#### Threatened, Endangered, Sensitive Rank Codes

In order for a species to be listed on the Threatened, Endangered, Sensitive (TES) list, it must meet one or more of the following criteria:

- The species is known to exist on the reservation at the present time.
- The species is known to have historically been present on the reservation.
- The reservation is within the range of the species and suitable habitat is found on the reservation.

Please note: TES rank does not apply to all species.

- **E** Endangered - A species is listed as endangered when it is likely to become extinct or extirpated from the reservation unless measures are taken to protect it and/or its habitat.
- **T** Threatened - A threatened species is one that is likely to become endangered or extirpated from the reservation unless measures are taken to protect it and/or its habitat.
- **S** Sensitive - A sensitive species is one that is likely to become threatened or extirpated from the reservation unless measures are taken to protect it and/or its habitat.
- **MC** Management Concern - A species that is likely to reach TES status unless measures are taken to protect its habitat, protect it from non-native species invasion, disease issues, or other factors that pose a threat to it.

#### Plant Life Cycle

This section refers to the yearly life cycle of a plant species. There are two main groups, Annual and Perennial. You will find more information about plant life in the Plants introduction on page 86.

#### Tree Type

This section refers to the two main groups of trees, coniferous and deciduous. You will find more information about tree types in the Tree introduction on page 106.
Amphibians begin life as one type of organism like a tadpole and then change into another like a frog. From unshelled eggs, most start off as some type of larvae with gills that extract air from the water around them. They then develop a lung and breathe air. Salamanders, frogs, and toads are all amphibians.

Reptiles are a group of animals that are covered in scales with dry skin. All except snakes have legs and well-defined toes and claws. Most reptiles lay eggs but there are a few species of snakes and lizards that give birth to live young. Lizards, snakes, and turtles are all reptiles.

Many people may be afraid of snakes, frogs, salamanders, toads, or turtles, but they are important to the ecosystem and should not be killed for no reason. On the reservation, there are no poisonous snakes that can kill people. In the spring, many people listen for the first songs of the Spring Peepers. They are known as a symbol of spring time.
American Toad

Scientific Name | Ojibwe Name | Occurrence | TES Status
---|---|---|---
*Bufo americanus* | Obigomakakii | R | B | M | A | E | T | S | VC

**Description**
Reddish brown colored skin with one to two warts in each darker patch on its back. Their chest is a lighter color with small dark spots.

**Size**
2-3½ inches long

**Life Span**
Most only live for a year in the wild, but they can live up to 10 years.

**Habitat**
During the breeding season, they can be found near water, but after the breeding season they may be found in most habitat types.

**Food**
Most of their diet consists of insects.

**Breeding**
Soon after emerging from hibernation, they begin the breeding season. Their mating call can be heard from mid-April-June. Eggs are fertilized from males as the female lays them underwater. Eggs are laid in two long jelly like tubes. Eggs hatch in 3-12 days into tadpoles. It takes 40-70 days for them to transform into adults.

**Overwinter Habits**
In the winter months, they burrow down to under the frost line and hibernate. If the frost line gets lower, the toad will keep burrowing in the dirt to stay below it.

Toads have conspicuous paratoid glands on their bank that secrete a milky substance called bufotoxin when they are provoked. This substance tastes bad to animals and may even kill others if they try to eat this toad.

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**Field Notes**

Date: ____________________________ Time: ____________________________

Location: ___________________________________________________________________________

**Observations**

☐ I observed this species.
☐ Tracks  ☐ Sounds

Length: ___________ Height: ___________

Estimated Weight: ________________________

Colors: ____________________________________

This subject is: ☐ Amphibian  ☐ Reptile

Describe the skin type: _________________________________________________________________

What was the subject doing? __________________________________________________________

Notes: __________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

---

**Scientific Name**

*Bufo americanus*

**Ojibwe Name**

Obigomakakii

**Breeding**

Soon after emerging from hibernation, they begin the breeding season. Their mating call can be heard from mid-April-June. Eggs are fertilized from males as the female lays them underwater. Eggs are laid in two long jelly like tubes. Eggs hatch in 3-12 days into tadpoles. It takes 40-70 days for them to transform into adults.

**Description**

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**Size**

2-3½ inches long

**Life Span**

Most only live for a year in the wild, but they can live up to 10 years.

**Habitat**

During the breeding season, they can be found near water, but after the breeding season they may be found in most habitat types.

**Food**

Most of their diet consists of insects.

---

**Occurrence**

R, B, M, A, E, T, S, VC

---

**TES Status**

ETS MC

---

**Occurrence**

R, B, MA, R

---

**Status**

ETS MC

---

**Notes**

_____________________________________________________________________________________

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**Notes**

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**Notes**

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**Notes**

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**Notes**

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Common Garter Snake

Description
A medium sized black snake with three yellow lengthwise stripes on its back and sides.

Size
Length: up to 3 feet

Life Span
3-4 years

Habitat
Can be found sunning themselves on rocks or the edge of the road. They can be found in most types of habitats.

Food
They eat many different types of food including earthworms, small rodents, frogs, and insects.

Breeding
It takes about 2 years for these snakes to reach sexual maturity. Male snakes emerge from hibernation before the females do. Once the females have emerged, male snakes will surround her and give off strong pheromones. The female then chooses a male to reproduce with. Females give birth in August or September and the young are left to fend for themselves.

Overwinter Habits
During the winter months, Garter Snakes find an unused burrow or rock pile to get below the frost line to hibernate.

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
Thamnophis sirtalis | Ginebig | R B M A E T S C |

Date: ____________________ Time: ____________________
Location: ____________________

Observations
☐ I observed this species.
☐ Tracks  ☐ Sounds
Length: _____________ Height: ______________
Estimated Weight: ________________________
Colors: ____________________________________
This subject is: ☐ Amphibian  ☐ Reptile
Describe the skin type: _________________________
What was the subject doing? _________________________
Notes: __________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
Common Snapping Turtle

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
--- | --- | --- | ---
Chelydra serpentina | Mikinaak | R | B | M | E | T | S | MC

**Description**
The back of their shell may be green, brown or black in color. Younger turtles have spiky rough shells that get smoother as they age. They have leathery skin and a large head with powerful jaws. They have very sharp long claws that help them defend themselves and dig holes for laying eggs.

**Size**
Shell: can reach 8-15 inches across
Weight: up to 65 pounds
These are the largest turtles found in Minnesota.

**Lifespan**
Up to 57 years. It takes 5-7 years for Snapping Turtles to reach maturity.

**Habitat**
They can be found in all types of aquatic habitats, but prefer calm water with mucky bottoms. Can be seen along roads sunning themselves or laying eggs along dirt roads.

**Food**
Fish, insects, clams, crayfish, worms, frogs, salamanders, other turtles, birds, snakes, small mammals, aquatic plants and carrion

**Breeding**
Breeding occurs in the spring and fall when the turtles are active. Females look for a nesting area with dry soils and a lot of sunlight. At that time 10-50 eggs are laid. The eggs will hatch in 50-125 days depending of the weather conditions. If the weather conditions are warmer all the eggs will become females, but if the weather is cooler than all the eggs will be males. Young turtles are vulnerable to predators and 60-100% of the young may not survive.

**Overwinter Habits**
They overwinter from October-April in Minnesota. They will find shallow ponds and either stay on the bottom of the pond or dig into the mud. Many turtles may overwinter in the same area.

**Field Notes**

Date: ___________________________ Time: ___________________________
Location: _____________________________________________________________________________

**Observations**
- I observed this species.
- Tracks
- Sounds

Length: ___________ Height: ________________

Estimated Weight: ________________________
Colors: ____________________________________

This subject is: [ ] Amphibian [ ] Reptile

Describe the skin type: _________________________________________________________________

What was the subject doing? __________________________________________________________

Notes: __________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
Gray Treefrog

**Description**
Small frog that has small toe pads that allow them to climb. They are able to change color between green, gray, or brown. The inner thigh on the hind legs is bright yellow in color.

**Size**
Length: 1¼-2 inches

**Lifespan**
7-9 years

**Habitat**
Can be found in woodland habitat near vernal pools.

**Food**
Moths, crickets, ants, flies, grasshoppers and beetles

They are often seen on house windows because they are attracted to the moths that are found around outdoor lights.

**Breeding**
Breeding season occurs in May. The frogs will move to breeding ponds. Females lay 30 eggs attached to vegetation. The eggs will hatch in 3-6 days and will transform from tadpoles to frogs in 2 months. It takes two years for them to become fully mature.

**Overwinter Habits**
Stay on land and create a glucose based antifreeze that keeps the cells from being destroyed. Their body can withstand partial freezing.

**Scientific Name**
*Hyla versicolor*

**Ojibwe Name**
agoozimakakii

**Occurrence**
R B M A E T W

**TES Status**

<table>
<thead>
<tr>
<th>Season</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
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<tr>
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<tr>
<td>Pt-cldy</td>
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<tr>
<td>Cloudy</td>
<td></td>
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<tr>
<td>Wind</td>
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</tr>
</tbody>
</table>

| Length: | | Height: |

**Estimated Weight:**

**Colors:**

This subject is: [ ] Amphibian  [ ] Reptile

**Describe the skin type:**

**What was the subject doing?**

**Notes:**

---

Field Notes

Date: ____________________  Time: ____________________

Location: _______________________________________

**Observations**

- [ ] I observed this species.
- [ ] Tracks  [ ] Sounds

**Length:**  ___________  **Height:**  ___________

**Estimated Weight:**

**Colors:**

This subject is: [ ] Amphibian  [ ] Reptile

**Describe the skin type:**

**What was the subject doing?**

**Notes:**

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Northern Leopard Frog

**Description**
A green to brownish colored frog covered in dark spots on its head, back and legs. The dark spots have a light colored edge around them. Dorsal folds are visible on the back of the frog. There are some Leopard Frogs that don’t contain spots, these frogs are called Burns Leopard Frogs.

**Size**
Length: 2-3½ inches long

**Life Span**
2-4 years

**Habitat**
They live in wet meadows and moist fields throughout spring and summer. In the fall, they move to the bottom of rivers, lakes and streams to survive the winter.

**Food**
Adults feed on insects. Tadpoles feed on algae, diatoms or small animal matter.

**Breeding**
It takes 2-3 years for Leopard Frogs to become sexually mature. At the end of April, male frogs will start calling to attract female frogs. Females will then lay eggs that are attached to vegetation under water. The eggs will hatch in about a week and by August the tadpoles will be grown enough to feed on land.

**Overwinter Habits**
During the winter months, they survive at the bottom of lakes, rivers and streams by breathing oxygen through their skin.
Painted Turtle

Description
Turtles bodies are encased in a shell that is dark brownish-green in color and the underside is bright red, yellow and orange. Their skin is black with yellow striping and scaly. They have a long tail and claws.

Size
Females: 4-10 inches long
Males: slightly smaller than females

Life Span
Adults can live for more than 55 years in the wild.

Habitat
Can be found in ponds, streams, lakes, or rivers. They may also be seen sunning themselves on the edge of roads or on logs in the water.

Food
Turtles eat a wide variety of aquatic foods ranging from aquatic vegetation to fish and crustaceans.

Breeding
It takes 2-9 years for male turtles to reach maturity and 6-16 years for females. Turtles mate in spring and autumn. Eggs are laid between late-May and mid-July.

Overwinter Habits
When the water temperature reaches around 60° F turtles stop eating and get ready for winter hibernation. Turtles hibernate from October-March most years depending on the weather. They burrow themselves into the mud or branches at the bottom of shallow water. While turtles are hibernating they do not eat, breathe or defecate.

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
*Chrysemys picta* | Miskwaadesi | R B M A E T U V C

Date: ______________________ Time: ______________________
Location: ____________________________________________

**Observations**

☐ 1 observed this species.
☐ Tracks    ☐ Sounds

Length: ___________ Height: ___________

Estimated Weight: ___________

Colors: _____________________________________________

This subject is: ☐ Amphibian    ☐ Reptile

Describe the skin type: _____________________________________________

What was the subject doing? _______________________________________

Notes: ____________________________________________________________

___________________________________________________________

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___________________________________________________________
Birds

Birds inhabit all types of habitats from high in the sky to under the water. They have a wide variety of diets such as raptors feeding on fish, songbirds feeding on nuts and seeds, hummingbirds feeding on nectar, waterfowl feeding on vegetation, woodpeckers feeding on grubs, or owls feeding on rodents. Every type of bird has its specialized skills that help it compete for its resources. There are 325 species of birds on the reservation.

Bird nest types include ground nests, platform nests, cup nests, pendulous nest, cavity nests, or no nest at all. There are some bird species that do not build a nest because they use nests of other birds. A good example of this is the Brown Headed Cowbird. This bird is considered a parasitic nester because they will lay their eggs in a nest that already has eggs in it. When this happens the host mother bird ends up raising the Brown Headed Cowbird’s eggs instead of her own young.

Ground nests are simple nests where a bird will just scrape a shallow nest out of the earth with no nesting materials added.

Platform nests are constructed of simple structures small twigs that are arranged in a platform with a small depression in the middle to hold the eggs.

Cup nests are basically a modified platform nest. They are started as a platform nest but then the sides are built from the outside in with grasses, small twigs, bark or leaves. The edges are higher than a platform nest and they are firmly attached to trees, shrubs, rock ledges, or on the ground. This type of nest is common in three-fourths of songbirds.

Cavity nests are excavated in a tree’s trunk or branch.

Pendulous nests are woven tightly with plant fibers and are attached to small branches on a tree. They resemble a sock hanging from a branch and are usually watertight.
**American White Pelican**

**Description**
A large white bird with black tipped wing feathers, a very large orange bill and feet.

**Size**
Length: 50-65 inches  
Weight: 150-320 ounces

**Sounds**
Low pitched grunts

**Life Span**
15-20 years

**Reproduction**
Mating season occurs in March and April. Females lay 2 white eggs. Incubation is 30 days.

**Habitat**
Can be found anywhere near water including lakes, streams, rivers, and ponds.

**Food**
A variety of fish and amphibians

**Nest Type**
Both parents help build nests on the ground in sandy or gravelly areas.

**Migration**
Complete migration to lower states, South American and Mexico.

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**Field Notes**

Date: ___________________________ Time: ___________________________

Location: ____________________________________________________________________________

**Observations**

- [ ] I observed this bird.
- [ ] Tracks
- [ ] Sounds
- [ ] Nest
- [ ] Flying
- [ ] Other: _______________________________

Length: ___________  Height: ___________

Weight: ___________  Wingspan: ___________

Colors: ____________________________________

Description: ____________________________________________________________________________

What was the bird doing? _____________________________________________________________

Notes: __________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

**Scientific Name**
*Pelecanus erythrorhynchos*

**Ojibwe Name**
Azhede

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
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<td><em>Pelecanus erythrorhynchos</em></td>
<td>Azhede</td>
<td>R B M A E T S M</td>
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</table>
Bald Eagle

**Description**
Adult: Large sized bird with a white head and tail and a dark brown body. Large curved yellow beak that is used for tearing apart food.
Juvenile: Dark brown body with white speckling throughout. Large grey colored beak.

**Size**
Head to tail: 35 inches
Weight: 10-12 pounds

**Sound**
A series of high pitched whistles or cackling sound.

**Life Span**
Can live up to 70 years but most only live to 30 years.

**Reproduction**
Mating season is late March–early April. 1-3 eggs are laid and incubated for 35 days. Both the male and the female help incubate the eggs. The fledglings will stay with the parents for 90 days and both parents help feed the young.

**Habitat**
Hardwood forests, lake shore and river shore. When nesting, they can be seen around areas of water including lakes, ponds, streams and rivers. They are usually located within a half mile of water. They may also be seen along highways searching for carrion.

**Food**
Small mammals, fish, ducks, and carrion

**Nest Type**
Large platform nests in large trees or man-made platforms. Both male and female help build the nest. A nest can weigh up to two tons. They will return to the same nest every year unless it is destroyed.

**Migration**
Not all eagles migrate in the winter. The ones that do, make their way south.

**Scientific Name**
*Haliaeetus leucocephalus*

**Ojibwe Name**
*Migizi*

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
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<td><em>Migizi</em></td>
<td>R</td>
<td>M A E T MC</td>
</tr>
</tbody>
</table>

Field Notes

Date: ___________________________ Time: ______________________

Location: ___________________________________________________

**Observations**
- [ ] 1 observed this bird.
- [ ] Tracks  [ ] Sounds  [ ] Nest  [ ] Flying
- [ ] Other: ____________________

Length: ________ Height: ________

Weight: ________ Wingspan: ________

Colors: ______________________

Description: ________________________________

What was the bird doing? ________________________________

Notes: __________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Spring  Summer  Autumn  Winter

Sunny  Pt-cldy  Cloudy  Wind

Rain  Sleet  Snow  Fog
Black-capped Chickadee

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
--- | --- | --- | ---
*

**Description**

Male and female look the same. Grayish colored bird with black on the cap of its head and on its throat. There is a white patch under the eye. The chest is a whitish yellow color.

**Size**

Head to tail: 5 inches long
Weight: 12 grams

**Sounds**

Their call sounds like “chickadee-dee-dee”. The more “dee’s” in the call the higher the threat level.

**Life Span**

2-3 years

**Reproduction**

Mating season occurs April through June. They may lay 1-13 eggs in the nest. Incubation is 12 days.

**Habitat**

Can be found in many different habitat types including, forests, wetlands, woody shrubs, weedy fields and residential neighborhoods.

**Food**

Seeds, berries, insects, carrion, suet, and spiders

**Nest Type**

Both parents build the nest or find a cavity in a tree to nest in or nesting box.

**Migration**

Do not migrate

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**Field Notes**

Date: ___________________________  Time: ___________________________

**Location:** ____________________________________________________________________________

**Observations**

- [ ] I observed this bird.
- [ ] Tracks
- [ ] Sounds
- [ ] Nest
- [ ] Flying
- [ ] Other: ___________________________

Length: _______  Height: _______

Weight: _______  Wingspan: _______

Colors: ________________________________________________________________________________

Description: ___________________________________________________________________________

What was the bird doing? _____________________________________________________________

Notes: __________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

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**Season**

- Spring
- Summer
- Autumn
- Winter

**Weather**

- Sunny
- Pt-cldy
- Cloudy
- Wind
- Rain
- Sleet
- Snow
- Fog

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**Scientific Name**

*Poecile atricapillus*

**Ojibwe Name**

*gijigijigaaneshiinh*

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**Occurrence**


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**TES Status**


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**Description**

- Male and female look the same. Grayish colored bird with black on the cap of its head and on its throat. There is a white patch under the eye. The chest is a whitish yellow color.
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**Reproduction**

- Mating season occurs April through June. They may lay 1-13 eggs in the nest. Incubation is 12 days.
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**Habitat**

- Can be found in many different habitat types including, forests, wetlands, woody shrubs, weedy fields and residential neighborhoods.
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**Food**

- Seeds, berries, insects, carrion, suet, and spiders
- Seeds, berries, insects, carrion, suet, and spiders
- Seeds, berries, insects, carrion, suet, and spiders
- Seeds, berries, insects, carrion, suet, and spiders
- Seeds, berries, insects, carrion, suet, and spiders

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**Nest Type**

- Both parents build the nest or find a cavity in a tree to nest in or nesting box.
- Both parents build the nest or find a cavity in a tree to nest in or nesting box.
- Both parents build the nest or find a cavity in a tree to nest in or nesting box.
- Both parents build the nest or find a cavity in a tree to nest in or nesting box.
- Both parents build the nest or find a cavity in a tree to nest in or nesting box.

---

**Migration**

- Do not migrate
- Do not migrate
- Do not migrate
- Do not migrate
- Do not migrate

---

**Notes**

- ____________________________________________________________________________________
- ____________________________________________________________________________________
- ____________________________________________________________________________________
- ____________________________________________________________________________________
- ____________________________________________________________________________________

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Common Loon

Most birds have hollow bones that weight less to help with flying, but loons have solid bones to help them dive deeper underwater.

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gavia immer</td>
<td>Maang</td>
<td>R B M A E T S MC</td>
<td></td>
</tr>
</tbody>
</table>

Description
Males and Females look the same. They are a large black and white bird that can be found in lakes and rivers. They have a thick neck with a long black beak. Their eyes are red in color which help them see underwater. Their legs are positioned farther back, this makes it hard for them for walk on land, but easier to swim. Their body is covered in black and white lines and spots.

Size
Length: 30-35 inches
Weight: 8-12 pounds

Sound
They make four different types of calls. The tremolo, which sounds a bit like maniacal laughter, is used as an aggressive call. The wail is a long, drawn-out sound. The hoot, which is a shorter call, is used to communicate among parents and young. The yodel is made by males guarding their territory.

Life Span
Average life span in the wild is 30 years.

Reproduction
Loons don’t breed until they are three or four years old. Mating season occurs in May and June. They lay 2 light brown eggs. Incubation is around 30 days.

Habitat
They are found swimming in lakes or rivers.

Food
Fish, crawfish, frogs, leeches, salamanders, and insects

Nest Type
Loons build a platform nest on the ground along the edge of the water.

Migration
Loons change to a grey color in late fall and migrate to southern states, gulf coast and Mexico.

Notes:
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

Date: ________________________ Time: ________________________

Location: ________________________

Observations

☐ 1 observed this bird.
☐ Tracks ☐ Sounds ☐ Nest ☐ Flying
☐ Other: ________________________

Length: __________ Height: __________

Weight: __________ Wingspan: __________

Colors: _______________________________________________________________________

Description: __________________________________________________________________

What was the bird doing? ________________________

Notes: _______________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
Great Gray Owl

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strix nebulosa</td>
<td>Gookooko’oo</td>
<td>R</td>
<td>M A T S</td>
</tr>
</tbody>
</table>

**Description**
A large gray owl with yellow eyes and a white “bowtie” under their chin. No ear tufts are visible.

**Size**
Length: 24-33 inches
Weight: 24-60 ounces

**Sounds**
A series of evenly spaced low pitched “hoo’s”.

**Life Span**
Up to 15 years

**Reproduction**
Mating season is March-May. Female lays 3-5 white eggs. Incubation 28-36 days.

**Habitat**
Found in Boreal Forests.

**Food**
Mostly rodents

**Nest Type**
They will nest in broken topped dead trees or in nests already made by other birds.

**Migration**
Do not migrate

Field Notes

Date: ______________________________________ Time: ______________________________________
Location: _______________________________________________________________________________

**Observations**
- I observed this bird.
- Tracks
- Sounds
- Nest
- Flying
- Other: _________________________________

**Length:** _____________ **Height:** ______________
**Weight:** ____________ **Wingspan:** ___________

**Colors:** ____________________________________

**Description:** ____________________________________________________________________________

What was the bird doing? _________________________________________________________________

Notes: ____________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

**Season**
- [ ] Spring
- [ ] Summer
- [ ] Autumn
- [ ] Winter

**Weather**
- Sunny
- Pt-cldy
- Cloudy
- Wind
- Rain
- Sleet
- Snow
- Fog

**Scientific Name**
Strix nebulosa

**Ojibwe Name**
Gookooko’oo

**Occurrence**
R

**TES Status**
M A T S

**Habitat**
Found in Boreal Forests.

**Food**
Mostly rodents

**Nest Type**
They will nest in broken topped dead trees or in nests already made by other birds.

**Migration**
Do not migrate

Although they are several known active nests on the reservation.
Mallard

**Description**
Males have a light grey body with a brown chest, green head, yellow bill and orange legs. Females are all brown with an orange and black bill.

**Size**
Length: 20-28 inches
Weight: 2-3 pounds

**Sounds**
Make a quaking sound that is similar to laughter.

**Life Span**
If a Mallard survives the first two years of life, the average life span is 7-9 years.

**Reproduction**
Mating season occurs in late March and into early April. They lay 1-13 greenish white eggs. Incubation period is 30 days. They may have 1-2 broods per year.

**Habitat**
Can be found in wetlands, ponds, lakes, rivers, ditches and in city parks.

**Food**
Aquatic vegetation, snails, earthworms, seeds, insects, and freshwater shrimp.

**Nest Type**
They form a small bowl shape on the ground to nest in. No nesting material is placed in the nest.

**Migration**
Complete migration to southern states.

<table>
<thead>
<tr>
<th>Scientific Name</th>
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<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anas platyrhynchos</td>
<td>Innishib</td>
<td>R</td>
<td>M</td>
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</tbody>
</table>

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Field Notes

Date: ___________________________ Time: ___________________________

Location: ___________________________

**Observations**

- [ ] 1 observed this bird.
- [ ] Tracks
- [ ] Sounds
- [ ] Nest
- [ ] Flying
- [ ] Other: ___________________________

Length: ________ Height: ________
Weight: ________ Wingspan: ________
Colors: ___________________________
Description: ___________________________

What was the bird doing? ___________________________

Notes: ________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Osprey

**Description**
Large raptor with a white underside and brown back. Their head is white with a brown streak through their eyes. Their eyes are yellow in color and their beak is black.

**Size**
- Length: 24 inches
- Weight: 3-4 pounds

**Sounds**
A high pitched whistling call.

**Life Span**
Up to 30 years

**Reproduction**
Mating season occurs from March-May. They lay 2-4 eggs and incubation is 32-42 days.

**Habitat**
May be found anywhere near water including rivers, ponds, streams, lakes, swamps and marshes.

**Food**
Eat all types of fish.

**Nest Type**
Nests are built on top of large trees in open areas. Sticks, vines and grasses are gathered to build the nest. Nests are commonly seen on telephone poles.

**Migration**
Complete migration to southern states, Mexico and South America.

---

**Field Notes**

*Date: __________________________  Time: __________________________
Location: ____________________________________________________________________________

**Observations**
- I observed this bird.
- Tracks
- Sounds
- Nest
- Flying
- Other: __________________________

**Length:** ______  **Height:** ______  **Weight:** ______  **Wingspan:** ______

**Colors:** __________________________

**Description:** __________________________________________________________________________

**What was the bird doing?** ____________________________________________________________

**Notes:** __________________________________________________________________________________

---

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**  
--- | --- | --- | ---  
**Pandion haliaetus** | **Biijigwane** | R | B | M | A | E | T | S | V | C  

---

**Field Notes**

*Date: __________________________  Time: __________________________
Location: ____________________________________________________________________________

**Observations**
- I observed this bird.
- Tracks
- Sounds
- Nest
- Flying
- Other: __________________________

**Length:** ______  **Height:** ______  **Weight:** ______  **Wingspan:** ______

**Colors:** __________________________

**Description:** __________________________________________________________________________

**What was the bird doing?** ____________________________________________________________

**Notes:** __________________________________________________________________________________

---

**Season**

- Spring
- Summer
- Autumn
- Winter

**Weather**

- Sunny
- Pt-cldy
- Cloudy
- Wind
- Rain
- Sleet
- Snow
- Fog

---

**Osprey**

**Pandion haliaetus**

**Biijigwane**

**Occurrence**

- **R**
- **B**
- **M**
- **A**
- **E**
- **T**
- **S**
- **V**
- **C**

**TES Status**

- **ET**
- **S**
- **MC**

---

**36**
Pileated Woodpecker

**Description**
Large black woodpecker with white and red striping on the face. Males and females have a red tuft on the top of their head, but males also have a red stripe under their eyes.

**Size**
Length: 19 inches
Weight: 11 ounces

**Sounds**
A series of piping calls that lasts several seconds. They also make a “cuk cuk” sound.

**Life Span**
Can live up to 13 years.

**Reproduction**
Breeding season is in between March and April. They lay 3-5 white eggs. Incubation period is 16 days.

**Habitat**
Live in wooded areas that contain large dead trees.

**Food**
Their main food is made up of carpenter ants. Their diet also consists of other ants, beetle larva, termites, caterpillars, grasshoppers, fruits, suet, and nuts.

**Nest Type**
Pileated woodpeckers nest in cavities in large dead trees.

**Migration**
Do not migrate

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dryocopus pileatus</td>
<td>Meme</td>
<td>R</td>
<td>MAEPTMC</td>
</tr>
</tbody>
</table>

**Scientific Name**
Dryocopus pileatus

**Ojibwe Name**
Meme

**Occurrence**
R

**TES Status**
MAEPTMC

**Observations**

Date: ____________________ Time: ____________________

Location: ____________________

**Season**
Spring Summer Autumn Winter

**Weather**
Sunny Pt-cldy Cloudy Wind
Rain Sleet Snow Fog

**Observations**

- I observed this bird.
- Tracks
- Sounds
- Nest
- Flying
- Other: ____________________

**Length:** ___________ **Height:** ___________

**Weight:** ___________ **Wingspan:** ___________

**Colors:** ____________________

**Description:** ____________________

What was the bird doing? ____________________

Notes: ____________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
# Field Notes

**Date:** ____________________  **Time:** ____________________  
**Location:** _______________________________________________________________________________________

**Observations**

- [ ] I observed this bird.
- [ ] Tracks
- [ ] Sounds
- [ ] Nest
- [ ] Flying
- [ ] Other: _______________________________

**Length:** _____________  **Height:** ______________  
**Weight:** ____________  **Wingspan:** ___________

**Colors:** ____________________________________

**Description:** ___________________________________________________________________________________

**What was the bird doing?** ________________________________________________________________

**Notes:** _______________________________________________________________________________________

---

## Ruby-throated Hummingbird

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
--- | --- | --- | ---
*Archilochus colubris* | *Nenookaasi* | | |

**Description**

Small iridescent green bird with a white stomach, green back and long black bill. Males have a black throat patch that reflects bright red when the sun shines on it.

**Size**

- **Length:** 3 inches
- **Weight:** 3 grams

**Sounds**

They emit a “chee-dit” sound to communicate with other humming birds and they also make little chipping noises.

**Life Span**

Average 3-4 years. The oldest living hummingbird was 12 years old.

**Reproduction**

Mating season takes place in March and April when the birds return from migration. The female then lays two tiny white eggs in the nest. Incubation is 13 days. They may have 1-2 broods per year.

**Habitat**

Found in deciduous woodlands, fields, forest edges, gardens, and orchards.

**Food**

They feed on nectar from flowers and on insects.

**Nest Type**

Females build a cup nest 10-50 feet above the ground on small branches of deciduous trees. They commonly use lichens and spider webs to build their nests.

**Migration**

Complete migration to southern states, Mexico and Central America.

---

**Ruby-throated Hummingbird**

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
--- | --- | --- | ---
*Archilochus colubris* | *Nenookaasi* | | |

**Description**

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**Size**

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- **Weight:** 3 grams

**Sounds**

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**Life Span**

Average 3-4 years. The oldest living hummingbird was 12 years old.

**Reproduction**

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**Habitat**

Found in deciduous woodlands, fields, forest edges, gardens, and orchards.

**Food**

They feed on nectar from flowers and on insects.

**Nest Type**

Females build a cup nest 10-50 feet above the ground on small branches of deciduous trees. They commonly use lichens and spider webs to build their nests.

**Migration**

Complete migration to southern states, Mexico and Central America.

---

**Ruby-throated Hummingbird**

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
--- | --- | --- | ---
*Archilochus colubris* | *Nenookaasi* | | |

**Description**

Small iridescent green bird with a white stomach, green back and long black bill. Males have a black throat patch that reflects bright red when the sun shines on it.

**Size**

- **Length:** 3 inches
- **Weight:** 3 grams

**Sounds**

They emit a “chee-dit” sound to communicate with other humming birds and they also make little chipping noises.

**Life Span**

Average 3-4 years. The oldest living hummingbird was 12 years old.

**Reproduction**

Mating season takes place in March and April when the birds return from migration. The female then lays two tiny white eggs in the nest. Incubation is 13 days. They may have 1-2 broods per year.

**Habitat**

Found in deciduous woodlands, fields, forest edges, gardens, and orchards.

**Food**

They feed on nectar from flowers and on insects.

**Nest Type**

Females build a cup nest 10-50 feet above the ground on small branches of deciduous trees. They commonly use lichens and spider webs to build their nests.

**Migration**

Complete migration to southern states, Mexico and Central America.
Ruffed Grouse

**Description**
Male - Brownish spotted bird that resembles a chicken. The feathers on the very top of their head stands up. Their tail is long and square shaped with a black band that is continuous throughout the tail.
Female - Same as male except the black band on the tail is broken up in the middle.

**Size**
Head to tail: 13 inches
Weight: 1½ pounds

**Sounds**
In the spring males attract females by "drumming". This is where the male flaps his wings quickly and compressing the air creating a low pitched drum sound. When alarmed they also make a peeping sound.

**Life Span**
Maximum is 11 years. Most birds don't make it over 2 years.

**Reproduction**
Mating is in late April: 9-14 eggs are laid and the female incubates the eggs for 23 days. Young are fully grown in 16 weeks.

**Habitat**
Young to middle aged forests.

**Food**
Herbivore; seeds, berries, nuts, buds, rosehips, clover, and insects

**Nest Type**
Ground nests in a dense forest usually along a tree or stump.

**Migration**
Non-migrator

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Bonasa umbellus</em></td>
<td><em>Bine</em></td>
<td>R</td>
<td>M</td>
</tr>
</tbody>
</table>

Field Notes

Date: ______________________ Time: ______________________
Location: ______________________

**Observations**
- [ ] 1 observed this bird.
- [ ] Tracks  [ ] Sounds  [ ] Nest  [ ] Flying
- [ ] Other: ______________________

<table>
<thead>
<tr>
<th>Length: _________</th>
<th>Height: _________</th>
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</thead>
<tbody>
<tr>
<td>Weight: _________</td>
<td>Wingspan: ________</td>
</tr>
<tr>
<td>Colors: ____</td>
<td></td>
</tr>
<tr>
<td>What was the bird doing?</td>
<td></td>
</tr>
<tr>
<td>Notes: _______________</td>
<td>________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Season</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunny</td>
<td>Pt-cldy</td>
<td>Cloudy</td>
<td>Wind</td>
<td></td>
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<tr>
<td>Rain</td>
<td>Sleet</td>
<td>Snow</td>
<td>Fog</td>
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</tbody>
</table>
Fish play an important role in the ecosystem and as an important food source. Many people enjoy fishing for sport or to catch a meal. Common sport fish include Walleye, Bass, Muskie, Northern Pike, Sunfish, perch, and Crappie. On the reservation, registered band members may harvest fish by using a fishing pole, tip ups, spearing or by netting. All fish contain mercury, which is found in our lakes from pollution given off by coal combustion, mining, or from acid water where mercury is given off by the minerals in the sediments. Smaller fish like sunfish, crappie and perch can be eaten more often than larger fish like walleye, northern and bass because they contain lower amounts of mercury. Women that are pregnant or nursing should take extra precautions on the amount of fish they consume.

Fish can carry different diseases, so look carefully before consumption. Some fish diseases are apparent on the outside of the fish, while others are not noticeable until the fish is filleted.
**Black Crappie**

<table>
<thead>
<tr>
<th>Scientific Name</th>
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<th>Occurrence</th>
<th>TES Status</th>
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</thead>
<tbody>
<tr>
<td>Pomoxis nigromaculatus</td>
<td>Gidagagwaasha</td>
<td>R</td>
<td>M A E T M</td>
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</tbody>
</table>

**Description**
Black to dark olive in color with silver sides and dark green to black blotches throughout their body. Depression above their eye is more pronounced than White Crappies.

**Size**
Length: 7-12 inches  
Weight: 10 ounces-1 pound

**Reproduction**
May-June they spawn in shallow weedbeds when the water temperature reaches 50° F in the spring. Male crappies clear out circular nests in the sand. Females produce more than 190,000 eggs a year. The male will guard the nest and young until they are able to feed on their own.

**Habitat**
Can be found in clear lakes, rivers and streams. Mostly in the summer they are found along the weedbeds, but may go into deeper water especially in the winter months.

**Food**
Mostly smaller fish, zooplankton, insects and earthworms

**Common Diseases**
Neascus (Black spot disease) is common in shallow water fish like Crappies and Sunfish. This disease can be seen on the outside and fish and sometimes in the meat. The fish will appear to have black dots all over its skin and fins. If the meat is properly cooked, it is safe to eat.

---

**Field Notes**

Date: ________________________  Time: ________________________

Location: _______________________________________________________________________________

**Observations**

- [ ] I observed this fish.

<table>
<thead>
<tr>
<th>Length</th>
<th>Height</th>
<th>Estimated Weight</th>
<th>Describe the scales:</th>
<th>Does this fish have teeth?</th>
<th>Notes:</th>
</tr>
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</tr>
</tbody>
</table>

**Season**
- Spring  
- Summer  
- Autumn  
- Winter

**Weather**
- Sunny  
- Pt-cldy  
- Cloudy  
- Wind  
- Rain  
- Sleet  
- Snow  
- Fog
Northern Pike

Description
A long body with the dorsal fin near the tail. They have a long flat head with a large mouth and sharp teeth. Their body is a dark green color with light green spots throughout. The underside is a light cream color. The underside of the jaw will contain five or less pores.

Size
Length: 17-24 inches
Weight: 2-5 pounds

Reproduction
Spawning season occurs in late March through early April when the water temperature reaches 40° F. Females deposit eggs on vegetation in shallow water.

Habitat
Can be found in lakes, ponds, streams and rivers. They spend most of their time along the weedline.

Food
They consume mostly smaller fish, but will also eat frogs and crayfish.

Common Diseases
Lymphosarcoma - a disease found in Pike and Muskies. Fish will have a small to large sized tumor on the outside of their body.

Northern Pike have dark colored skin with light colored spots and Muskies have light colored skin with dark spots.

Date: _______________________________________ Time: ___________________________________
Location: _______________________________________________________________________________
Observations
I observed this fish.
Length: _____________ Height: ______________
Estimated Weight: ________________________
Describe the scales: _______________________
____________________________________________
Does this fish have teeth? ___________________
Notes: __________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

Spring Summer Autumn Winter
Sunny Pt-cldy Cloudy Wind
Rain Sleet Snow Fog

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
*Esox lucius* | *Ginoozhe* | R | M A E T D MC

Northern Pike have dark colored skin with light colored spots and Muskies have light colored skin with dark spots.

48
Walleye

**Description**
Silver to golden or dark olive brown in color with a long round body. Both first dorsal and anal fin contain spikes. They have sharp teeth and a white spot on the bottom part of the tail fin. A dark patch is located at the base of the dorsal fin.

**Size**
Length: 14-18 inches  
Weight: 1-3 pounds but can exceed 10 pounds

**Reproduction**
Spawning takes place in tributary streams or rocky lake shores when the water temperature reaches 45 degrees in the spring. No parental care involved.

**Habitat**
Can be found in lakes are rivers.

**Food**
Carnivorous; fish that will eat smaller fish, frogs, crawfish, and leeches.

**Diseases**
Dermal Sarcoma - a disease that only walleyes contract. Walleyes will get purple grape like tumors on the outside of their body. It is spread mostly during breading season in the spring. The effects on humans from this disease is unknown.

Myofibrogranuloma - another disease that is only found in walleye. The outside of the walleye appears normal but, the inside meat contains yellowish translucent patches. The meat has a freezer burn appearance. Consumption of these fish is not recommended.
White Sucker

**Description**
This is a common fish throughout Minnesota. Their back is brownish in color and their sides are silver. Their belly is white and the dorsal fin and tail are gray. Their head is rounded with a blunt snout and large lips.

**Size**
Length: 12-19 inches
Weight: 2-3 pounds

**Reproduction**
April-May they spawn in gravel along shorelines or in streams.

**Habitat**
Can be found in all types of water bodies.

**Food**
Insects, crustaceans, and plants

---

**Scientific Name | Ojibwe Name | Occurrence | TES Status**
---|---|---|---
*Catostomus commersonii* | Namebin | R | M | A | E | T | MC

---

Suckers play a very important role in the ecosystem. They are a large food source for many other fish. White sucker meat is used in soups, chowders, fish sticks or smoked.

---

Field Notes

Date: ____________________________  Time: ____________________________

Location: ____________________________

**Observations**

- [ ] I observed this fish.
- Length: ____________  Height: ____________
- Estimated Weight: ____________
- Describe the scales: ____________________________________________
- Does this fish have teeth? ____________

**Notes**

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________
Insects are defined as arthropods containing 6 legs and bodies that are segmented into the head, thorax and abdomen and usually having a pair of wings. Insects are a very important food source for many different animals including, frogs, birds, rodents, fish, other insects and even certain plant species. Every insect has different adaptations to help them survive. Bees and wasps have stingers to ward off predators and protect their homes. Certain caterpillars retain toxins from the plants they eat so predators know they are toxic to eat. Other insects may have spikes, bristles or hairs that detours predators. Insects like deer ticks or mosquitoes can carry different disease and should be watched carefully if bitten by them. Some of the prettiest insects found on the reservation are moths and butterflies. Butterflies can commonly be seen puddling on dirt roads. This is where butterflies find small puddles and extract sodium ions and amino acids which aid in reproduction.
Eastern Tiger Swallowtail

Description
These butterflies are bright yellow with black striping on the top of their wings and a bold black edging on the sides and bottom of their wings. Females have a vibrant blue color at the bottom tips of their wings where the male only has black.

Size
Wingspan: 9-14 centimeters
Females are slightly larger than males.

Habitat
These butterflies can be seen in many different types of habitats including forests, gardens, streams, fields, and roadways. They can be seen on dirt roads puddling. Puddling is where a butterfly gets sodium ions and amino acids from small mud puddles, which aid in reproduction. There may be only one butterfly seen on a small mud puddle or many butterflies.

Food
Most of their food consists of nectar from red or pinkish colored flowers.

Life Cycle
These butterflies go through a four stage life cycle including egg, caterpillar, pupa, and adult butterfly. Female butterflies lay one small green egg on a host plant. 3-5 days later the egg hatches and a caterpillar emerges. The caterpillar will then feed on the leaves of the host plant. The caterpillar goes through 5 instars before it becomes a pupa. The chrysalis measures 3.2 centimeters in length and usually takes 9-11 days in the summer before the transformation to an adult butterfly is complete. Near the winter months they will stay in the chrysalis over winter.

Overwinter Habits
Pupa stay in the chrysalis over winter and emerge in the spring.

Field Notes

Date: ___________________________ Time: ___________________________

Location: ____________________________________________________________________________

Observations

☐ I observed this insect.
☐ Walking or standing  ☐ Flying
☐ Other: ____________________________

Length: ___________ Height: ___________

Wingspan: ____________________________

Colors: ____________________________________

Description: __________________________________________________________________________

What was the insect doing? _____________________________________________________________

Notes: __________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
Papilio glaucus | Memengwa | R | B M A E T L W

<table>
<thead>
<tr>
<th>Season</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather</td>
<td>Sunny</td>
<td>Pt-cldy</td>
<td>Cloudy</td>
<td>Wind</td>
</tr>
<tr>
<td>Rain</td>
<td>Sleet</td>
<td>Snow</td>
<td>Fog</td>
<td></td>
</tr>
</tbody>
</table>
Monarch Butterfly

**Description**
A large butterfly that is mostly orange with black on the edge of the wings and white spots. There is also black venation throughout the wings. In the caterpillar stage, they are yellow, black and white striped.

**Size**
Wingspan 3¾-4¾ inches

**Habitat**
In the summer, butterflies can be found in open areas such as fields, meadows, and yards. In the winter months, Monarchs migrate down to Mexico. In the summer, Caterpillars will usually be found on Milkweed plants because they feed on the leaves.

**Food**
Caterpillars feed on Milkweed leaves and adults eat nectar from plants.

**Life cycle**
Monarchs complete a full metamorphosis. Eggs are laid on Milkweed plants. After hatching, they feed on the Milkweed as caterpillars. When they become large enough they become a pupa and then hatch into butterflies.

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danaus plexippus</td>
<td>Memengwaa</td>
<td>R M</td>
<td>E T V C</td>
</tr>
</tbody>
</table>

**Danaus plexippus**

**Memengwaa**

**Season**
- Spring
- Summer
- Autumn
- Winter

**Weather**
- Sunny
- Pt-cldy
- Cloudy
- Wind
- Rain
- Sleet
- Snow
- Fog

**Notes**

**Date:** ___________________________  **Time:** ___________________________  **Location:** ___________________________

**Observations**
- [ ] I observed this insect.
- [ ] Walking or standing  [ ] Flying
- [ ] Other: ___________________________

**Description:**
Caterpillars feed on Milkweed leaves and adults eat nectar from plants.

**Length:** ____________  **Height:** ____________

**Wingspan:** ____________

**Colors:** ____________

**What was the insect doing?** ___________________________

**Notes:**

________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

**Spring Summer Autumn Winter**

**Sunny Pt-cldy Cloudy Wind**

**Rain Sleet Snow Fog**
Orange-belted Bumblebee

**Description**
First abdominal segment is covered in yellow hairs. The second and third body segments are orange and the fifth and sixth segments are black. They can be easily identified by their orange band around their midsection. Nests are made in the ground and are lined with honeypots.

**Size**
Queen length: 17-20 millimeters
Male length: 9-13 millimeters
Worker length: 8-13 millimeters

**Habitat**
They can be found in gardens, parks, meadows, and fields. They are commonly sighted around Aster, Milkweed and Goldenrod plants.

**Food**
They feed on honey that is created when adult bees collect pollen and nectar and bring it back to the nest and mix it with enzymes.

**Life Cycle**
The only duty of a drone bee and a queen bee is to reproduce. The four stages of the Tri-colored Bumblebee is egg, larva, pupa, and then adult. Eggs are laid in the spring shortly after the Queen Bee has emerged and it takes about a month for them to become adult worker bees.

**Overwinter habits**
Only newly developed Queen Bees survive the winter and reproduce the next year. In April, the Queen Bee emerges from the ground and starts looking for a nest site to lay her eggs and start a new colony of bees.

Unlike Honey Bees, Tri-colored bees don’t have a barb on the end of their stinger, so they can sting repeatedly without dying.
Virginia Ctenucha Moth

Description
A medium sized moth with a metallic blue body, gray to black wings with an orange head. They have two long black fuzzy antennas extending from their head. Their eyes are large and black. The caterpillar is covered in thick stiff hairs and has a black thorax and abdomen with a cream-colored subdorsal stripe and a broken, white, subspiracular stripe.

Size
Length: 1 inch  
Wingspan: 2 inches

Habitat
Moist open grassy fields or meadows. They can be seen flying around in the day or near lights at night. They can be seen in May-June.

Food
Adult moths feed on nectar from flowers. Caterpillars mostly feed on grasses and sedges.

Overwinter Habits
Caterpillar hibernate on the ground under leaf litter.

Life Cycle
Two generations are produced every year. The life cycle goes through four stages like most moths. Female Moths lay eggs on the underside of leaves. Eggs hatch into caterpillars which feed on grasses and sedges. Once large enough, they become a chrysalis and then emerge as a moth.

This species of moth has adapted ways to ward off predators. When they are caterpillars they retain toxic chemicals from the plants they eat. When they become adults, they produce ultrasonic sounds that interfere with bats. Also, the color of the adult’s abdomen is a metallic blue which resembles a wasp.

Scientific Name | Ojibwe Name | Occurrence | TES Status
---|---|---|---
Ctenucha virginica | Totowesi | R B M A E T | VC

Date: ___________________________  Time: ___________________________

Location: ___________________________________________________________________________________________

Observations
☐ I observed this insect.  ☐ Walking or standing  ☐ Flying
☐ Other: ___________________________

Length: ______  Height: ______

Wingspan: ___________________________

Colors: ____________________________________

Description: ____________________________________________________________________________________________

What was the insect doing? ____________________________________________________________________________________________

Notes: ____________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
__________________________________________________________________________________________
Mammals

Mammals come in all shapes and sizes on the reservation. They can be large like a bear to small like a mouse. Many of the mammals on the reservation are hunted or trapped for their fur or meat including Beaver, White-tailed Deer, Muskrat, Otter, Mink, and Rabbit. A growing concern for people that are hunting is lead poisoning to people or other animals. One species that is commonly affected by lead is the Bald Eagle. Every spring, Bald Eagles are brought to the Division of Resource Management with lead poisoning and eventually die. This is common in the spring and fall because hunters leave gut piles that contain lead. Bald Eagles will feed on these around hunting season or in the spring when the gut piles have thawed. Hunters and trappers are encouraged to use copper or steel shots instead of lead.

On the Leech Lake Reservation many different wildlife monitoring studies are conducted yearly including scent post surveys, winter track surveys, small mammal surveys, and rare species surveys. By conducting these surveys, we can protect the habitat for rare species and determine the population growth or decline. Surveying and monitoring these populations help determine hunting seasons and bag limits.

What Do Mammals Eat?

Carnivore - An animal that feeds on the flesh of other animals for its main nutrition.
Herbivore - An animal that feeds on plants for its main nutrition.
Omnivore - An animal that eats food of both plants and animal origin for its main nutrition.

When Are Mammals Out & About?

Diurnal - Active during daylight hours as opposed to nighttime hours.
Nocturnal - Active during nighttime hours as opposed to daylight hours.
Crepuscular - Active during the early morning and late evening hours as opposed to day or night.
American Black Bear

**Description**
Usually black in color, but there are different color morphs where they can be brown, tan or cinnamon in color. Their snout is usually light brown in color and they may have brown or white markings on their chest. Their tail is short and not usually noticed.

**Size**
- Length: 4½-6 feet
- Tail length: 4-6 inches long
- Height: 3-3½ feet tall
- Weight Male: 100-900 pounds
- Weight Female: 90-500 pounds

**Sounds**
- snorts, huffs, and grunts

**Tracks**
Hind paw is 7-9 inches long, 5 inches wide with 5 toes. Forepaw 4 inches long and 5 inches wide with 5 toes.

**Breeding**
Mating season occurs June-July; Gestation period is 60-90 days. Females will produce cubs once every two years. Females undergo delayed implantation until November. 1-5 young are born in January or February while the mother is denned for the winter.

**Life Span**
Average life span is around 10 years, but they can live up to 30.

**Habitat**
Forests, wetlands and farmlands

**Food**
Omnivore; they eat berries, insects, fish, small mammals, carrion, nuts

**Signs**
Scratches on tree trunks, possibly with hair on the tree from shedding their winter coat. Large scat piles that contain noticeable berries or nuts.

**Activity**
Mostly nocturnal, but they can be seen feeding during the day.

---

**Field Notes**

Date: ___________________________ Time: ___________________________

Location: _______________________________________________________________________________

**Observations**

- [ ] I observed this mammal.
- [ ] Tracks  [ ] Sounds  [ ] Scat
- [ ] Other: __________________________________

**Length:** _____________  **Height:** ______________

**Estimated Weight:** ________________________

**Colors:** ____________________________________

What was the subject doing? __________________________________________________________

**Description:** __________________________________________________________________________

**Notes:** __________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________
Eastern Cottontail Rabbit

Description
Grayish to light brown colored body with a white chest and white tail. Long erect ears with a white spot between them on the forehead. Their nape is usually a rusty brown look. Unlike Snowshoe Hares, Cottontail Rabbits stay brown in the winter time.

Size
Length: 13-17 inches
Tail Length: 2 inches
Weight: 3 pounds

Sound
When caught by a predator they may make a high pitched screaming sound.

Tracks
Hind paw 4 inches long and forepaw is 1 inch long. Tracks are small and oval shaped. Forepaw fall behind the hind paw when hopping.

Breeding
Mating occurs February-March; gestation is 30 days. 3-6 offspring are born up to 5 times through the summer. Within hours of giving birth the female can mate again.

Life Span
If they survive the first year the average life span is 3 years.

Habitat
Yards, forests, and brush piles

Signs
Branches low to the ground may be cut off at an angle from their sharp incisors. Small round dry scat pellets may be left on their trails.

Food
Herbivore; grasses, vegetables, berries, twigs, and bark.

Activity
Nocturnal, crepuscular

Date: _________________________ Time: _________________________

Location: _________________________

Observations
☐ I observed this mammal.
☐ Tracks  ☐ Sounds  ☐ Scat
☐ Other: _________________________

Length: _______ Height: _______

Estimated Weight: _________________________

Colors: _________________________

What was the subject doing?
Description: _________________________

Notes:
__________________________________
__________________________________
__________________________________

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
Sylvilagus floridanus | manido-waabooz | R | E M A E T S M C
Gray Wolf

Description
Gray in color with dark and light highlights. Some can also be all black in color. A very large bushy tail with a black tip.

Size
Length: 4-5 feet
Tail length: 15-20 inches
Height: 26 to 40 inches
Weight: 55-130 pounds

Sounds
Barks, yelps, snarling, snapping of teeth and howling

Tracks
Track measure 4¼ inches long and 3½ inches wide. Claws may be seen and the stride is 26-30 inches.

Breeding
Mating occurs January-February; 63-65 day gestation period. Usually 1-10 pups are born in March or April.

Life Span
Average life span is 5-6 years, but can live up to 15.

Habitat
Swamps and forested areas. The territory size of a wolf pack may cover 100 square miles or larger if food is scarce.

Food
Omnivore; small and large mammals, berries, grass, fish, insects, and carrion

Signs
Scratches in the dirt. Urine scent markers on tree stumps, rocks, or logs. Scat is same as domesticated dog, but may contain bone fragments or undigested hair pieces.

Activity
Nocturnal in the summer and diurnal in the winter.

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
Canis lupus | ma’iingan | R E M A E T S MC

Formerly endangered; recovering and scheduled for eventual delisting.

---

Field Notes

Date: ______________________  Time: ______________________
Location: _______________________________________________________________________________

Observations
☐ I observed this mammal.
☐ Tracks  ☐ Sounds  ☐ Scat
☐ Other: ____________________
Length: ______________  Height: ______________
Estimated Weight: ______________________
Colors: ______________________

What was the subject doing? __________________________________________________________

Description: ____________________________________________________________________________

Notes: __________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

Season
Summer  Autumn  Winter
Spring
Weather
Sunny Pt-cldy Cloudy Wind
Rain Sleet Snow Fog

TES Status
ET  S  MC

70
Mink

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
---|---|---|---
*Neovison vison* | Zhaangweshi | R | M A E T S MC

**Description**
Dark to light brown weasel with a light yellow patch on their chin. They have small rounded ears. Their legs are short and they have a long body and tail.

**Size**
- Length: 14-20 inches
- Tail length: 9 inches
- Weight: 2-4 pounds

**Sounds**
Piercing shrieks and hisses when threatened, muffled chuckling sounds when mating.

**Tracks**
Hind paw is 2-3¼ inches long with 5 toes. The forepaw is about 1½ inches long with 5 toes. Both tracks have claw marks in them. Their stride is 12-25 inches and their tracks may end at the edge of water.

**Breeding**
Mating season occurs January-April; 6 week gestation period. Females give birth to 3-6 young in late spring.

**Life Span**
1-3 years

**Habitat**
Minks can be found anywhere near water. They usually den in hollowed out logs or previous cavities in the mud left by other animals.

**Food**
Mostly fish, frogs, ducks, crayfish, earthworms and mice.

**Signs**
Minks usually leave their droppings on rocks or logs near waterbodies. You may even see them on fishing piers.

**Activity**
Nocturnal and diurnal. They will hunt for several hours, then rest for hours.

**Field Notes**

Date: ___________________________ Time: ___________________________
Location: ___________________________

**Observations**

- ☐ I observed this mammal.
- ☐ Tracks  ☐ Sounds  ☐ Scat
- ☐ Other: ___________________________

Length: ___________ Height: ___________

Estimated Weight: ___________
Colors: ___________________________

What was the subject doing?
Description: ___________________________
Notes: ___________________________
**Season**

<table>
<thead>
<tr>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
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</thead>
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**Weather**

<table>
<thead>
<tr>
<th>Sunny</th>
<th>Pt-cldy</th>
<th>Cloudy</th>
<th>Wind</th>
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</thead>
</table>

| Rain | Sleet | Snow | Fog |
Mammals

Field Notes

Date: ______________________________________ Time: ______________________________________
Location: _______________________________________________________________________________

Observations

☐ I observed this mammal.
☐ Tracks ☐ Sounds ☐ Scat
☐ Other: __________________________________

Length: _____________  Height: ______________
Estimated Weight: ________________________
Colors: __________________________________

What was the subject doing? __________________________________________________________
Description: __________________________________________________________________________
Notes: __________________________________________________________________________________
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_________________________________________________________________________________________
_________________________________________________________________________________________

Muskrat

Description
Compared to the American Beaver, muskrats are much smaller with longer narrower tails. They are all brown in color and have small eyes and ears. They have webbed feet and spend most of their time in or near water.

Size
Length: 8-13 inches
Tail length: 7-12 inches
Height: 5 inches
Weight: 2-4 pounds

Sounds
The only sound really made is by the chewing sound while eating.

Tracks
Hind paw 2-3½ inches long with an elongated heal. Forepaw is about half the size. 5 toes on each foot.

Breeding
Mating April-August; 25-30 day gestation period. 6-7 young produced 2-3 times per year.

Life Span
1-5 years

Habitat
Ponds, lakes, ditches, marshes, streams and small rivers

Food
Mostly herbivore; roots, cattails, bulrush shoots, dead fish, crayfish, clams, snails, and aquatic plants

Signs
Muskrats build a lodge made of aquatic vegetation and mud.

Activity
Nocturnal, crepuscular, active year-round

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ondatra zibethicus</td>
<td>wazhashk</td>
<td>R</td>
<td>E M A E T</td>
</tr>
</tbody>
</table>
Northern River Otter

Description
A long and slender dark brown body with a light brown belly and chest. Small ears and eyes. Long thick tail that tapers at the end. Short snout with long white whiskers. They have webbed feet and are usually seen in or around water.

Size
Length: 2 1/2 - 3 1/2 inches
Tail length: 13-19 inches
Weight: 10-20 pounds

Sounds
Grunts, growls and snorts during play and a loud, crying noise when threatened.

Tracks
Hind paw 3 1/2 inches, forepaw slightly smaller. Round tracks with 5 toes on each food. 12-24 inch stride.

Breeding
Mating occurs March-April; 200-265 day gestation period. 1-6 offspring are born in March or April and the females may mate only days after giving birth.

Life Span
6 years, but they can live up to 20

Habitat
Rivers, streams and lakes

Food
Carnivore; insects, fish, crayfish, frogs, small mammals, clams, and turtles

Signs
Slides in the snow from them sliding down hills on their stomach. Scat is brown with short segments and may contain fish or crayfish parts.

Activity
Diurnal, nocturnal; active year-round

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lontra canadensis</td>
<td>Nigig</td>
<td>R</td>
<td>M</td>
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</tbody>
</table>

Scientific Name
Lontra canadensis

Ojibwe Name
Nigig

Occurrence
R

TES Status
M | A | E | T | S | MC

Date: ____________________________________________________________________________
Time: ____________________________________________________________________________
Location: _________________________________________________________________________

Observations
☐ I observed this mammal.
☐ Tracks ☐ Sounds ☐ Scat
☐ Other: _______________________________________________________________________ 

Length: ____________ Height: ____________

Estimated Weight: ____________

Colors: ________________________________________________________________________

What was the subject doing?
Description: ______________________________________________________________________

Notes: __________________________________________________________________________
Porcupine

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Occurrence</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erethizon dorsatum</td>
<td>Gaag</td>
<td>R</td>
<td>M</td>
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</tbody>
</table>

**Description**
Brown body covered with long white hairs and quills. Short legs and a long tail. Eyes and ears are small and dark. Usually slow moving.

**Size**
Length: 20-25 inches  
Tail length: 5-10 inches  
Height: 6-12 inches  
Weight: 10-30 pounds

**Sounds**
Loud shrill screeching sounds during mating.

**Tracks**
Hind paw 3 inches long. The forepaw is 2-2½ inches long. 5 toes on back feet and 4 on front feet. Tracks are oval shaped and claw marks should be visible. Tail drag marks may also be noticeable.

**Breeding**
Mating occurs October-November; 7 month gestation period. Female in estrus for 8-12 hours. 1 offspring produced in May or June. Young are born with quills, teeth erupted and eyes open.

**Life Span**
5-10 years in the wild

**Habitat**
Deciduous and coniferous forests

**Food**
Herbivore; nuts, berries, bark, leaves, and buds

**Signs**
Large chunks of bark gnawed off the trunk of a tree. Chew marks on buildings, wooden handles, canoe paddles. Large piles of scat pellets at the base of a large tree.

**Activity**
Nocturnal, crepuscular; Active year-round

---

**Field Notes**

Date: ___________________________  Time: ___________________________

Location: _______________________________________________________________________________

**Observations**

- ☐ I observed this mammal.
- ☐ Tracks  ☐ Sounds  ☐ Scat
- ☐ Other: __________________________________

**Length:** _____________  **Height:** ______________

**Estimated Weight:** ________________________

**Colors:** ____________________________________

**What was the subject doing?** __________________________________________________________

**Description:** __________________________________________________________________________

**Notes:** __________________________________________________________________________________

_________________________________________________________________________________________

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**Season**

<table>
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**Weather**

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<thead>
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<th>Pt-cldy</th>
<th>Cloudy</th>
<th>Wind</th>
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<tr>
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<th>Sleet</th>
<th>Snow</th>
<th>Fog</th>
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<td>☂️</td>
<td>☃️</td>
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</tr>
</tbody>
</table>

---

**Scientific Name**

Erethizon dorsatum

**Ojibwe Name**

Gaag

**Occurrence**

R | M | A | E | T | MC

**TES Status**

ETS MC

---

**78**
Raccoon

Scientific Name | Ojibwe Name | Occurrence | TES Status
--- | --- | --- | ---
*Procyon lotor* | Esiban | R | M | A | E | T | S | MC

**Description**
Usually grey and brown. Distinct black markings around the eyes. Tail is long and bushy with 4-6 black and grey bands.

**Size**
- Length: 24-25 inches
- Height: 9-12 inches tall
- Weight: 10-30 pounds

**Sounds**
Snarls, growls and hisses

**Tracks**
Hind paw is 3½-4½ inches long with 5 toes and claw marks, forepaw 2½-3 inches long with a heel and 5 toes. Stride 8-20 inches.

**Breeding**
Mating occurs February-June; 54-65 day gestation. 3-6 young born in May. Female in estrus for only 3-6 days.

**Life Span**
Average 5 years

**Habitat**
Found in all types of habitats.

**Food**
Omnivore; crawfish, fish, clams, reptiles, nuts, berries, birdseed, bird eggs, insects, and carrion

**Signs**
Partially digested berries that are on a rock or log. Broken crawfish pieces along the water’s edge or opened clam shells.

**Activity**
Nocturnal; active year-round

---

Raccoons don’t have salivary glands so they will put their food in water before eating it.

---

**Field Notes**

Date: ______________________________________ Time: ______________________________________

Location: _______________________________________________________________________________

Observations
- I observed this mammal.
- Tracks
- Sounds
- Scat
- Other: ________________________________

Length: ___________ Height: ______________

Estimated Weight: ________________________

Colors: __________________________________

What was the subject doing?

Description: ____________________________________________

Notes: __________________________________________________________________________________
Red Fox

**Scientific Name** | **Ojibwe Name** | **Occurrence** | **TES Status**
---|---|---|---
Vulpes vulpes | waagosh | R | E M A T E T V C

**Description**
Most commonly they have reddish colored bodies, but there are different color morphs including dark colored morph and silver morph which have more black on them. Their ears are large with a white inside and black on the outside. Their jowls, chest, belly and tip or tail are usually white. Their legs are black and they have a bushy tail.

**Size**
Length: 25 inches  
Tail length: 13-17 inches  
Height: 15 inches  
Weight: 8-15 pounds

**Sounds**
High-pitched squeals and screams, yelps, cries, and barks.

**Tracks**
Forepaw is 2 inches long. The hind paw is slightly smaller and the tracks are oval shaped. Stride is 12 inches when walking.

**Breeding**
Mating occurs in February; 50 day gestation period. 1-10 offspring are born in April or May.

**Life Span**
5-10 years

**Habitat**
Coniferous and hardwood forests, cities, prairie, and farmland

**Food**
Omnivore; mice, rabbits, snakes, berries, nuts, seeds, fruits, fish, insects, and carrion

**Signs**
Scat is cylindrical and may contain undigested berries or hair and bone pieces.

**Activity**
Mostly nocturnal, crepuscular

---

**Field Notes**

Date: ___________________________  
Time: ___________________________

Location: ___________________________________________________________________________

**Observations**

- [ ] I observed this mammal.
- [ ] Tracks  
- [ ] Sounds  
- [ ] Scat  
- [ ] Other: ___________________________

Length: _______  
Height: _______

Estimated Weight: _______________________

Colors: __________________________________

What was the subject doing? ___________________________________________________________

Description: __________________________________________________________________________

Notes: __________________________________________________________________________________

_______________________________________________________________________________________

_______________________________________________________________________________________

_______________________________________________________________________________________
**White-tailed Deer**

### Scientific Name
**Odocoileus virginianus**

### Ojibwe Name
Waawaashkeshi

### Occurrence
<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>E</th>
<th>M</th>
<th>A</th>
<th>T</th>
<th>C</th>
<th>MC</th>
</tr>
</thead>
</table>

### TES Status

### Description
In the winter months, their coat will be a greyish brown color and in summer months it will change to a reddish brown. Their tail is brown with a black tip and a white underside. When alarmed they will flash the white of their tail. Males grow antlers throughout the summer and shed them in winter.

### Size
- Length: 4-7 feet
- Height to shoulder: 3-4 feet
- Tail length: 10 inches
- Male Weight: 100-300 pounds
- Female Weight: 75-200 pounds

### Sounds
- Snorts, grunts, and bleats

### Tracks
- Front hoof 2-3 inches long, hind hoof slightly smaller. The hoof tracks are heart shaped.

### Breeding
Mating season occurs late Oct.-Nov.; 6-7 month gestation. 1-2 fawns born in May or June. Newborns are covered with white spots.

### Life Span
Average 2-3 years; very few deer live past 10 in the wild.

### Habitat
Can be found in all habitat types.

### Food
Herbivore; Grasses, acorns, mushrooms, nuts, corn, leaves apples in summer, twigs and buds in winter

### Signs
- Tree rubs from males rubbing velvet off antlers.
- Scraperes in the fall from males marking their territory for breeding season.
- Browsed twigs that are torn off.
- Round depressions in the snow from bedding or scat pellets.

### Activity
Nocturnal, crepuscular; active in late afternoon throughout the night

### Table: Scientific Name, Ojibwe Name, Occurrence, TES Status

---

**Date:** ___________________________ **Time:** ___________________________

**Location:** _______________________________________________________

**Observations**

- [ ] I observed this mammal.
- [ ] Tracks  [ ] Sounds  [ ] Scat
- [ ] Other: _______________________________________________________

**Length:** _______  **Height:** _______

**Estimated Weight:** ___________________________

**Colors:** _______________________________________________________

**What was the subject doing?**

**Description:** _______________________________________________________

**Notes:** __________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

---

**Spring**  **Summer**  **Autumn**  **Winter**

**Sunny**  **Pt-cldy**  **Cloudy**  **Wind**

**Rain**  **Sleet**  **Snow**  **Fog**
From open fields to thick forests, a large variety of plants can be found on the Leech Lake Reservation. Some of which are edible, while others are poisonous. Some plants even have their own defense mechanisms like poison ivy which causes an allergic reaction or raspberries which have pointy thorns that poke and scratch. One of the most important plants for human consumption on the reservation is Wild Rice. This high protein food has been eaten for centuries and makes up a large portion of the Native American diet. This plant can be harvested in August and September with a permit on the reservation. There are many wild edible plants including raspberries, blackberries, strawberries, blueberries, dandelions, asparagus, fiddlehead ferns, leeks and many more. People are urged to use caution when gathering wild herbs though because there are some lookalike plants and berries that may be toxic.

There are many invasive species that enter the reservation each year. There are about 100 non-native plant species on the reservation. Some of the common invasive terrestrial plants to be on the lookout for include Garlic Mustard, Leafy Spurge, Common Buckthorn, Wild Parsnip, Common Tansy, and Spotted Knapweed. Some aquatic invasive species include Eurasian Watermilfoil, Curly Leaf Pondweed, and Purple Loosestrife.

**Annual Plants**

Annual plants grow and perform an entire life cycle in one season and then die off. These plants usually have small root systems because they don’t have as much time to grow extensive root systems.

**Perennial Plants**

Perennial plants last many years and have extensive root systems that shoot up new plants each year.
Black-eyed Susan

**Scientific Name**  
*Rudbeckia hirta*

**Ojibwe Name**  
*Wezawab-gonik*

**Life Cycle**  
Annual

**TES Status**  
E T MC

**Size**  
Height: 1-3 feet tall

**Leaf Description**  
Leaves are usually slender but may vary in shape and range. Leaves are usually 2-7 inches long and up to 2 inches wide. Leaves and stems are covered in white stiff hairs.

**Flower Description**  
Yellow flowers with long petals and a dark brown center. Flowers can reach 2-3 inches across and each flower contains 8-20 petals. The center of the flower protrudes out and is a dark brown in color. Blooming season is June - October.

**Seeds**  
Tiny seeds 1/16 inch long

**Habitat**  
Can be found in most sunny locations including fields, open woods or along ditches.

---

### Field Notes

**Date:** ______________________________________  
**Time:** ______________________________________

**Location:** _______________________________________________________________________________

**Observations**  
☐ I observed this plant.

**Estimated Height:** _________________________

**Leaf Description:** __________________________  

____________________________________________

**Flower Description:** _______________________

____________________________________________

**Notes:** __________________________________________________________________________________  

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<table>
<thead>
<tr>
<th>Season</th>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
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</thead>
<tbody>
<tr>
<td>Weather</td>
<td>Sunny</td>
<td>Pt-cldy</td>
<td>Cloudy</td>
<td>Wind</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>Weather</td>
<td>Rain</td>
<td>Sleet</td>
<td>Snow</td>
<td>Fog</td>
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</tbody>
</table>

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**Common Milkweed**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Asclepias syriaca</em></td>
<td>Zhaabozigan</td>
<td>Perennial</td>
<td>E T M C</td>
</tr>
</tbody>
</table>

**Size**
Height: 2-5 feet tall

**Leaf Description**
Leaves are oblong shaped with a pointed tip. They measure 8 inches long and 3 inches wide. Leaves are toothless with fine hairs on the underside and attached in an opposite arrangement. When leaves are broken, a white sticky sap oozes out.

**Flower Description**
2 inch round clusters of pinkish-white flowers that arise from the leaf axis. Each flower is ½ inch long with a 5 parted crown and 5 downward facing petals. Blooming season is June-August.

**Fruit**
Green bumpy seed pods about 5 inches long can be seen near the top of the plant. Many brown seeds with fuzzy parachutes are released when pods crack open.

**Habitat**
Can be found in wet or dry fields, along shores, or on the edges of woods.

**Observations**
- I observed this plant.
- Estimated Height:
- Leaf Description:
- Flower Description:
- Notes:

Milkweed is an important part of the Monarch Butterflies life. The leaves are the main food source for Monarch caterpillars and these are the only plants Monarchs will lay their eggs on.

Milkweed is declining because of herbicide use.
Fireweed

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Epilobium angustifolium</em></td>
<td>Ozhaashijibik</td>
<td>Perennial</td>
<td>E TS MC</td>
</tr>
</tbody>
</table>

**Average Size**
Height: 3-7 feet tall

**Leaf Characteristic**
Leaves are 2-8 inches long and up to 2 inches wide. Mostly toothless and wavy with a tapered pointy tip. Midrib is colored white.

**Flower**
Flowers grow in a spike-like cluster at the top of the plant. Purple flowers are 1 inch across with 4 petals. There are 8 long white stamen at the center of each flower. Flowers bloom from July-August.

**Seeds**
A slender upright pod that contains seeds. When ripe the pod will turn purple and peel open like a banana releasing all the small brown seeds to float away in the wind.

**Habitat**
Can be found in moist soils in shade or sun. Commonly found in forests or clearing edges.

**Notes:**
Fireweed is used as traditional Ojibwe medicine, usually in the form of a poultice, to treat any kind of inflammatory bruises or cuts.
Lowbush Blueberry

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccinium angustifolium</td>
<td>Minagaawanzh</td>
<td>Perennial</td>
<td>E T P M C</td>
</tr>
</tbody>
</table>

**Average Size**
Height: ½-2 inches

**Leaf Description**
Stalks are woody with alternate leaves that are ¾-1½ inches long and ½ inch across. Leaves are elliptical shaped, leathery to the touch and have serrated margins.

**Flower Description**
Small clusters of white bell shaped nodding flowers that are ¼ inch long with fused petals. Blooming season is late spring and into early summer.

**Fruit**
A round berry that is ¼-⅗ inch diameter with a waxy blue coating

**Habitat**
Can be found in sunny or shady areas with rocky or sandy soils. Frequently found in bogs or along the edges of wetlands.

The longest word in Ojibwe is “Miin-aan baash kimini-sij-i-gan bitooyin sij-i-gan-i bukwayszhigan” which translates to blueberry pie in English.

---

**Field Notes**

Date: ___________________________ Time: ___________________________
Location: _______________________________________________________________________________

**Observations**

☐ I observed this plant.

Estimated Height: ___________________________

Leaf Description: ___________________________________________________________________________

Flower Description: _________________________________________________________________________

Notes: _____________________________________________________________________________________
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**Season**

<table>
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<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
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**Weather**

<table>
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<th>Pt-cldy</th>
<th>Cloudy</th>
<th>Wind</th>
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<table>
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<tr>
<th>Rain</th>
<th>Sleet</th>
<th>Snow</th>
<th>Fog</th>
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</table>
Marsh Marigold or Cowslips

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caltha Palustris</td>
<td>Waabigoniin</td>
<td>Perennial</td>
<td>E E MC</td>
</tr>
</tbody>
</table>

**Size**
Height: 8-24 inches tall

**Leaf Description**
Leaves are round with a deep heart shape at the base. They can reach up to 4 inches long on 2-6 inch long stalks. Leaf edges are toothless but are scalloped.

**Flower Description**
2-5 bright yellow flowers that grow on a stalk that is slightly above the leaves. Each flower usually contains 5 petals that are 1-1½ inches long. Blooming season is April-May.

**Fruit**
Fruit is a curved capsule called a follicle that is about ¾ inches long. The follicle starts out green and erect and as it matures it changes to a brownish green color and splits to allow the seeds to fall out.

**Habitat**
Can be found in moist to wet soils including ditches, swamps, bogs, marshes, and wet woodlands.

They are one of the first flowers to bloom in the spring and the yellow flowers can be seen in the ditches.

---

**Field Notes**

Date: ___________________________  Time: ___________________________

Location: _______________________________________________________________________________

**Observations**

☐ I observed this plant.

Estimated Height: ___________________

Leaf Description: ___________________

_____________________________________________________________________________________

Flower Description: ___________________

_____________________________________________________________________________________

Notes: __________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

Season
- Spring
- Summer
- Autumn
- Winter

Weather
- Sunny
- Pt-cldy
- Cloudy
- Wind
- Rain
- Sleet
- Snow
- Fog

96
Red Columbine

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquilegia canadensis</td>
<td>Misudidjeebik</td>
<td>Perennial</td>
<td>E T M V</td>
</tr>
</tbody>
</table>

**Size**
Height: 1-3 feet tall

**Leaf Description**
Compound leaves in groups of 3 that alternate on the stem. Leaflets are 2½ inches long and are lobed in 2 or 3 segments with rounded tips.

**Flower Description**
Branching cluster of nodding bell shaped flowers at the top of the plant. Each 1-2 inch flower has 5 yellow petals that are rolled into a column with 5 red sepals surrounding them.

**Fruit**
5-7 erect green capsules that measure ½-1 inch in length. When mature that capsules split down the sides and release the seeds.

**Habitat**
Can be found in rocky areas, cliffs, bluffs, and in gardens.

---

The flowers and young seed pods are edible and taste sweet like honey.

---

Field Notes

Date: ___________________________________________________________________________________
Time: ___________________________________________________________________________________
Location: _______________________________________________________________________________

**Observations**

- [ ] I observed this plant.

**Estimated Height:** _________________________

**Leaf Description:** __________________________

**Flower Description:** _______________________

**Notes:** ___________________________________________________________________________________

_________________________________________________________________________________________

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_________________________________________________________________________________________
**Showy Lady’s Slipper**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
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<th>E</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Cypripedium reginae</em></td>
<td>Agobizowin</td>
<td>Perennial</td>
<td>E T</td>
<td>T</td>
<td>E</td>
<td>MC</td>
<td></td>
</tr>
</tbody>
</table>

**Average Size**  
Height: 10-17 inches tall

**Leaf Description**  
4-12 elliptical shaped leaves that are 5-10 inches long with wavy edges and longitudinal veins. Clumps of 20 or more stems may grow out of a single rhizome.

**Flower Description**  
1 or 2 white flowers with pink streaking can be found at the top of each stem. Each inflated flower measures 1-2 inches long. Blooming season is June and July. It may take 4-16 years to produce first flowers.

**Seed**  
Each year a Lady’s Slipper may produce a half million small seeds that are as fine as flour dust.

**Habitat**  
Can be found in partly shaded areas that have moist soil including moist prairies, bogs, ditches, fens, sedge meadows, or cool dark woods.

**Field Notes**

- **Date:** ______________________________________  
- **Time:** ______________________________________  
- **Location:** _______________________________________________________________________________

**Observations**

- I observed this plant.
- **Estimated Height:** _________________________
- **Leaf Description:** __________________________
  ______________________________________________
- **Flower Description:** _______________________
  ______________________________________________
- **Notes:** __________________________________________________________________________________
  ___________________________________________________________________________________________
  ___________________________________________________________________________________________
  ___________________________________________________________________________________________
  ___________________________________________________________________________________________

**Season Weather**

- Spring  
- Summer  
- Autumn  
- Winter  
- Sunny  
- Pt-cldy  
- Cloudy  
- Wind  
- Rain  
- Sleet  
- Snow  
- Fog

**Scientific Name**

*Showy Lady’s Slipper*  
*Cypripedium reginae*

**Habitat**

Can be found in partly shaded areas that have moist soil including moist prairies, bogs, ditches, fens, sedge meadows, or cool dark woods.

**Cypripedium reginae**

The Showy Lady’s Slipper is the Minnesota State flower. These flowers grow to be very old, some as old as 100 years or more.

**Without a permit it is illegal to pick these or dig them up.**
Water Lily

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Nymphaea odorata</em></td>
<td>Nabagashk</td>
<td>Perennial</td>
<td>E T M C</td>
</tr>
</tbody>
</table>

**Size**
Can be found in water up to 8 feet deep.

**Leaf Description**
Leaves can be seen floating on the water’s surface. They are round with a large slit at the base and have a 4-12 inch diameter. Leaves are green, smooth, shiny, toothless and attached to a long stem.

**Flower Description**
Large white flower with a 3-6 inch diameter and 20-30 petals with many yellow stamen. Flowers can be seen floating on the surface of the water. They open in the day and close at night and are fragrant smelling. Will be in bloom from July through September.

**Fruit**
Fruit is berry-like and contains small oval seeds ⅛-¼ inch in size.

**Habitat**
Can be found in shallow water with mucky soil in lakes, rivers, wetlands, and ponds where large amounts of sunlight can reach. They grow in large colonies along the water’s edge.

**Field Notes**

Date: _______________________________  Time: _______________________________

Location: ____________________________________________________________________

**Observations**

☐ I observed this plant.

Estimated Height: _______________________________

Leaf Description: _______________________________

Flower Description: _______________________________

Notes: _______________________________________________________________________
_____________________________________________________________________________
Wild Rice

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Life Cycle</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zizania aquaticus</td>
<td>Manoomin</td>
<td>Annual</td>
<td>E  T  MC</td>
</tr>
</tbody>
</table>

Size
Height: 3-8 feet tall

Description
Grows in wetlands, lakes, and rivers, in 3 inches to 10 feet of water. In late spring and early summer, the leaves will be ribbon like and will be floating on the surface of the water.

Leaf Characteristics
Leaves are long and ribbon like, about 3-4 feet long and approximately ¼-2 inches wide with sharply toothed margins.

Flower
In bloom from July-September. Flowers are monoecious meaning that male and female flowers can be found on the same plant. Pollination occurs from the wind.

Seed
Ovoid grains are yellow to red in color. The seeds ripen in September-October, at which time they can be harvested.

Field Notes

Date: ____________________________ Time: ____________________________
Location: _______________________________________________________________________

Observations
☐ I observed this plant.

Estimated Height: _______________________

Leaf Description: _______________________
____________________________________________

Flower Description: _______________________
____________________________________________

Notes: ___________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________
___________________________________________________________________________________

Season
Spring ☐ Summer ☐ Autumn ☐ Winter ☐

Weather
Sunny ☐ Pt-cldy ☐ Cloudy ☐ Wind ☐
Rain ☐ Sleet ☐ Snow ☐ Fog ☐

Habitat
Can be found in marshes, ponds, edges of rivers and lakes. Found in areas of calm water with mucky soils.
Trees play an important role in the ecosystem, whether it be a giant White Pine or a dead Maple Tree. Course woody debris (fallen dead trees) plays an important ecological role. These trees begin to decay and give back vital nutrients to the ecosystem which allows more trees and plants to thrive. Standing trees (snags) also provide food for animals such as porcupines, shelter for mammals and amphibians, homes for woodpeckers and owls, or nesting spots for songbirds and raptors. There is some concern for trees though, due to invasive species and disease. The Emerald Ash Borer has been documented in Minnesota and targets Ash Trees. Because of this threat, people are urged not to transport wood far distances. Some tree pathogens include Bur Oak Blight, Dutch Elm Disease, and Oak Wilt.

There are two main groups of trees, coniferous and deciduous. Coniferous trees are trees with evergreen needles that stay on the tree year round. These types of trees produce cones that house the seeds. The only coniferous tree that doesn’t follow these rules is Tamarack. This tree has needles and cones, but it loses its needles in winter. Deciduous trees have leaves that are usually dropped every fall. Red Oaks are deciduous trees that do not lose their leaves in the winter. Leaves on the branches may be arranged in two different ways, opposite or alternate. Opposite leaf arrangements mean that the base of the leaves are directly across from each other. Alternate leaf arrangements means that the base of the leaves are spaces out throughout the branch. They are not directly across from each other, but alternate along the branch.

In May, the Division of Resource Management has a tree and shrub giveaway. Enrolled members are encouraged to stop by and pick up free trees and shrubs to plant at home.
Balsam Fir

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Tree Group</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abies balsamea</td>
<td>zhingob</td>
<td>Coniferous</td>
<td>ET U MC</td>
</tr>
</tbody>
</table>

**Tree**

Trunk tapers near the top of the tree with horizontal branching from the ground up. Tree has an aromatic scent.

**Size**

Height: Up to 60 feet
Diameter: 20 inches

**Bark Description**

Smooth grayish brown with blisters of sap.

**Needle Description**

Single needle that is ½-1 inch long and has a spiral arrangement on the twig. The needles are soft, blunt-tipped, flat, green on the top and silvery on the bottom. If the needles are rolled between your fingers they feel flat.

**Fruit/Seed**

Bluish colored cone that is erect on the branch. Cone is 2-4 inches long with dense clusters near the top of tree.

**Habitat**

Moist soils, shaded forest, and along bogs.

**Fall Color**

Stays green throughout winter.
Eastern White Pine

Scientific Name | Ojibwe Name | Tree Group | TES Status
----------------|-------------|------------|--------------
*Pinus strobus* | Zhingwaak   | Coniferous | E T E T      |

**Tree**
A single trunk with horizontal whorls of branches.

**Size**
Height: 80-100 feet
Diameter: 40 inches

**Bark Description**
Thin smooth green colored bark on young pine trees. Thick and rough with a brownish color on older trees.

**Needle Description**
Needles are 2½-5 inches long. They occur in bundles of 5 and are flexible.

**Fruit/Seed**
Cones are 5-8 inches long and cylindrical shaped. Each scale on the cones contains two small winged seeds. Cones usually are resin coated and sticky to the touch.

**Habitat**
They can survive in a wide variety of soil types from dry and sandy to moist areas.

**Fall Color**
Stay Green throughout winter.

**Notes:**

---

Field Notes

Date: ______________________________________  Time: ______________________________________
Location: _______________________________________________________________________________

**Observations**

- [ ] I observed this tree.
- Height: __________  Diameter: __________

**Bark Description:**
_____________________________________________________________________________________

**Needle Description:**
_____________________________________________________________________________________

**Needle Type:**
[ ] Single  [ ] Cluster of ____________  [ ] Bunch

**Notes:**
_____________________________________________________________________________________
_____________________________________________________________________________________
_____________________________________________________________________________________
**Jack Pine**

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Ojibwe Name</th>
<th>Tree Group</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pinus banksiana</td>
<td>Okikaandag</td>
<td>Coniferous</td>
<td>E I E MC</td>
</tr>
</tbody>
</table>

**Tree**
Single trunk with many dead branches and a very open irregular crown.

**Size**
Height: 60 feet  
Diameter: 8 inches

**Bark Description**
Reddish gray to black in color with many loose scales.

**Needle Description**
Clustered needles with 2 needles per cluster that are ¾-1½ inches long.  
Needles are widely forked, stiff, slightly twisted and pointy.

**Fruit/Seed**
Strongly curved 1-1½ inches cones. Each cone contains small winged triangular seeds.

**Habitat**
Dry, sandy or rocky soils. They need direct sunlight to grow.

**Fall Color**
Stays green throughout winter.
Northern Red Oak

Scientific Name: *Quercus rubra*
Ojibwe Name: Mitigomizh-iig
Tree Group: Deciduous
TRE Status: E T F MC

**Tree**
Single straight trunk with a broad round crown.

**Size**
Height: up to 80 feet tall
Diameter: 36 inches

**Bark Description**
Smooth dark grey bark on young tree. Older trees have thick brown bark that is broken by shallow fissures into regular, flat, smooth surfaced vertical plates.

**Leaf Description**
Leaves have 7-11 lobes and are 4-9 inches long. The end of each lobe has several pointy tips. The sinuses only cut halfway to midrib.

**Fruit/Seed**
A large bitter ¾-2 inch acorn that matures the second year. The base is flat with a dark brown cap.

**Habitat**
Dry soil types

**Fall Color**
Red to brown

---

**Field Notes**

Date: ______________________  Time: ______________________

Location: ____________________________________________________________________

Observations

\[ \square \text{I observed this tree.} \]

Height: __________  Diameter: __________

Bark Description:

Leaf Description:

Leaf Type: \[ \square \text{Lobed} \]  \[ \square \text{Compound} \]  \[ \square \text{Smooth} \]  \[ \square \text{Serrate} \]

Leaf Arrangement: \[ \square \text{Opposite} \]  \[ \square \text{Alternate} \]

Notes:

______________________________________________________________________________

______________________________________________________________________________

______________________________________________________________________________

---

### Scientific Name: *Quercus rubra*  
### Ojibwe Name: Mitigomizh-iig  
### Tree Group: Deciduous  
### TRE Status: E T F MC
Northern White Cedar

Tree
Compact pyramid shaped tree with single or multiple trunks that are often twisted. Branches are short and horizontal.

Size
Height: 50-60 feet
Diameter: 20-36 inches

Bark Description
Gray to reddish brown in color. Vertical fibrous shredded looking strips of bark may be hanging on the tree.

Needle Description
Green scale-like needles that are 1-2 inches long. They branch out to form flat shaped branches. Very aromatic scent when crushed or broken.

Fruit/Seed
A green cone that turns light brown when mature that is half and inch long in upright clusters. Each cone contains many 2 tiny winged seed.

Habitat
Can be found in moist or wet sandy soils.

Fall Color
Stays green throughout winter.

Field Notes
Date: ___________________________ Time: ___________________________
Location: ____________________________________________________________________________

Observations
☐ I observed this tree.
Height: ________ Diameter: ________
Bark Description: __________________________
Needle Description: _______________________
Needle Type: ☐ Single ☐ Cluster of _____________ ☐ Bunch
Notes: ______________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

Scientific Name | Ojibwe Name | Tree Group | TES Status
--- | --- | --- | ---
Thuja occidentalis | Giizhik | Coniferous | E | T | MC

Tree Group
Coniferous

Season
Spring | Summer | Autumn | Winter

Weather
Sunny | Pt-cldy | Cloudy | Wind

Rain | Sleet | Snow | Fog

Notes:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________
**Paper Birch**

<table>
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<tr>
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<th>Ojibwe Name</th>
<th>Tree Group</th>
<th>TES Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Betula papyrifera</td>
<td>Wiigwaasaatig</td>
<td>Deciduous</td>
<td>E T E E MC</td>
</tr>
</tbody>
</table>

**Tree**
Can grow alone or in clusters. Branches droop down. When Paper Birch grow in clusters it is a result of logging.

**Size**
Height: 70 feet tall
Diameter: 20 inches

**Bark Description**
Thin papery bark that is light grey in color with pore holes, but changes to white with age of tree. Bark separates into sheets that may be rolled up or curled.

**Leaf Description**
Simple 2-3 inch overall shaped leaf. The teeth on the leaves are irregularly serrated. The end comes to a point and the base is rounded.

**Fruit/Seed**
A cone shaped nutlet that contains many small seeds. Nutlets are grouped in a 1 inch catkin that ripens in August and September.

**Habitat**
Moist soils

**Fall Color**
Light yellow

---

**Field Notes**

Date: ______________________________________  Time: _____________________________________
Location: _______________________________________________________________________________

**Observations**

☐ I observed this tree.

Height: ____________  Diameter: ____________

Bark Description: ________________________________________________

Leaf Description: ________________________________________________

Leaf Type:  □ Lobed  □ Compound  □ Smooth  □ Serrate

Leaf Arrangement:  □ Opposite  □ Alternate

Notes:  _________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

---

**Season**

Spring  Summer  Autumn  Winter

**Weather**

Sunny  Pt-cldy  Cloudy  Wind

Rain  Sleet  Snow  Fog
Quaking Aspen

Scientific Name | Ojibwe Name | Tree Group | TES Status
---|---|---|---
*Populus tremuloides* | *Azaadi* | Deciduous | E I F MC

Tree
Medium sized tree with a single straight slender trunk, lacking side branches, round crown.

Size
Height: 65 feet  Diameter: 12-24 inches

Bark Description
Dark gray in color and deeply furrowed lower on the tree and changes to white and smooth on the upper part of the tree.

Leaf Description
Simple round leaves 1-3 inches in length alternating on the branches. They come to a short sharp point and are finely toothed.

Fruit/Seed
Catkin-like fruit that are 4 inches long. It is composed of many small green capsules that are ⅛ inch long. These open and release seeds that are attached to cottony material that float away.

Habitat
Wet or dry sandy soils

Fall color
Golden yellow

Field Notes

Date: __________________________  Time: __________________________

Location: _______________________________________________________________________________

Observations

I observed this tree.

Height: ____________  Diameter: ____________

Bark Description: __________________________

Leaf Description: __________________________

Leaf Type:  [ ] Lobed  [ ] Compound  [ ] Smooth  [ ] Serrate

Leaf Arrangement:  [ ] Opposite  [ ] Alternate

Notes: ____________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________
_________________________________________________________________________________________

Spring Summer Autumn Winter

Sunny Pt-cldy Cloudy Wind

Rain Sleet Snow Fog
Red Maple

<table>
<thead>
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<th>Tree Group</th>
<th>TES Status</th>
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</thead>
<tbody>
<tr>
<td>Acer rubrum</td>
<td>Aninaatig</td>
<td>Deciduous</td>
<td>E T S MC</td>
</tr>
</tbody>
</table>

**Tree**
Medium sized tree with a single trunk and a narrow dense crown.

**Size**
Height: 65 feet tall  
Diameter: 24 inches

**Bark Description**
Gray, smooth, broken by narrow irregular cracks

**Leaf Description**
Leaf has 3-5 lobes and is 3-4 inches long. It is attached in an opposite arrangement along the branch. There are notches in between lobes with a double toothed margin.

**Fruit/seed**
Pair of 1 inch long winged seeds that are red in the summer time.

All trees in the “Acer” family can be tapped in the spring to make syrup and sugar cakes.

**Habitat**
Can be found in wet to moist soils. Seen along wetlands or depressions that hold water.

**Fall Color**
Red to orange

---

Field Notes

Date: ____________________________  Time: ____________________________

Location: _______________________________________________________________________________

**Observations**

- I observed this tree.

<table>
<thead>
<tr>
<th>Height: _______</th>
<th>Diameter: _______</th>
</tr>
</thead>
</table>

**Bark Description:**
______________________________

**Leaf Description:**
______________________________

**Fruit/seed:**
______________________________

**Fruit/seed**
Pair of 1 inch long winged seeds that are red in the summer time.

**Leaf Type:**  
- Lobed  
- Compound  
- Smooth  
- Serrate

**Leaf Arrangement:**  
- Opposite  
- Alternate

Notes: _______________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________

_____________________________________________________________________________________
Red Pine

Scientific Name | Ojibwe Name | Tree Group | TES Status
--- | --- | --- | ---
*Pinus resinosa* | *Apakwanagemag* | Coniferous | E T E

**Tree**
Single straight trunk, lower branches turn brown and die off. The crown is round and broad.

**Size**
Height: 40-80 feet tall  
Diameter: 30-40 inches

**Bark Description**
Reddish brown and becoming redder near the top of the tree. There are many flat scales.

**Needle Description**
2 needles per cluster that are 4-6 inches long. Needles break when bent.

**Fruit/Seed**
Cones are brown and 2 inches long containing small seeds that are about ¼ inch wings and are scattered by the wind.

**Habitat**
Usually found in dry sandy soil types. Needs direct sunlight.

**Fall Color**
Stay green throughout winter.

**Field Notes**

Date: __________________________  Time: __________________________

Location: ____________________________________________________________________________________

Observations

- [ ] I observed this tree.

Height: _______  Diameter: _______

Bark Description: ____________________________________________________________

Needle Description: ____________________________________________________________

Needle Type:  [ ] Single  [ ] Cluster of _______  [ ] Bunch

Notes: _________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

_________________________________________________________________________________________

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Season

<table>
<thead>
<tr>
<th>Spring</th>
<th>Summer</th>
<th>Autumn</th>
<th>Winter</th>
</tr>
</thead>
</table>

Weather

<table>
<thead>
<tr>
<th>Sunny</th>
<th>Pt-cldy</th>
<th>Cloudy</th>
<th>Wind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rain</td>
<td>Sleet</td>
<td>Snow</td>
<td>Fog</td>
</tr>
</tbody>
</table>

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White Spruce

**Scientific Name** | **Ojibwe Name** | **Tree Group** | **TES Status**
--- | --- | --- | ---
*Picea glauca* | *Gaawaandag* | *Coniferous* | E T S MC

**Tree**
Straight single trunk with many horizontal branches.

**Size**
Height: Most grow to 60 feet tall but can get up to 100 feet tall
Diameter: 24 inches

**Bark Description**
Dark brown and scaly

**Needle Description**
Single needles that are ½-¾ inches long. They are stiff, pointed and aromatic when crushed. Needles are blueish green in color.

**Fruit/Seed**
2 inch slender brown cone. Cone scales are soft and flexible.

**Habitat**
Can be found in shady areas with dry or moist soils.

**Fall Color**
Green throughout winter.
Terms and Definitions

**Berry** - A fleshy fruit with several seeds within.

**Catkin** - A scaly cluster of usually same sex flowers.

**Carrion** - Dead or decaying flesh. Carrion is a significant food source for many animal species.

**Carnivore** - An animal such as a mink, fox or wolf that eat the flesh of other animals for its main nutrition.

**Clustered needles** - A group of needles emanating from a central point, usually within a papery sheath, as in pine trees.

**Crepuscular** - Active during the early morning and late evening hours as opposed to day or night.

**Delayed Implantation** - The embryo does not immediately implant in the uterus, but is maintained in a state of dormancy.

**Diurnal** - Active during daylight hours as opposed to nighttime hours.

**Endangered Species** - Seriously at risk of extinction.

**Estrus** - A state of sexual readiness in most female animals that immediately precedes ovulation. The time when females are more receptive to mating.

**Extinct** - Having no living members.

**Extirpate** - Lost from an area.

**Follicle** - A dry seed vessel, or pod, usually contained in a cone or cone-like seed catkin.

**Foliation** - The process of fish reproduction. It involves females laying eggs and males fertilizing them to produce young.

**Midrib** - The central vein of a leaf, often more pronounced as larger in size than other veins.

**Nape** - Back of the neck.

**Nocturnal** - Active during nighttime hours as opposed to daylight hours.

**Nutlet** - A small or diminutive nut or seed, usually contained in a cone or cone-like seed catkin.

**Omnivore** - An animal such as a bear that eats a wide variety of foods including plants, insects, carrion, or meat as its main nutrition.

**Ovate** - Shaped like an egg.

**Phosphate buffered saline (PBS)** - A buffer solution commonly used in biological research. It is a water-based salt solution containing sodium phosphate, sodium chloride and potassium phosphate.

**Pod** - A dry fruit that contains many seeds and opens at maturity.

**Serrate** - Having tooth-like projections pointed away from the petiole.

**Scat** - Fecal droppings of an animal.

**Spawning** - The process of fish reproduction. It involves females laying eggs and males fertilizing them to produce young.

**Stride** - In larger animals, the distance between individual tracks. In smaller animals like weasels, the distance between sets of tracks.

**Threatened Species** - Vulnerable to endangerment in the near future.

**Tip up** - A device used in ice fishing in which a wire attached to the rod is tripped, raising a signal flag, when a fish takes the bait.

**Thorax** - The second or middle region of the body of certain arthropods, including the insects and most crustaceans, lying between the head and the abdomen.

**Velvet** - A soft furry covering on antlers, which contains many blood vessels that support antler growth. Velvet is shed when antlers reach full size.

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Measuring in the Field

Diameter: Distance across a circle. Circumference: Distance around a circle. It could also be called the perimeter of a circle.
To figure out the circumference of the circle, we multiply the diameter of the circle times pi or 3.14.
Example: the 4” diameter circle has a 12.56 circumference.