## **Habitat Conservation Area**

## A Self-Guided Interactive Tour Fall Activities

## LEAF & BARK RUBBINGS

## Materials: Crayons, blank paper, hard surface like a book or clipboard

As the seasons change in North America, we immediately begin to notice two things: the days are getting shorter and the temperature is starting to drop. This is because the season of fall is created by the earth's axis tilting away from the sun, providing us with less sunlight and less intense sunlight.

Another more physical response to fall are the trees starting to change colour and eventually lose their leaves. Why and how is this happening though? To understand that we need to first understand a little bit about how plants make their food. Plants create their own food through a process called photosynthesis. Photosynthesis works by harvesting the suns energy through a pigment called chlorophyll. Chlorophyll is also the reason why plants are green! As there begins to be less daylight and colder temperatures, plants are no longer getting enough energy from the sun for photosynthesis. As a survival method, plants begin storing nutrients in their roots and preparing for winter. Since they are not photosynthesizing, the chlorophyll in their leaves begins to break down which allows the other light-harvesting pigments like yellow (carotenoids and xanthophylls), orange (carotenoids) and red (anthocyanins and carotenoids), to shine through! Giving us the colours we know and love during fall.

As you walk through the conservation area, admiring the changing fall leaves, try to notice the differences between the leaves. Picking some up off the ground and inspecting the different shapes and edges of the leaves helps youu distinguish one plant from another. Wascana park is home to many different species of trees such as, Russian Olive, Bur Oak, Green Ash, Blue Spruce, Butternut and many others. All of which have varying leaf shapes, characteristics and tree bark.

An easy way to identify different plants are to take leaf rubbings. This allows you to have a copy of the leaf that you can then reference with a tree guide to help you correctly identify the plant. To do this you are going to collect different leaves and place them on your hard surface with no overlap. Next, place a piece of paper over top and with a crayon, start colouring over top of the leaves. The patterns of the leaves should start showing through with the veining, ridges and edges on the leaf. After you have done your rubbing, take a closer look at your leaves. Are the outsides jagged or smooth? Is there just one big leaf or are their small multiple ones? You can also do this same activity with bark. Placing a piece of paper over the tree and rubbing a crayon over top will allow you to see the pattern in the bark, the depth of ridges and any other characteristics of that tree. Even if you cannot identify a tree to its common name, observing the different characteristics in plants is a fun way to appreciate plant diversity and serve as an introduction to the breakdown of plant characteristics!

