SECTION II

If you see any people cutting trees, please call the police immediately at 911. If you see evidence of trees which have been cut down, please call the Conservation Authority at 416 661 6600.

Aster

Arrow-leaved Aster (Aster urophyllus)

Asters are very common and numerous in southern Ontario. This perennial herb has leaves with soft teeth around the margin. The leaves are arrow or heart shaped and clasp the stout, branched and hairy stem which can grow from 60 to 200 cm tall.

The daisy-like flowers are bluish, sometimes with a pinkish tinge, with a yellow disk in the centre which turns purple.

Heart-leaved Aster (Aster cordifolius)

This perennial herb grows up to 120 cm tall. The smooth stems have many leaves. The leaves have heart-shaped bases and are sharply toothed. The underside of the leaves are hairy while the upper surface is rough near the edges.

The small flowers have blue to purple rays with a yellow centre. They appear in

clusters near the top of the plant. The fruit is small, smooth, dry seeds.

1st Nations people used the leaves to make a medicinal tea. Some birds make use of the seeds as food.

New England Aster (*Aster novae-angliae*)

A very showy aster with deep violet flowers with numerous rays (up to 1000). The toothless lance-shaped leaves are crowded on the hairy stem. Notice how the base of the leaf wraps itself around the hairy stem.



This aster grows from 90 to 210 cm tall.

Look for all the asters in the northern regeneration area as well as in the sunny portions of the Altona Forest trails.

Avens (Geum urbanum)

Avens is five petaled and a member of the rose family. It is a blue-green in colour with small yellow flowers. It grows on poor soils and so does well in various parts of Altona Forest, especially along trails and in clearings. It is usually 30 to 60 cm. tall.

It is a herbaceous perennial which is native to most temperate zones on Earth. Eugenol in the roots give them a faint smell of cloves. Pioneers used a strong tea made from this plant to treat sore gums and oral ulcers. It was used as a mouthwash and not swallowed as it is very sour and astringent.¹

The white avens rose has flowers with 5 sepals shaped like a star

with many stamens and pistils in the centre.

Balsam Fir (*Abies balsamea* (L) Miller) The balsam fir here are mature and tall. Look for trunks of trees with prominent blisters especially around Interpretative Posts 8, 9 and 10.

On lower branches, soft needles generally occur as two rows along sides of the branch. They are 2 to 5.5 cm long. On older branches, the needles tend to be shorter and curved upward so as to cover the upper sides of the twigs.

Individual needles which may be blunt, dented or notched at the end are very soft to the touch. They are usually dark green on the upper surface, lighter on the lower surface. Two silvery bands of stomata (pores) are found on the lower surface.

The scientific name "balsamea" is an ancient word for the balsam tree, so named because of the many resinous blisters found in the bark. These blisters are the reason that it has sometimes been incorrectly called a blister pine.

Balsam fir bark is thin, ash-gray and smooth except for numerous blisters on young trees. These blisters contain a sticky, pleasantly fragrant, liquid resin or **balsam pitch**, which is difficult to remove from hands and even more difficult to remove from clothes. Upon maturity, bark may

become up to 1.5 cm thick, red-brown and broken into thin scales.

As a Christmas tree, balsam fir has several desirable properties. It has a dark-green appearance, long-lasting needles, and attractive form. It also retains its pleasing fragrance. Nine to ten years in the field are required to produce a 2-metre tree.

The soft wood has been used primarily for pulpwood in the pulp and paper industry. The wood is also used for light frame construction, interior knotty panelling, and crates. Wood resin in the bark blisters is the source of Canada balsam, used for making of microscope slides and as a clear cement for glass in optical instruments. Resin was sold in stores as a confection prior to the advent of chewing gum, and resinous fir knots were once used as torches. A balm of balsam fir resin was

used in American Civil War as an external application to the injuries of combat. Balsam fir boughs were often used for stuffing "pine pillows,"

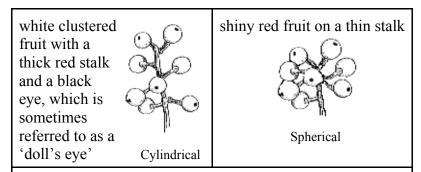
The aromatic foliage once served as a deodorant.

In Altona Forest deer browse the foliage, while chickadees, squirrels and other rodents eat the seeds. The grouse uses fir forests for cover and obtains food from the needles.

Baneberry

The baneberry, a perennial, is in the buttercup family.

white (Actaea pachypo	da) red (Actaea rubra)
white globular flowers	clusters of red flowers



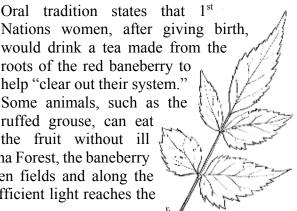
The alternate, stalked leaves are compound with three to five leaflets which are sharply toothed, irregularly lobed and pointed at the tip. The leaves are commonly hairy on the veins underneath

The berries of the red and white baneberry are poisonous.



Nations women, after giving birth, would drink a tea made from the roots of the red baneberry to help "clear out their system." Some animals, such as the ruffed grouse, can eat the fruit without ill

effects. In Altona Forest, the baneberry is found in open fields and along the paths where sufficient light reaches the ground.



Barberry

Common Barberry (Berberis vulgaris L.) is a bushy shrub which can grow up to 3 m. The bark is light grey to vellowish grey. The flowers are yellow in drooping clusters. The berries are red and oblong.

This plant was sold in nurseries but when it was discovered to be an alternate host for wheat rust fungi, which affects wheat, oats and barley, it was banned from the store shelves. Commercial production and use of the barberry was banned by the Government of Canada in 1970. Anyone having common barberry in their gardens or on their property must remove them. This plant was very rare in Altona Forest and it is thought not to exist here any longer. If discovered here, it will be removed. The Japanese barberry, which has become naturalized, is very common here

Japanese Barberry (Berberis thumbergii DC.) This plant is not susceptible to the rust fungi. It is a smaller shrub than the common barberry. It has soft prickles or thorns which are almost 1 cm long, arranged singly at intervals along the stem. The small leaves are oval but elongated near the base coming to a point just as the leaf joins the woody reddish-brown stem. Older stems are a gray brown.

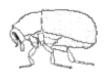
The fruit, which may persist into the winter, is a bright orange-red, almost flourescent orange and is usually found arising from the stem in groups of two.

Other members of the family are the Blue Cohosh (Caulophyllum thalictroides), which flowers in terminal clusters and deeply cut leaves and the Mayapple (genus Podophyllum) which has showy

white flowers attached between

two large palmate leaves. **Bark Beetle**

Bark Beetle



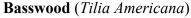
lays its eggs under the bark of living or dead trees. The larvae then eat their way around the tree

This small beetle

just under the bark leaving trails which resemble roads. Theses trails can be seen in many of the fallen old trees in the Altona Forest

Barren Strawberry (*Waldsteinia fragarioides*)

Not a species of the familiar strawberry with fleshy fruit, this species has small (<1 cm) yellow flowers, unlike the white flowering strawberry. Its fruit is a tight cluster of dry inedible seeds. It is a low growing plant which attains a height of up to 20 cm. The compound (3 leaflets) leaves are light green and resemble the strawberry. The leaflets have a combination of large teeth and small lobes giving them a jagged appearance.



Also called the American basswood, linden, bee tree, whitewood and limetree, the basswood is found in the hardwood forests of Altona Forest.

The smooth, shiny, dark green leaves are alternate, more or less heart-shaped, 8 - 16 cm long, with evenly spaced teeth around the margins. The underside is glistening bright with tufts of rusty hair.

The fruits are woody nutlets with thick-shells measuring .5 to 1.0 cm in diameter with short, thick and brownish downy covering. They are borne in groups from a long stem attached to narrow modified leaf called a bract, which acts as a parachute as it floats to the ground. The clustered fruit and bracts may remain on the tree until late winter.

In Altona Forest, the fruit are eaten by squirrels, chipmunks and other small rodents.

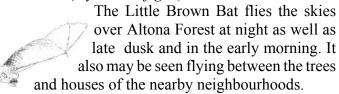
In June and July, the scent of the tiny basswood flowers can be detected up to a kilometre away. This scent attracts bees, hence one of its common names "Bee Tree." Basswood honey is a popular flavour produced only in the spring. With five sepals and five yellowish-white petals, the flowers hang from the bract where the fruit will develop.



Trails left under the bark of a tree

attacked by a bark beetle.

Bat - Little Brown (Myotis lucifigus)



Little brown bats eat mosquitoes, cockroaches and flies and are a welcome site on a warm summer's evening. Although their eyesight is poor, bats use a radar system to locate and catch their prey. As it flies, it emits a very high-pitched sound that bounces off objects and returns to the bat's sensors. In flight, with it rapid wing beats of three per second, the little brown bat is comparatively steady and can make sudden changes in course and even perform somersaults in the air.

When it alights, the little brown bat, with its wings extended, catches hold of whatever it is landing on with its hook-like claws on the thumbs. It then clasps the object with its hind feet and folds its wings before resting with head downward.

The idea that bats might fly into your hair and get caught there is just a myth. It is most unlikely that you will ever be bitten by a bat. The small teeth of bats common to Altona Forest, would not usually be able to break the skin of a person.

Because of the tree cover in the forest, bats are easier to spot on the edges of the forest or flying around and over the

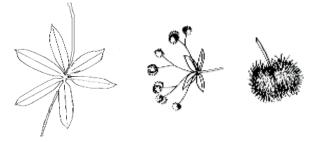


homes of the neighbours. August is the month when the newborn nocturnals are making their way out into the night looking for insects and for new homes. To promote the bats staying in the neighbourhood, some residents have built bat homes. Similar to bird houses, the bat homes have bottom entrances for the bats. Inside, the bats hang from a series of slats.

Bats can eat up to 600 mosquitoes in one hour and, if for no other reason, that should be enough for us to make sure they are not harmed in the forest or outside the forest.

Bedstraw (Galium spp.)

There are about 30 species of perennial bedstraw which grow in southern Ontario. We will examine only the ones which are more common in Altona Forest. The narrow stalkless leaves of the bedstraw are whorled around the stem. Many of the leaves and corners of the stems have bristly hairs that help it to hold onto surrounding vegetation and to the pants or legs of hikers who walk too close. The leaves of the Fragrant Bedstraw have a vanilla fragrance when crushed. The numerous tiny flowers are usually greenish white. They grow from leaf axils. The stems are usually square.



The bedstraw is found along sunny trails and in open fields. Some of the hitchhiking seeds, called burrs, which you might pick up on a walk, may be seeds from the bedstraw plant. A variety of bedstraw may be found in Altona Forest. The following chart will help you identify them.

	leaves	stems	fruit
Northern (<i>Galium</i> <i>boreale</i>)	whorls of 4	smooth stem	densely covered with hairs
Fragrant (<i>G. triflorum</i>)	whorls of 6	smooth stem	densely covered with hooked bristles
Rough (G. asprellum)	whorls of 6	rough stem	relatively smooth
Cleavers (G. <i>aparine</i>)	whorls of 8	prickly stem	hairy
Wild madder (<i>G. mollugo</i>)	whorls of 8	smooth stem	hairy

1st Nations people had many uses for the various bedstraw species. The roots of the Northern were used to make red dye. The dried leaves and roasted nuts of the Fragrant Bedstraw where used to make a drink which was used by pioneers as a coffee substitute. Parts of the Rough Bedstraw where used to treat kidney ailments.

Beech (Fagus grandifolia)

Also called American beech, white beech, red beech and ridge beech, the leaves have an alternate arrangement on the twigs. They are elliptical in outline, simple, 5-13 cm long, stiff leathery texture, with a tapered tip and sharply toothed margins. They are glossy dark green (almost bluish) above, paler green below. Each vein in the leaf ends in a point at the margin.

The dried leaves sometimes remain on the branches of young trees all winter.

The buds are very long, 2-2.5 cm, slender, sharp-pointed



and covered by 10-20 reddish-brown scales. They are divergent from the twig.

Of all our deciduous trees, the American beech has the most easily recognizable bark. It is smooth, pale gray and mottled with dark spots. The trunk is sometimes compared to the leg of an elephant.

Fruit is a three-winged pale brown, shiny nut (edible), enclosed by a prickly 4-valved bur covering (involucre), 2 cm long. The beechnuts are very important food for wildlife in Altona Forest including squirrels, deer, grouse and many song birds. **Bitternut Hickory** (*Carya cordiformis*) This tree can grow up to 18 m high.

The leaves are alternate, compound, 18 to 30 cm long. The 7 - 11 leaflets are lance-shaped, bright green and smooth above while paler and somewhat downy beneath with fine to coarse toothed margins.

The wood of this species is somewhat more brittle than other hickories and the nuts are too bitter to eat. Bitternut hickory is reported to be the best wood for smoking ham and bacon, giving a rich "hickory smoked" flavour.

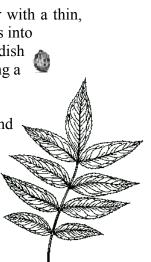


The greenish flowers are small and inconspicious.

The fruit is nearly round, 2 to 5 cm in diameter with a thin, yellowish husk, which, like other hickories, splits into 4 sections almost to the middle when ripe. The reddish brown to gray brown nut has a thin shell protecting a bitter kernel.

In Altona Forest the buds, leaves, seeds, bark and twigs are eaten by rabbits, chipmunks, squirrels, raccoons and deer. The woodpecker and blue jay also use the bitternut hickory as a source of food.

Black Ash (*Fraxinus nigra* Marshall) Sometimes called swamp ash, this medium-sized tree reaches 14 to 28 m high.



The opposite leaves are compound with 7 to 11 pointed leaflets each 9 to 15 cm long. Only the end leaflet is stalked. The margins are toothed, dark green above, lighter green beneath with some rusty hairs.

The fruit resembles that of White Ash but is usually shorter and slightly wider, 3 to 5 cm long and 1 cm wide.

The mature trunk is dark grey, with soft or corky scales or flakes which can be easily rubbed off or dented with a thumbnail.

Songbirds and many mammals eat the seeds. Whitetail Deer browse the twigs and young foliage.

Black Cherry (Prunus serotina Ehrh.)

Also called wild cherry, rum cherry and mountain black cherry, the black cherry of Altona Forest is an important source of food for many song birds and other small animals.

The alternate leaves are lance-shaped simple, 5 - 15 cm, narrow with tapering tip, shiny dark green above, paler below with fine short teeth. Fine rust brown hairs are visible on underside near the middle vein.

As is characteristic of cherries, the leaf has one or more small glands at the base (usually 2 glands).

The edible (although acidic) fruit are arranged in



elongated clusters of up to 12 fruits. They are round, purplish black, 8 - 10 mm in diameter and contain a single round, stony seed.

Black-eyed Susan (Rudbeckia hirta)

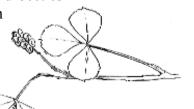
The big, single, daisy-like yellow flower with many rays and a chocolate brown centre. is also commonly called an oxeyed daisy. As a member of the Aster family, it is a composite.

The opposite pale green leaves are thick, slightly toothed, woolly rough and lance-shaped. The leaves and unbranching stems are very hairy. It is found in Altona Forest near the edge of the trails, around the wetland and in the regeneration area on the north side where there is abundant sunlight. This plant grows up to 100 cm tall.

sunlight. This plant grows up to 100 Control of the set of the set

observe bees, wasps, butterflies and beetles which come for the abundant pollen and nectar.

Black Medick (*Medicago lupulina*) The leaves and flowers of the black medick resemble those of the clover plants. The flowers are yellow and the leaflets have a



few small spikes or points at the top and sides. The stems are slightly hairy and the twisted seed pods are a distinctive black colour. This is a low growing or creeping plant which can be found in open fields and along the trails where the sun is plentiful.

Blue-beech (Carpinus caroliniana Walt.)

Blue-beech is also called American hornbeam, musclewood and often incorrectly called ironwood. Its fruit are small (6-9 mm) ovoid nutlets which are found in the axil of three-lobed bracts, which help with wind dispersion. These nuts are eaten by many birds and by squirrels.

The leaves are simple, alternate, elliptical, 5-13 cm long, sharply and doubly serrate, dark green in summer, yellowish, orange, to red in fall. Look for a tree with a dark gray trunk which has a distinctly muscle-like texture with a deeply ridged and sinewy look and you will have found the unique blue-beech tree. It prefers deep, moist, rich soils along streams, in ravines and along the borders of swamps.

Blue Cohosh (*Caulophyllum thalictroides*)

The leaves are compound with 3 to 5 oblong leaflets which are 2 to 5 lobed near the tip. The maroon to yellowish-green flowers, 1 cm wide, appear on stalks before the leaves are fully open. The poisonous fruit are dark blue and berrylike.

1st Nations peoples did use the roots to make a medicinal tea

which was said to promote menstruation and rapid childbirth. (See Common Blue-eyed Grass)

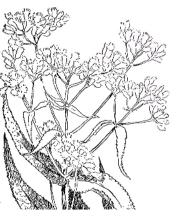
Blue Jay (Cyanocitta cristata)

This bird is common in Altona Forest. The male's bright blue colour, black necklace, large size and prominent crest make it easy to identify. The female is less prominently coloured but easily identified as a jay because of the crest. Nests are made of sticks, lined with roots and constructed in branch crotches close to the tree trunks. Blue jays eat acorns from the white and red oaks which are found in many parts of the forest. It also eats insects and occasionally fish or frogs. It has a loud, harsh call which sounds like *jay*, but sometimes it makes a musical *queedle queedle*, and assorted other notes. A good place to see this bird is around the wetland.

Blue-stemmed Goldenrod (see Goldenrod)

Boneset (*Eupatorium perfoliatum*) Boneset belongs to the same botanical family as Echinacea and daisy and is a composite.

This plant, also known as thoroughwort and Indian sage, grows up to one metre in height. The flowers are white, in round to flat-topped clusters of fuzzy heads. The wrinkled and hairy lance-shaped leaves have prominent veins and toothed



like a saw blade and quite wrinkled. They are arranged opposite on the stem and are fused around the stem.

The stem is stout and hairy, growing to a height of 30 to 150 cm.

In Altona Forest, the boneset can be seen in flower from July to early October. It prefers open sunny locales. Although butterflies seem to ignore the dull white flowers of the boneset, flies, wasps, beetles and bees are frequent visitors.



1st Nations people used dried boneset as a treatment for a wide range of infectious, fever-related conditions. They did not use fresh boneset as it contains a toxic chemical that can be fatal. Pioneers used its leaves and flowering tops to treat fever and even malaria.² Herbalists may recommend commercially processed boneset for patients who suffer from colds and influenza. Do not pick or use the parts of this plant for medicinal usages as it must be prepared correctly or it can be very dangerous.

Bracken Fern (*Pteridium aquilinum*)

This perennial fern grows to 1 metre tall and spreads through underground stems called rhizomes. The compound leaves are widely triangular and up to 90 cm long and often very wide at the base. The lowest pair of leaflets are much larger than the rest.



One leaflet of a bracken fern.

This fern is found in many locations in Altona Forest, both sunny and shaded, including along the trails.

1st Nations people once ate the underground stems and fiddleheads. Recently it has been discovered that there are a number of dangerous chemicals contained in this plant and none of it should be eaten by humans or animals.

Buckthorn (*Rhamnus cathartica*)

This tree is a native to Europe. It is considered an intrusive tree which grows quickly shading out native species of trees, shrubs and wild flowers. It often grows after a disturbance to a forested area. Many small areas of Altona Forest was cut down years ago making a suitable area for buckthorn. This tree has spread from these initial location to other areas were it competes and sometimes shades out the native species of trees.

and sometimes shades out the native species of trees, shrubs and flowering plants. Because of this, buckthorn is a common tree in Altona Forest. The elliptical to oval shaped leaves are either alternate or opposite, smooth, dark shiny green on the top, lighter green underneath. It has tiny thorns located on the stems, thus the name.

- , spring The flowers are green to yellowish and appear in dense clusters during early June.
- summer The purplish to black berry fruit develops during the summer ripens in August to September.

- , autumn The bitter tasting fruit is usually ignored by birds and other animals
 - winter The birds will eat the fruit when there is nothing else available. Birds spread the seeds over a wide area. The seeds germinate quickly the next spring and may grow half a metre in its first year.

Bulblet Fern (*Cystopteris bulbifera*)

The narrow delicate looking light green leaves lay horizontally over the ground or rocks. The extended triangular leaves may be 90 cm long and 20 cm wide at the base. The leaves are pinnately compound with 20 to 40 pairs of triangular shaped leaflets.

Bull Thistle (Cirsium vulgare Savi)

The bull or spear thistle, is a biennial plant. It reproduces by seeds which are covered with hooked prickles and hitch rides on any animal, including humans which get close enough.

The widely-branched stems are erect, 30 - 150 cm high with short hairs and spiny leaf-like wings. As the plant matures in its first year, the stem gets thicker and woody and the leaves appear in large, flat basal rosettes. Each leaf is deeply lobed with hard, sharp spines from the tips of each lobe and smaller spines along the margins. The undersurface of the leaf is light green, finely woolly-hairy and soft to the touch while the upper surface is dark green, with closely spaced, short, sharp spines which protect it from being touched. This unique upper surface distinguishes this thistle from all others.

The composite flower heads are large (2.5-7.5cm across) and appear at the tips of branches. They appear to be one flower but are many. Purplish disk florets are surrounded by many, overlapping, outward-pointing green spine tipped bracts. The attractive flowers appear in July and often last until September.

Bull thistle can be seen along the edges of the Altona Forest, along the sunny portions of the paths and around the wetland and regeneration portions of the forest. Some caterpillars eat the leaves and some birds have been k n o w n t o munch on the seeds

Burdock (*Arctium minus* (Hill) Bernh.) The common burdock is also called lesser burdock, wild rhubarb, cloth bur, < beggar's-buttons, smaller burdock, cuckoo button, cockle button, hardock, hurr-burr and cuckold dock.

The leaves are alternate and reduce in size the closer to the top of the plant. The stems are hollow.

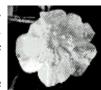


The flowers appear in clusters in the axils of the upper leaves. The heads are short-stalked, 1 to 3 cm across, with purple florets surrounded by rows of overlapping hooked bracts.

The fruiting heads, containing one seed, attach themselves to clothing or the fur of passing animals.

Buttercup (Ranunculus acris L.)

This plant, also called the tall buttercup, meadow buttercup, tall crowfoot, blister plant, gold cup, butter-rose, butter-daisy, horsegold, bachelor's-buttons has basal leaves which are long-stalked and deeply lobed into 3 to 7 parts. The leaves which are higher up on the stems are alternate, short-stalked and 3-lobed. Both types of leaves have soft-hairs on both sides.



The shiny golden-yellow flowers are 2 - 3.5 cm across with 5 petals 8 to 16 mm long. They appear on long stalks. The sepals are hairy.

The buttercup contains a chemical which causes inflammation of the mouth and intestinal track when eaten. These characteristics disappear if the plant is cured as when it is collected with hay and allowed to completely dry out. Butterflyweed (Asclepias syriaca) (also see milkweed)

The prominent orange to red or sometimes yellow flowers are a distinctive feature. Visible from a distance, the orange heads of the flowers make a beautiful contrast to the green of mid to late summer foliage. The stems grow from 30 to 90 cm tall and are very leafy. The leaves are long and narrow and grow opposite on the stem. This plant is not as milky as the common milkweed but is a good plant to observe if you wish to see a variety of butterflies. This plant is relatively rare in Altona Forest but may be seen in the reforestation area at the north and occasionally around the wetland.

Cabbage White Butterfly (Pieris rapae)

Native to Europe, this butterfly was introduced into Canada and the eastern United States around 1860.

The cabbage white butterfly prefers open weedy areas such as fields and along roadsides. The caterpillar is a very destructive caterpillar to plants which humans grow in their gardens and on farms. The larvae or caterpillar stage eats plants in the mustard family such as mustard, cauliflower, broccoli and cabbage. The adult butterfly eats nectar from mustard, dandelions, red clover, asters and mints. The upper surface of the wings is white with a black spot on the forewing. The underside of the wings is a greenish yellow. There are also two black spots on the wing margins of the female, while the male has only one.

This butterfly can be seen in all open sunny areas of Altona Forest particularly around the wetland and in the northern regeneration area.

Canada Mayflower (*Maianthemum canadense*) Also called 'wild lily-of-the-valley', the bitter fruit provides food to Altona Forest rabbits, mice, chipmunks and ruffed grouse. flower stalk Consumption by humans may cause diarrhea. The stem bears two alternate, parallel-veined, egg-shaped leaves and is terminated by a longstalked cluster of small white flowers. stem-They are dark green, egg-shaped, sharp or blunt pointed, heart shaped at the base, hairless or finely hairy on the underside. The small, white flowers are clustered at the end of the flower stalk which often zigzags into the air. The pale-red speckled round berrylike fruit ripen in July.

Canada Thistle (*Cirsium arvense* (L.) Scop) The Canada thistle also goes by the names Canadian thistle, creeping thistle and field thistle. It is a perennial which reproduces both by seed and by horizontal roots which produce new shoots. It is often found in dense patches.



The branched, slender, smooth stems are erect and 30-150 cm high. The elliptical to oblong lobed leaves are spiny, alternate (1 per node), and usually clasp the stem.

Because the leaves have a wide variation in lobing, spininess, hairiness, texture and colour, Canada thistle is divide into four botanical varieties -- Spiny Canada thistle, (*Cirsium arvense* L.) Scop. *var. horridium* Wimm & Grab), Entire-leaved Canada thistle, (*Cirsium arvense* L. *var. integrifolium* Wimm. & Grab), Gentle Canada thistle, (*Cirsium arvense* L. *var. mite* Wimm. & Grad) and Woolly Canada thistle, (*Cirsium arvense* L. *var, mite* Wimm. & Grad) and Woolly Canada thistle, (*Cirsium arvense* L. *var, westitum* Wimm. & Grab) For the purpose of this trail guide, we will not be examining these varieties. Please see a specialized field guide to weed and wild flowers for further information.

The numerous purplish or white flower heads are small, 5 - 15 cm wide and 10 to 30 cm long. The bracts have small spines or they are almost smooth. It flowers from June to late autumn.

Cardinal (Cardinalis cardinalis)

The bright red cardinal is easily seen silhouetted against the green trees especially in the wetland of Altona Forest or during the winter months.

the whiter months

The loud clear whistle sounding like *what cheer*, *what cheer*, or the *wheat*, *wheat*, *wheat*, *is* sung in summer and sunny winter days. Unlike most female birds, the female cardinal sings too.

The cardinal is about 20 cm long. It has a high crest of red feathers on its

head. The throat and area around the base of the bill are black. The female and young have gray-brown backs and dull red wings, tail, and crest.

Cardinals build their nests of twigs, roots, and bits of bark and line them with soft grass. The two to four eggs are bluish white spotted with brown. They hatch in 12 days. The male cares for the young after they leave the nest, while the female prepares for the next family.

Cardinals eat weed seeds, berries, and a great variety of insects and larvae. They do not migrate; they spend the winter in their nesting areas.

Cat Grape (Vitis palmata Vahl)

The leaves, which are reminiscent of maple leaves, are hairless with long points and deeply lobed.

The hairless, round, red twigs grow tendrils for grabbing onto trees, fences and other plants. The tendrils are absent opposite every 3rd leaf.

The black sweet fruit appears in late summer to October.

Cattail (Typha latifolia)

Wrongly called "Bulrush" by many people, this plant can attain heights of 2.8 m. The long, thin and slender leaves would remind a person of grass from a lawn if it were not for the fact that they might be more than 100 cm long.

The long brown cylindrical top of the stalk is a dense mass of female flowers or fruit, which are clearly visible in the wetland area of Altona Forest because of the height and contrast to the grayish green leaves.

The seeds are designed to float as the cattail is most often found in marshes and other wetland areas.

Centipede

The usually dark brown centipede is one of the larger invertebrate which can be spotted in Altona Forest. They resemble flattened worms with many body parts and long thin legs. Their mouths are equipped with strong jaws.

They move quickly and can capture smaller insects which venture too close to their rotten log or moulding leaf litter.

Chickweed (Stellaria borealis)

Also called Northern chickweed, this perennial herb grows up to 50 cm high but often lays on the ground in long mats of vegetation. The simple, opposite, stalkless and hairless leaves are roughly lance-shaped and 1 to 4 cm long, 2 to 8 mm wide.

The small greenish white star-shaped flowers, appear singly in the leaf axils or in terminal clusters. The fruit is a pale brown, egg-shaped capsule.

The Mouse-eared Chickweed (*Cerastium fontanum*) differs from the Northern chickweed in that it has hairy stems and the leaves are covered with small hairs.

Chicory (*Cichorium intybus*)

Originally a Mediterranean perennial herb of the family Asteraceae (aster family), it has become naturalized in North America.



The tall stalks of lavender blue flowers can be seen along some of the trails in Altona Forest from June to October. They might remind a person of a mass of blue daisies but they do not grow on a single stem. These flowers consist of about 20 disc flowers in the head surrounded by fringed ray flowers. The ray flowers are toothed at the end. The plant grows to 60 cm high. The young gray-green leaves are tender and edible and can be used in a salad. The leaves are eaten by some foraging animals.

The tap root can be roasted, powdered and mixed with coffee or even used as a substitute for coffee. It is a food staple in Egypt where it is called 'chichorium'.

Chipmunk (Tamias striatus)

The chipmunk is a small ground squirrel. It has a chestnut colour with white face and black and white side stripes. They are much less common in Altona Forest than the ture squirrels. They emit a sharp bird-like squeak when threatened. They live in

underground burrows dug under rocks or tree roots or in old logs or in the old stone fences which can be seen along the Northeast Loop.

> The burrow contains storerooms and a leaf-lined nest. By late spring, some 30 days after mating, the female bears an average of four or five young. The young do not leave the nest until they are a month to six weeks old. Chipmunks eat nuts, seeds, wild fruits, and berries. They have inner cheek pouches that they can stuff with food. In the fall they store some extra food for the winter. They will not be seen in the winter as

they hibernate or sleep for extended periods of time.

Chipmunks can climb and swim fairly well. They belong to the squirrel family of rodents, or Sciuridae. They are sometimes called ground squirrels, but the name belongs more properly to one of their relatives.

Choke Cherry (*Prunus virginiana* L.)

The Choke Cherry is commonly found as a shrub in Altona Forest beside clearings or along trails. The trunk is often slender, twisted or crooked. It has a narrow, irregular crown. It is a fast-growing but short-lived tree.

The alternate, simple, broadly oval-shaped leaves are 5 to 10 cm long. Often the broadest portion is above the middle. It tapers at both ends. It is thin, with fine, sharply toothed edges. Each tooth ends in a straight hairlike point. The upper surface is dull green while it is paler underneath. Often tufts of dark hair can be seen at the vein axils.

- , spring The small, white flowers grow in elongated, cylindrical clusters at the end of twigs. The flowers are attractive in the spring and open before the new leaves are fully developed.
 - **summer** The fruit is a juicy, shiny, red to dark red drupe and is about 1.5 cm

in diameter. They hang in elongated, drooping clusters. The fruit ripens in August or early September. They are astringent but edible and provide food to many species of birds and mammals.

1st Nations people ate the Choke Cherry fruit. They collected the cherries in the fall and dried them usually with the stones left in. They also used the Choke Cherry wood for handles of implements, and shredded the bark for decorating basket rims. A tonic was made from the bark for helping women regain their strength after childbirth.

Choke Cherries can be used for wine, juice, syrup, and jelly. This trees is an important source of food for mammals and birds.

Christmas Fern (*Polystichum acrostichoides*) This perennial fern grows from 10 to 60 cm high. The shiny dark green, thick leaves are pinnate compound and roughly lance shaped.

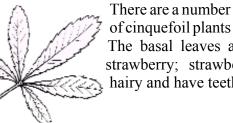


Each leaflet has a prominent tooth near the base which is a definite way to identify this fern.

Cicada

The cicada is a large insect which is often heard but infrequently seen. It clings to the bark of trees after it matures. The males have small round organs on their chest which they vibrate quickly creating the characteristic buzzing sound which is the call to the females saying "Here I am. Come and find me and we will mate." After mating, the female lays eggs in the ground. The larva will spend up to 17 years in the ground before it emerges, dries its wings and flies up to the trunk of a tree to start the cycle all over again.

Cinquefoil (Potentilla)



of cinquefoil plants found in Altona Forest. The basal leaves are often identified as strawberry; strawberry leaflets are less hairy and have teeth only at their bases.

Rough Cinquefoil (*Potentilla norvegica* L.), which is native to North America, have alternate leaves which are palmately compound with three coarsely toothed leaflets of 2 to 10 cm in length. They are covered with long hairs. The basal leaves are long-stalked and hairy on both sides. The stems are covered with long stiff hairs.

R

The yellow flowers, 7 to 12 mm in diameter, are like a strawberry flowers. Often confused with the strawberry, it is much taller reaching 30 to 90 cm high.



Common Cinquefoil (*Potentilla simplex*) also has yellow flowers and looks like a strawberry plant. This plant sends out runners along the ground. Leaves and flowers rise from the runners on their own stalks which can be 18 to 60 cm high. The palmately compound leaves have five leaflets which gives rise to one of the alternative names -- five finger a cinquefoil.



The Rough-fruited or Sulphur Cinquefoil (Potentilla recta L.), has 5 to 7 leaflets which are more narrow than the other cinquefoil leaflets and have 7 to 17 triangular teeth on the margin. The pale yellow or sulphur coloured flowers are larger than other cinquefoil flowers at 2 to 3 cm. They appear in terminal clusters. The roughfruited cinquefoil is 30 to 60 cm tall.

The cinquefoils are also known as upright cinquefoil and yellow cinquefoil. This flowering weed is common in Altona Forest along the trails where there is sufficient light, near the wetland and in the northern regeneration area. It also spreads outside to neighbouring flower gardens.

The fruit is composed of several brown achenes with one seed.

Coltsfoot (*Tussilago farfara* L.)

Coltsfoot was introduced from Europe and has escaped into forests, fields, and disturbed ground along roads, rivers, lakes, ravines and drainage ditches in urban and rural areas throughout southern and eastern Ontario. This perennial plant reproduces by rhizomes and seeds and is found in disturbed areas of the forest especially along the trails and where trees have been uprooted.

- very early in the spring, the spring leafless stems bearing yellow dandelion-like flower heads in early spring.
 - very short stalks bearing large hoofsummer shaped leaves

Coltsfoot can be distinguished from dandelion by its several to many purplish bracts on the flowering stem and their pappus (parachute) is much finer and denser. The long bright to dark green to bluish-green leaves are broadly heart-shaped 7.5 - 13 cm long and palmately veined. They are hairless on the upper surface and white woolly on the underside.

Common Blue-eyed Gass (Sisyrinchium montanum)

This grass is actually in the iris family. It has six-petalled violet-blue flowers with yellow centres which some people say looks like eyes on a leaf stem - thus the name. The pointed petals appear on stalks which are usually taller

than the 10 to 50 cm long leaves. The leaves are glass-like with points.

Cottonwood (Populus deltoides Bartr.)

Also called Eastern Cottonwood, Eastern Poplar, Southern Cottonwood, Carolina Poplar and Necklace Poplar, its leaves are

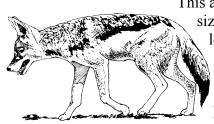


deciduous, triangular, 5 - 10 cm long and tapered to a point. They are edged with 20 - 25 large, rounded teeth, and are attached to the twigs by flat stalks. The upper surface is bright shiny green while the under side is paler.

In the fall the leaves of the cottonwood turn a bright yellow.

After flowering clusters of capsules or pods appear, they split into three or four parts during early summer, releasing fluffy white seeds that may be seen floating through the air.

Coyote (Canis latrans)



This animal looks like a scrawny medium sized dog. It is usually 130 to 160 cm long and 60 to 70 cm tall. The Altona Forest coyote, which is also known as the prairie wolf or brush wolf, roams in all parts of Altona Forest. It also travels south along Rosebank Tributary to Petticoat Creek and down

towards Lake Ontario. It also travels north through the hydro property and on to the Rouge Park and the Rouge Valley. It hunts rabbits, deer, squirrels and any other rodents it can find in the forest. It lives only in the western hemisphere and adapts quickly to the tropics, deserts, plains, mountains, woodlands and even the arctic. It is cunning and very happy in close proximity with people as it is very secretive when it wants to be. If a neighbourhood cat or dog roams into Altona Forest and doesn't come back, there is a good chance that it has been caught by one of the coyotes. It also feeds on birds, amphibians, fruits, berries and other vegetation. They may hunt in pairs when after swifter animals such as deer and rabbits. Hikers in Altona Forest will likely never see or hear a coyote. You are more likely to see one roaming the

neighbourhood streets on garbage night than in the forest. If you are lucky enough to spot a coyote, remain still to observe it. They are shy and will run away if approached nevertheless, do not approach as they are predators and are capable of attacking if cornered or provoked.

Daisy (*Chrysanthemum leucanthemum*) The white field daisy, oxeye, or the "day's eye," as the daisy was known in Old English, is like a tiny sun surrounded by white rays. They have been described as wheel-like white flowers with golden centres. They are common in Altona Forest in open areas and along the sunny parts of many of the trails. They can be seen from May to early October.

The leaves are dark green with many indentations.

The daisy is part of the composite family. It has white petals, which are the female ray flowers with hundreds of minute tiny yellow tubular flowers arranged closely together in the centre.

Tradition records that the seeds of the daisy were carried to North America in hay brought to feed horses during the Revolutionary War.

The **Painted Daisy** (*Chrysanthemum coccineum*) has white, crimson, or lilac flowers.

These two daisies are related to Pyrethrum, from which an insecticide is made.

Other daisy like flowers are the **Black-eyed Susan**, also known as the yellow daisy (*Rudbeckia hirta*). It is a common wild flower and the striking white **Shasta daisy**, which is a hybrid developed by Luther Burbank. (Also see Black-eyed Susan)

All daisies are members of the family of plants called Compositae which have composite flowers.

Damselfly (*Zygoptera*)

Unlike many insects, damselflies cannot fold their gauzy-like wings to their sides when at rest. The wings either stay spread out or, more commonly, are held above the body. The damselfly breathes by means of three paddle-shaped gills which protrude from the end of the long, slender abdomen. They are graceful fliers but not as fast as the dragonfly.

Damselflies spend their first year of their life as larvae, called nymphs. These develop in the spring in the wetland and in the Rosebank Tributary. They swim by undulating their bodies. They catch prey in the claws at the end of the extendible lower lip. A favourite food is the larva stage of the mosquito. As the nymph grows it sheds its skin and grows each time. The final molting takes place out of the water when the skin over the back splits and the winged adult emerges. The 3 to 6 cm long adults are carnivores and are found along the Rosebank Tributary and around the wetland.

Spread-winged Damselflies (Family *Lestidae*) have narrow, clear wings that are stalked at the base and held spread over the body when the fly is at rest.



Broad-winged Damselflies (Family *Calopterygidae*) have broader wings, black or with blackish markings, that are narrowed at the base. When the fly is resting, the wings are held together over the body.

Narrow-winged Damselflies (Family *Coenagrionidae*) have narrow, clear, stalked wings like spread-winged damselflies, but the wings at rest are held together over the body.

Damselflies, like dragonflies, consume a great number of insects including mosquitoes, making them a very beneficial insect.

Dog-strangling Vine (*Cynanchum nigrum* L.) This plant, also called Swallowwort and / or Black Swallowwort, is a herbaceous twining perennial of Eurasian origin. It is found in many areas in Altona Forest. It is in the milkweed family. It is commonly found near the fence line where the native plants have been disturbed. It is also found in some areas near the path. It is well named as thickets of this plant can entangle medium sized animals such as dogs. It becomes particularly thick like a low mat in September and early October.



Dog-strangling vine is a perennial which often grows along the ground and elevates itself to a height of .5 to 1.5 m or it will use trees, other plants and fences to climb. It has 5 lobed purple flowers, stems which are strong and flexible and opposite simple lilac-like leaves.

It is considered an invasive species in Ontario.

Dogwoods - Flowering Dogwood (Cornus florida L.), Red-osier Dogwood (C. Stolonifera) and Alternate-leaved Dogwood (C. alternifolia L.) and Roundleaf Dogwood (C. Rugosa)

The dogwood is a tree that seldom grows to 5 metres tall. It is found in many locations in Altona Forest, especially as an understory or at the edge of trees along an sunny clearing or trail. Along the trails it grows in full sun where it grows more like a dense shrub

The reddish-brown bark of the Flowering Dogwood is broken into small, square blocks similar to an alligator's hide.

The Red-osier Dogwood has bright red twigs and is a common dogwood along the Rosebank Tributary portion of the hiking trail.

The Alternate-leaf Dogwood has greenish twigs.

The twigs of the Roughleaf Dogwood are red-brown or brownish

Except for the Alternate-leaf, the dogwood leaf is opposite, simple, 9-15 cm long, with a pointed tip and they are clustered toward ends to the twigs. The margins smooth or slightly wavy. The veins are described as parallel as they all curved toward the tip. The texture of the leaf is firm and thick and it is slightly hairy above and paler and hairy beneath.

The Flowering Dogwood has spring

clusters of small inconspicious yellowish to 3 white flowers, in the middle of four large white petal-like bracts, bloom between Flowering Dogwood March and May. The flowers

of the other dogwoods are smaller and in groups like a bouquet.

White clusters of egg-shaped berries summer appear in late summer. The dogwood is summer drought tolerant once established.

Flowering autumn The leaves turn a bright red or Dogwood

purple in autumn. The red berries, in clusters of three or four, ripen in September and October and often remain on the tree until the middle of December.

Birds frequently eat the flower buds during winter, affecting the blooming the following spring. Songbirds, squirrels, raccoons and small mammals eat the fruits and white-tailed deer browse the leaves,



twigs and especially the new growth.

Other dogwoods

Bark of the flowering dogwood was once used as a substitute for quinine for fevers.

Downy Woodpecker (*Picoides pubescens*)(Also see woodpecker)

Also called the little Guinea Woodpecker, Tommy Woodpecker and black-and-white driller, the Little Downy Woodpecker is a quiet, friendly bird of orchards and tree-lined city streets. Its



big twin, the Hairy Woodpecker (*Picoides villosus*), lives mostly in more northern forests than Pickering.

The Downy Woodpecker is seen most often during the winter. The Downy is about 18 centimetres long, the Hairy 25 centimetres long. The males of both species have a red patch on the back of the neck. The females lack this red patch. The wings and back are black with white spots. A broad white stripe runs down the centre of the back. The Downy Woodpecker climbs by means of short, jerky movements. It has strong feet and uses the two toes in front and two behind to clasp the tree bark. It taps the tree to see where insects are hidden. When found, the woodpecker quickly drills a hole in the bark. Its long, barbed tipped tongue is then used to grab hold of the insect or grub inside the tree.

Although most of its diet is insects, the Downy Woodpecker will eat berries when insects are scarce.

Dragonfly (Anisoptera)

This stout-bodied, 3 to 11 cm long, brightly coloured insect with large compound eyes and chewing mouth parts is a perfect predator of insects including the mosquito.

It has two pairs of elongate, membranous, many-veined wings that always remain outstretched even at rest. This is the easiest way to tell it from the damselfly. Patterns of wing venation distinguish between species and families.

In Altona Forest, the dragonfly can be found around or near the wetland, the tributary and large areas of standing water. Dragonflies see in colour and are strong fliers. They can fly up to several kilometres while hunting. During the Altona Forest spring, they can often be seen flying in tandem, in mating position. The male flies above the female, grasping the back of her head with his legs.

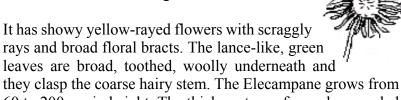
Dwarf Raspberry (*Rubus pubescens*)

This low or creeping vine has hairy erect stems which bear alternate compound leaves, each having three coarsely-toothed leaflets. The flowers are white to pale pink and the fruit has the normal raspberry shape and colour but is much harder to remove from the shrub than most other types of raspberries. Most of the Altona Forest animals and birds including rabbits, chipmunks, squirrels, mice, foxes, raccoons, deer, grouse, cardinals eat the fruit or buds.

Eastern Cottontail (See rabbit)

Elecampane (Inula helenium)

Pronounced elkampan, it is a hardy European herb in the aster family. It is now a naturalized plant and is even cultivated in gardens.



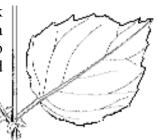
60 to 200 cm in height. The thick root was formerly regarded as a tonic and remedy for coughs and diseases of the chest. It was used in horse medicine, whence its popular name horse-heal.

This herb has a colourful history. It was once in a family of plants called Helenium (sneezeweeds) because old stories related that Helen carried the flower when Paris took her to Troy. Another myth relates that it sprang from Helen's tears while a third story says that it was named for Helenus, a son of Priam.

This plant can be found in Altona Forest clearings and along the trails where the sun is sufficient.

Enchanter's Nightshade (Circaea lutetiana)

The name *Circaea* comes from the Greek goddess Circe, who, the myth relates, made a powder from the plant to enchant people to love. The oval to heart-shaped coarsely toothed leaves, 1 to 7 cm long, are oppositely arranged on the stem. The underside is conspicuously hairy.



The white, 2mm-long flowers have only two petals which are deeply lobed. They appear as terminal clusters. The small fruit is pear-shaped and covered with soft, hooked hairs which "hitchhike" on passerbys as its means speading.

In Altona Forest, the Enchanter's Nightshade is found in moist to wet areas. It is a member of the Evening Primrose family.

Fairy Shrimp (Eubranchipus vernalis)

Fairy shrimp are crustaceans of the class Branchiopoda They are among the smallest of the crustaceans which include the

water fleas and brine shrimp. The fairy shrimp are freshwater dwellers that are less than 0.6 cm in length. They are filter feeders, removing

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tiny, edible particles from the water.

They are found in vernal pools, and other freshwater areas in Altona Forest in early spring.

Other small crustaceans, the water fleas, which are also found in Altona Forest fresh water, use their second pair of antennae as oars to swim through the water. This is an example of the various ways crustaceans use their appendages. Although most water fleas are nearly microscopic in size, some--for example, the genus *Daphnia*--are an important food source for many freshwater fishes and can be seen with a good magnifying glass.

False Solomon's-Seal (Smilacina racemosa)

This wild flower of the lily family grows up to 60 cm high. The oval leaves are pointed and alternately arranged along the stem and 15-24 cm long. The six pointed star-shaped flowers are creamy white and arranged in a spiraea-like cluster at the tip of the stem. The stem is sometimes zigzag and may have eight or more leaves arranged alternately and slightly folded lengthwise. The fruit is first green, then red, spotted with magenta and finally a translucent red. The fruit may persist into the early winter even after all the leaves have withered away.

True Solomon's Seal (genus *Polygonatum*) is a perennial herb of the lily family. It has bell-shaped greenish-white to yellow flowers, which appear from May to July and hang

from under the leaf axils.

The fruit is a whitish blue berry with brown speckles which turn to bright red. The fruit is a favourite food of mice and the Ruffed Grouse.

The six points of the flower resemble the Star of David, thus its name Solomon's Seal.

Fleabane (*Erigeron canadensis* L.)

Also called Canada fleabane, horseweed, fleabane, bitter-weed, hog-weed, mare's tail, blood stanch, colt's tail and fireweed, this annual or biennial plant has leaves and stems with numerous branches that when crushed have a carrot scent.

The leaves are alternate, oblong to lance-shaped, 2 to 10 cm long. The lower leaves have a short stalk while the upper leaves have no stalk. The leaves may cause skin irritations for some people and animals.

The flowers appear as numerous flower heads, 3 to 5 mm across with white to yellow short ray florets with a yellow centre. A single seed is produced by each flower floret.



A variety, **Philadelphia Fleabane** (*Erigeron philadelphicus* L.) (Also called skevish, daisy fleabane, sweet scabious), requires full sun and moist soil to grow. The flowers are larger than the Canada fleabane, being 5 to 10 mm long with a white to purplish colour with a yellow centre. It too can cause skin irritation on some people.

In the past a tea made from the plant was used in the treatment of diarrhea, gout, epilepsy and menstrual problems. A poultice made of the plant was used in the treatment of headaches and sores.

Foamflower (Tiarella cordifolia)

Similar to a maple leaf, the Foamflower leaf is toothed around the entire margin with 3 to five lobes. The upper surface is finely hairy while the undersurface is much more hairy. The long stalked leaves arise from the base of a long, sometimes hairy stem that

the base of a long, sometimes hairy stem that bears tiny white flowers.

Fox (see red fox)



Foxglove, Grecian (Woolly) (Digitalis lanata)

This beautiful biennial weed is toxic. Do not eat any part of this plant. It is native to southeastern Europe. Since the middle of the nineteenth century, this foxglove species has been most widely used for the production of the cardiac glycosides which are the basic materials for heart stimulating medicines such as Digoxin or digitalis.

This attractive plant, which in flower can grow from 50 to 60 cm high, is often cultivated but extra care should be taken when doing so.

The alternate downy leaves grow from pubescent stems with terminal hanging purple and white 4 cm long flowers which resemble lipped bells.

Fern (See Bulblet Fern, Intermediate Wood Fern, Oak Fern, Sensitive Fern, Bracken Fern, Christmas Fern, Marginal Wood Fern and Northern Beech Fern – all of these are found in Altona Forest.)

Ferns belong to an ancient group of plants which date back millions of years. They were as big as trees 200 million years ago during the Carboniferous Period. The ferns that died during this Period eventually became a part of the coal of today.

Ferns produce no flowers and reproduce by spores which are very small and light. The spores are spread by the wind. The green spots, which turn brown, on the back of the fern leaves or on separate fruiting stalks, are the pouches where the spores develop. When the spores land on a suitable spot, the spore develops into a small plant called a prothallium which is about 1 cm across. On the underside two sets of cells develop. These sets, female and male, need moisture so that the male cells can float over to the female cell. From this union a new familiar fern plant develops.

Ferns can be found almost everywhere except the arctic and hot desert. Ferns are common in Altona Forest. You can see them near the trails as well as off the trails in the shade of trees. They are often found near decaying logs in groups.

Frog (see Spring Peeper or Wood Frog)

Garter Snake (*Thamnophis colubridae spp.*)

This small snake is common in Altona Forest. It is rare to see it, however, as it is timid and hides quickly and well. It can be wet or dry areas, in found on the forest or in the open sunning light-coloured stripes itself. It is marked by sides of the body, bordered by darker stripes. The down the position of the stripes distinguishes different, closely related species. Most species have two small, white or yellow spots on top of their heads. The garter snake grows up to 1 metre long. The females are larger than males.

It feeds on frogs, toads, salamanders, earthworms, insects and sometimes mice. Like most snakes, it is a friend to humans because of the large number of harmful insects that it eats. It mates in early spring and late summer. The babies are born alive, 15 to 27 cm long. When frightened, it might flatten its body making the pattern of stripes especially visible. They may also discharge a slightly unpleasant-smelling musk odour when alarmed, but few species actually bite.

Garter snakes are not poisonous or dangerous.

Ginger (see Wild Ginger)

Goat's-beard or Yellow Goatsbeard (*Tragopogon dubius* Scop.)

This biennial is occasionally an annual and sometimes a perennial. It reproduces by



Goat's beard

seed.

The plant grows from 30 - 100cm high, with smooth, round, somewhat fleshy stems. The young plants resemble shoots of grass.

The smooth, fleshy leaves are alternate, long and glasslike. When broken, the leaves emit a milky white fluid. The previous year's brown shrivelled leaves are often visible.

The showy, yellow flowers, with brown spots in the centre, are large (4 - 6 cm) and appear at the ends of the stems. Yellow Goatsbeard flowers from June to September. The flowers open each morning and follow the sun until around noon when it gradually closes during the afternoon.

The mature seed head is a white, fluffy sphere, 7 - 10 cm in diameter, resembling the fruit of a dandelion.

Yellow Goatsbeard can be found along many sunny portions of the paths and in the regeneration area in the north. Look for the lemon yellow flowers, dandelion-like fruit and leaves that resemble long blades of grass.

Goldenrod (Solidago)

Goldenrod occurs in many parts of Altona Forest especially in clearings, around the edge of surrounding roads and along the sunny parts of trails. It has a very



conspicuous bright yellow composite flowers during the late summer and early fall. This is also the ragweed hay-fever season but goldenrod pollen is produced in small quantities, and is heavy and sticky. It is not carried on the wind and the plants are pollinated by insects. Goldenrod pollen is too often incorrectly blamed for hay fever but since it is not carried on the wind, it is not a source of irritation for ragweed hay fever sufferers.

Goldenrod is a perennial which grows up to 130 cm in height. The stem is erect and slender. The leaves are either featherveined or with parallel veins. They are longer than wide, broadest at the base and narrowed to the top. They are wedgeshaped or narrowly triangular at the base. The leaves are slightly toothed or sometimes untoothed. They are smooth on the top and fuzzy on the veins beneath.

I	summer	Flowers in late summer and early autumn		
"	autumn	It does not contribute to hay fever		
†	winter	The plants remain upright during much of the winter.		

A yellow dye was once made from goldenrod and a tea or tincture made from this plant was used as a great urinary demulcent, anti-inflammatory and diuretic.

Wasps like to lay their eggs in the stems of goldenrod. A gall develops as the plant attempts to protect itself against this incursion. In the spring the adult wasp emerges from the gall.

If you examine one of these galls, look for a tiny hole. If there, the wasp has emerged or a bird has dug out the grub before it became an adult.

The Canada Goldenrod seems to be immune to this gall as wasps will choose other Goldenrod species instead.

Blue-stemmed Goldenrod (*Solidago caesia*) As the name would indicate, the smooth stem of the Blue-stemmed Goldenrod is bluish or purplish. The plant grows from 30 cm to 1 m in height. The leaves are smooth and slender. The yellow flowers appear in the axils of the alternate leaves.

The Blue-stemmed Goldenrod is one of the plants in which adult female wasps like to lay their eggs. An egg is deposited into the stem where immediately the plant starts forming a gall around it. The gall grows to 5 to 7 cm in size. The egg hatches and the larva spends the winter in the gall eating. In the spring the wasp larva eats its way to the surface before changing into an adult. If you find a goldenrod with a gall, examine the gall. If it is green in colour, the egg or larva is probably inside. If it is brown and there is a small hole in the side of the gall, the wasp is gone — flown away or a bird has made the hole and eaten it.

Canada Goldenrod (Solidago canadensis)

The stem is smooth at the base but downy at the top. The toothed parallel-veined leaves are smooth. The flower head resembles the silhouette of a pine tree from a distance. When dried, the petals can be shaken off and what is left is often used as small trees on model railroads.



This plant grows from 30 to 150 cm high and is seen in some of the open areas of Altona Forest.

Late Goldenrod (Solidago gigantea)

The lance-shaped parallel-veined leaves are arranged alternately on the smooth pale green or purplish stems. The leaves have teeth around the entire margin.

The plant is often covered with a whitish bloom. The clustered flower heads are similar to the Canada Goldenrod and the Tall Goldenrod. The dried flower heads are also used for trees on small model displays.

This plant grows from 60 to 210 cm high ¬ and is found in sunny areas along Altona Forest trails.

This is another popular goldenrod for wasp galls. See bluestemmed goldenrod for details about galls.

Tall Goldenrod (Solidago altissima)

The leaves are parallel-veined with fewer teeth than Canada and Late Goldenrod. The teeth are mainly around the upper half of the leaf around the tip. The leaves are rough and hairy beneath. The grayish stems are also hairy.

The clustered flower heads are similar to the Canada Goldenrod and the Late Goldenrod. This is another popular goldenrod for wasp galls. See Bluestemmed Goldenrod for details about galls.

This plant is 90 to 180 cm tall. It is usually found in the more sunny parts of Altona Forest, including along the trails.

Zigzag Goldenrod (Solidago flexicaulis)

The stem of the zigzag or broad-leaved goldenrod forms a zigzag with the clusters of golden flowers in the axils of the broad upper leaves. These plants grow from 30 to 100 cm high and occur in shady to semi-sunny areas in Altona Forest.

This is another popular goldenrod for wasp galls. See blue-stemmed goldenrod for details about galls.

Grasses (Also see sedges)

Greater Burdock (Arctium lappa)

This species of burdock gets its name from the flower heads which are 3 to 4.5 cm. in size. It also has larger leaves than other burdocks.

Hawkweed (Hieracium caespitosum)

The leaves are arranged in basal rosettes. They are oblong, blunt-tipped and about 6 to 25 cm long. The margins are usually smooth with the occasional small tooth.

The leafless stem is terminated by a cluster of black bristly flower stalks having small yellow dandelion-like flower heads.

In Altona Forest the deer and ruffed grouse eat the leaves, flowers and seeds.

Hemlock (Tsuga canadensis (L.) Carr.)

The Hemlock, also called Canadian hemlock, eastern hemlock and hemlock spruce is a common tree in all the softwood forested areas of Altona Forest. The hemlock is extremely shade tolerant and can be seen often as an understory.

The flat, flexible, singular needles (1 to 2 cm long) on the twigs seem to be flattened horizontally despite the fact that they are spirally arranged on the twig. They remain on the tree for two to three years. The blunt tipped leaves are dark green and glossy above, with two white lines formed by the stomata on the lighter green underside.

The brown papery cones are 2 cm long, egg-shaped and hang singly on the previous season's growth near the tips of the branches.

The hemlock grows 20 to 30 metres high with up to 100 cm diameter trunk. It can grow to 600 years old.

It usually has a dense, pyramidal crown. The leading shoots often droop and point to the east. The dense horizontal branches on medium to smaller trees droop toward the ground affording protection and shelter in winter for white-tailed deer, ruffed grouse, chickadee, songbirds and other small animals. These same animals also get seeds in winter from the hemlock. Deer browse it heavily when deep snow makes other food scarce.

First Nations people and pioneers made a medicinal tea from the twigs and leaves. They also used the inner bark as a poultice. British Columbia coastal people carved hemlock wood, which is fairly easily worked, into spoons, combs, roasting spits and other implements. They also used hemlock roots to splice onto kelp fishing lines to strengthen them.

The poisonous hemlock tea of mystery novels is not made from this tree.

Hepatica (*Hepatica americana*) The hepatica is also called Liverleaf by some people and more properly called Round-lobed Hepatica. It has three rounded sections (lobes) on the leaves and hairy stalks. The flowers are white, pink or blue and appear singularly on hairy stems. It is a short plant,

growing from 12 to 18 cm tall.

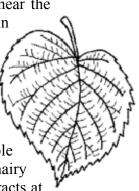
Sharp-lobed Hepaticia (*H. acutiloba*) is much more common in Altona Forest than Round-lobed Hepaticia. It is similar but with points on each of the lobes.

This plant is found in partial sun to shady areas along the trails in Altona Forest. Keep your eyes on the edges of the trails to see this and other low growing plants.

Hobblebush (Viburnum alnifolium)

With leaves which greatly resemble those of the basswood tree, the hobblebush is a low shrub which grows near the ground or on angles to the ground up to 2 m in height. The branchlets and buds are rusty-hairy while older stems are purplish-brown with occasional ridges. It reproduces by seed and by underground rhizomes which develop suckers.

The 10 - 20 cm long leaves are opposite, simple and heart-shaped with teeth. The stalks are hairy and 1 - 6 cm long with a pair of bristly-like bracts at



the base.

It has two kinds of white flowers growing in clusters. The large outer flowers are sterile while the less showy inner ones are fertile. The flowers appear in May to June.

The fruit are round to oval and berrylike. They are green in July before turning red to purplish black in September to early October.

The hobblebush is found in Altona Forest in the hardwood areas in shade to semi-shade. In non flowering or fruiting times, it is easy to mistake this shrub for a basswood seedling.

Honeysuckle (*Lonicera tatarica*) or (*Lonicera canadensis*) The Honeysuckle is an erect shrub. The smooth-margined leaves are opposite and slightly heart-shaped.

- , spring *L. tatarica* The flowers appear in May and June. They are white and pink in colour and occur in pairs and have five lobes. *L. canadensis* – Its greenish-yellow tube flowers have very short lobes.
 - summer The small red berry fruit ripens in late June to August.

Horsechestnut (Aesculus hippocastanum)

Normally a large wide-spreading tree this is a very uncommon tree in Altona Forest, however, it grows well in a variety of conditions and does exist in a couple of locations. Here, it is tall and gangly as it reaches for the sun among the maples and cedars. The large palmately compound leaves with five to seven leaflets, turns gold or pale brown in autumn.

Unlike the true Chestnut tree the nuts produced by this species are bitter and considered inedible. The dark brown seeds are surrounded by a prickly husk.

The buds are large and sticky. In its natural state, the showy flower clusters are white and about 30 cm long with small spots of purple and yellow. They appear in late April or early May.

Horsechestnut was introduced to North America in the 1740s by settlers who wanted large shade trees. The name "horse chestnut" was probably given originally because the fruits were known as At-kastan (horse chestnut) to the Turks, who found them useful as a drug for horses suffering from coughs. It is considered a 'dirty' tree because it seems to be always dropping twigs, flowers, fruit, leaves or other litter onto the ground.

Squirrels gather many seeds and hide them. Not being too

bright, the squirrel often forget where they hid the seeds (also the acorns from oaks), hence new seedlings sprout.

Horsetail (*Equisetum giganteum*) & (*Equisetum arvense*) & (*Equisetum. hyemale*)

The name horsetail refers to any of the genus Equisetum (Latin for horse bristle). They are survivors of primitive vascular plants. Like the ferns and club mosses, relatives of the living horsetails thrived in the Carboniferous period when they contributed to what eventually became coal deposits. Many extinct horsetails, which were common 60 or more million

years ago, were treelike and attained great heights.

Horsetails have whorls of small scalelike leaves around a hollow, jointed stem that is green and carries on photosynthesis. Some may attain a length of 3 m while others are as small as 9 cm. They reproduce by an alternation of generations similar to that of the ferns. In some horsetails, special nongreen shoots have at their tops strobilae that bear the spores.



The Scouring Rush

(Equisetum hyemale) has a coarse texture and has been used in

abrasive and scouring powders. Other horsetails have been used for a variety of home remedies.

Hummingbird

These birds sip nectar from flowers. They also capture and eat insects and spiders which might be in the flowers that they are feeding from. Their feet are small and weak but they can perch on twigs or wires. However, they never walk or hop. The wings differ significantly from other birds. The wings move from 55 up to 200 times a second depending on the activity they are engaged in. They hover easily when feeding or searching for food.

Ironwood (Ostrya virginiana (Mill.) K. Koch)

Ironwood, also erroneously called hop-hornbeam, musclewood, blue-beech and water-beech, occurs in small numbers in most of the hardwood forested areas of Altona Forest.

The leaves, which are similar to elm leaves, are simple and alternate in two rows along the twigs. They are 7 - 12 cm long and get larger toward the end of the branches. They have sharp teeth of different sizes (doubly serrate) giving an appearance of a saw edge. They are elliptical, usually widest near the middle, have a sharp tip and have a fine hairy coating beneath. They are very thin but tough. Held up to the light, you can see your hand through them. They are a dark, yellowish-green, turning yellow in the fall. They eventually turn to a brownish colour and often persist on the tree into winter.

I.

summer The fruits are small flattened, ribbed nutlets, 5 -8 mm long which are encased inside an inflated papery sac about 15 mm long and covered with stiff hairs. They mature in August. Each sac contains one seed.

A number of these sacs overlap in hanging clusters which resemble the fruit of the hop vine used in brewing beer and therefore the secondary name "hop-hornbeam."

autumn The fruits mature in autumn and drop in winter, leaving the axis attached to the twig.

Birds, such as the ruffed grouse, as well as squirrels eat the nutlets. Cottontail rabbit and white-tailed deer sometimes eat the bark and shoots.

As its name suggests, the ironwood has the strongest wood of all native Canadian trees. Its wood is heavy, close-grained, hard and tough. Because of its wavy fibres, it is almost impossible to split and has been the cause of many a blunt saw and ax. Early settlers dreaded seeing this tree in their fields as it was hard to cut and often dulled their saws and axes.



Joe-Pie Weed, Spotted (Eupatorium maculatum L.)

Also known as the trumpet weed, Spotted Joe-Pye Weed has very noticeable flowers in the late summer with beautiful, decorative dull pink or magenta flower composite heads which are relatively flat topped. In Altona Forest, look for this weed around the wetland and in open fields such as we find in the north near the regeneration area. This slight fragrant weed is a favourite of butterflies.

The weed got its name from an a 1st Nations man named 'Joe Pye'. Oral tradition relates a story of how he cured typhus fever, kidney ailments and other illnesses with this plant.



CAUTION: Do not use this plant as a medicine.

This weed may grow from 60 cm to 200 cm high. The lanceshaped leaves are sharply toothed, rough on top, occasionally hairy beneath while being broad at the base and sharply-pointed at the tip. They grow on a short stem in a whorl of 3 to 6 around the main stem with smaller leaves near the top of the plant.

The name comes from the purple spotted stems.

Lady Slipper Orchid (See Showy Lady's Slipper Orchid)

Largetoothed Aspen (*Populus grandidentata* Michx.) Also called bigtoothed aspen and poplar, the largetoothed aspen occurs in small pure stands, usually resulting from root sprouts from one tree. In Altona Forest it is also found mixed with other species such as alders, willows, trembling aspen, white birch, white spruce, balsam fir, jack and white pine.

The leaves are alternate, simple, 6 - 12 cm long with 7 - 15 large uneven teeth on the margins with some other smaller teeth in between. In early summer, the leaves

occasionally appear silvery in colour making the tree stand out. The normal colour of the leaves is a dull green above and lighter below. The petiole is flattened. The leaves often turn a shade of yellow in the fall.

The fruit is a seed catkin 10 - 12 cm long. The catkins contain cone-shaped capsules with seeds. The seeds, which are covered with long silky hairs, mature before the leaves are fully grown.

A small to medium-sized tree, 10 to 20 m high, the largetoothed aspen lives about 60 years. The trunk is long, cylindrical and smooth. The crown is rounded. The root system is shallow but spreads out for many metres.

The young bark is smooth and light gray to green turning dark brown and rough with age.

Late Goldenrod (see goldenrod)

Little Brown Bat (see bat)

Marginal Wood Fern (*Dryopteris marginalis*) Up to 75 cm long, the dark green to bluish-green leathery leaves of this fern are erect and spreading. The underside of the leaves are usually light green to grey-green. The pinnately compound leaves have lance-shaped leaflets which in turn are subdivided. The spore clusters are near the margins of the subleaflets, thus the name.

Marsh Fern (*Thelypteris palustris* var. *pu*) These delicate ferns can grow up to 70 cm tall. The compound leaves have lance shaped leaflets which are deeply cut and are slightly hairy on both sides. Although the leaflets protrude at right angles from the stem, they often droop down on larger leaves.

Often small dots of spore clusters can bee seen on the underside of the upper leaflets.

Mayapple (Podophyllum peltatum)

The May-apple often covers large portions of the forest floor.

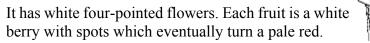


The yellow-green maple-like leaves are deeply lobed.

spring Well hidden, under the leaves, on a nodding stem, is a single large white flower with a yellow centre can be seen in the spring.

The edible berries are sometimes used for condiments and jellies.

Mayflower (*Maianthemun canadense*) Also called the wild lily-of-the-valley, the Mayflower is similar to the False Solomon's Seal but it has only two leaves; their heart-shaped bases seeming to hug the stem.



Milkweed (*Asclepias syriaca* L.)(also see butterflyweed)

This perennial, also called silkweed, reproduces by seed and by horizontally spreading underground roots. The stems are hairy. Growing from 1 - 2 m in height, the milkweed is unbranched or has only one or two branches near the



The broad yellowish green leaves are opposite (2 per node) or whorled (3 or more per node). They are smooth-margined and oblong with a rounded or tapered base and a rounded to somewhat pointed tip. Fine velvety hair is seen underneath the leaves while the upper surface is usually without hair and deeper green

The greenish to purplish or whitish, small (8 - 10 mm) flowers are found in dense clusters at the tip of the stem and in the axils of upper leaves. The fragrant flowers are rich in nectar which attracts bees, wasps, flies, beetles and butterflies. The flowers, which often emit a delightful odour, are perfectly formed for insect

pollination. The waxy pollen is held on tiny wishbone-shaped structures which hook onto an insect's leg but come off when transferred to the flower of a different plant.

The fleshy fruit is green – later turning brown, 7 - 10cm long and covered with soft, warty protuberances. The fruit splits lengthwise along a single opening and releases numerous brown seeds, each having a tuft of long silky hair at one end, which carries it away in a slight breeze.

The leaves, root, stem, flowers and fruit, contain a thick, white, milky latex juice which gives the plant its name.

, spring in the past the spring shoots were considered edible. Later in the season, they are definitely

67

This plant occurs around the wetland and is very common in the north end regeneration area where Monarch butterflies can be seen throughout the

summer flitting from plant to plant. It is believed that the milkweed passes it toxicity to the Monarch butterflies, making them unpalatable for birds and other predators.

Mint (Labiatae)

The plant of the mint family spread quickly and often pushes out other vegetation. All mint species have square stems and opposite leaves. The stems are often slightly hairy. The simple leaves have a strong minty aroma created by tiny glands on the surface which contain the scented compounds. The flowers appear in terminal clusters or in the axils of the leaves.

68

autumn seeds matures from August to October

1st Nations peoples used the strong milky fluid to remove warts. They also used a tea made from the roots as a laxative and contraceptive and the pods and young shoots were cooked as a vegetable.

Like so many of the other wild flowers of Altona Forest, the milkweed can be found along the forest trails where a clearing large enough occurs.



the flowers appear from mid-June to August

not edible.

L

summer

top.

Mint leaves have been used to flavour beverages, jellies and sauces. As with other wild herbs, the 1st Nations people used it in natural remedies. They felt it was useful in reducing fevers.

Aromatic members of the mint family include common mint, lavender, peppermint, oregano, basil, sage, thyme, rosemary, bergamot and patchouli. Some use to be used in the production of perfumes.

Monarch Butterfly (Danaus plexippus)

Migrating Monarch Butterflies are divided into two groups - one west of the continental divide which is considered too high for the butterflies to fly over, and the other includes the eastern United States and Canada.

The Monarch undergoes a chemical change delaying sexual maturity, allowing the butterflies to wait out the winter in large colonies south of the freeze line. They have been found in Mexico and California. They only mate when they return north, living as long as nine more months.

The distinctive colouration of the monarch butterfly warns predators about the bad taste and poisons that are contained inside the bodies. The orange colour is a common indicator of danger in the animal world and it is one theory that some insects mimic the colour for protection.

In the fall, the Monarchs which have not mated, migrate south travelling as much as 200 km a day en route to over-wintering grounds high in the mountains of central Mexico.

Starting around October 23, millions of M monarchs start arriving at the monarch sanctuaries in Mexico. By early

Monarchs on plants and trees in Mexico.

November 2, about 5 million monarchs are estimated to be in Mexico, with about 180 million on their way. Over the next four months, at least 180,000 people visit the monarch sanctuaries in Michoacan.¹ The butterflies only live for a few months, so ones arriving at the reserves in the fall are descendants of those that left on their journey northward during the preceding spring.

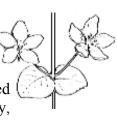
In the spring, the northward migration begins. Mating en route, the next generation of adults complete the trek north.



¹The Santuario de Mariposas El Rosario, the monarch butterfly sanctuary, was created by the Mexican government to protect the monarchs' migration site. It's located in the eastern part of the state of Michoacán, in central Mexico.

Moneywort (Lysimachia nummularia)

The Moneywort's delicate stems trail across the ground or on top of other small ground cover. The small, rounded to slightly heartshaped leaves are arranged in pairs on the slender stalk. The bright yellow 3 cmwide, stalked (flowers of this member of the Primrose family, grow in the leaf axils.



Mountain Ash (Sorbus americana)

Other names for this tree include American mountain ash, rowan tree, whitebeams and dogberries.

Common on the front lawns of residents but a very uncommon tree in Altona Forest, the Mountain Ash does grow in a couple of places. Probably planted from the droppings of birds, this tree does not do well in extreme heat and grows in the shade of other hardwood trees here.

A 20 cm long compound leaf with 13 - 17 leaflets that are light green on top and paler green beneath with no hairs. Each leaflet is 3 - 8 cm long, sharp pointed and toothed. The base of the leaflet is often toothless.

The dense flattened clusters of cream-coloured flowers appear in May and June

The thin fleshy, small(4 - 6 mm diameter) apple-shaped fruit is coral red in colour and grows in large clusters. They mature in August. The fruit is easily seen from a distance.

Mouse



A number of small rodents, including field mice inhabit Altona Forest. These timid creatures are preyed upon by owl, coyote, fox and hawk. The mouse is active at night and stays hidden as this is its only protection from its predators.

Mushrooms

A number of mushrooms and fungi grow in Altona Forest. These plants do not make their own food. They send out networks of underground root-like strands which are, in fact, the mushroom plant. The typical appearance of the mushroom is actually the fruiting body.

The common field mushroom (*Agaricus campestris*) is white with pinkish-brown gills. It is umbrella-shaped, stocky, and solid. These are the mushrooms usually sold in grocery stores. They are grown on trays in sheds where temperature and moisture are carefully controlled. Nearly complete darkness usually produces the best results. Hence they are often cultivated in damp basements and abandoned mines.

CAUTION: It takes an expert to tell the difference between many of the species of mushroom. Do not assume that any mushroom found in Altona Forest is edible. It is against the law to pick any plants in Altona Forest including mushrooms and, in the case of mushrooms, picking could be very dangerous to your health. New England Aster (see aster)

Northern Beech Fern (*Phegopteris connectilis*) This fern grows up to 40 cm tall. The single erect triangular leaf is pinnately compound, 6 to 25 cm long and 4 to 15 cm wide. The 10 to 25 pairs of leaflets are deeply cut making them almost double compound.

This fern can best be identified by examining the bottom two leaflets. These are separate from the other leaflets and bend downward and outward.

Oak Fern (*Gymnocarpium dryopteris*) The yellowish-green leaves are widely triangular, thin and lacy. The double compound leaves have two to three triangular leaflets each with their own round-toothed sub-leaflets. The centre or uppermost leaflet is the largest. The leaf stalk is scaly at the base.

Partridgeberry (Mitchella repens)

This trailing plant stays close to the ground and attains a height of no more than .5 m when it climbs a tree or other object. The 1 - 2.5 cm diameter almost rounded leaves are evergreen. A distinguishing trait is that the dark green leaf has a pale green midrib and often has white lines on the surface. The fragrant purplish flowers are small (10 - 15 mm long) and usually appear in pairs in June to July. The bright red berrylike fruit ripen in August or September and persist through the winter. In Altona Forest, the Ruffed Grouse eat the fruit.

Pileated Woodpecker (*Dryocopus pileatus*)(also see woodpecker)

The pileated woodpecker of Altona Forest is a shy bird. If you are lucky and very quiet, you may be lucky enough to see one.

It is about 43 centimetres long, with a great scarlet crest.

Plantain (Plantago major)

Considered a troublesome weed in lawns and gardens, plantain is also called ribwort or common plantain. It usually has a rosette of broad-ribbed leaves. The leaves are basal, long-stalked, simple with a wavy margin, 5 to 30 cm long with parallel veins.

The small flowers are greenish and arranged on a narrow spike 5 to 25 cm long.

The seeds are contained in fruit capsules, 2 to 4 mm long. The brown or purplish fruit loose their lid and the

6 to 15 seeds can fall out. Plantain is seen at the St. Elizabeth Seton entrance along the path. It is also found in the regeneration area in the north end of the Forest. Young leaves were at one time used in salads or cooked as a green vegetable. This is no longer done and is not recommended.

Polypore (*Polyporus sulphureus*)

The polypore is a member of the bracket fungi. This brown fungi with colourful bands grows in overlapping shelves on the trunks of dead or stressed trees.



L

It often has orange or sulphur yellow colours in it.

Poison Ivy (*Toxicodendron radicans*)

Poison Ivy is common in Altona Forest especially in disturbed areas and near the edges of the forest and along some paths. Poison Ivy is very common along the school fence, along the backyard fences where undergrowth has been removed and in the



open areas. Please be cautious and stay on the trail.

Poison Ivy is a perennial that spreads by seeds and woody rhizomes. Its leaves are arranged alternately on the stem and consist of three leaflets. Look carefully at the middle leaflet which has one stalk much longer than those of the two lateral leaflets. The edges of the leaflets may be smooth or toothed. The leaves vary greatly in size, from 8 mm to 10 cm long.



- **spring** The leaves are reddish or purplish when they first emerge. Male and female flowers are normally found on separate plants. They are clustered, small, and cream to yellow green in colour.
- summerLeaves are green and the green to yellow-beige
fruits are clustered, round, and waxy. They are
3-7 mm in diameter and contain 1-seeded.
- **autumn** leaves turn shades of purple, yellow, orange, red, or bronze
- winter leaves fall but the stems and fruit persists and can still transmit the harmful chemicals which can cause severe rash

If you wish to learn more about poison ivy, consult Appendix A.

Purple Flowering Raspberry (future addition)

Purple Loosestrife (*Lythrum salicaria* L)

Purple loosestrife is a perennial wetland herb. It was introduced from Europe, probably by accident, in the 1800s. Because it has no natural enemies here, it has spread aggressively and is now widely found in meadows, river flood-plains, and damp roadsides throughout most of Ontario and the rest of North America. In Altona Forest, it is found along some trails and in and around the wetland. The root system chokes out native plants and eventually this weed fills in ponds and marshes. It does not provide food or shelter for our wildlife but it crowds out those plants which do provide these necessary things and so, where it invades, valuable wildlife habitat is destroyed.



Five insects from Europe could

potentially provide long-term control without harming native flora or fauna. Leaf-eating beetle adults and larvae as well as root mining weevil larvae are now being studied for their possible use against this most intrusive plant. The University of Guelph is testing a natural insect enemy of the loosestrife. This insect, the Galerucella beetle, larvae and adult, live exclusively on a diet of loosestrife. It is being sold in Ontario to conservation authorities, cottage owners and some businesses.

This perennial weed reproduces by seeds. The stems are from 60 -120 cm high, with branches and fine hairs. The stem is more or less square in cross-section. This shape can be felt if the stem is rolled between the thumb and finger. The leaves are opposite or sometimes whorled (3 or more per node), stalkless, broad near the base and tapering towards the tip.

The 6-petaled flowers are seen in dense very showy terminal spikes made up of red-purple petals 7 - 10 mm long. It flowers from June to autumn. A single plant can produce three thousand individual flowers. Purple Loosestrife reproduces prolifically by cuttings and offshoots as well as by seeds. A single plant

may produce up to 300,000 seeds, which are carried by wind, water and animals, which explains how it spreads so quickly.

Shakespeare called Purple Loosestrife "long purples" and "dead men's fingers."

Pussy Willow (Salix discolor Muhl.)

This shrub or small tree has distinctive flowers which are gray and very soft. Male and female flowers, called catkins, are found on separate plants. The flowers appear before the leaves. They eventually turn yellow as the pollen is released.

The alternate, bright green, elliptical leaves are shiny above and whitish underneath.

The fruit are finely hairy capsules 7 to 12 mm long.

Like other willows, the Pussy Willow's preferred location is near water. It is not a surprise, then, that this plant is found in a number of locations along Rosebank Tributary.

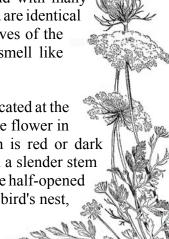
Queen Anne's Lace (Daucus carota L.)



Also known as Wild Carrot and Bird's-nest, Queen Anne's Lace

is usually a biennial which reproduces by seed. It is a member of the parsley family.

Mature green leaves are compound with many finely dissected (lacy) divisions and are identical in appearance and smell to the leaves of the cultivated carrot. The roots also smell like carrots, thus the secondary name.



The white compound flowers are located at the tips of stems. There is often a single flower in the middle of the grouping which is red or dark purple. Each flower head grows on a slender stem which is covered with stiff hairs. The half-opened flower is cup-shaped resembling a bird's nest, hence one of its common names.

It flowers from June to September and can be found along many of the trails in Altona Forest.

The cultivated carrot was developed from the Queen Anne's lace or wild carrot, which has a coarse, woody, fibrous, unpalatable taproot.

Flies, bees, beetles and wasps frequent the Queen Anne's lace for food.

Rabbit - Eastern Cottontail (Sylvilagus floridanus)

Also known as the cottontail rabbit, the eastern cottontail is from 30 to 45 cm long and weighs from two to four pounds. These

rabbits live mostly in or near the northern regeneration area in Altona Forest. It is most active at night but can be seen in the early morning or early evening when the grass and other vegetation which it eats, is covered with dew and makes for a drink as well as a meal.

In Altona Forest, the cottontail is a favourite food of the fox, coyote, hawk and owl. Even crows and squirrels will attack and kill small baby rabbits. With little physical defence, the rabbit must use flight not fight to protect itself. At a young age, it will also learn that its colouration makes it almost invisible when it freezes still where it is. You may walk very close to a cottontail and not see it.

Raccoon (*Procyon lotor*)

The Raccoon is dark brown or a salt and pepper mixture with a black mask over the eyes. It is a stocky animal with a bushy black and yellowish-white ringed tail. It is usually from 54 to 84 cm long. It builds dens in hollow trees, logs and buildings if available.



Racoons are omnivorous and will eat almost anything from insects, crayfish, birds eggs, to fruit, nuts, grains to garbage. They sometimes dunk their food in water prior to eating it.

Although the Raccoon lives in Altona Forest, it often leaves the shelter of the forest, under cover of night, to

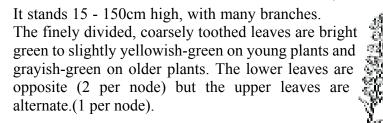
raid neighbours' gardens, especially fruit trees, and garbage bags. Raccoons' large appetite and the fact that they are expert climbers, are curious, clever, have excellent memories, and highly-developed senses of hearing, sight, and touch allow them to become rivals with people for crops and garden vegetables. They can get into almost any garbage container and at times, cause a lot of annoyance for farmers and home owners.

Raccoons have variable voices. While the females twitter to reassure their young, both sexes will growl and snarl when angry or threatened. Mating occurs in February or March and they have a lifespan of about 6 years.

Raccoon meat is edible, and its distinctive fur patterns made it an animal which was hunted by 1st Nations people of the area. Coonskin caps were worn by some early explores, especially south of the border. The most famous of these men was Davy Crockett.

Raccoons are occasionally kept as pets, but tame, cute, raccoon pups become wild, sharp toothed and unpredictable racoon adults.

Racoons of Altona Forest have ample shelter and a good supply of food but they do venture out of the area on a regular basis, especially at night. Lawns that are dug up in the search for grubs, gardens partially devastate and even outdoor flower pots with uprooted plants all are common occurrences in the immediate area of the forest. Racoons should not be approached as they can be vicious if they feel threatened. **Ragweed** (*Ambrosia artemisiifolia* L.) Ragweed belongs the Compositae family. This annual weed reproduces only by seed. It is abundant in the Pickering area and in Altona Forest. It is found along open parts of the trails and along the edge of the forest as well as in the regeneration area in the north.



The very numerous, tiny, non-showy, greenish male the flower heads cluster along a terminal spike. They produce huge quantities of very light pollen which when released can be carried by the wind for more than 200 km. Common Ragweed pollen is the most important cause of hay fever during August and September.

All the female are in tight axillary clusters. Each female flower produces a single, hard, somewhat triangular or diamond-shaped seed with several, short, sharp spines. Flowers from August to October.

Do not confuse this weed with Goldenrod (*Solidago* spp.), which is not a contributor to Hay Fever.



Red Admiral Butterfly (Vanessa atalanta rubria)



This butterfly (4.5 - 7.6 cm wing span) is found in Europe as well as in United States, Mexico, Guatemala, Hawaii, New Zealand, North Africa, Asia and Canada. The black wings with spots near the apex and a marginal red or orange bans make this butterfly very distinctive. This butterfly is found in all the open areas of Altona Forest flying

swiftly with sharp, very erratic, rapid course changes from flower to flower. A short quiet wait in the wetland, while observing flowering weeds, will likely result in spotting one of these butterflies. They are particularly fond of the nectar in composite flowers.

Male red admirals wait for females, who lay eggs singly on the tops of host plant leaves. These plants are often the nettles of the forest. Young caterpillars eat and live within a shelter of folded leaves while older caterpillars make a nest of leaves tied together with silk. Adults hibernate for the winter but cannot survive sever winters. Most of these butterflies die during the winter and the new spring

sittings are of new arrivals from the south.

Red Admirals prefer sap flows on trees, fermenting fruit, and bird droppings for their food. They will visit the Altona Forest flowers milkweed, red clover and aster for nectar when their preferred food is not available.

Red Clover (*Trifolium pratense*)

An introduced species from Europe and Asia, it is a perennial and is considered a forage crop which is often found with White Clover. Clovers belong to the pulse or pea family. The flowers are reddish pink to purplish red, 12 to 20 mm long, in a globeshaped clusters. The sweet odour as well as the sweet nectar attract bees and various butterflies. Each flower produces a pod containing yellow or purple seeds.

The green leaves have 3 leaflets, each 2 to 5 cm long, usually with an inverted light green 'V' or chevron on the upper surface of each leaflet. The leaflets close up at night to protect their sensitive surfaces from the cold. The clover can grow from 24 cm to 60 cm high.

Farmers plant clover to attract bees because red clover honey is considered excellent honey. Clover is also an excellent fodder for cattle. In Altona Forest, it is mostly the bees and butterflies, as to a lesser extent, other insects which feed from the red clover.

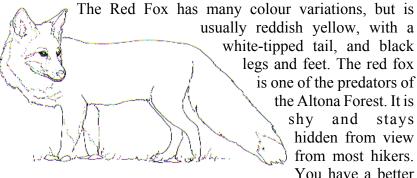
In Europe, Red Clover is widely cultivated and used as a tonic and a salad herb. Herbalists have long considered the red clover blossoms and leaves to have chemical components which can be used as a blood oxidizer, for treatment of bacterial infections,



inflamation of the bowel, lung problems and skin conditions, such as psoriasis & eczema and an anti-cancer herb. The scientific community continues to investigate these claims. The plant does cleanse and fortify the soil where it is growing.

In Altona Forest Red Clover attracts great number of butterflies as well as bees.

Red Fox



chance of seeing a fox outside of the forest, where it hunts cats and rodents, than you do of seeing one inside the forest. Although chiefly nocturnal, the red fox often wanders around during the day, especially in early morning or late evening. During the midday, it usually rests in solitude in some sheltered spot from which it can detect approaching danger.

Red Maple (*Acer rubrum*)(also see Sugar Maple)

Also called scarlet maple, soft maple, swamp maple, water maple and white maple, the Red Maple has leaves which are opposite, simple, 5 - 15 cm long, with 3-5 shallow lobes, coarsely toothed, light green above, pale green to whitish beneath. They turn brilliant red or orange in autumn.

The seed flowers are red with five sepals and petals. They are clustered on or near the ends of twigs. Pollen flowers are yellowish green and usually on different branches of the same tree. The flowers appear before the leaves.

The fruit wings are 12 - 25 mm long and are angled at about 60E. The red to brown keys mature and are dropped individually during early summer. These seeds are the Red Maples' main method of reproduction.



The Red Maple is often found in swamps on moist soils but it tolerates a variety of soil types. It can grow as the understory to other trees as it is moderately shade-tolerant. In Altona Forest it is found mixed with other hardwoods. One of its names, soft maple, indicates that the wood of the Red Maple is not as hard as the sugar maple.

Red Pine (*Pinus resinosa* Alt.)

The Red Pine grows up to 25 m high and can obtain an age of 200 years. The crown is usually symmetrical and oval shaped. A number of these trees are found in the softwood forest portions of Altona Forest.

The dark green needles are slender, in groups of 2, and are 10 to 18 cm long. They are flexible, but break when bent in half. The margins have tiny teeth and the tip is sharp-pointed. The needles persist for 4 years. A similar species, which will be found in gardens and planted in parks, is the Austrian pine. The needles of the red pine break when bent in half unlike the Austrian pine which does not break when subjected to bending.

The fruits are chestnut-brown seed cones, 4 to 7 cm long, with a wide base. When fully opened, the cone is much wider at the base than most other pines.

The cones are almost stalkless, and the basal scales remain attached to the twig when the cone falls. This leaves a small depression in the base of the cone.

Red-shoulder

Altona Forest's resident hawk lives and nests near the Northeastern Loop. The nest is camouflaged and almost impossible to see. The hawks, however, are easier to see from forest clearings or from the surrounding area as they sore on the warm air looking for their prey. Its tail contains many bars of white and black. Each shoulder has a reddish brown patch. The body is barred with brown.

Red Trillium (Trillium erectum)

'Trillium' comes from the Latin word for 'three', referring to the three whorled leaves.

This relatively rare trillium is part of the Altona Forest plant community. Also called Stinking Benjamin and Birthroot, it is not often found near the paths but in the darkest parts of the interior. The large, dark purple to dark red flowers make it unique in the trillium family. It flowers from late April to June. The odour from the flower is unpleasant and is often described as like a "wet dog." This scent repels humans and has been known to cause nosebleeds. Insects, however, are attracted to the smell.

1st Nations people used a tea of the root to bring on labour and to improve the force of contractions during labour. The leaves were crushed and applied as a poultice, serving as a local irritant for treating skin disease or ulcerations.

The settlers and early pioneer doctors learned from the 1st Nations and used this root tea to assist in childbirth and in the

root tea to assist in childbirth and in the treatment of haemorrhages, menstrual disorders, cough and

The Red Trillium grows up to 30 cm in height. The leaves are arranged in a whorl, at top of stem and parallel to the ground.

Red Winged Blackbird

asthma.

This bird is about the same size as a small crow. It is black except for the red splotches which occur on the top of the wings when at rest and near the middle of the wings when flying. A very good place to see the Red Winged Blackbird in the summer is in the wetland area. Notice how it has been adapted to cling to vertical stems of sedges and cattails.

Riverbank Grape (Vitis riparia)

The 6 to 27 cm long leaves are shiny, green beneath and almost hairless. It is deeply lobed and is sometimes mistaken for the Cat Grape. The leaf tips are long-pointed. The twigs are redish brown or green and usually hairless. The tendrils are normally absent opposite every 3rd leaf.

The bitter fruit is blue-black with whitish powder.

Ruffed Grouse (Bonasa umbellus)



Also called Birch Partridge, Drumming Grouse and Mountain Pheasant, this large chicken-like brown bird hash tufts of shiny black feathers on each side of its neck.³ It is easily identified by its fan-shaped tail. It has a tendency to ruff out their back neck feathers, thus its name. A crest of feathers adorns the top of its head.

This game bird is hunted eagerly in areas where it is allowed (not Altona Forest). In

some regions it has almost been exterminated, so we are particularly lucky to have this bird living in Altona Forest where it enjoys the deep thickets and vegetative cover around the ponds. It prefers the hardwood deciduous regions of the forest over the coniferous areas.

The colours of the male are more pronounced, while the female blends with her surroundings. In winter, Altona Forest ruffed grouse coats turns a snow white. On their feet they grow downy feathers that keep them from sinking into the snow.

During the mating season the male's dull booming love calls might be heard as you walk along the trails. By rapidly beating the air or their breast with their wings, they produce a drumming sound that may be heard a kilometre away.

These love calls are usually accompanied by strutting and ruffing of feathers and by fights among the males.

The Ruffed Grouse may attain a size of 50 cm. They eat seeds, fruits, and insects which are common in Altona Forest.

Salamander



The salamander is an amphibian like frogs and toads.
They lack scales and claws and have moist skin. The salamanders in Altona Forest are usually found under decaying logs.

Sarsaparilla (Aralia nudicaulis L.)

Also called wild sarsaparilla, nearly every part of this plant has at one time been used by humans. The aromatic roots were once used in a drink called sarsaparilla, which evolved into a drink we now call root beer. The shoots of young plants were used as



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herbs, and the berries were made into jelly.

The leaves are large, compound, with 5 leaflets divided into 3 sections.

The flowers, which appear in June and July, are small, greenish-white and occur in ball-like clusters atop a naked stalk. The fruit are purplish-black berries.



It is found in Altona Forest along the trails and in open fields.

Scotch Thistle, (*Onopordum acanthurn* L.)

Also called cotton thistle and white thistle, this biennial or sometimes annual, reproduces only by seed. The stems stand 1 - 2.4 m high, usually with many branches,

The densely whitish felt-like woolly leaves, unique among thistles, are large, (up to 60 cm) lobed and coarsely toothed and have broad, spiny, leaf-like wings.



The purple showy flower heads appear at the ends of branches and from leaf axils. They are large (2.5 - 5 cm) across, nearly spherical, surrounded by numerous spine-tipped bracts. The flowers appear in June and last until September.

Scots Pine (Pinus sylvestris L.)

Often called Scotch Pine, which is incorrect, this tree has been used for reforestation projects in Europe. In North America, it has been planted in an attempt to produce forest products, but has had little success because it does not grow as well as in its native habitat and it lacks some good qualities of some of our native pines. Some farmers have planted this pine near the edge of their properties as a wind break or a boundary marker. There are a number of Scots Pine along the hydro fence in the norther section of Altona Forest.

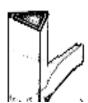
The Scots Pine is easily identified by its distinctive orange-red flaking bark which is relatively smooth and peels into papery flakes and strips on the middle to upper parts of the tree. The lower trunk has deep fissures and irregular gray plates with orange scales. The attractive trunk and bark help it to be a popular ornamental tree.

The stiff, slender needles appear in bundles of 2 and have a variety of lengths and colours. They are usually 3 - 9 cm long, bluish-green or dark green with a circular cross-section. The needles are usually twisted, which is one of the best ways to identify them. The needles frequently change to yellow-green in winter.

The conical to ovoid-shaped seed cones are 5 - 8 cm long, short-stalked and yellowish or reddish brown in colour. The cones appear in clusters of 2 or 3, usually pointing back along the branch. The seeds are released during winter and into spring.

Sedges (Carex -) (Also see Grasses)

Sedge is a common name for members of the genus Carex. Sedges differ from true grasses in having solid (rather than hollow), usually triangular, stems. Remember 'sedges have edges' and you will not mix them up with grasses.



Most sedges are perennial and reproduce by underground rhizomes. The male and female flowers are usually small and inconspicious.

The pith of Cyperus papyrus was used in ancient Egypt to make a paper-like material called papyrus. In Altona Forest, there are a number of sedges including; *Carex communis* (common sedge or fibrous-rooted sedge), *Carex disperma* (soft-leaved or two-seeded sedge), *Carex aurea* (golden-fruited sedge), *Carex intumescens* (bladder sedge), *Carex deweyana* (Dewey's sedge) and *Carex retrorsa* (retrorse sedge).

In Altona Forest, sedges are found in and around any open area. They are often associated with various types of wildflowers especially in the regeneration area on the northern side as well as the wetland area. The leaves and seeds of the sedges provide food for squirrels and other rodents, deer, raccoons, ruffed grouse, sparrows and other birds.

Bladder Sedge (Carex intumescens)

This smooth, hairless dark green sedge grows up to 80 cm tall. The margins of the leaves are rough and often reddish at the base. The large bladderlike



female flower spikes are a definite aid in the identification of this sedge.

Common Sedge (*Carex communis*)

The leaves occur in dense clumps with the flowering stems extending 20 - 50 cm high. The leaves are purplish green at the base.

Dewey's Sedge (*Carex deweyana*)

This sedge grows in clumps with flowering stems 30 - 80 cm tall. The light green to yellowish-green leaves are 2 - 5 mm wide, flat and most often grow from the base up rather than from other stems.

Soft-leaved Sedge (*Carex disperma*)

The flat leaves are light green, very thin with rough edges 5 - 60 cm tall and often leaning over toward the ground.

Sensitive Fern (*Onoclea sensibilis*)

This perennial fern grows from 50 to 70 cm high. It is found in sunny or partially shady areas in Altona Forest especially near moisture such as along the Rosebank Tributary. The widely triangular leaves, which are much less delicate looking than most other ferns, have 5 to 11 pairs of lance-shaped leaflets with wavy margins. The leaves are very sensitive to cold and usually turn black after the first frost.

Shinleaf (*Pyrola elliptica*)

The unique looking dull dark green oblong or egg-shaped leaves appear at the base of the plant. They have wavy margins and are 2 to 8 cm long. The greenish-white flowers appear in July to August and are held above the leaves by a leafless stalk. The fruit appears in August. In Altona Forest, Ruffed Grouse eat the seeds.

Showy Lady's Slipper Orchid (*Cypripedium reginae*)

This orchid usually has one large flower with a large pink pouched lip lined with red veins. The leaves have parallel veins and are arranged in pairs and usually lie flat on the ground. <u>These are</u> <u>delicate plants will die if they are</u> <u>transplanted.</u> It is against the law to remove flowers or any plants from Altona Forest. Please leave any of these and other wild flowers for all to enjoy.

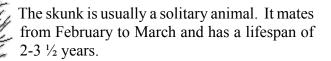
The smaller **yellow lady's slipper** (*Cypripedium calceolus parviflorus*) is also found in Altona Forest woods. This orchid, as the name indicates, is smaller than the showy lady's slipper and the pouched lip is yellow.

Skunk (*Mephitis mephitis*) The Striped Skunk is familiar to nearly everyone by odour if not by sight. It is about the size of a large house cat with a length of 39 to 54 cm. It has a small head, bushy tail and is distinct in its black fur with white stripes which extend to the forehead and with its white area on top of the head. It has well-developed scent glands which emit a foul odour when frightened or threatened. The foul spray is not toxic but the odour is pungent and can last for a number of days. Skunks can hit a target with the yellowish, oily liquid from up to 5 metres away. The best thing to do when your cat or dog has been sprayed is to wash it in tomato juice. It may require a number of washes before the desired effect is reached. It is not known why tomato juice works but somehow it neutralizes and removes the odour.

The preferred living area for the skunk is semi-open country with a mixture of woods, brushland and open grassland, preferably not more than two kilometres from water. All of these preferred factors are found in Altona Forest.

The skunk is an omnivore and generally comes out shortly after sundown and starts a search for insects, grubs, mice, eggs, berries and a variety of small animal life that may be encountered. It also will search for food in the garbage. The den is normally a hole in the ground, either made by the skunk or

abandoned by some other animal.

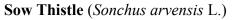


Skunks and other carrion eaters can contract rabies from feeding on an infected animal. Because rabies is very dangerous in humans, people should avoid contact with skunks and areas where skunks have been feeding. To reduce the risk of rabies or being sprayed, garbage should not be accessible to animals.

Slippery Elm (Ulmus rubra Muhl.)

The leaves of the slippery elm are alternate, simple, 15 to 21 cm long, very rough on both sides or soft-hairy below. The oval doubletoothed leaves are very noticeably uneven at the base. The petiole is short. It is often mistaken for the White Elm. There are 15 veins per side with several of them forked while the White Elm has 15 to 20 veins per side with not more than two being forked.

The fruit, which matures in the spring, is like the white elm but larger — 2 to 2.5 cm long. The winged margin is not hairy but it is slightly notched at the tip.



This perennial weed is also called creeping sow-thistle, field sow-thistle and glandular-hairy perennial sow-thistle. It reproduces by seed and from buds on widely spreading, creamy white, brittle, underground roots.



Standing 60 - 150 cm high, it is smooth and

hairless on the lower part but glandular-hairy towards the top and on branches. The plant has a sticky white juice appearing on its surface and it has a sour odour.

The leaves of seedling plants are broadly club-shaped with

irregularly toothed margins with spines. Some leaves are similar to dandelion leaves in shape.

The bright yellow flower heads are showy, 2.5 - 4 cm wide and resemble dandelion flowers but are larger. The flowers can be seen from June to late autumn.

In Altona Forest, the Sow Thistle is found along with other wild flowers and weeds in sunny clearings and along the sunny parts of the trails.

The perennial Smooth Sow Thistle, (*Sonchus arvensis* L. var. *glabrescens* Guenth, Grab. & Wimm.) is distinguished from other sow thistles by its lack of hairs on its stems, leaves and flower parts.

Spotted Joe-Pie Weed (See Joe-Pie Weed, Spotted)

Spring Peeper

This frog begins calling very early in the spring. Their high-

pitched *peep peep* was heard often in Altona Forest in the past but not as often now. Listen on the South Trail up to and around the wetland for this tan frog with a dark brown *x* on the back. The peeper is a tree frog. Each of its toes end in a small suction cup which is used to cling to the grass as well as to the bark and stems of trees. **Squirrel** (*Sciurus canadensis*)



Probably no wild animal is more commonly known than the Eastern Gray Squirrel. It is now found as often in city parks and gardens as in its native forests. The eastern gray squirrel (gray phase) lives in the woods of Altona Forest. The black phase of the eastern gray squirrel (same species) and the red squirrel (Tmiasciurus hudsonius) also live here.

The squirrel is a member of a family which includes the ground squirrels and flying squirrels, woodchucks, prairie dogs, and chipmunks.

Staghorn Sumac (*Rhus typhina*)

Staghorn Sumac spreads by root suckers to form large thickets. Often found along edges of forests or along paths or trails such as the ones found along the first few metres through the St. Elizabeth Seton entrance to the forest.

The leaves are compound with many toothed narrow pointed leaflets. The leaf, stem and fruit are covered with small soft hairs.

- summer an elongated mass of tiny yellowish flowers develop
- autumn The leaves turn a bright red or purple in the fall.

The leaflets droop down in the fall. The large flower clusters evolve into a bright red fruit which is sometimes described as an inverted "cone".

First Nations people and early settlers collected the fruit and made a lemon-like flavoured drink which is rich in Vitamin A and malic acid (also found in grapes). The fruit stays on the tree during the winter which provides food for over wintering songbirds and ruffed grouse. Grubs and small insects often hide in the many openings in and around the cone-shaped fruit head.

Sugar Maple (Acer saccharum Marshall)

Also called Rock Wood Maple, Hard Maple and Rock Maple, the Sugar Maple has a leaf which is opposite, simple, 5-lobed with few large teeth, 8 - 20 cm long, bright green above, pale green below. This is the leaf represented on the Canadian flag.



- small flowers emerge spring
 - fruit develops summer
- Leaves turn bright yellow, orange, red autumn or a combination of these colours in the fall.

Paired winged and horseshoe-shaped, the fruit is only slightly divergent. The paired seeds often drop

100



together. Only one of them is usually viable. The fruit matures in autumn and sometimes persists into winter.

Sugar Maple is commonly found in the hardwood forests of Altona Forest.

Sweet Violet (*Viola odorata*)

This perennial white wild flower is native to Europe and Asia and is just one of the violets that can be found in Altona Forest. Future updates will include more of these beautiful flowers.

The bluntly heart-shaped leaves of the Sweet Violet have deep lobes at the base. The small flowers posses a wonderful scent, and have therefore been used in perfumery. The seed capsule is green.

In Europe and Asia the essential oil from the

fresh flowers was extracted using fat. This process is now being abandoned in favour of synthetic compounds, which experts maintain are not as good as the original. A cough syrup was once made by gently heating the fresh flowers in honey.

The sweet violet grows in moist areas of Altona Forest.

Tall Goldenrod (see goldenrod)



Thimbleweed (*Anemone riparia*) Anemones, which include the thimbleweed, are in the buttercup family.

The leaves of the thimbleweed are so deeply cut that they seem to be palmately compound with three to five leaflets. However, on closer examination, it can be seen that the parts are in fact one leaf.

Long-stalked flowers of 5 petal-like white sepals are 2 cm. wide.



The fruit resembles a thimble, thus the name.

Trembling Aspen (Populus tremuloides)

Also called quaking aspen and quivering aspen, the trembling aspen is in the poplar family. It grows best on moist, well-drained soils in Altona Forest such as those found around the wetland, where a number of them can be seen on the northern edge.

The leaf, which is triangular or almost circular in shape but has an abrupt sharp tip is smooth, with a flattened stalk that is longer than the leaf. It is dark green above, paler underneath. The leaf is usually 4 to 6 cm in diameter. The teeth are very fine and usually quite irregular. The flattened, slender stalk allows the leaves to move easily in the slightest breeze, thus the name.

autumn The leaves turn golden yellow or red in the fall

It is sometimes called a "nurse tree" because when other trees start to grow in its area, the trembling aspen is easily replaced.

Tick Trefoil (Desmodium spp)

The Tick Trefoil, members of the Pea family (which includes the clovers), are so named because

- A. They have long pointed pods bearing hooked hairs, allowing for hitch hiking on clothing and
- B. They have stalked leaves of 3 leaflets.

The flower clusters at the top remind some of the purple loosestrife except the individual flowers look like the flowers on a pea plant. The flowers can be pink, lavender or sometimes white.

The fruit is a clinging pea pod with seeds inside.

Trout Lily (Erythronium americanum)

The small trout lily is common on the Altona Forest floor. Look for it where there is an upperstory of trees which give shade to the ground. The two basal leaves are speckled with a lighter colour which reminds some of the trout fish.



- , spring Solitary long-stalked nodding 2-3 cm flowers have 6 yellow petals.
- **summer** When the flowers are gone, the green distinctive leaves are seen on sections of all the trails in the

Altona Forest.

True Solomon's Seal (genus *Polygonatum*) (see false Solomon's seal)

Vetch (Vicia cracca)

Also called the Perennial Pea, Wild Pea and Macusson, the Vetch, or Cow Vetch, a member of the Pea family, is considered a weed.

It can grow up to 150 cm or more. It is weak and easily pulled up or broken. The alternate leaves are compound with nearly stalkless leaflets rumbering 8-12 pairs. The oblong leaflets are compared bright green.

The pink to blue to violet flowers resemble a Sweet

Pea in colour, shape and fragrance, and occur in groups on long, erect stalks from the leaf axils. Vetch flowers from June to September while the sweet nectar is enjoyed by bees and butterflies.



The fruit pods are light brown, short stalked and lance-shaped.

Some birds will eat the seeds from the pods. Reproduction occurs by seeds and also by underground tubers which are difficult to destroy if this plant invades home flower gardens. Vetch is found climbing trees or in mats of growth near the ground in many parts of Altona Forest. Look for it in clearings and along the sunny parts of the trails. When a vetch tendril comes in contact with another plant, it curls around it for support and continues to grow upward and outward.

Violet (see sweet violet)

Virginia Creeper (*Parthenocissus quinquefolia*)

Virginia Creeper is also called American ivy, or woodbine. It is a creeping vine which belongs to the same family as the grapes, Vitaceae.

The leaves of the Virginia Creeper are divided into five leaflets. The flowers grow in clusters from a central axis. The climbing is aided by tendrils which often have sticky discs at the ends.

Virgin's Bower (Clematis virginiana)

This vining woody perennial is toxic. Native to the central, southern and eastern United States and Canada, it is the native clematis. The plant grows on fences or up into trees, or anything else it can cling to and it creates its own shade. The attractive white flowers, which grow in the leaf axils, are very noticeable when in bloom. The seeds are decorated with long, feathery plumes which look like a beard, thus one of the common names

"Old Man's Beard."

The leaves are compound with three toothed leaflets. If fresh leaves are rubbed on the skin, a blister may result as the plant is a natural corrosive. It is a very dangerous plant to eat. Its dangerous traits were utilized when long ago people made the leaves into a salve for treating scabies and for removing warts.

White Ash (Fraxinus americana L.)

White ash prefers deep, well-drained, upland soils which is not common in Altona Forest. Nevertheless, White Ash is found in Altona Forest in hardwood forested areas with other broadleaf trees such as cherry, birch, maple, beech and other ashes. It is also found in fewer numbers in softwood sections with hemlock and pine.

The leaf is opposite, compound, 15 - 25 cm long, with 5 - 9 leaflets (usually 7) each 6 - 15 cm long, short-stalked, dark green above and pale beneath, oval to lance shaped, margins entire or with a few rounded teeth toward the tip.

- **spring** The purple flowers are small and inconspicious. The pollen flowers and seed flowers are on separate trees.
- *u* autumn The fall foliage colours range from

brilliant vellow to dark maroon.

The fruit is a winged seed, called a samara. It is usually 2.5 - 5 cm long. The seeds hang in clusters which remain attached for several months after ripening in autumn.

The juice from the leaf has been used to relieve mosquito bite itching.

The wood is heavy, straight-grained, hard, strong, tough and light brown to white in colour. Wooden baseball bats are often made from white ash

White Birch (Betula papyrifera)

Of all the trees in Altona Forest, the White Birch is one of the most recognizable. The bark is white and sheds in large peels exposing pink or golden vellow under bark. This peeling bark often resembles a role of paper and thus the secondary name, paper birch. Also called canoe birch because this tree's bark was used by 1st Nations people in the building of canoes. The leaves are widest below the middle and they are double toothed

The fruit resembles small cones called catkins

Please do not peel any bark off the White Birch as this exposes the under bark before it becomes resistant to disease.

White Cedar (*Thuja occidentalis*) Cedar is the common name for a number of mostly



coniferous evergreen trees. The true cedars (genus Cedrus), of the pine family, are all native to Europe and Asia. These include the cedar of Lebanon (C. libani) and the fragrant deodar cedar (C. deodara). In North America, the name cedar refers to the juniper (red cedar), arborvitae (white cedar), and other conifers of the cypress family. Several tropical North American trees (genus Cedrela) of the mahogany family are also called cedars.

Also called eastern thuja and eastern arborvitea, the white cedar leaves are small, flat branched close-knit and scalelike. The leaves give off a pleasant aromatic scent when you crush them between your fingers. It is one of the most common trees in the Altona Forest and is the predominant tree species in a number of locations.

The oval shaped fruit, called a cone is small (7 - 12 mm long). It is yellowish-brown with 6-12 scales and grows alone or in clusters on the end of the branch. The seeds are about 1/8 of an inch long and have two narrow wings almost circling the seed. The fruit ripens in late summer.

A row of these trees acts as a natural fence because the branches grow so thick. Some of the trees in Altona Forest may have been planted as a natural fence. Look for unnatural straight plantings of these trees.



Deer love to browse on this evergreen in the

winter when food is scarce. Porcupines eat the thin cedar stems as a tasty snack and red squirrels nibble on the buds. Pileated woodpeckers will excavate large, oval holes in the sides of the white cedar in search of carpenter ants.

People use the light, soft and brittle wood for making fence posts, building poles, rot-resistant lumber, shingles for buildings, fence posts and cedar-strip canoes. In Altona Forest there are a number of examples of white cedar split rail fences. These are around 60 years old and in still good condition. Some of these rail fences along the South Trail have 50 year old cedar trees growing between the rails!

Winter "yards" for white-tailed deer are often in or near groves of white cedar. One white cedar on the Niagara Escarpment is over 700 years old.

White Clover (Trifoliuim repens L.)

Also called alsike clover, Dutch clover and white clover, the green leaves of this common plant

have three leaflets of 1 to 3.5 cm in length. The flowers are white to pinkish. They are found in globe-shaped clusters 15 to 20 mm wide. The sweet odour as well as the sweet nectar attract bees and various butterflies. The fruit is a pod of 4 to 5 mm in length containing 3 to 6 dull yellow to orangish brown seeds. d white n plant

White Elm (Ulmus americana)

Also called American elm, soft elm and water elm, the leaves are alternate, simple, about 12 cm long and 6 to 9 cm wide. They have a distinctive unequal base which is the main way to identify them. The upper surface of the leaf is dark green and smooth. The underside is paler green with soft hairs. The veins are prominent with about one vein per cm at the mid-portion of the leaf. The veins rarely fork to become more than 2 smaller veins. The margin is coarsely double-toothed, sometimes described as having teeth on the teeth. This feature is particularly evident on the top margin of the leaf. The petiole is short.

- , spring The flowers and fruit appear before the leaves.
- " autumn The leaves turn a bright yellow in early autumn.

The seed is contained in a fruit which is made up of an oval, thin papery wing, 1.5 cm long, with a deep notched at the tip. The seeds/fruit are borne in clusters and are distributed with the aid of the wing.

The drooping crown of the white elm gives it a vase-shaped appearance, however, since most of the white elms in Altona Forest are either young trees or are growing in close proximity to maples, beech and ash, the shape is very difficult to see. Many of these uncommon trees were destroyed by vandals during the summer of 2000.

If you see any people cutting trees, please call the police immediately at 911. If you see evidence of trees which have been cut down, please call the Conservation Authority at 416 661 6600.

The twigs are distinctively zig-gag in shape.

White elm prefers alluvial flats with moist soil but can be successful in many other types of soil. It is rarely found in pure stands and usually associates with red and silver maple, black ash, sycamore, yellow birch and balsam poplar.

White Pine (Pinus strobus L.)

Although it prefers moist, sandy loam soils, the white pine can grow on dry, sandy locations, rocky ridges and bogs. Many white pines do well in Altona forest even though the ground is full of rocks and is shallow in most places with underlying clay.

They usually reach a height of 30 m high and live to 200 years old. Young trees have a conical shape while mature trees are irregular shaped with a number of strong branches. A beautiful sample of a white pine is at the St. Elizabeth Seton Trail entrance. Trees which you can see growing above the rest of the trees in the forest, are probably white pines.

The mature tree has been described as looking wispy or feathery. Because of this, the white pine has been the subject of many

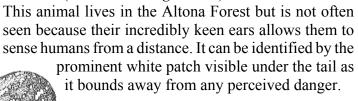


The white pine has distinctive bright bluish-green needles that are 9 to 16 cm long and grow in bundles of five. The needles are soft, flexible, and 3-sided.

Many birds, squirrels, chipmunks and mice feed on the seeds and soft needles. The inner bark provides a winter food for porcupine while deer are often seen browsing the twigs.



Whitetail Deer (Odocoileus virginianus)



Only the males have antlers consisting of a main beam with prongs. The deer of Altona Forest eat fungi, acorns, grass,

herbs and the leaves, bark and twigs of many of the trees. They use the hemlock to shelter during the snows of

winter and wonder out onto the streets of the neighbourhood when they get confused or chased out of the forest.

spring The young, called fawns, are chestnut-coloured with white spots.

summer The body is yellowish brown with a white neck and belly.

winter The body turns gray-brown

At night, they sleep in dry, level, and grassy areas such as the open regeneration area on the north side of the Northeast Loop. A flattened area several feet in diameter is usually an indication of white-tailed deer.

The life span of the deer is 15 to 25 years.

White Trillium (Trillium grandiflorum)

Ontario's provincial flower, this beautiful plant grows in various shady portions of the forest. Visible during the spring, it disappears for much of the other seasons.

Remember, it is against the law to pick or attempt to transplant trilliums in Ontario.

Wild Cucumber (Echinocystis lobata)

The wild cucumber, four-seeded bur cucumber or balsam-apple, has maple-like leaves which grow on a vine with tendrils.

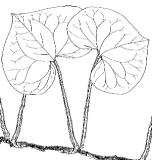
The small white flowers develop into single large (around 6 cm) green, fleshy fruit which is covered with soft prickles or thick hairs. The fruit quickly dries out and becomes a pale beige colour.



ppears for much of

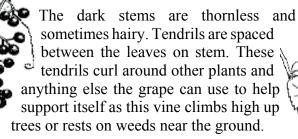
Wild Ginger (Asarum canadense)

This low lying creeping perennial has two heart shaped leaves and one flower each year. The hairy leaves are wider than they are long. The flowers are purplishbrown. The fleshy fruit is 1 to 1.5 cm wide.



Wild Grape (*Vitis* spp.)

The leaves are toothed, roughly heart-shaped, often lobed, alternate and from 6 to 30 cm wide.





The bark is shreddy and peels off in thin strips.

It flowers in May to July. The flowers are green and inconspicious but the fruit is grape-like, purple, or black in colour and hangs in clusters from July to October.

In Altona Forest, the varieties of wild grape grow in many locations on the trails and off including on the Rosebank Tributary bank, in the drier woods and in the sandy soils of the clearings.

Wild grapes have been eaten by humans in jelly, wines, and

preserves, and the leaves are used to wrap rice and meat mixtures while cooking. Most of the song birds of Altona Forest appreciate the grapes and use the thin, peeling bark in their nests. Other animals from the forest that eat wild grapes are skunks, grouse and racoon. Needless to say, the popularity of the fruit means that grape seeds are dispersed by animals far and wind in the forest and outside the forest by birds.



Wild Lettuce (Lactuca spp.)

There are many varieties of wild lettuce and it is difficult to distinguish them easily. This annual, biennial or perennial plant grows up to 2.5 m high. There is a milky liquid contained in the stems and leaves. The leaves are alternate and look much like dandelion. They are deeply lobed, however, the occasional leaf has no lobes. The white, yellow, blue or pink flowers are usually found in cone shaped clusters. The leaf, flower and seeds are eaten by deer and some birds.

Wild Raspberry

Similar to domestic raspberry except the fruit is smaller.

Wild Rose (Rosa spp.)

There are many native varieties of prickly, flowering wild roses. The leaves are compound, with 3-11 leaflets and similar in shape to the garden rose. The flowers are white but can also be red to pink, with 5 petals. They are fragrant and 3 to 12 cm across.

The twigs and stems are red or green and are very thorny. The fruit are the regular fleshy 'hips' which are familiar on cultivated roses.



In Altona Forest, wild roses are found along the banks of the Rosebank Tributary. In some

areas they form a bramble which could be harmful to small children while affording protection for smaller wild animals.

Tradition has it that these wild roses growing along the bank of the small creek were the inspiration for the name of the creek - Rosebank Tributary - and thus the name of the street, Rosebank Road.



The wild rose flowers in June and continue to blossom for most of the summer.

Wild Sunflower (*Helianthus decapetalus*)

The name *Helianthus* comes from the Greek helios, the sun, and anthos, a flower. This flower grows in Altona Forest from June to September and is easily identified when full grown as it soars to a height of 150 cm or higher, with conspicuous daisy-like composite yellow flowers.

The stem branches at the top and is slightly rough near the top but smooth below. The wild sunflower has both smooth and rough leaves which are thin and coarsely toothed.

1st Nations people of Ontario cultivated this plant and used the stalk for textile fibres, the leaves for fodder, the flowers for yellow dye and the seeds for food and oil.

Witch Hazel (Hamamelis virginiana L.)

The alternate leaves of the witch hazel are simple, oval, 12 to 18 cm long and rounded at the tips. The leaf margins are wavy, dark green above, paler beneath. The midrib and primary veins are prominent.

This tree is very unique because the flowers, with & bright yellow strap-shaped petals, appear as the fruit

from the previous year ripens in October or November.

The fruit is a yellowish-brown woody pod holding two shiny black seeds. Ripe pods burst open throwing the seed one to two meters away.



Wood Fern (*Dryopteris carthusiana*) (future edition)

Wood Frog (Rana sylvatica)

Also called the Forest Frog, the very small Wood Frog is common throughout Canada and north to Alaska and

> Labrador. It is a bronze or beige colour with a dark mask extending backward from the eyes. These colourations make it easy to identify. During the mating season the colours may change temporarily to a more camouflaged drab brown or gray. They travel far in Altona Forest frequenting ponds and vernal pools in the early spring. Their mating calls resemble the quaking of ducks.

After breeding they leave the water and do not return to it until the following spring. The female lays clusters of 2000 to 3000 eggs in gelatinous globs under the water and attaches them to submerged branches or other objects. The tadpoles emerge and take from 5 to 12 weeks to fully develop into frogs.

Woodpecker (also see pileated woodpecker and downy woodpecker)

When the drumming of a woodpecker on a tree is heard, you can be sure it is looking for food. Once it has detected the sounds of insects gnawing or moving within the bark or wood, it begins to hammer its beak until a hole is made and its prey attainable. They also save many living trees from serious injury from insects. Trees are not injured by these birds and any holes soon heal. Woodpeckers help trees by removing harmful insects. On Altona Forest trails, you can see a number of old dead trees with many woodpecker holes.

Woodpeckers are built for hammering. Their strong claws grip the tree trunk while the tail feathers are stiff and prop up against the tree holds the bird from falling backwards. The bill is thick and the powerful neck muscles can drive it deep into the bark of a tree. The sticky tongue can extend a great distance into the tree.

They do not sing, but they have a variety of calls. They make their nest in holes in trees, often enlarging and decorating holes with sawdust and wood chips. The male and female generally work together to prepare the nest. In the deep nest lined with sawdust and fine chips, the female lays two to eight white eggs.

Yarrow (Achillea millefolium)

This herbaceous perennial, which grows up to one metre in height, is native to temperate zones worldwide. It grows vigorously in any kind of soil. It is found along the edge of Altona Forest, along the trails and in any area which has been disturbed.

The flowers, which are white, pink, or yellow, are arranged in flat, tight, composite clusters near the top of the plant. The flowers are visible from June to August and, along with the soft, fern-like leaves are a fast way to identify this plant. The alternate, gray-green leaves are aromatic when crushed.

Yarrow was brought to North America by the early colonists, who made a medicinal tea by steeping the leaves in water. The pioneers also dried the flower for decoration and for use as a tea in the colder weather. Another old remedy of a tea of dried yarrow flowers was used to relieve excess menstrual bleeding. It was also used as a tonic against colds and other ailments. Made into an ointment, it was used to help heal wounds. Today, any healing properties, if any, are ignored in favour of its aromatic odour when used in flower arrangements.

CAUTION: Do not use this plant for any medicinal purposes.

The "*Achillea*" in the scientific name come from the famous Greek, Achilles, who is supposed to have discovered yarrow's healing powers. "*millefolium*" means thousand-leaved.

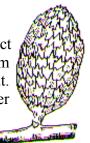
Yellow Birch (Betula alleghaniensis Britt.)

Also called swamp birch, gray birch and silver birch, this tree is relatively rare in southern Ontario but occurs in Altona Forest. The alternate, simple leaves are oblong-ovate to ovate, sharply doubly toothed, 8 - 11 cm long, dull green above, yellow-green beneath. There are 9 or more veins per side each ending in a large tooth.



There are 2 or 3 intervening teeth. Two leaves often appear to originate very near to each other.

The flowers are catkins. Male (pollen) catkins are about 2 cm long and grow to 8 cm long at pollenation. Female (seed) catkins, fruit, are erect on the stem after pollenation and grows up to 5 cm long. Under each scale is a small, winged nut. They ripen in late September and seeds drop over the fall. The catkin axis and some scales often remain on the tree over winter.



The bark, which is one of the best indicators for this tree, is thin, shiny, gold-gray to bronze coloured, eventually peeling into papery strips and reddish brown ragged edged plates on mature trees.

The twigs are slender, yellowish-brown to dark brown. They have a wintergreen odour and taste when scratched or tasted.

Zigzag Goldenrod (see goldenrod)

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<u>Compton's Interactive Encyclopaedia</u> © 1998 The Learning Company, Inc.

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GLOSSARY (future edition)

achene compound leaf drupe simple leaf stomata



There are many other plants and animals which live in Altona Forest which are not listed here. Many will be added in future editions.

ENDNOTES

1. Please note that just because a herb was used in days past for a remedy for some ailment, it does not mean that it is an effective treatment for anything. Please consult a physician before using any of the wild plant old remedies listed in this booklet. 2. There is no clear proof that the boneset can be used in the treatment of malaria. As with all herbal remedies, please consult a physician.

3. The plumage often also contains gray, and red, with touches of purple and dark green in some species.