

**Skä•noñh Center: List and text for signs**  
**Existing plants and plants added to garden**  
Catherine Landis August 1, 2016

**1. Existing plants on Skä•noñh Center grounds**

**Trees**

**red oak *Quercus rubra***

- widely distributed, one of most northerly oaks
- leaves lobed with bristle tips
- acorns relatively large and abundant, take 2 years to mature
- throughout history, acorns served as staple food for peoples all over the world
- acorn remains occur in local archaeological sites; acorn meats part of diet
- must leach tannins (with water) before eating; wood ash (lye) can also draw tannins out
- dried acorns store well, for long periods without spoiling
- oaks are projected to increase in this area due to climate change

**staghorn sumac *Rhus hirta***

- small tree or shrub; found in open, sunny places
- branchlets covered with dense, soft hairs; pinnately compound leaves turn brilliant crimson in autumn
- clonal or colonial; new plants sprout from existing root system
- many birds, mammals eat fruit, thus spreading seeds; eat bark also
- showy, red fruits ripen early August; contain malic acid (sour), and can be soaked in cool (not hot!) water to create a refreshing drink (“sumac lemonade”)
- many medicines from this tree: the “sumac-ade” drink from the red fruits used for fevers; bark has antimicrobial activity; chewing a branchlet releases substances that act against oral bacteria (tooth decay)
- most sumac populations have male and female flowers on separate trees, and only female bear fruit
- sumac fresh white sap (milky latex) used as a sealant; sumac wood used for spiles to tap maple trees for sap

**eastern white pine *Pinus strobus***

- “The primary national symbol of the Haudenosaunee is the Great White Pine (the Great Tree of Peace), which serves throughout the Great Law of Peace as a metaphor for the confederacy. Its branches are said to shelter the people of the confederated nations, and its roots spread to the four directions, inviting other peoples, regardless of race or nationality, to take shelter under the tree” (from *Encyclopedia of the Haudenosaunee*)
- bundles (fascicles) of 5 needles represent the Five Nations when they first united for peace;
- pine needle tea high in vitamin C; prevented scurvy historically; no oranges from Florida back then

- white pines up to 12' in circumference once grew in the Syracuse area
- provides many foods, medicines, products (see Haines, p. 50)

**northern white-cedar *Thuja occidentalis***

- don't confuse this species with eastern red cedar, famous for its reddish fragrant wood and oil
- northern white-cedar swamps were once one of the most important habitats around Onondaga Lake before they were destroyed for salt production, commerce, and urban development
- cedar swamps botanically rich, support many wildlife—deer, wolves, frogs, birds, etc.
- long-lived trees; up to 1500 years!
- wood is rot resistant, and therefore used for longhouse posts, canoe ribs, and (later), fence posts
- important medicine: cedar preparations shown to enhance immune function; phytochemistry is antibacterial, antiviral, antifungal
- wood of choice for friction fire sets: spindles and fireboards for bow drills, fireboards for hand drills
- dried inner bark fibrous, used for soft cordage for clothing, blankets

**green ash *Fraxinus pennsylvanica***

- ash splint baskets were used by the salt industry to drain freshly exposed salt crystals (see photos at Liverpool Library);
- black ash, a wetland tree once common around the lakeshore, important for native basketry
- white ash among best woods for bow making in the eastern US; today, preferred wood for baseball bats
- medicinal uses largely external, for minor skin maladies e.g.
- bark used to make berry buckets—acquire during “peeling season” in spring
- emerald ash borer (EAB; a metallic wood-boring beetle) lethal to all species of ash in the area

**sugar maple *Acer saccharum***

- deeply revered by Haudenosaunee; only tree that has a ceremony
- “The maple tree started the year. Its returning and rising sap to the [Haudenosaunee] was the sign of the Creator’s renewed covenant” (Parker 1968)
- maple sap contains nutrients such as calcium, potassium, manganese, zinc, magnesium
- dominant species of local forests, the official state tree of New York, and the source of beloved and economically valuable maple syrup
- expected to decline markedly in Northeast due to climate change

**red maple**

- bright red flowers and fruit (seeds) & flaming fall foliage make it a popular landscape tree
- abundant species with wide distribution; can grow on dry, disturbed sites as well as in swamps
- may provide important early spring flower for pollinators, especially bees
- medicinal uses from bark—as analgesic, treatment for eye ailments, hives, muscular aches
- many mammals browse sprouting shoots, while birds nest in cavities in this species
- can be tapped for syrup, but only half the sugar content of sugar maple

**butternut, white walnut** *Juglans cinerea*

- more northerly range than the closely related black walnut
- fruit is ovoid, like an elongated walnut; trees produce best in full sun
- important mast species; butternut trees planted around Haudenosaunee villages; nuts store well, high in fat and protein
- a foreign pathogen, butternut canker (*Sirococcus clavigignenti-juglandacearum*) is killing many trees
- medicinal uses similar to black walnut—preparations are anthelmintic, antimicrobial, laxative, sedative

**eastern cottonwood** *Populus deltoides*

- fast-growing, short-lived (up to ~80 years) tree
- adapted to floodplain (riparian) conditions; tolerant of flooding
- male and female plants are separate trees; produces copious amounts of tiny, wind borne seeds
- seed release timed to take advantage of exposed soils following spring floods/highwater
- high value wildlife species for browse, cover, cavity nests, perch sites

**European buckthorn** *Rhamnus cathartica*

- listed as invasive by federal and state agencies
- native to Europe and Asia, brought to US for use as windbreak and ornamental
- perennial shrub or small tree; twigs spine-tipped
- species is dioecious; individual plants are either male or female
- can form dense thickets that crowd out native plant regeneration, due to shade and possibly chemical deterrents (allelopathy)
- seeds viable in seed bank up to 5 years
- black, berry-like fruits have strong laxative (“cathartic”) effect

**Herbaceous plants**

**common reed** *Phragmites australis*

- a giant grass; rapidly spreads by means of underground stems or rhizomes, and above-ground stems known as stolons

- grows in brackish and freshwater marshes; common along highways (such as the Onondaga Lake Parkway) where road salt applied
- once uncommon around Onondaga Lake, although it occurred around Lake Ontario in the nineteenth century
- since the 1960s, area covered by *Phragmites* has exploded
- these “new” reed stands appear to consist of a more vigorous Eurasian variety of *Phragmites*
- there is a native species of common reed (*Phragmites americanus*) that lacks the invasive growth habit of the European version; it occurs sparsely, and mixed with other plants in emergent marshes
- road salt and wetland degradation have contributed to the spread of this salt-tolerant plant
- common reed stolons can grow dozens of feet in a year, and new plants can sprout from mere fragments of stems
- *Phragmites* rhizomes were an important ingredient in a mixture used to soak corn seeds before they were planted (see Waugh 1916; probably the native species was used)
- this “corn medicine” caused the kernels to germinate slightly, added vitality to the seeds and growing plant, and may have helped ward off birds and other seed-eaters once the seed was in the soil

**2. Garden plants we added (some present now, some still need to be planted).** *Selected for ecological, cultural, and historical values*

**narrow and short leaf mountain mints** *Pycnanthemum tenuifolium, P. muticum*

- *Pycnanthemum* species have fragrant foliage and nectar-rich flowers; very popular with butterflies, beetles, bees
- *P. muticum* leaves strongly scented and flavored of mint; can be used to make tea, or sparingly in meats, soups, salads
- indigenous groups used these species to treat headaches, fever, coughs
- crushed leaves repel biting insects

**yellow evening primrose** *Oenothera biennis* (not yet planted 8/1)

- early successional species of roadsides, fields, shorelines
- taproot is edible, and tastes like parsnip; best collected spring or in late summer/fall; avoid eating it when the plant has sent up the aerial stem
- the very young shoots, young leaves, flower buds, and green, immature fruits are also edible
- seeds are also edible, highly nutritious, and have medicinal value (contain linoleic acid) in treating headaches, eczema, chronic pain and arthritis

**common milkweed** *Asclepias syriaca*

- some part of the plant can be eaten over much of the growing season, beginning with the early shoots in spring

- young leaves, flower buds, flowers, and immature fruits (up to ~3 cm long) make excellent vegetables
- practice honorable harvest when taking this plant, the host plant for monarch butterflies and a valuable plant for dozens of pollinator species
- used medicinally to treat warts; apply fresh sap to warts 2x/day for 2 weeks
- stems supply fiber to make supple cordage (though not as strong as dogbane)

#### **little bluestem *Schizachyrium scoparium***

- native, warm season bunchgrasses like little bluestem have been largely replaced by introduced, cool season turf grasses such as perennial rye, tall fescue and Kentucky bluegrass
- deep rooted; root biomass of native, warm season grasses far exceeds that of introduced cool season grasses
- bunchgrass growth form allows for other plants (like wildflowers) to establish and add diversity to meadow settings
- grows best in warm weather (spring & summer); occurred historically in fire-created openings
- drought resistant; wide ranging species
- well adapted to spring and fall fires used by Haudenosaunee, since the plant has stored carbohydrates that aid in recovery; summer fires (during growing season, i.e.) more detrimental to this grass

#### **boneset *Eupatorium perfoliatum***

- belongs to aster family; tall plant of wet, open habitats
- opposite leaves are fused at the base
- plant has many healing benefits, associated with stimulating immune response
- chemistry similar to the popular *Echinacea*, but boneset reportedly possesses 4x the potency to stimulate immune response, compared to *Echinacea*
- used to treat colds, flus, respiratory infections; historically used as antidote against malaria
- very bitter to consume

#### **great blue lobelia *Lobelia siphilitica***

- wetland plant, grows in swamps and wet grounds
- used by indigenous groups as cough medicine; also as anti-divorce remedy, and to treat headaches
- attracts hummingbirds
- named by Linnaeus for its use in treatment of syphilis; according to botanist John Bartram, "the Roots of this Plant cureth the Pox much more perfectly and easily than any mercurial Preparations"-- not surprising given the toxicity of mercury

**Jerusalem artichoke** *Helianthus tuberosus* (not yet planted 8/1)

- common name misleading, since this plant is native to North America (not Jerusalem) and is a sunflower, not artichoke
- knobby roots (or rhizomes, more properly) have crisp texture and unique, nutty flavor; they contain high levels of soluble fiber, along with iron, potassium, and other nutrients
- plant grows vigorously and bears many golden yellow flowers as well as starchy tubers underground
- native to the central parts of North America, it grew in wet prairies and damp woods; spread by people, and along disturbed portions of floodplains
- range probably extended by native people who valued it as a crop
- tubers best gathered in the spring (when they are sweetest) and fall, after stalks die
- noted by the earliest explorers to North America and were soon adopted by Europeans.
- grew frequently in native cornfields on flat lands along streams

**wild bergamot** *Monarda fistulosa*

- hawk moths, hummingbirds, and long-tongued bumblebees visit the flowers for nectar; flowers bloom June to September
- Haudenosaunee used the plant for tea; bergamot has long list of medicinal uses ranging from treatment for skin ailments, colds, headaches and abdominal pain
- found in upland woods, thickets, prairies; drier habitats than its close relative bee balm (*Monarda didyma*)

**nodding onion** *Allium cernuum*

- listed as Threatened in NYS
- prefers full or partial sun, unlike its forest-dwelling relative *Allium tricoccum* or wild leeks
- occurs on dry rocky slopes, barrens, bluffs, edges of woodlands
- flowers mainly visited by bees, for pollen and nectar
- long history of use among native people across North America

**Culver's root** *Veronicastrum virginicum*

- listed as Threatened in NYS
- moist to wet meadows and prairies; roadsides, openings
- native groups used for a "multitude of medicines" – as an analgesic, cathartic (laxative), emetic (induces vomiting), treatment for coughs
- unique flowering stalk attracts long and short tongue bees, bumblebees, mason bees, masked bees, spicid wasps, syrphid flies, and other visitors

golden alexanders *Zizia aurea*

groundnut *Apios americana*

purslane

sweetgrass

dogbane

### **Other plants at Skä•noñh Center**

sycamore

pin oak

“silver” (probably Freeman’s) maple

Austrian pine

boxelder

hawthorne

redbud

black walnut

Siberian elm

tree-of-heaven (*Ailanthus*)

### **Shrubs & vines**

red osier dogwood

black raspberry

wild grapes

juniper (ornamental)

### **Herbaceous**

St. John’s wort

blue-eyed grass

dogbane

garlic mustard

nettles

grasses

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