



TINKER NATURE PARK

Tinker Nature Park is a 68 acre, handicap accessible park. It features a 1.2 mile walking/exercise trail, a 1/2 mile nature trail, and several museums on the property.

In 1994, Henry Hansen made possible the purchase of a log cabin building which became the Hansen Nature Center. In 1998, he provided funds for the building of an addition which more than doubled the Nature Center's size. The nature center features displays on the Natural History of New York and offers classes year round.



plants of
interest

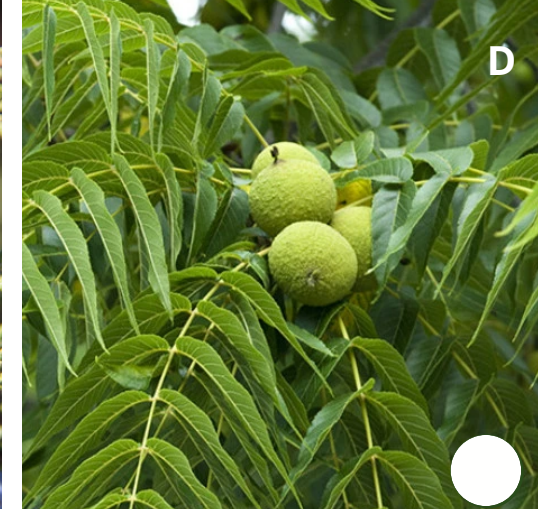
AUGUST
TINKER NATURE PARK





TABLE OF CONTENTS

- Glossary 1
- What is a Fruit 2
- Edible Plants 4
- Useful Plants 6
- Fruiting Trees of Tinker 8



FRUITING TREES OF TINKER

A Northern Spicebush *Lindera benzoin* - single- or few-stemmed, deciduous shrub, 6-12 ft. tall, with glossy leaves and slender branches

B Apple *Malus sp.* - up to 39', with dense crown. Native to North America.

C Juniper *Juniperus sp.* - found across 4 continents in the Northern Hemisphere. Make up the highest elevation treeline in Tibet.

D Black Walnut *Juglans nigra* - native to North America. Prefers riparian zones. Important economic source for early settlers, important food source for wildlife.

E Dwarf Elderberry *Sambucus ebulus* - up to 7', small leggy shrub, treasured for medicinal properties.

F European Buckthorn *Rhamnus cathartica* - Invasive shrub. Up to 25'. Twigs are usually tipped with sharp spine.

G American Beech *Fagus grandifolia* - up to 115'. Important source of food for wildlife. Trees don't produce significant crops until age 40.

H Dogwood *Cornus sp.* - popular for their spring blossoms, the bark was also used during the Civil War to make tea that would treat fevers.



GLOSSARY

Adaptations- special traits animal species develop over time to help the species survive in their environment

Catkin- a string of tiny flowers, usually yellow or green. This type of flower usually spreads its pollen in the wind.

Classification- process of grouping plants and animals according to shared qualities or characteristics into smaller and more specific groups

Deciduous- plants that drop their leaves in autumn

Endocarp- the innermost layer of the pericarp which surrounds a seed in a fruit. It may be membranous (as in apples) or woody (as in the stone of a peach or cherry)

Habitat- area that has the food, water, shelter/cover, and space arranged in a way that meets an animal's needs

Ovary- female reproductive structure of a flower that usually develops into a fruit

Pericarp- the part of a fruit formed from the wall of the ripened ovary


Pistil- receives pollen to fertilize the egg located in ovary

Riparian Zone- habitat along a river's edge.


Samara- A type of fruit that has a papery tissue surrounding the seed to help disperse the seed in the wind. Maple samaras are called "helicopter seeds" in the Northeast US.

Tissue- the combination of cells that perform a similar function


WHAT IS A FRUIT, ANYWAY?

 **Berry**- has many seeds within a skin. Can be encased in a hardened rind (gourds), or a leathery rind (citrus)


- tomato
- cucumber, pumpkin
- orange
- pepper
- blueberry

 **Drupe**- has fleshy fruit and a single seed with a hard endocarp

- peach
- black walnut
- coconut
- olive

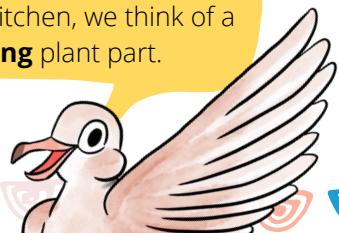
 **Aggregate**- develop from a single flower that had many pistils

- raspberry
- strawberry

 **Multiple**- are created when multiple flowers come together and form a fruit

- pineapple
- fig
- mulberry

An **OLIVE** is a fruit?! Well it is according to botanists! A fruit is the **seed-bearing** structure of a flowering plant. In the kitchen, we think of a fruit as a **sweet-tasting** plant part.



USEFUL PLANTS

A Common St. John's Wort *Hypericum perforatum*

Found in waste areas and open fields. Very common.

Leaves contain antidepressant compounds that regulate levels of dopamine, interleukins, melatonin, monoamine-oxides, and serotonin. **Flowers** are used fresh in olive oil as a treatment for external ulcers, wounds, cuts, and bruises. Flower tea is folk remedy for bladder problems, worms, dysentery, and diarrhea.

B Chicory *Chicorium intybus*

Found along roadsides and in disturbed soils.

Root tea has diuretic and laxative properties. Used for jaundice, skin problems, and fevers. Root extract is a mild sedative and may be used for gallbladder and liver ailments. Root extracts are antibacterial and may lower heart rates.

C White Clover *Trifolium repens*

Found in open fields and on lawns..

Leaf tea used for colds, coughs, and fevers. **Flower** tea used for rheumatism and gout.

D Jewelweed *Trifolium repens*

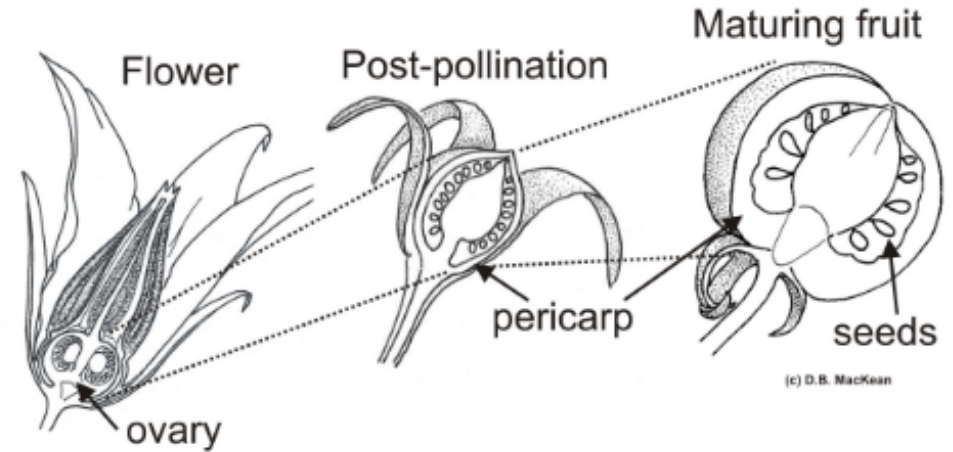
Usually grows in dense stands in moist, shady soils along water. Leaf tea used for colds, coughs, and fevers. Flower tea used for rheumatism and gout.

Crushed leaves in poultice form are a traditional and well-known remedy for poison ivy. Ice cubes made from **leaf tea** are also rubbed topically on rashes. **Juice** from the stem before flowering also used topically on poison ivy rash.

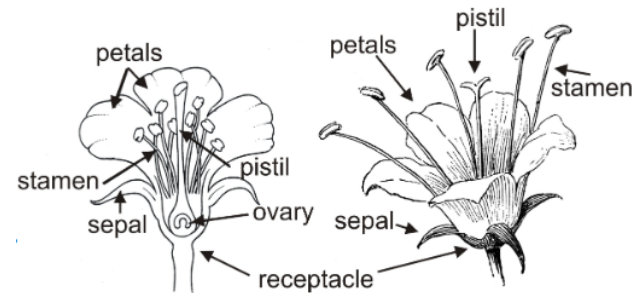


HOW FRUIT IS FORMED

There are so many different varieties of fruit, it's hard to describe the process on one page. Here is a simple diagram of a tomato fruit being formed, which is a type of berry!



POLLINATION!



The fruiting process can't even happen without *pollination!* About **2/3** of our crops depend on insect-pollination to happen. That means an insect carries pollen grains from the **stamen** of one flower to the **pistil** of another flower while they are in search of nectar. That pollen transfer begins the whole fruit making process.



LEAVES, STEMS & BARK



Spruce
Picea spp. To 200 ft. (60 m)
Four-sided needles grow singly around hairy twigs. Eat young shoots, inner bark and use needles to make tea.



Balsam Poplar
Populus balsamifera To 80 ft. (24 m)
Long, drooping flower clusters are succeeded by oval capsules containing cottony seeds. Sap and inner bark are edible.



Maple
Acer spp. To 100 ft. (30 m)
Leaves have coarsely toothed lobes. Fruits are a 2-winged samara. The seeds, sap and inner bark are edible.



Willow
Salix spp. To 60 ft. (18 m)
Most have narrow short-stemmed leaves. Flowers bloom in long, fuzzy clusters. Dried bark and twigs can be boiled to make soothing headache or fever remedy.



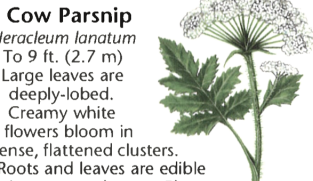
Lamb's Quarters
Chenopodium album
To 6 ft. (1.8 m)
Leaves and stems have a whitish cast. Seeds develop in dense clusters at the junctions of leaves and stems. All parts of plant are edible and are high in vitamins A and C. Seeds can be ground into flour or used whole in soups, stews and baked goods.



Cottonwood
Populus spp. To 100 ft. (30 m)
Leaves are oval to heart-shaped. Flower clusters are succeeded by capsules containing cottony seeds. The inner bark and sap are edible.



Trembling Aspen
Populus tremuloides To 70 ft. (21 m)
Long-stemmed leaves rustle in the slightest breeze. Eat the soft inner bark.



Cow Parsnip
Heraclium lanatum
To 9 ft. (2.7 m)
Large leaves are deeply-lobed. Creamy white flowers bloom in dense, flattened clusters. Roots and leaves are edible in soups and stews. Plant resembles the deadly poisonous water hemlock that lacks large leaves.



White Clover
Trifolium spp. Stems to 12 in. (30 cm)
The common lawn clover, it has rounded, white to red flowerheads and leaves with 3 leaflets. Entire plant is edible raw or cooked. Fresh or dried blossoms can be used to make tea.

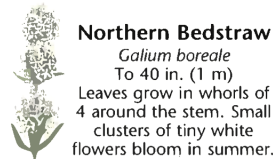


Cattail
Typha spp. To 10 ft. (3 m)
All green parts of this marsh plant are edible. The roots of young plants, called Cossack's asparagus, are the most delectable. Green seed spikes can be prepared and eaten like corn on the cob. Collect pollen by shaking flower heads into a plastic bag and adding water to make a dough.



Watercress
Rorippa nasturtium-aquaticum
To 10 in. (25 cm) above water.
Often appears as a bed of floating plants on slow-moving streams. All parts of plant are edible. Collect from unpolluted water sources.

LEAVES, STEMS & BARK



Northern Bedstraw
Galium boreale
To 40 in. (1 m)
Leaves grow in whorls of 4 around the stem. Small clusters of tiny white flowers bloom in summer.



Common Chickweed
Stellaria media To 8 in. (20 cm)
Sprawling herb has white flowers with 5 deeply cleft petals. Leaves and stems can be prepared like spinach.



Prickly Lettuce
Lactuca serriola
To 5 ft. (1.5 m)
Prickly, scalloped leaves are lance-shaped. Small flowers resemble dandelions. Eat leaves raw or cooked. Older leaves are bitter and should be cooked in 2 changes of water.



Curly Dock
Rumex crispus
To 4 ft. (1.2 m)
Large leaves have curled or wavy edges. Flowers are succeeded by small, heart-shaped, winged seeds. Sour-tasting leaves are a thirst-quenching trail snack and a tasty addition to any dish calling for cooked greens.



Labrador Tea
Ledum groenlandicum
To 30 in. (75 cm)
Leaves have rolled edges and are rust-colored and hairy below. White flowers bloom in large clusters. Use dried leaves in tea.



Thistle
Cirsium spp. To 6 ft. (1.8 m)
Leaves are scalloped and prickly. Leaves can be rendered palatable by boiling in several changes of water. Peeled young stalks are a good raw snack. Thistle seeds can be ground into flour.



Penny Cress
Thlaspi arvense
To 30 in. (75 cm)
Herb has lance-shaped leaves. Flattened fruits are notched at the tip. Cook leaves in 2 changes of water.



Cheeseweed
Malva parviflora
To 3 ft. (90 cm)
Young leaves are good in salads. Flowers have notched petals. Seed clusters resemble small cheese rounds and can be eaten raw or cooked.



Pickerelweed
Pontederia cordata
To 4 ft. (1.2 m)
Aquatic plant has a dense spike of blue flowers. Eat young leafstalks in salads. Egg-shaped fruit capsules contain edible seeds.



Fireweed
Chamerion angustifolium
To 10 ft. (3 m)
Very common in open woodlands. Eat leaves and flowers.

LEAVES, STEMS & BARK



Asparagus
Asparagus officinalis
To 6 ft. (1.8 m)
Erect flowering branchlets (spears) are familiar to most. Slice off young plants near base and they will regrow.



Common Evening Primrose
Oenothera biennis
To 5 ft. (1.5 m)
Lemon-scented, 4-petaled flowers bloom in the evening. Leaves and roots of young plants are palatable if boiled in 2 changes of water.



Common Dandelion
Taraxacum officinale
To 20 in. (50 cm)
The flowers, leaves and roots of this common lawn weed are edible raw or cooked. Flowers are used in wine-making.



Stinging Nettle
Urtica spp. To 10 ft. (3 m)
Plant prickles eject a stinging toxin on contact. Boil or steam leaves for 10 minutes to destroy toxin. Dried leaves can be used in teas and stews.



Pigweed
Amaranthus retroflexus
To 6 ft. (1.8 m)
Coarse herb has leaves that are widest near the base. Flowers bloom in long spikes at the junction of stalks and leaf stems. Seeds are nutritious and make an excellent meal. Leaves can be prepared like spinach.



Common Plantain
Plantago major
To 18 in. (45 cm)
Common lawn weed has edible leaves. Collect seeds from flowering stalks and roast or use in stews and soups.



Violet
Viola spp. To 16 in. (40 cm)
Leaves are typically heart-shaped and slightly toothed. Flower color varies from yellow to purple to white. Leaves and blossoms are a good source of vitamin C.



Mustard
Brassica spp. To 4 ft. (1.2 m)
Leafy plant supports small clusters of yellow flowers. Leaves are good source of vitamins A, B and C and can be eaten raw or cooked. Seeds can be ground and used to make mustard.



Ostrich Fern
Matteucia struthiopteris
To 5 ft. (1.5 m)
Collect coiled 'fiddleheads' in spring and scrape off brown scales. Steam and serve buttered.



Lotus Lily
Nelumbo lutea
Flowers to 10 in. (25 cm) wide.
Aquatic plant's flowers and leaves are supported above the water. Young leaves, stalks and tuberous roots are edible. Harvest seeds from large seed head and boil or roast.



Yellow Pond Lily
Nuphar lutea
Flower to 2.5 in. (6 cm) wide.
Floating aquatic plant has edible fruits and root tubers. Air-dry fruits and eat seeds.