Enhancing the Edibility of Landscapes with Native Species

Presented by Russ Cohen at the 2013 RI Land and Water Conservation Summit

Saturday, March 9, at the URI Memorial Union, Kingston, RI



Flowering Raspberry (*Rubus odoratus*) in bloom



Ripe Butternuts (Juglans cinerea) in their husks

•There has been a burgeoning interest in recent years in <u>restoring</u> <u>native plants to our gardens, yards</u> <u>and landscapes</u> (e.g., as evidenced by the 2010 formation of the group <u>Grow Native Massachusetts</u>).

•This movement got a major boost several years ago from the publication of the book <u>Bringing</u> <u>Nature Home: How Native Plants</u> <u>Sustain Wildlife in our Gardens</u>.

•In Bringing Nature Home, author and University of Delaware Entomology Professor <u>Doug Tallamy</u> makes a compelling case for the <u>key</u> <u>role that native plant species play</u> in supporting our native species of wildlife, particularly insects (such as butterflies and moths), which (in addition to their intrinsic value) serve as a major source of nourishment for nestling birds.

BRINGING NATURE HOME



How Native Plants Sustain Wildlife in Our Gardens

DOUGLAS W. TALLAMY



Volunteers planting native plant species along the banks of the Housatonic River in Great Barrington, MA

A few examples of outreach materials intended to promote and facilitate the planting of native species --

Connecticut Native Tree and Shrub Availability List





Connecticut Department of Environmental Protection Bureau of Natural Resources Wildlife Division

Recommended Native Species for Planting in Lexington, MA

National Wildlife Federation's Community Wildlife Habitat Program

<u>Mass. Coastal Zone Management's</u> <u>Coastal Landscaping with Native Species</u>



Native Plant Site Solutions for Backyard Habitat

A how-to guide for designers and homeowners interested in enhancing wildlife habitat value in urban and suburban areas



THE UNIVERSITY OF RHODE ISLAND OUTREACH CENTER

Excerpt from <u>*Rhode Island Coastal Plant Guide*</u> - while extremely informative and user-friendly, note the lack of an "edible by humans" column

University of Rhode Island

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Rhode Island Coastal Plant Guide

University of Rhode Island ELS Cooperative Extension Education Center

College of the Environment and Life Sciences



Hale

50 of 231 Species	Page 1 🔻 of 3		C	lear F	ilte	r												Help
[Enter all or part of name above to filter list] [Select from dropdown list to filter plant list by attributes]																		
		-	-	+ 💌	•	-	-	•	-	-	-	-	-	-	-	-		
Species	Common Name	Zone	Plant Type			Shade Tolerant	_			Na:Spray Tolerant		Acid Tolerant	pH Adapt	Rain Gardens	Dune Plant	Height	Width	
Alnus incana ssp. rugosa	Speckled Alder	1	Shrub	+	+	+	+	+	+	+	-	+	-	-	-	>10'	6-12'	
Alnus serrulata	Common Alder	1	Shrub	+	+	+	+	+	+	+	-	+	-	-	-	>10'	6-12'	
Amelanchier arborea !	Serviceberry	1	Tree	+	+	+	+	-	+	+	-	+	-	+	-	>10'	15-25'	
Amelanchier canadensis !	Shadbush	1	Shrub	+	+	+	+	+	+	+	+	+	+	+	+	>10'	variabl	le
Amelanchier laevis !	Allegheny Serviceberry	1	Tree	+	+	+	+	-	+	+	+	+	+	+	-	>10'	15-25'	
Amelanchier stolonifera	Running Serviceberry	1	Shrub	+	+	+	+	+	+	+	+	+	+	-	-	2-6'	variabl	e
Ammophila breviligulata	American Beach Grass	1	Grass	+	+	-	+	-	+	+	+	-	-	-	+	2-6'	-	
Andropogon gerardii	Big Bluestem	1	Grass	+	+	-	+	-	+	+	+	-	-	-	-	6-10'	2'	
Andropogon glomeratus	Bushy Bluestem	2	Grass	+	+	-	+	+	-	-	-	-	-	-	-	<2'	-	
Andropogon virginicus	Broomsedge	1	Grass	+	+	-	+	-	+	+	+	+	-	-	-	2-6'	1-2'	
Arctostaphylos uva-urs	i Bearberry	1	Shrub	+	+	+	+	-	+	+	+	+	-	+	-	<2'	variabl	e
Asclepias tuberosa	Butterfly Milkweed	2	Per.	+	+	-	+	-	-	-	-	-	-	+	-	2-6'	2'	
Atriplex sp.	Salt Bush	1	Shrub	+	+	-	+	-	-	+	+	-	-	-	+	<2'	6'	
Baccharis halimifolia	Groundsel-bush	1	Shrub	+	+	-	+	-	+	+	+	+	+	-	-	>10'	5-12'	
Baptisia tinctoria	False Indigo	1	Per.	+	+	-	+	-	+	+	-	-	-	-	-	2-6'	2-3'	
Betula populifolia	Gray Birch	2	Tree	+	+	+	+	+	+	-	-	-	+	-	-	>10'	10-20'	
Carex flaccosperma	Thin Fruit Sedge	2	Grass	+	+	+	+	-	-	-	-	+	+	-	-	<2'	6-12"	
Carex pensylvanica	Pennsylvania Sedge	1	Grass	+	+	+	+	-	+	-	-	+	-	-	-	<2'	6-9"	
Carex platyphylla	Broadleaf Sedge	2	Grass	+	-	+	+	-	+	-	-	+	+	-	-	<2'	10"	
Carex stricta	Tussock Sedge	2	Grass	+	+	+	+	+	-	-	-	+	-	+	-	<2'	1.5-2'	
Carya ovata	Shagbark Hickory	2	Tree	+	+	+	+	-	-	-	-	+	+	-	-	>10'	-	
Ceanothus americanus	New Jersey Tea	2	Shrub	+	+	+	+	-	-	-	-	+	+	-	-	2-6'	3-5'	
Celtis occidentalis	Common Hackberry	2	Tree	+	+	-	+	+	-	-	-	+	+	-	-	>10'	40-60'	

What this presentation is about:

- Extolling the edibility of many of the plant species native to the Northeast, some of which you might want to consider adding to your/ your clients' properties if they aren't already there (NOTE, however, the Precaution on a subsequent slide)
- Expounding on the premise that enabling people to connect to nature via their taste buds helps strengthen their support for land conservation, and that owners/managers of parks, open spaces and other conserved lands might consider edible native species as an opportunity to "spice up" (literally as well as figuratively) their properties and make them more attractive to people as well as wildlife
- Learning that many native species edible by people are directly/indirectly edible/useable by wildlife too, and so planting them enhances wildlife habitat and biodiversity as well as people's enjoyment of open spaces
- In other words, we can have our acorn cake and eat it too



Talking about Wild Carrot on a foraging walk at The Trustees of Reservations' Old Town Hill Reservation in Newbury, MA



Teaching about the edibility of Japanese Knotweed at an Army Corps' flood control project on the Quinebaug River in West Thompson, CT as part of a wild ediblethemed canoe/kayak paddle trip



Talking about Burdock during one of my annual foraging walks at Blue Hill Organic Farm in Lincoln, MA (the land is owned by the Lincoln Land Conservation Trust)



Talking about Curly Dock on a foraging walk at Essex County Greenbelt's Cox Reservation, Essex, MA

What this presentation will not be covering (although these are all worthy topics):

- Foraging for <u>non-native</u> species (many of which are weeds or invasives)
- Growing <u>crops</u> and other agricultural activities on conserved lands
- •<u>How</u> to plant native species (soil testing and preparation, propagation from seeds, cuttings, how to protect young plants from damage by deer, insects, etc.)
- <u>Design</u> of Edible landscapes, edible forest gardens, permaculture, etc.
- Info about the ecological, aesthetic and other attributes of <u>non-</u><u>edible</u> native species suitable for adding to conserved landscapes

• The types of conserved lands I'm focusing on in this talk: <u>parks and open space</u> <u>lands where the natural plant communities have been significantly disrupted and</u> <u>native species diversity reduced through past and/or current human activity</u> (e.g., farming, mowing, land clearing)

Precaution regarding introducing new plants to conserved lands

• If you know or suspect that <u>the property in question contains rare species and/or</u> <u>a relatively pristine and intact native plant community</u>, do <u>not</u> add new plants or seeds to those sensitive, ecologically significant sites

That said --

• If you are restoring a disturbed plant community (through, e.g., the removal of invasive plants), it is OK to reintroduce members of that plant community that are missing, or to enhance the numbers of plants of species that are already there (wintergreen and partridgeberry, e.g.)

• It's also OK to introduce native plants to other highly-disturbed, humaninfluenced sites, such as plantings in gardens and around buildings, parking lots, farms or playing fields

Precaution regarding picking edible plants on conserved properties

• Importance of respecting applicable policies and regulations ("no collecting" policy at Audubon sanctuaries, e.g.)

• Importance of foraging in an environmentally-responsible manner (fruits vs. roots)



In addition, you may want to consult <u>The</u> <u>Vascular Plants of Massachusetts: A</u> <u>County Checklist, First Revision (2011)</u> (a.k.a., the "yellow book") to confirm that a species you want to plant is deemed to be native to the county where your property is located.

Here's an example of what the info inside the yellow book looks like:

Tricolpates	The Vascular Plants of Massachusetts - 2011								
JUGLANDACEAE WALNUT FAMILY	Status	S-Rank	BE FR HS HD WO MI ES SU NO BR PL BA DU NA						
Juglans cinerea L Butternut	WL	S4?							
nigra L Black Walnut		SNA							

See also the MA Natural Heritage Program's info on Natural Plant Communities

Documents like this exist for other states, so it is advisable to consult them as well to be informed about which plant species are considered to be native to which locations (counties, states, regions). Two other resources helpful in figuring out which species are/are not native to your region:

the "Go Botany" website (<u>http://gobotany.newenglandwild.org</u>), set up and maintained by the <u>New England Wild Flower Society</u> (NEWFS); and
the book <u>Flora Novae Angliae</u>, by NEWFS research botanist Arthur Haines.



Now it's finally time to share the delicious details about members of the:

Edible Plant Species Native to the Northeast



Ostrich Fern (<u>Matteuccia</u> <u>struthiopteris</u>) – cooked fiddleheads are edible – note "U"shaped trough in stem, vaseshaped clump and brown papery scales on the curled-up part



Alluvial (silty) floodplain soil – ideal Ostrich Fern habitat



Note vase-shape of unrolled fronds, plus pair of fertile fronds (see arrows)

Marsh Marigold (Cowslip) - <u>Caltha palustris</u> - young leaves are edible after boiling



Sweet Cicely (<u>Osmorhiza longistylis</u>) - entire plant smells/tastes of licorice (especially the root) - this native species likes damp, shady hardwood forests, esp. floodplains - not to be confused with <u>Osmorhiza claytonii</u> (Bland sweet-cicely) or <u>Myrrhis odorata</u> (a non-native species , sometimes planted in herb gardens)



Evening Primrose - <u>Oenothera biennis</u> - has an edible taproot, best gathered between the first + second years of growth (rosette stage)



(Note the pink coloration at the top of the root)



Common Blue Violet, Dooryard Violet, *Viola cucullata*



Black Walnut Cake, decorated with Candied Violet Flowers



Wild Lettuce - Lactuca canadensis



Our native species of Wood Sorrel (*Oxalis montana*) prefers cool, acidic woodlands, and is common in northern New England (esp. in the White Mountains) – the (possibly) non-native Yellow Wood Sorrel (*O. stricta*) is a very common field and garden plant elsewhere



100 % Wild Salad (except for the croutons)



Partridgeberry or Twinberry - Michella repens









Ground Cherry/Husk Tomato (*Physalis heterophylla and other spp.*) - the fruit is <u>always</u> found inside a husk (a.k.a. calyx), unlike poisonous look-alikes



Wild Leek (Ramps) - <u>Allium tricoccum</u>





Commercial harvesting and sale of wild leek (ramp) bulbs, or whole plants dug up with the bulbs attached, on a large-scale basis, is of questionable sustainability, at least in some locations where the plant grows



Photo taken at the Blue Hill at Stone Barns Restaurant, Pocantico Hills, NY

Photo taken in the produce section of the Berkshire Food Co-op, Great Barrington, MA

The good news: Wild Leeks/Ramps can be propagated (e.g., in a stockbed, such as the one at Garden in the Woods pictured below); and if only one leaf/per plant is harvested, and the bulb is left undisturbed, the plants can be harvested sustainably



Bluebead Lily or Corn Lily, *Clintonia borealis*



An Odd Couple: the acid soil- preferring Clintonia (on I.) and the sweetersoil preferring Wild Leek (on r.) found growing together (in western NH).





Indian Cucumber - Medeola virginiana



Small Whorled Pogonia, Isotria medeoloides





Dwarf Ginseng (*Panax trifolium*) - edible part is the round tuber (one per plant, usually 1/3 to 1/2 inch in diameter) - harvest only where abundant



Cat Brier - Smilax rotundifolia







Carrion Flower - *Smilax herbacea*



Steamed Carrion Flower shoots, ready to be folded into an omelet


Pokeweed (*Phytolacca americana*) – Shoots 4-9" high are edible + yummy after being boiled for 7 minutes – note the dried remains of last year's stalk (see arrow), emerging from the ground at the same spot as this year's shoots



Common Milkweed (*Asclepias syriaca*) - the "procrastinating forager's dream food"



Boiled Milkweed Flower buds - ready to eat as is or incorporate into other dishes, like Milkweed Egg Puff (see below)





Milkweed pods at the edible stage (up to 1.5 inches long and nice and firm to the touch, not "springy" or "spongy")



Monarchs also munch on Milkweed



Sassafras - *Sassafras albidum*



Sassafras shoots with the root portions peeled (peelings are in the bowl) the peelings are used to make Sassafras tea, Sassafras candy and other "root beer" flavored items



Young Sassafras Leaves at the right stage for making Filé powder



Sassafras leaves can produce some beautiful fall colors



Bayberry (*Myrica pensylvanica*) - its aromatic leaves may be substituted for commercial bay leaves in cooking. While this species is typically associated with sandy, open areas near the coast, it does occur in similar habitats inland (like the edge of sand and gravel pits). Like members of the Pea family (Fabaceae), this plant can produce its own nitrogen



Cattails (*Typha latifolia* and *angustifolia*) – the "Supermarket of the Swamps"







Immature Cattail Bloom Spikes (flowers) - boiled or steamed until tender, they taste like a cross between corn and artichokes



Cattail Heart (see arrow) – tender and tastes like cucumber

Cattails at the right stage for collecting pollen





Processing Cattail Pollen



Cattail Pollen Muffins (A corn muffin recipe, with cattail pollen substituted for some of the corn meal)

Calamus (Sweet Flag) - Acorus calamus



Calamus flower (see arrow) and Calamus shoots, with tender spicy hearts







Wild Rice - Zizania aquatica



Two Edible aquatic plants: Spatterdock (a.k.a., Cow Lily or Yellow Pond Lily), Nuphar variegata, and White or Fragrant Water Lily, Nymphaea odorata Arrowhead/Wapato (*Sagittaria latifolia*) – has edible tubers – note veining on the leaf radiates from a single point (helps distinguish the plant from Arrow Arum/Tuckahoe)





American Lotus - Nelumbo lutea



Nelumbo lutea, American lotus





Nelumbo lutea, American lotus







Two pretty native species with similar (wet meadow, pond/rivershore) habitat preferences:



Basswood (*Tilia americana*) – the young leaves from all *Tilia* species are edible raw, and the fresh or dried flowers make a pleasant-tasting tea with multiple medicinal properties



Juneberry/Shadbush/Serviceberry, *Amelanchier spp. -* an early-blossoming tree (a week or two before apples/crabapples) - flowering time is also a good time to spot (and remember) the trees for later fruit-picking opportunities



Juneberry (Shadbush/Serviceberry) - *Amelanchier canadensis* and other species - fruit is purple when ripe and tastes like a cross between a cherry and an almond





One of the fun (and yummy) items to make from Beach Plums, Juneberries and other wild fruit struedel Flowering Raspberry (*Rubus odoratus*) – an attractive, thornless bramble – Has flavorful fruit (though a bit on the dry side)



Flowering Raspberry fruit - the pulp on the ripe fruit (see arrows) is thin and a bit on the dry side, but has a decent flavor and can be eaten raw or used in cooking



Black Raspberry (*Rubus occidentalis*) - not a showy flower, but tastier fruit, and its purplish-colored canes add "off-season" interest to the landscape



Jewelweed (*Impatiens capensis* (*biflora*) and *pallida*) - the edible portions are the seeds inside the pods (see arrows), which explode when ripe (hence the plant's other name, "Touch-me-not"). Although an annual, it propagates and regrows readily from seed, and likes moist places away from full sun

One fun way to use Jewelweed seeds (if you have the patience)



Black Huckleberries (*Gaylussacia baccata*)



Blue Huckleberry or Dangleberry (Gaylussacia frondosa) prefers slightly damper habitat than the Black Huckleberry - the plants also tend to be somewhat taller and the fruit ripens 2-3 weeks later



Common or Black Elderberry (Sambucus canadensis), at (edible) blossom stage


Two examples of commercial beverages flavored with wild-harvested Elderberry blossoms:



A nonalcoholic version from New Zealand, where the plants are non-native (left), and a liqueur made with the native (to Europe) Sambucus nigra flowers, gathered from the foothills of the French Alps (right)



Elderberry (Sambucus canadensis) - ripe fruit is edible after cooking or drying



May Apple (*Podophyllum peltatum*) - fully ripe fruit (early August) is edible and delicious raw and made into marmalade sorbet, chiffon pie and other desserts





May Apple flowers (and, eventually, fruit) are located in the crotch between the double-branched stalks (see arrow)



Also - Pawpaws (Asimina triloba) and Persimmons (Diospyros virginiana), native to Zones 7 or higher, will grow in warmer and/or sheltered microclimates further north

Persimmon (Diospyros virginiana)



Sweet Fern (*Comptonia peregrina*) – not a true fern, but related to Bayberry (and shares its aromatic nature and tolerance of poor soils, due to its roots' ability to fix nitrogen) – one of the native species the American Colonists turned to to make tea from during the Revolutionary War era – the seeds inside the burrs (see arrows) are also edible



Sweet Goldenrod (*Solidago odora*) – the leaves and flowers have a licorice-like flavor – also one of the "Revolutionary tea" plants





Spicebush (*Lindera benzoin*) - yet another of the "Revolutionary tea" plants - the dried berries make a fine Szechuan Pepper-like substitute -

Migrating birds like these high-energy berries, though, so be sure to leave some on the plant

Spicebush likes to grow as an understory plant in hardwood forests, often near streams Spicebush (along with Sassafras) also serves a host plant for the coollooking <u>Spicebush Swallowtail</u> caterpillar (i.e., another reason why you might want to consider adding this species to your property if it isn't already there)





Hog Peanut (*Amphicarpa bracteata*) - this delicate, prostrate vine likes to grow in damp areas in the woods with dappled sunlight - the main edible portion are the small subterranean "peas" the plant uses for food storage these are available from September onwards





Black Cherry (*Prunus serotina*)





Beach Plum - Prunus maritima



Beach Plum – *Prunus maritima*



Beach Plums, gathered many miles inland from the ocean

Beach Pea (Lathyrus japonicus) - tender, green peas inside pods are edible (in moderation)







Beach Pea plants in bloom (above); Ellen shelling Beach Peas (left and below)



Wintergreen (Gaultheria procumbens), also called Teaberry or Checkerberry

Berries are edible yearround, and the leaves can be used for tea (the new, reddishgreen, tender leaves are best for this look for them in late spring)



<u>Black or Sweet Birch (Betula lenta</u>) - can be nibbled or drunk







Black birch trees (indeed, any good-sized tree of any Birch species) can also be tapped for sap, which can be drunk as is or boiled down to make a molasses-like syrup ► ■ Wintergreenflavored "sun tea" made from peeled Black Birch twigs and peelings



Wild Raisin (*Viburnum cassinoides*) – can tolerate drier, rockier soils (still likes sun) – produces pretty clusters of edible fruit (ripe when purple)



Nannyberry (*Viburnum Lentago*) – a shrub that likes damp, meadowy areas – the fruit ripens in September and resembles stewed prunes in flavor and texture





Hobblebush or Moosewood (*Viburnum alnifolium*) - a common understory plant in cool, northern hardwood forests - pretty spring flowers, and fruit with prune, clove-spiced flavor ripe (when black) in late summer





... and Hobblebush leaves can put on quite a colorful show in the fall







Wild Grapes - Riverside and Fox (Concord) Grape, Vitis riparia and V. labrusca

Wild Grape Cheesecake with a Wild Hazelnut Crust and a Wild Grape Glaze



Riverside Grape (*Vitis riparia*) leaves (note smooth, green undersides) at the right stage for stuffing



Stuffed Riverside Grape Leaves



Staghorn Sumac - *Rhus typhina*



Ripe Staghorn Sumac berry clusters, ready to be made into Sumacade



Sumacade (aka "Rhus Juice" or Indian Lemonade) -



Staghorn Sumac produces brilliant autumn plumage



Bog Cranberry - Vaccinium macrocarpon



Ripe Cranberries growing in a "mini-bog" on the slopes of Mount Wachusett



<u>Highbush Cranberry</u> - *Viburnum trilobum* or *americanum* -



NOT Guelder Rose, *V. opulus*, an inedible European import

Highbush cranberry fruits often persist into the winter and can be gathered while snowshoeing or cross-country skiing





<u>Common Hazelnut</u> (*Corylus americana*) - flowers, husks and nuts

female

male




<u>Beaked Hazelnut</u> – Corylus cornuta



Oaks/Acorns (*Quercus alba* and other spp.) - note the rounded lobes on the White Oak leaves on the left, versus the pointy lobes of the other oak leaf, which produces more bitter acorns due to higher tannic acid levels



Fall Harvest Muffins, made with acorn flour





A basketful of freshly-gathered Shagbark Hickory Nuts, still in their husks





Maple Hickory Nut Pie

Thumbprint Cookies: chopped hickory nuts on the outside and wild jelly on the inside



<u>Black Walnut</u> (*Juglans nigra*) - while not technically native to Massachusetts, the species occurs throughout the state, esp. in/near farms and cities



Basket full of Black Walnuts, (mostly) still in their husks



De-husked Black Walnuts, nestled in a bowl made from Black Walnut wood, ready for shelling, separating the nut meats from the shells and eating as is or for use in various recipes





Black Walnut Baklava

<u>Groundnut</u> - *Apios americana*



Groundnut "beans" (left) and tubers (right)



One fun and easy way to cook Groundnuts: slice thinly and then pan fry in oil until golden to make Groundnut Chips







Jerusalem Artichoke (*Helianthus tuberosus*) in flower



Jerusalem Artichoke tubers (note golf ball for scale)



Some examples of programs and projects involving adding edible native plants to the landscape:

- Growing Native (Potomac watershed)
- Beacon Food Forest (Seattle)
- Edible Forest Garden at Roger Williams Park (Providence, RI)
- Revive the Roots/Niantic Gardens (Smithfield, RI)
- Edible Ecosystem Garden, Wellesley College
- Edible Garden at NEWFS's Garden in the Woods, Framingham, MA



The <u>Growing Native</u> project, managed by the <u>Potomac Conservancy</u>, a Marylandbased, watershed-focused land trust, emphasizes the connection between clean water and healthy forested land. Each fall, thousands of volunteers throughout the Potomac River watershed collect native nuts, fruits and seeds, which are donated to state nurseries, and used to restore streamside forests along the Potomac and its tributaries.

Since Growing Native's inception in 2001, nearly 56,000 volunteers have collected more than 164,000 pounds of acorns, black walnuts, and other native hardwood tree and shrub seeds. Many of the targeted species for collection are edible (e.g. Hazelnut, Pawpaw, Persimmon, Spicebush, Black Cherry)



<u>A Coordinator's Guide to</u> <u>Community Seed Collection</u>

<u>News article from the</u> <u>Washington Times about</u> <u>Growing Native</u>



The <u>Beacon Food Forest</u>, a seven-acre edible urban forest garden, being developed on a publicly-owned, grassy site in the Beacon Hill neighborhood of Seattle (will have mostly cultivated food plants instead of native edible species)



Nation's largest public Food Forest takes root on Beacon Hill (Crosscut, 2/16/12)

"Living on Earth" Interview with Beacon Food Forest designer Jenny Pell (3/9/12) Wild Orchard – A Food Forest Grows in Seattle (Mother Nature Network, 3/7/12) A less-publicized (but closer-to-home) example: the <u>Edible Forest Garden at</u> <u>Roger Williams Park</u> in Providence, which will utilize predominantly native edible species (see <u>plant list</u>) - the first phase is being installed in the spring of 2012

The year 2017 — Predominantly native understory thrives while canopy layer grows up!



The year 2042 — American Chestnut, American Persimmon and Paw Paw canopy layer thrives!



See also the <u>URI Outreach Center's Landscape Restoration Program</u>, which focuses on the restoration of native plants (edible and otherwise) and plant communities – see, e.g., <u>Native Plant Site Solutions for Backyard Habitat</u>

What is an Edible Forest Garden?

- Organic plant-based food production system **modeled after a woodland ecosystem**
- Incorporates fruit and nut trees, shrubs, herbs, vines and perennial vegetables that yield 'edibles' for humans and wildlife
- Our best attempt to mimic the architecture and interactions of a natural forest system



The Design Process: OUR GOALS

- Design a system that meets human and wildlife needs through the incorporation of palatable native plants that collectively also provide wildlife habitat
- Establish a plant system that serves as a riparian buffer to mitigate stormwater runoff and impacts on the adjacent Edgewood Lake



Revive the Roots, a grassroots group set up fourteen months ago by six friends from high school, recently entered an agreement with the <u>Smithfield (RI) Land</u> <u>Trust</u> to lease a portion of the historic Mowry Farm, recently donated to the Trust, to establish Niantic Gardens, an organic farm, community garden and a forest garden that will serve as a "permanent food-producing ecosystem".





An example from Massachusetts: the Edible Ecosystem Garden, a project sponsored by the Wellesley College Botanical Gardens, a plant community (designed by Dave Jacke of Dynamics Ecological Design and Keith Zaltzberg of <u>Regenerative Design Group</u>) intended to mimic the properties, principles, patterns and processes of natural ecosystems while producing food and other products useful for humans.



Dave Jacke and Wellesley students, Sophia Liu and Katie Byrnes, prepare for planting.



Edible Garden at NEWFS's Garden in the Woods, Framingham, MA





-- Questions? --

More information on Russ' foraging programs, recipes, book/articles, etc.: <u>http://users.rcn.com/eatwild/sched.htm</u>

Russ Cohen (781) 646-7489 (h) (617) 626-1543 (w) <u>eatwild@rcn.com</u>

