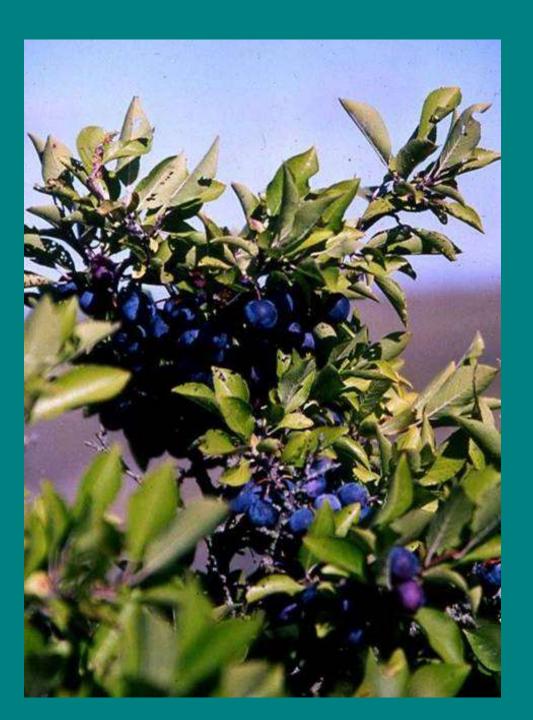


Enhancing the Edibility of Conserved Landscapes with Native Species Presented by Russ Cohen at the <u>2018 Massachusetts Land Conservation</u> <u>Conference</u>, Worcester Technical High School, Worcester, Massachusetts × Saturday, March 24, 2018. <u>PART TWO</u>





Beach Plum - <u>Prunus maritima</u>



Beach Plum – Prunus maritima



Beach Plums, gathered many miles inland from the ocean



Beach Plum (*Prunus maritima*) – the yellow-fleshed variety – collected in Dennis, MA, September, 2015

Some of the Beach Plum pits I had stored in my stratification fridge since having collecting them in September, 2015 "woke up" (i.e., the radicles emerged) in February, so I had to sow them right away. Here they are, about a month later, growing up on a window sill in my basement.



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



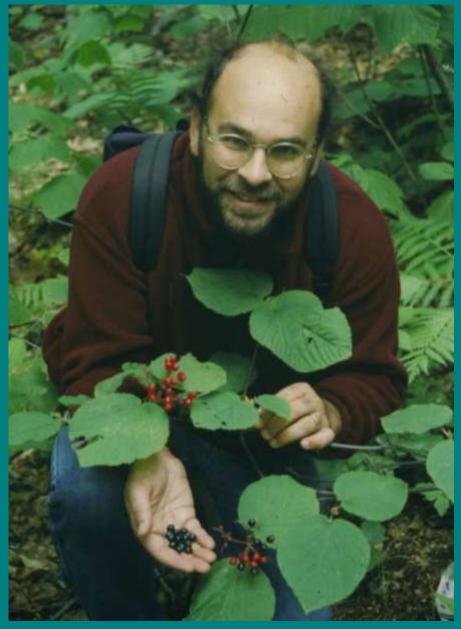
Nannyberry (*Viburnum lentago*) - a shrub that likes damp, meadowy areas - the fruit ripens in September and resembles stewed prunes in flavor and texture





Hobblebush or Moosewood (*Viburnum alnifolium*, aka <u>V. lantanoides</u>) – 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





Staghorn Sumac - Rhus typhina

All red-berried Sumacs native to New England are edible – that includes Smooth Sumac, *Rhus glabra*, and Winged (aka Shining) Sumac, *Rhus copallinum*.



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





<u>To make Sumacade:</u>

- (1) Place berry clusters in a bowl;
- (2) Add 1-2 quarts lukewarm or colder water;
- (3) Knead /rub the berry clusters in the water for 4-
 - 5 minutes (see how the water takes on a pinkishorange color);
- (4) remove and discard the spent berries;
- (5) pour the liquid through a paper towel or equivalent filter; and
- (6) Serve the Sumacade hot or cold, sweetened or unsweetened (I usually serve it cold and sweetened, like lemonade).





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

Staghorn Sumac propagates easily from seed - perhaps too easily. About six years ago, I made the mistake of putting some spent R. *typhina* berries in my compost pile. I am still getting sumac plants sprouting from that seed in my raised beds where I use my "finished" compost. So now I just pot those Sumac babies up, and grow them out for planting elsewhere.



Staghorn Sumac produces brilliant autumn plumage



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



This photo is of a Fox Grape vine laden with ripe fruit, which are often first detected by smell



A basket of Fox Grapes, Vitis 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

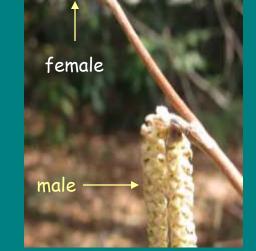


Stuffed Riverside Grape Leaves





Common Hazelnut (*Corylus americanus*) flowers, husks and nuts







The best place I know to find lots of common Hazelnuts: under power lines The best time to gather Hazelnuts: the second week of September, when the nearly-ripe nuts are still on the bushes.

Hazelnut plants often grow in dense thickets, such as the one below.

Beaked Hazelnut - Corylus cornuta

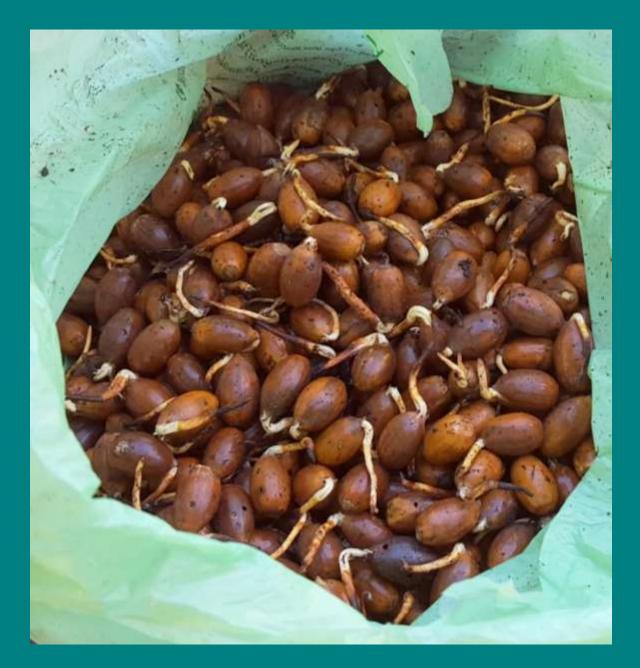


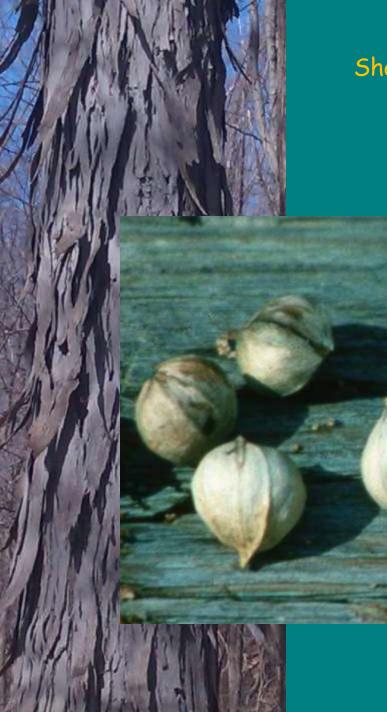
While Hazelnuts (*C. americana* or *cornuta*) readily grow from seed, the nuts are "hydrophilic", meaning they will lose their viability if allowed to dry out. They should be sown outdoors soon after collecting, or may be cold moist stratified for up to a year, or possibly longer, and then sown in the spring. Do not forget to protect sown nuts from rodents. I use a half-inch mesh metal hardware cloth for this purpose; the sprouts can grow through the mesh. Leave the mesh on until the nut has been completely used up by the developing tree.

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



White Oak (Quercus alba) acorns start sprouting soon after falling off the trees in late September, so they can't be stored in a stratification fridge for longer than a month without their radicles rotting. So better to sow them soon after collecting them in the fall, and protect the sown nuts from rodents and other critters.





Shagbark Hickory - Carya ovata

A basketful of freshly-gathered Shagbark Hickory Nuts, some still in their husks, and one still attached to the tree (see photo at right) – and a close-up (below), showing the four-parted husks, the de-husked shells, and a pair of nut meat halves extracted from a shelled nut (note the penny for scale).







Maple Hickory Nut Pie

Examples of three cookie recipes utilizing Shagbark Hickory Nuts:



Thumbprint Cookies, filled with Wild Fruit Jelly (left) Hickory Nut Wafer Cookies (center) Triple Maple Hickory Nut Sandwich Cookies (right) While Shagbark Hickory readily grows from seed (I have been getting about an 80% germination rate on the nuts I have planted), the nuts are "hydrophilic", meaning they will lose their viability if allowed to dry out. They should be sown outdoors soon after collecting, or may be cold moist stratified for up to a year, or possibly longer, and then sown in the spring. Do not forget to protect sown nuts from rodents. I use a half-inch mesh metal hardware cloth for this purpose; the sprouts can grow through the mesh (see below). Leave the mesh on until the nut has been completely used up by the developing tree.



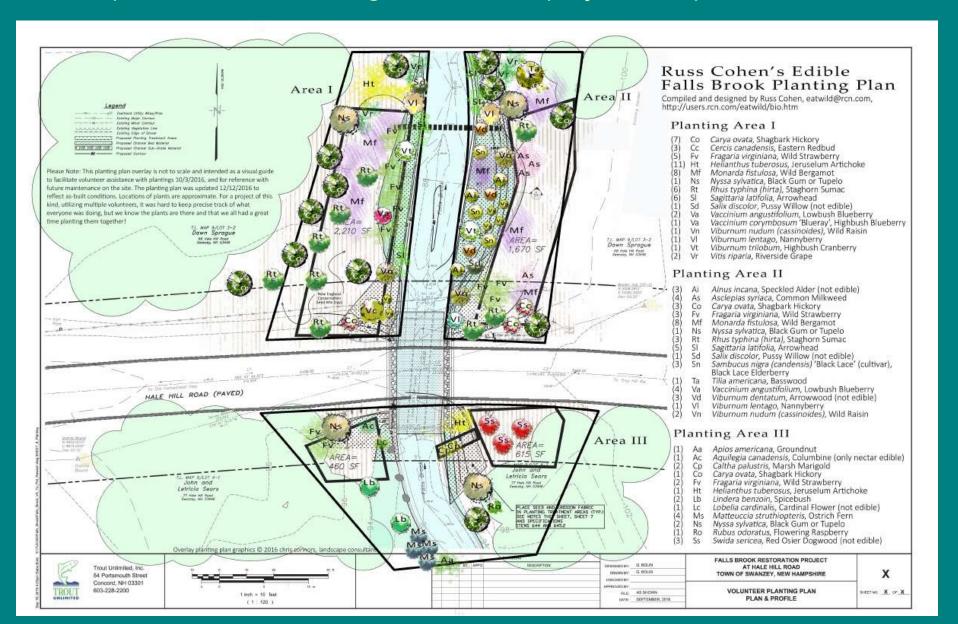
I sow C. ovata nuts in 14"-deep "Treepots", to accommodate the species' notoriously-long taproots. Four of these otherwise very tippy Treepots fit very snugly into a standard milk crate.



C. Ovata nuts begin to sprout within a week after being moved from cold to warm moist stratification. I have also passed along many *C. ovata* nuts to others for them to propagate into trees. In the photo below, Keene State (NH) greenhouse manager Katie Featherston shows off Shagbark Hickory tree seedlings she grew from nuts I supplied her. Some of these trees were later deployed (along with many other edible native species supplied by Katie and myself) to <u>revegetate a site along Falls</u> <u>Brook in Swanzey, NH</u> following a <u>culvert replacement project</u> (see next slide).



"As Planted" Schematic for the Falls Brook Culvert Replacement Project, Swanzey, NH, October 3, 2016, listing and showing the location of the edible native species used in the revegetation of the project area post-construction.



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

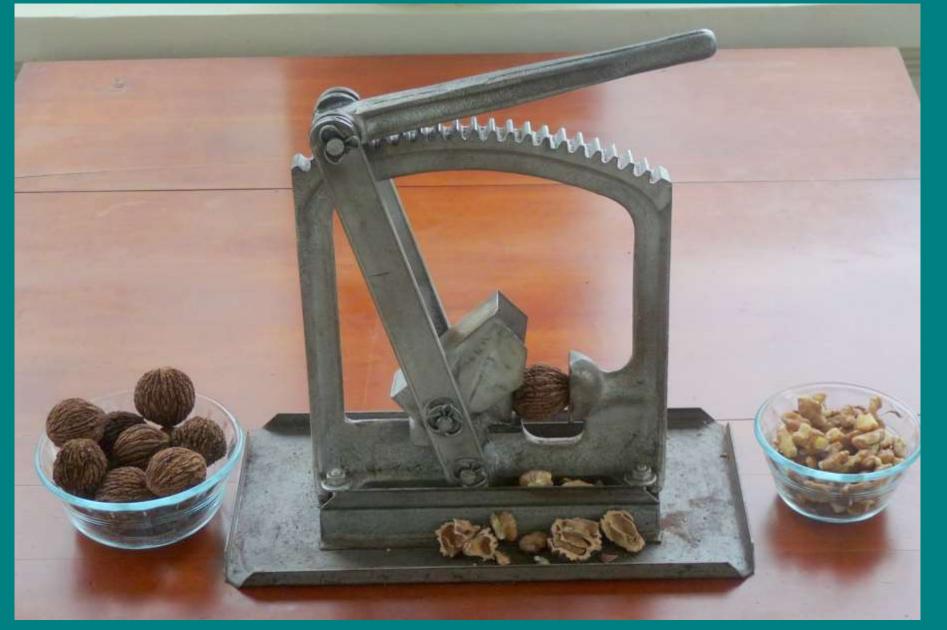


Basket full of Black Walnuts, (mostly) still in their husks



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 shells are notoriously hard to crack open; they will break most conventional nutcrackers. Here's the device I use to open Black Walnuts; you can also use a hammer or vise to get them open.



The assertive, aromatic flavor of Black Walnuts pairs well with honey, as in these desserts: Black Walnut Baklava and Black Walnut Honey Squares



Groundnut - <u>Apios americana</u>



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





A list of some of the places where I have been planting edible native plants in New England over the past couple years:

• Planted Beach Plums on The Trustees of Reservations' Crowninshield Island, Marblehead, MA

• Planted a variety of edible native species along trails and field edges of the Essex National Heritage Area's land holdings on Bakers Island, Salem, MA

• Planted beach plums, persimmons, shagbark hickories, Sassafras and other native edibles along the trails serving the two new AMC/DCR paddler access campsites on the Connecticut River in Whately and Montague, MA

Planted a variety of edible native species at Graylag Cabins, Pittsfield, NH

 Planted a variety of edible native species in conjunction with a Trout Unlimitedcoordinated culvert replacement project on Falls Brook, Swanzey, NH

 Planted Beach Plums, Sweet Goldenrod, Wild Strawberry, Rose Mallow and Milkweed at the Cohasset Conservation Trust's Bassing Beach in Scituate, MA

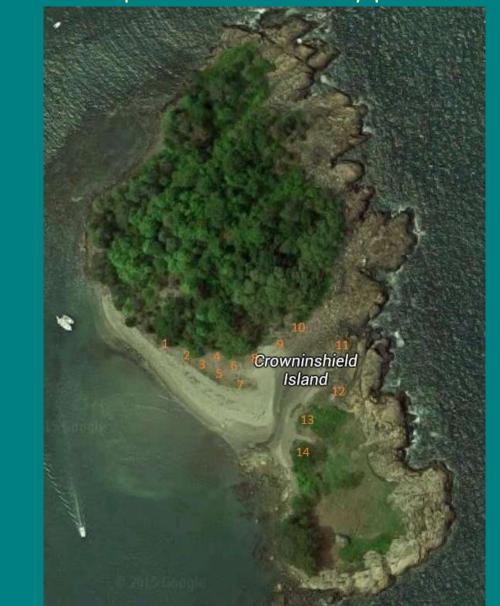
 Planted 10 species of edible natives along the trails and field edges of the Westport Land Conservation Trust's Mill Pond Conservation Area in Westport, MA

• Planted a variety of native edible plants along the trails and field edges of the Essex County Greenbelt Association's Cox Reservation, Essex, MA; and

Planted a variety of edible native plants at the Acton Arboretum, Acton, MA

Planting Beach Plums on Crowninshield (aka Brown's) Island, Marblehead, MA, a 10-acre island owned by The Trustees of Reservations (TTOR). The numbers indicate the approximate location of where the plums were eventually planted.







A <u>reconnaissance trip to the island on 8/28/15</u> revealed several locations which appeared to be suitable habitat for Beach Plums.



After getting the OK from TTOR, I purchased fourteen local ecotype, wildseed-propagated Beach Plum plants from the New England Wild Flower Society, then headed out to the island on November 10 to locate and pre-dig the holes into which the Beach Plums will be planted.





Volunteer Jonathan Gawrys (of SumCo Engineering of Salem, MA) carting out some of the fourteen Beach Plum bushes over to Crowninshield Island across the mud flat at low tide on November 18, 2015



Volunteers from the Marblehead Conservancy planting the Beach Plums, and trimming back invasive buckthorn and bittersweet to help make room for them

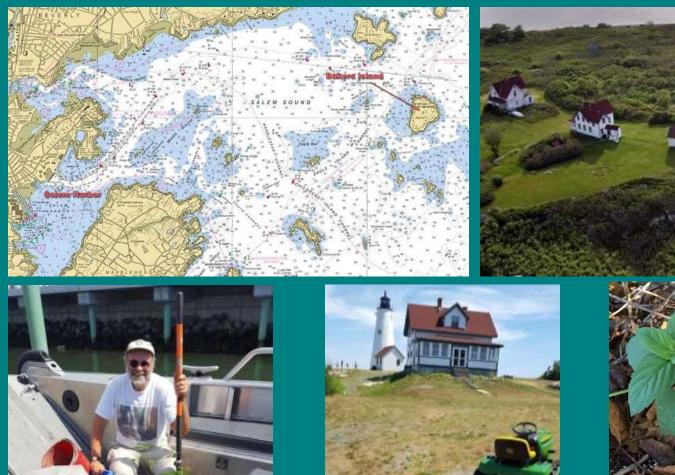


Posing for photo at the end of the planting project (see one of the new beach plum bushes at arrow).

Checking in on one of the beach plum plants the following spring, at blooming time

Summer 2017 update: at least 10 of the original 14 Beach Plum bushes are still alive, and at least six bushes produced fruit.

<u>Planting Edible Native Species on the Essex National Heritage Area's property</u> <u>on Bakers Island</u>, Salem, Summer 2016 and onward





One of the places where Beach Plums I propagated from seed were planted: Bassing Beach, Scituate MA, a barrier beach owned by the Cohasset Conservation Trust. Here I am with volunteers from the Trust, just after a lobster boat had ferried us, the beach plums and other edible native species out to the island.



Kristen Sykes of AMC helping me plant native edibles at a new Connecticut River paddler access campsite in Whately, MA



Connecticut River Paddlers' Trail

is series of access points and primitive campsites along the Connecticut River, spanning from it's source to the ea

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River Photos



Whately Oaks Primitive Campsite

Site Steward: Appalachian Noventain Club

Volunteer adopter: Fran Fortino

Site Description: Features two text platforms and a pricy. Suitable for large groups.

More Infia

Home

No potable water, Register at http://gom.gl/Norms /ND2NcWPOrt.Com021 Competite Rules: Paddle Access Only, No Notorcoed Buets! Two Hight Maximum Stay. First Come, First Served, Ten Person, Four Tent Limit on The Site. Carry In, Carry Out. Foiline Leave No Tace Principles.



Location Whately, MA Make a Donation

Location



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Sara Quintal, of the Buzzards Bay Coalition, with Marsh Marigold (*Caltha palustris*) plants I had provided and she and I had planted in the spring of 2017 at the Coalition's Sawmill property in Acushnet, MA. We planted over a dozen additional edible native species at this property later that year.



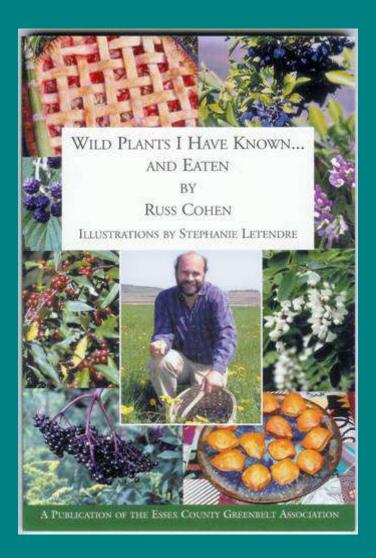


Click <u>here</u> to download <u>Edible Wild Plants Native to the Northeast U.S. and E.</u> <u>Canada</u>, a recently updated compilation of >150 species, that originally accompanied my Native Edible Plants presentation at the 2013 Ecological Landscape Alliance Conference. Below is a sample of the info contained in that document.

Edible Wild Plants Native to the Northeast U.S. and Eastern Canada				Thursday, December 22, 2016 3:38:52 PM	
Compiled an	d Copyrighted © by Rus	ss Cohen, eatwild	@rcn.com <u>http://users.rc</u>	<u>cn.com/eatwild/bio.htm</u>	
Common Name	Botanical Name	Native to MA	Type of plant	Preferred habitat	Comments
Box Elder	Acer negundo	Yes	small to medium tree	wetlands and other damp areas; floodplains	a species of Maple; sap may be tapped + boiled down for syrup
Maple, Red	Acer rubrum	Yes	medium to large tree	red maple swamps (of course)	can be tapped for sap like Sugar Maple
Maple, Silver	Acer saccharinum	Yes	medium to large tree	forested floodplains and other wet ground	can be tapped for sap like Sugar Maple; seeds are edible raw
Maple, Sugar	Acer saccharum	Yes	medium to large tree	hardwood forests; roadsides	sap is source of maple syrup and sugar
Sweet Flag (Calamus)	Acorus americanus	Yes	herbaceous perennial	wet fields and meadows; sunny wetlands; along waterways	the similarly-appearing A. calamus is apparently non-native to MA
Wild Leek (Ramps)	Allium tricoccum	Yes	herbaceous perennial	rich, mesic woods, such as those pref. by maidenhair fern + Dutchman's breeches	over-collecting by commercial diggers is harming ramps + habitat - pick 1 leaf/plant only
Juneberry/Shadbush	Amelanchier spp.	Yes	Shrub/small tree	likes to grow near water, but often planted in parks and other landscaped areas	fruit ripe in late June; flavor is a cross between cherries and almonds
Hog Peanut	Amphicarpaea bracteata	Yes	herbaceous perennial vine	damp spots in woods w/ some sun; often on old woods roads	small subterranean seeds are available from late summer onward; tiny peas may be edible too
Angelica	Angelica atropurpurea	Yes	herbaceous perennial to 6 ft -large spherical flower cluster	wet ground along rivers and streams, in full or partial sun	tender, emerging leaves are edible raw or cooked, young, boiled stems are sometimes candied
Seacoast Angelica	Angelica lucida	Yes	herbaceous perennial	rocky areas near the ocean	tender, emerging leaves are edible raw or cooked

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

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The End O

"Encore" slide

(1) "Man vs. Wild"/Wolfeboro NH story

