Nature Column

Text and photos by Russ Cohen

Editor's Note: We hope this article will whet your appetite for more writings by Russ Cohen... specifically, his new book, Wild Plants I Have Known... and Eaten, *published by Greenbelt this summer. Cohen, one of the region's foremost experts on wild edible plants, has compiled more than 30 years of learning, practicing and teaching about wild foods foraging into this entertaining and informative book. The following article does not come directly from the new book, but it offers a taste of his writing style as well as the type of information to be found there. Greenbelt is very grateful to Russ for all of the time, energy and expertise shared in this book, and for very generously donating all proceeds to Greenbelt to be used towards land conservation efforts. To order a copy, see information on page 3.*

All oak trees produce acorns, and all acorns are edible, however, some acorns are tastier than others. There are around a dozen species of oak trees (*Quercus spp.*) in Massachusetts, about ten of which are known to occur in Essex County. These can be sorted into two basic groups: the so-called "hard" oaks, and the "soft" oaks (the "hard" and "soft" names reputedly relate to the relative hardness of the wood).

The leaves of the "hard" oak species (e.g., Scarlet Oak (*Q. coccinea*), Scrub Oak (*Q. ilicifolia*), Red Oak (*Q. rubra*) and Black Oak (*Q. velutina*), have distinctly pointy lobes, usually tipped with little bristles. In contrast, "soft" oak species such as White Oak (*Q. alba*), Swamp White Oak (*Q. bicolor*) and Chestnut Oak (*Q. prinus*) have leaves with smooth, rounded lobes.

The acorns from the "soft" oak species have a better flavor than those from the "hard" oak species, as the latter tend to be higher in bitter–tasting tannic acid content. Squirrels and other animals that eat acorns know this too; they typically go for the sweeter-tasting "soft" oak acorns first and leave the others for later consumption.

Nevertheless, several of the "hard" oak species are not without virtue from an edibility standpoint as they tend to be the preferred host species for several choice edible mushroom species: the Sulphur Shelf or Chicken mushroom (*Laetiporus sulphureus*), the Hen-of-the-Woods mushroom (*Grifola frondosa*), and the Beefsteak mushrooom (*Fistulina hepatica*).

The Hen-of-the-Woods mushroom is one of several species that prefer to make its home on "hard" oak trees.

Acorns are at the right stage for harvesting in Essex County from mid-September into early October. White Oak is the most common "soft" oak species in Essex County. The most likely places to find a tree with a good nut crop are in and along fields, and along lightly-traveled roads (if there is a neighborhood dog around to intimidate the squirrels, so much the better). It is not necessary to pick the acorns directly off the trees; wait until they fall to the ground (but don't wait too long or the acorns might get wormy and/or moldy).

The rounded leaves of the "soft" oak species (left) as compared to the pointy leaves of the "hard" oak species (at right).

Once you have found some, taste one to judge its flavor, as the acorns' tannic acid content varies from tree to tree as well as from species to species. First remove the shell with a pair of pliers or even your teeth, then bite into the nutmeat. A sweetish, starchy flavor with a slight bitter aftertaste is fine, but an intensely bitter taste indicates that you have found the wrong species of acorn.

Although the sweeter-tasting acorns can be eaten raw, they are usually processed into flour and used for baking. If you are lucky, you can find acorns with a slight-enough bitter aftertaste that they can be ground into flour without any further processing. Usually, however, there is enough bitterness even with acorns from the "soft" oak species that you will want to leach some of the tannic acid out of the nutmeats.

Native Americans used at least two techniques to accomplish this. One way was to place the shelled acorn nutmeats in a basket or other mesh-type container, stick the basket in a stream and let the water flow constantly through the basket for a few days. Another technique was to mix the shelled and ground nutmeats with wood ashes, whose alkalinity helps to neutralize the tannic acid.

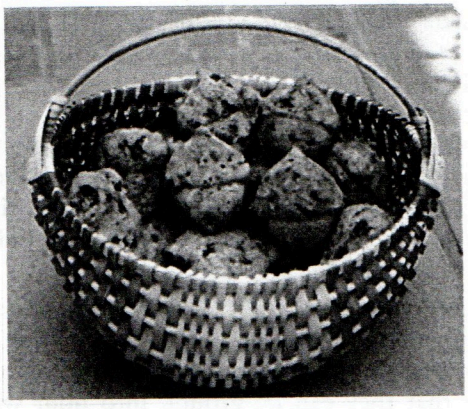
The standard method most folks use today is to get a big pot of water boiling on the stove, drop the shelled nutmeats in and boil for a few minutes until the water turns a coppery color (that's the tannic acid coming out). Pour off the water, and repeat the process. Most books advise to keep boiling the acorns in changes of water until the water stops turning color, but I usually get bored before that stage and go on to the next stage, which is simply to spread the boiled acorn nutmeats out on a cookie tray and then put them in a warm

More info about ***Russ Cohen's schedule of public foraging programs:*** *http://users.rcn.com/eatwild/sched.htm*
More info about ***Wild Plants I Have Known...and Eaten:*** *http://users.rcn.com/eatwild/press_release.htm*
More info about ***Russ Cohen:*** *http://users.rcn.com/eatwild/bio.htm*

oven (around 150º F) for a few hours until the nutmeats are thoroughly dried.

The next step is to throw the dried nutmeats into a food processor and grind them up to a flour- or meal-like consistency. Now you have the raw material for making some delicious and distinctively-flavored muffins, breads, and other baked goods (see recipe below). Any acorn flour you don't use relatively quickly after processing should be stored in your freezer to avoid spoilage.

Nutritionally, acorns are a good food concentrate for wildlife. They are high in fat and carbohydrates and they contain protein, vitamins, calcium, and phosphorus. At least 96 species of wildlife are known to feed on acorns. Among them are deer, squirrels, quail, turkey, ducks (especially mallards and wood ducks), many non-game birds, raccoons, and flying squirrels. Populations of deer and other species reliant on wild nuts tend to fluctuate with the abundance of acorns and similar "mast" crops. Nevertheless, there are typically more than enough acorns around for humans to get their share while leaving plenty behind for wildlife.



Fall Harvest Muffins

Guests at Sunday brunch will be amazed at how good these muffins taste. The delicious and distinctive flavor of the acorn flour will be quite evident in the muffins despite the fact that it makes up only 1/3 of the flour used in this recipe. Although it is OK to substitute store-bought walnuts for the Hickory Nuts used in this recipe, Hickory Nuts are better, and gathering them makes an enjoyable fall foraging activity (see Chapter Eleven of *Wild Plants I Have Known...and Eaten* for the delicious details). Wild cranberries and apples can be substituted for cultivated fruit in this recipe, but as their flavor is more or less the same, it is not necessary unless you are looking for more foraging opportunities.

Dry ingredients:

1 1/3 cup white flour (OK to use corn meal for 1/2 of the flour mixture)

2/3 cup acorn flour (prepared as described above)

2 tsp. baking powder

1/2 cup light brown sugar

3/4 tsp. salt

Wet ingredients:

2 eggs

1 cup milk

1/3 cup melted butter

1/4 cup maple syrup

Fruit and nuts:

1 cup peeled, chopped apples

1 cup sliced raw cranberries

1/2 cup chopped hickory nuts

Preparation:

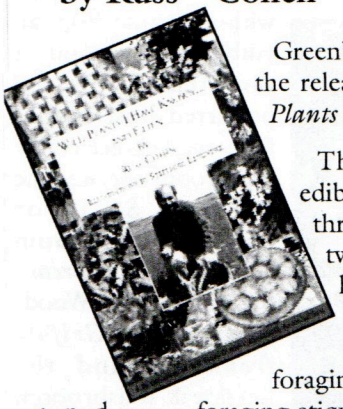
Preheat oven to 400º F. Get well-greased muffin tins ready. Mix dry ingredients together in one bowl; mix wet ingredients together in another bowl (beat eggs before adding); mix dry and wet ingredients together with just a few strokes (do not overmix; lumps are OK), quickly fold in fruit and nuts, then spoon mixture into muffin tins, filling up each compartment about halfway (add water to any surplus compartments to protect the pan and help keep the muffins moist while baking).

Bake at 400º F for 25 minutes. Makes 18 small or 12 large muffins.

New Products and Publications

Wild Plants I Have Known... and Eaten

by Russ Cohen



Greenbelt is very pleased to announce the release of its latest publication, *Wild Plants I Have Known... and Eaten.*

This guidebook highlights wild edible plants that can easily be found throughout Essex County. The first two sections of the book introduce helpful general information about where and when to forage, related conservation issues, foraging with children, safety concerns, and foraging etiquette.

Fourteen wild edibles are featured in Part Three of the book. In Part Four, Cohen includes tasty tidbits of information about 27 more edible species found throughout Essex County.

The book's author, Russ Cohen, is one of the foremost wild edibles experts in New England, and has been foraging and teaching about wild edibles of New England for over 30 years (see page 8 for information on the walk Russ will be leading this September).

All proceeds benefit Greenbelt. To purchase a copy for $15 (plus $2 for shipping) call the office at (978)768-7241 or send a check to ECGA, 82 Eastern Avenue, Essex, MA 01929.