

Art from the Forest: A Guide for Landowners

A Vermont Land Trust publication

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An Invitation

You know your land well. You've gone over maps, walked the boundaries, made management decisions, and ultimately decided to conserve your property with Vermont Land Trust. Perhaps it's been in your family for generations, and you have memories of hauling firewood as a child or snowshoeing through the forest with your own children. Perhaps you've bought it only recently, and are still discovering the best views and favorite spots. You know the strangeness of reconciling the clean, straight property lines on a map with the uneven, colorful realities outside your door. The life inside those simple lines is incredibly complex.

What's growing depends on the interaction of site factors – the patterns of soils, bedrock, water movement, topography, and local climate – and human factors, the history of land use decisions regarding agriculture, timber management, structures, and stewardship. As you walk your property, you undoubtedly associate certain places with certain qualities, based on your interests and history with this



Mittens dyed with goldenrod and black walnut by Susanne Grosjean, bowl turned from American elm by Toby Fulwiler, basket woven from brown ash by Mary Sanipass.

land. For example, maybe you scare up a partridge every time you walk through that old apple orchard behind your house. This guide invites you to see your landscape from a perspective that might be new to you: that of a skilled artisan who uses plants, lichens, or mushrooms to craft beautiful and functional items. The land can not only feed, shelter, and warm us, it can supply materials for creative work.

This guide synthesizes knowledge from master artisans across Vermont, Massachusetts, New Hampshire, and Maine who make baskets and natural dyes using materials they gather locally. Most of these people have been practicing their craft for decades; many are also teachers, passing their knowledge and craft on to the next generations. Use this guide to take a virtual field walk on your property, in spirit with these knowledgeable and creative people. You'll find information about each of them at the end of this guide.

This guide is based around the generalized landscape drawing found on pages 4 and 5. Using this image, we'll follow landscape feature "clues" to take us to places – also known as microsites and niches – that may have some of the special plants, mushrooms, and lichens used by these craftspeople. The guide will help you identify species, but should be used alongside a guidebook such as *Newcomb's Wildflower Guide*, *Peterson's Trees and Shrubs of North America*, or *Audubon's Field Guide to North American Mushrooms* for more positive identification. The main purpose of this guide



is to show you an artisan's way of looking at your landscape, through understanding the species of interest in their surroundings. Compare the landscape and site descriptions here with your knowledge of your own property to learn what parts of your land might have some new possibilities.

If you're interested in learning to make something with the materials you find, working with a local artisan to use materials on your land, or considering how some of these plant, mushroom, and lichen species could be incorporated into your stewardship activities, suggestions and resources are included at the end of the guide.

Gathering tips

If you do decide to work with plants, mushrooms, or lichens from your land, you probably want to make sure they will still grow there in the future. To ensure this, it's always a good idea to consider these gathering principles:

- Tread lightly. You can easily trample plants, compact soils, and disturb wildlife, so be attentive to your impact. Gathering when the ground is wet or along stream banks causes more damage than gathering in dry areas. If appropriate, enter your harvest site from one place, and work uphill.
- To minimize unnecessary waste, be sure you've identified the plant, mushroom, or lichen appropriately, and that you have a specific use planned for it.
- Don't clean out an area; most gatherers don't harvest more than 10-50% of the material in a particular spot.
- Adapt your approach to the species you are harvesting material from. Removing an entire plant or the roots is more disruptive than taking berries or twigs, so just take what you need. Harvest practices often require specialized knowledge, seasons, and conditions in order to maintain the

health of the individual plant, its population, and the ecosystem of which it is a part, as well as to obtain appropriate material for use.

- Happy gathering!

Nature imitates art?

The word "landscape" has historically described a vista that has been filtered through the human eye and brain, rather than objectively describing an area of land. The word entered English from the Dutch "landschap", a painter's term, in 1598, and was used exclusively to refer to paintings for decades before being employed simply to describe a place. What 'frames' do you put around the landscapes around you? How do these human-created outlines shape your decisions about land?

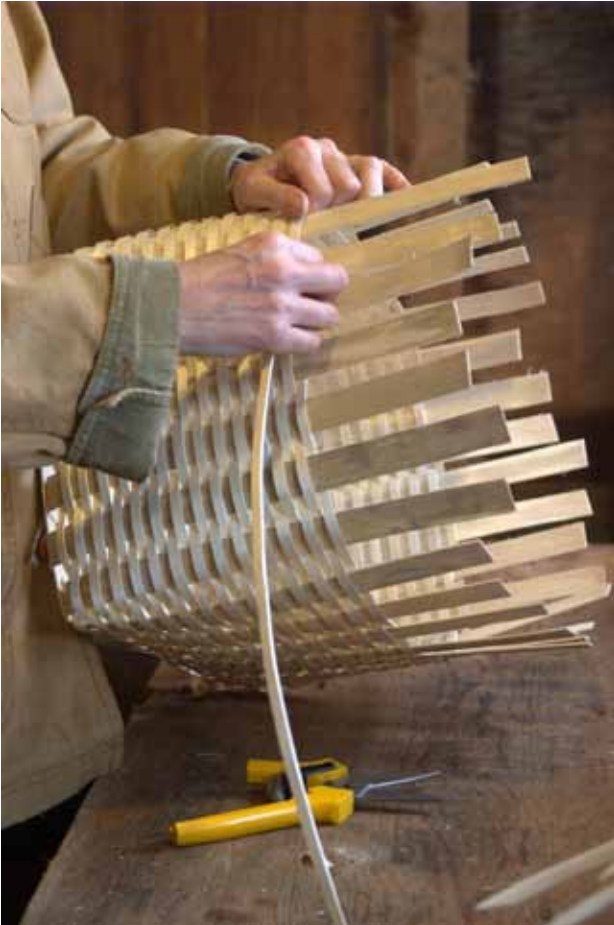
Image credit:

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Below, from top: *Gathering birch bark from a fallen tree; Mushroom-dyed wool by Anne Williams; Antique birch bark container from Judy Dow's collection.*



Above, from top: *Natural-dyed textiles by Kate Smith; Sue Carpenter weaving black ash; Black ash pie basket by Barbara Carpenter.*

Black ash photos by Sylvia Ferry Smith.

Decoding a Landscape

Experienced gatherers use landscape features as clues to lead them to the plants, mushrooms, and lichens they seek. Here's how they might 'read' this Vermont scene.

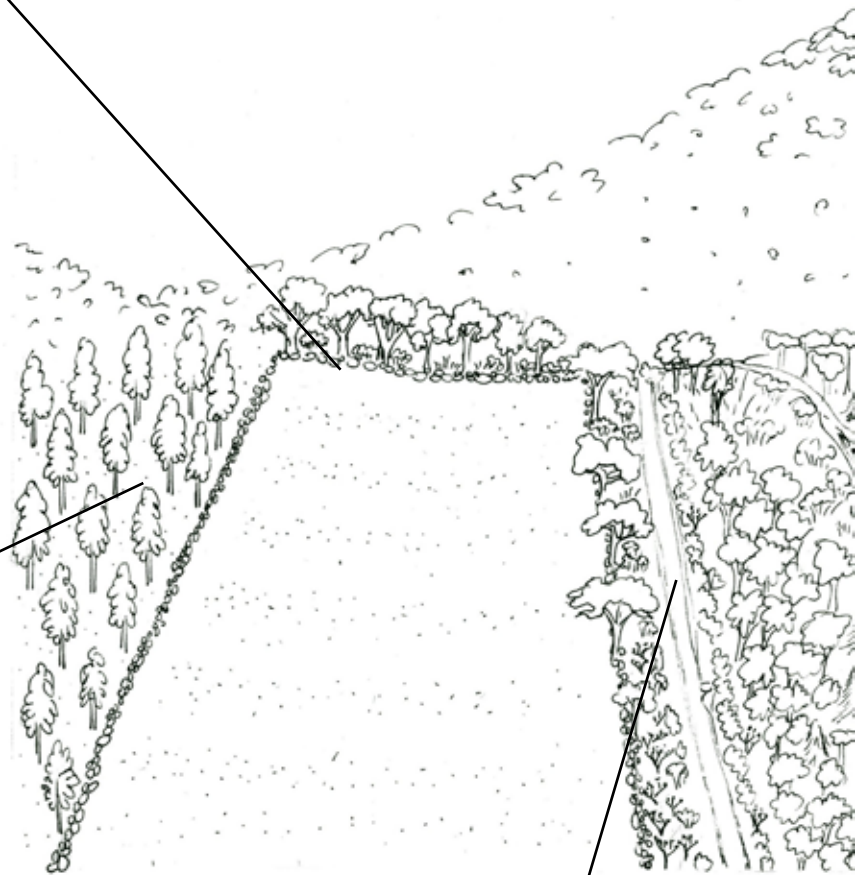
Stone walls attract small mammals, who cache nuts and seeds for the winter in spaces between rocks. Some of the food that doesn't get eaten grows into butternut, basswood, or black walnut trees. Since black walnut, whose nut hulls produce a prized brown dye, doesn't grow naturally in forests in much of Vermont, the trees you find are likely to be near human habitation. American elms sometimes grow along stone walls or from rock piles in the middle of old fields. **Page 19**

Open, light forest floors under oaks and pines, carpeted with needles, leaves, and lowbush blueberry plants, can host the surprise webcap mushroom. Its brown cap hides red gills, which hint at the dye it produces. The dyer's polypore mushroom, known for its yellow pigments, grows from decaying logs or stumps, as well as living roots of pine and other conifer trees. **Page 15**

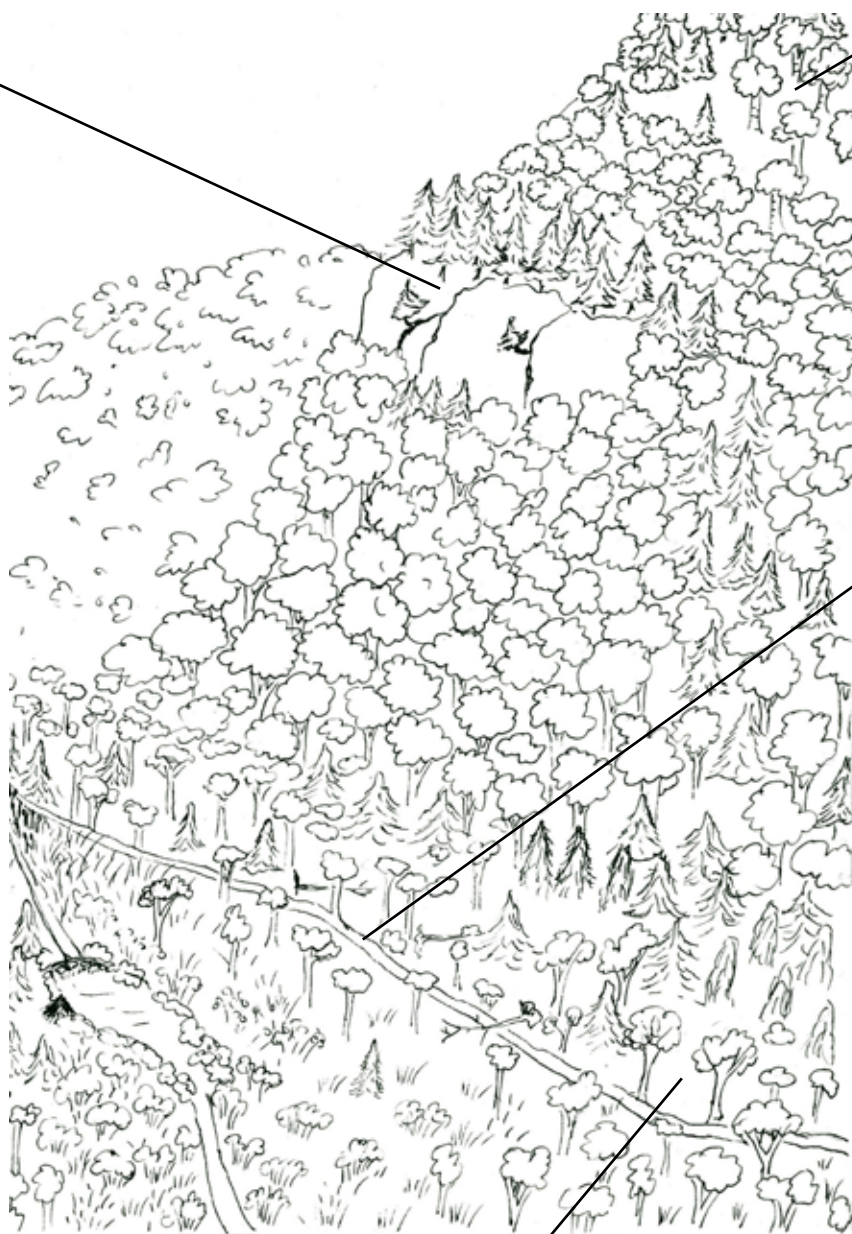
Woods roads, forest gaps, and hedges can contain a variety of shrubs that yield lovely dyes. Berries from nannyberry, highbush cranberry, elderberry, Virginia creeper, and the fuzzy bark from staghorn sumac produce a range of colors. Elderberry, highbush cranberry, and staghorn sumac are also edible. **Page 17**

Rocky cliffs and slopes

often have large amounts of *Umbilicaria* and *Lasallia* lichens, which have been used for centuries to produce beautiful purple dyes. Cliffs can be picked out of a far-off hillside because the vegetation on top of them is often different from the bottom. From a distance, look for horizontal bands of evergreen trees, with hardwood trees below. Slopes below cliffs often have soil high in nutrients, which can support trees like butternut, whose nuts produce a golden brown dye, and American basswood. **Page 11**



Cool slopes and hollows that face north or east, where you feel a little chill no matter the season, may be covered with brilliant white-barked paper birch trees at higher elevations, pointy, sharp-needed red spruce trees, and tiny three-leaved goldthread. Abenaki Indians use paper birch to make elegant one-piece baskets that are sewn together with spruce roots, and prefer the birch trees that grow on mountain slopes. Goldthread's namesake root is used for a yellow dye, and is also a powerful medicinal plant. **Page 12**



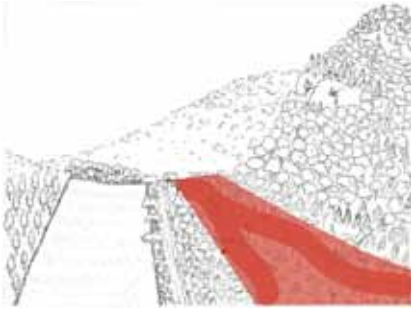
Streams are watery trails leading through variable habitat. Follow one and you'll pass through sunny and dark areas, steep slopes and broad floodplains, rocks and sand, twists and turns and a diverse array of plants that grow in each of these specialized niches. *Wet meadows* and the edges of *open wetlands* probably contain willow and dogwood shrubs, used by cultures throughout the world to create strong, beautiful baskets.

Look across fields for lines of person-height vegetation that may be sheltering a stream, or sprawling clumps of shrubs along old beaver meadows. Goldenrods, also found in these places, can produce all shades of yellow dye. Bark taken from dead American elm trees is a flexible, leathery basket material, while the inner bark of American basswood is woven into baskets. *Mosy streambanks* that are continually wet might yield the tiny bloodred webcap mushroom which can dye wool red or pink. **Page 6**

Forested wetlands or swamps at the base of slopes, or near springs, seeps, and streams, may contain the black ash tree, whose growth rings are separated and woven into baskets. **Page 9**



Streams



Streams and rivers inscribe themselves in topography, predictably finding the lowest hollows and connecting landscape features like words in a sentence. They carve out deep channels and pools below rocky drops and culverts, or meander slowly across broad floodplains, depositing fine, nutrient-rich sediments in different places each year. As you follow a stream, observe its variation in width, shape, and speed, and the accompanying differences in sunlight, plants, and temperature throughout the seasons. If the stream passes through or near an open wetland such as a cattail marsh or beaver pond, or even a field with a soggy lower corner, look around the sunny edges for shrubs like willow or red osier dogwood. If it's more of a river than a stream, these shrubs may grow right along its sunnier banks or on islands in the middle. Drier, sunny spots could be full of Canada goldenrod and other goldenrods, which flower in late summer and early fall. American elm roots often stabilize streambanks and ditches, and the rich, moist soil of floodplains can host this tree as well as American basswood, butternut, and black

ash. Mossy, rocky banks line cooler, darker sections of streams that run through coniferous forests. In late summer, look closely in small mossy hollows made by roots and rocks, and you may spot a brilliantly colored bloodred webcap mushroom.

Willow and Red osier dogwood

Salix sp. and *Cornus sericea*

“What could be simpler? Twigs twisted so they stay together.” –Tom Cady

Both European and Native American artisans follow long traditions of weaving the flexible, strong shoots of willow and the garnet-hued stems of red osier dogwood into baskets. Most of the 23 native willow species in Vermont have thin, pointy leaves and distinctive “pussywillow” catkins in spring. As they are difficult to identify to species, basketmakers use many varieties. Red osier dogwood, like most dogwoods, has smooth-edged, rounded leaves that are opposite on the stem and whose veins trace the side of the leaf instead of ending at the edge. Another way to tell if you've got a dogwood leaf is to gently tear it in half down the midvein; if it's a dogwood, the elastic side veins will keep the two sides from completely separating.

A single plant can supply

basket material for generations, but only the current year's straight shoots will work. The bigger the root system, the longer the shoots will grow in a year. These realities mean that careful basketmakers often manage willow and dogwood by pruning back some of the stems each spring and weaving them into baskets right away while they are still pliable. Without pruning, the plant will grow into a twisty, branching shrub and ultimately a small tree. These plants have a useful property: every bud can sprout roots and shoots in the right conditions. Basketmakers have long known this, and many ensure future supplies of willow by planting shoots, tips, and even baskets when they gather this plant. Conservationists plant stems of both these shrubs along streambanks to trap sediment and minimize erosion into the water.

“The willow, that's the whole purpose of it, is to cut it down so you have one year's growth. Then you have no twigs, you have no splits, you have it straight. That's why



From left: *Willow catkins and leaves, Red osier dogwood.*

you go back to the same places, that's why you don't tell your place." –Judy Dow

"Traditionally you would make two [willow baskets] and bury one, to replenish what you took. It grows, each one of these little buds will grow." –Judy Dow

"If you can't tie it in a knot, you can't weave it into a basket." –Tom Cady

"I throw my [willow] scraps in a brook, that's how willows got spread around so much." –Tom Cady

Canada goldenrod or common goldenrod

Solidago canadensis

The brilliant yellow color of this plant's flowers translates, under the hand and eye of a skillful dyer, into beautifully-hued wool. Increasing the concentration of the dye with more plant material means deeper, more intense colors, while selecting only certain parts of the plant, such as the flower heads, will shift the colors. Susanne Grosjean boils goldenrod with alum, a nontoxic chemical also known as a mordant, that helps the pigment adhere to the yarn, and often overdyes that wool with blues to get a variety of greens.

"I use the whole plant, not the root. The flowers will give you very clear yellows, the leaves will give greener tanner yellows. And I use the whole plant because I figured, well then I don't have to pick so much, in fact I was finding that 2 stalks will dye a pound of wool."

–Susanne Grosjean

American basswood

Tilia americana

Its heart-shaped, asymmetrical, serrated dark green leaves and sweet-smelling flowers give it away in summer, while winter wanderers can recognize basswood by its large buds and blocky, often deeply-furrowed bark. Basswood flowers have a high sugar content and are good nectar sources for pollinators and honey production – some people call them "bee trees." The Abenaki and neighboring tribes traditionally twist the fibrous inner bark of this tree into cordage, basketry, and weaving material. Judy Dow prefers bark from younger trees with smoother bark, as it is easier to remove. A small cut is made at the bottom of a tree and a strip of bark is pulled upward; trees can recover well from this small wound. Then bark must be soaked in order to separate the fibers. Harvesting basswood bark from trees that have fallen in rivers eliminates part of the soaking time and utilizes already-dead trees.

"There's this 2-week window when you can harvest basswood, it's like May-ish, and what happens at the same time is the high water is bringing it all downstream and it washes up on the banks." –Judy Dow

"It's not the size so much as the feel of the bark. The smoother, the better, the easier." –Judy Dow

American elm

Ulmus americana

The graceful vase shape of mature American elm trees is becoming rarer, as trees continue to succumb to Dutch elm disease. This disease is caused by a fungus often carried by a beetle and can be spread to neighboring trees through the soil. Such pathology virtually eliminated the neat rows lining Elm Streets in towns throughout Vermont and nearly all of eastern North America, but large American elms are still seen isolated in the middle of fields or along roadsides. A fast colonizer of rich, moist soils along sunny streambanks, small elms are common in these places, though few trees will survive to maturity. Elms have furrowed, corky bark and asymmetrical, sharp-toothed, fuzzy leaves. When elms are about to die or need to be removed for another reason, their inner bark can be harvested for a unique basket material. Harvesting can only occur in early spring when the sap is running. JoAnn and Steve Catsos cut the pale bark into strips, coil it, and store it. When ready for use, a dip in water causes these dry coils both to soften into a leathery texture and darken in color. Repeated soaks turn it a rich dark brown.

"We wait until the bugs are in them so we know they are not long for this world, and we get permission. They start to flag...on the very top, you can see the holes; the bugs infest from the top down. We cut the tree down and elm makes pretty good firewood, so we buck it up and leave it for firewood for the owner." –JoAnn Kelly Catsos





Above, from left: *American basswood*, *American elm*.



Left: *Elm bark*.

vibrant colors are possible using household materials as mordants or by simply making the dye in an iron pot. This mushroom is exceptionally high in pigment, requiring about 2/3 mushroom weight to wool weight. Many other natural dye materials require a 1:1 weight ratio or higher.

"It's moss, there should be a certain wetness. You shouldn't be getting your feet wet, but in a place where the moss is kind of luxurious...I think it's a moisture thing, proximity to water...every time I've found [Cortinarius sanguineus] it's been near flowing water." –Karen Wittshirk



Bloodred webcap mushroom.
Photo: Jose Manuel Lekuona

Bloodred webcap mushroom

Cortinarius sanguineus

Beginning in late summer and continuing through the fall, *Cortinarius sanguineus*, the bloodred webcap mushroom, pokes its red, knobby cap through damp mosses at cool, shady stream edges. Karen Wittshirk describes these places, often under the silvery shade of hemlocks, as "luminous." The cap, gills, and stalk of this small (up to 3" wide) mushroom are all a deep red, and the cap often has a distinctive knob in the center. Though poisonous to eat, *Cortinarius sanguineus* is safe to handle for dyes. Its pigments are similar to those in madder, giving a range of reds and pinks. As with many dye materials, the color depends on the mordant used. Mordants are chemicals, often metals, that help the pigment molecules adhere to wool fibers. Deep,

Growing dye plants

Color-loving humans have long traded and cultivated dye plants far from their native soils. Canada goldenrod, a staple of colonial American and French Canadian dyepots, is now grown in Europe for its pigments. Likewise, dye plants from Europe and Asia can grow well under cultivation and function as nectar sources as well as color sources in a perennial garden. Susanne Grosjean grows and uses weld (*Reseda luteola*) for yellows, Japanese indigo (*Persicaria tinctoria*, also known as dyer's knotweed) for blues, and dyer's madder (*Rubia tinctorum*) for reds. In addition to these, Kate Smith grows alkanet (*Alkanna*



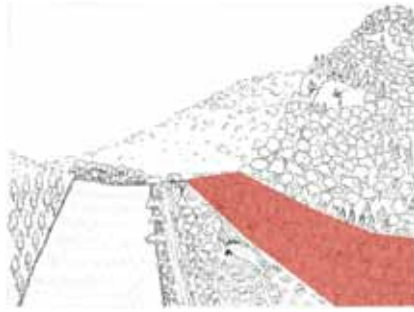
tinctoria) for blues, and uses the bark from thin branches and root suckers of apple trees (*Pyrus malus*) to get yellowy tans. Native to the Mediterranean, northern Africa, Japan, Kazakhstan, or the Middle East, this global panoply of plants brightens gardens and textiles here in New England.

"Dye plants are historically survivors; they grow in any soil."
–Susanne Grosjean

Japanese indigo plant with indigo-dyed wool.



Forested wetlands or swamps



If you're in the forest, the terrain is fairly flat, and you've started hopping between dead logs and hummocks to avoid getting your feet wet, look around and listen. Do you hear a faint trickle of running water? Are there seeps and springs, where water bubbles up out of the ground? Do some trees seem to be growing on stilts made of their own roots? Not surprisingly, these areas are frequently flooded or wet in spring or early summer. However, the flooding comes not only from rain or melting snow, but from groundwater. This water source, enriched with nutrients by contact with the underlying bedrock, provides the necessary conditions to support one of Vermont's pickiest, most site-sensitive trees, the black ash. Places where different soil types meet, such as slope bases, can often result in groundwater coming to the surface due to differences in soil drainage. Presence of black ash may be one clue that this is happening. Other plants frequently growing in these areas include foamflower, false hellebore, and sensitive fern. Hemlock, red maple, yellow birch, green ash, or balsam fir trees may

also grow nearby.

Black ash, also called Brown ash *Fraxinus nigra*

"[An ash basket is] a work of art that's beautiful, that takes time and patience."
-Jesse LaRocque

"I've watched [one tree] for maybe 20 years, thinking 'this one is special'. It's expanding, growing well, popping bark off, making flakes." -Stephen Zeh

Growth rings help us describe the life of a tree. The number of rings tells its age, a thin ring means poor growing conditions, too much or too little water, shade from a competitor, or poor genetics. Thick rings result from vigorous growth, discolored ones, if not in the heartwood, hint at past wounds or disease. Ash basketmakers in New England separate these growth rings by pounding the log or pieces of it, split them into strips and weave them into baskets. Some basketmakers will even divide them further, producing 2, 3, or 4 thinner rings from one thick one. Also known as brown ash, this tree rarely gets bigger than 12 inches in diameter and has distinctive pale, corky bark that compresses and flakes off when touched. Sometimes the bark is furrowed into diamond shapes like other species of ash, but other times it appears stretched



From left: False hellebore (*Veratrum viride*), black ash leaf, foamflower (*Tiarella cordifolia*).

and patchy. Many basketmakers see this 'stretchiness' as a sign of vigorous growth. Black ash crowns, full of featherlike compound leaves whose 7-13 leaflets are pressed right to the leaf stem, usually look a bit skimpy. Basketmakers look for trees that are at least 6 inches in diameter; the upper limit is usually determined by how they are



Brown ash basket by Stephen Zeh.
Photo: Stephen Zeh

Wabanaki heritage and ash

"Glooskap came first of all into this country, into the land of the Wabanaki, next to sunrise. There were no Indians here then. And in this way he made man: He took his bow and arrows and shot at trees, the basket trees, the ash. Then Indians came out of the bark of the ash trees." –Wabanaki creation story, from *A Wabanaki Guide to Maine* by the Maine Indian Basketmakers Alliance

Black ash ranges from Newfoundland to Manitoba, and as far south as Delaware. Native Americans whose homeland overlaps with this tree have woven strong, functional containers from its rings for millennia. After European contact, black ash sustained the Western Abenaki in Vermont and Quebec, the Mohawk in New York, and the Micmac, Maliseet, Penobscot, and Passamaquoddy in New Hampshire, Maine, and Atlantic Canada in their dealings with Europeans. Most of Maine's potato harvest was collected in ash baskets until the 1960s, creating a steady demand among farmers for the work of master Native basketmakers. In Victorian times, entire Abenaki basketmaking families would relocate each summer to resorts throughout the northeast, making their living selling "fancy baskets" made of ash and sweetgrass (*Hierochloe odorata*) to tourists. Today, members of many of the tribes are conducting research and implementing conservation measures in order to ensure a diverse and robust supply of this tree in the face of threats like the emerald ash borer beetle (*Agilus planipennis*), which has devastated stands to the west.

"You can only take a tractor so far but two Indians can go anywhere, a mile into the woods to get the best tree." –Jesse LaRocque



Above: *An encampment of Native American basketmakers in New York state, late nineteenth century, by A.C. McIntyre. National Anthropological Archives, Smithsonian Institution 94-4939.*



Top: *The emerald ash borer adult is 1/2 inch long. Larvae chew S-shaped tunnels under the bark of ash trees, and adults leave D-shaped holes in the bark when they exit. Photo: David Cappart, MSU, Bugwood.org.*

Bottom: *Ash and sweetgrass "fancy basket" by Gertrude O'Bomsawin.*

getting that tree out of the woods. People taking the tree out by hand will rarely haul one larger than 8 inches in diameter. They agree that the tree must be as healthy as possible, with no dead limbs. Trees must be straight and free of knots. Twists in the general pattern of the bark could indicate twist in the grain, and twisting grain could cause problems when trying to remove growth rings.

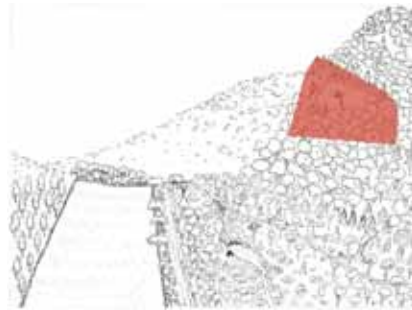
“Not every black ash is a basket tree, it’s got to have the straight grain, fast growing so thick growth rings, no curve or not much, no knots.” –JoAnn Kelly Catsos

“If [a ring] is too thick, it’s hard to work with, if it’s too thin, there’s nothing to work with...only one in 100 [trees] will be good enough.” –Stephen Zeh

“If it’s very shady on one side then the rings tend to be very small, and paper thin and that’s not very useful, and if they’re grown in more of an open area, the rings can be really thick...[but] if they’re more than 1/8 inch thick, well then that’s too thick.” –Sue Carpenter

“I’ll look at 100 [trees], pick two, and take the second best.” –Jesse LaRocque

Rocky cliffs and slopes



Though it’s landlocked today, half a billion years ago Vermont was a land of coastal collisions. Volcanic islands in the eastern ocean crashed into the North American continent. When such landmasses collide, mountains rise and faults open. Reflecting the patterns of these long-ago events, our major mountain ranges run north-south, and the folded landscape contains many cliffs and exposed talus slopes. Exposed rock may be covered in lichens that yield intense purple dyes; these include rock tripes, *Umbilicaria americana* and *U. mammulata*, and toadskin lichen, *Lasallia papulosa*. Slopes below cliffs can contain exceptional plant diversity and unusual species. Exposed rock weathers quickly due to physical and chemical factors, such as frost heaving and rain, and the biological effects of lichens; these fascinating organisms, in the words of biologist Lynn Margulis, “slowly turn solid rock inside out.” This inside-out and weathered talus crumbles into soil high in nutrients, which makes its way downslope via gravity and water. Roots of nutrient-hungry trees like butternut and American basswood catch these particles

and thrive. Porcupines make their dens in these places, and craftspeople use their quills for quillwork designs and jewelry.

Rock tripe and toadskin lichen

Umbilicaria americana,
Umbilicaria mammulata, and
Lasallia papulosa

Despite their gray, brown, or black color, these lichens and many others worldwide yield intense purples that have been valuable as natural dyes for thousands of years. The ancient Phoenicians used lichens to dye cloth purple – the color of royalty – as early as 3000 BC. Demand for Scottish lichens in the Industrial Revolution caused many species to go locally extinct from over-harvesting. Today, lichen dyes for wool can be made using household products and a lot of patience; wool must soak for months to get the most vibrant color.

Natural dyers use the flat, leaflike part of lichens, known as the thallus, preferentially harvesting material that is already detached from the rock on which it grew, or material growing on gravestones or slate roofs. If lichen is taken from cliffs and boulders, it can grow back if the holdfast stalk, or rhizine, is left attached to the rock. *Umbilicaria americana*, or frosted rock tripe, is nearly identical to but grayer than the smooth rock tripe, *U. mammulata*, which is more brown. Toadskin



lichen is paler, and lumpy like its namesake. Dyers often combine different lichen species in the same dye pot.

“When you collect [lichens], a lot of people will say this is an endangered species. It is, but the reason it’s endangered is not from you and I collecting lichens for dyeing, it’s the environment. Lichens will not grow in polluted environments... But you also need to understand that each little thallus of the Umbilicaria probably is close to 200 years old... I just pull it off with my fingers and I prefer to do it after a rain because then they’re green and they’re very pliable and it’s very easy to get them off, and I spot, I don’t strip.” –Anne Williams

“It’s not very scientific... it just sits there and this [lichen dye bath] is about 4 years old, and I add a little bit more lichen just to brighten it... Flowers you use it up and mushrooms, but that lichen goes on forever.”

–Anne Williams



Top, from left: *Lasallia papulosa*, *Umbilicaria americana*.

Bottom: *Lichen-dyed wool, dyed by Cindy Craft. Ash and sweetgrass basket by Gertrude O’Bomsawin.*

Butternut

Juglans cinerea

An uncommon tree usually found in nutrient-rich soils, butternut is becoming even rarer each year due to the fatal butternut canker, a fungus that girdles the tree. Young cankers are vertically elongated elliptical gashes in the trunk, often with black centers. Butternut’s distinctive bark – take the diamond-shaped furrows of white ash, and imagine they’ve been ironed and flattened – makes it recognizable even when dead. A healthy butternut producing nuts is a cause for celebration, a tree to visit and check on regularly. Butternut leaves are pinnately compound, like feathers, usually over a foot long, with 11-17 fuzzy leaflets. The nuts are like skinny, less spherical walnuts, and if you find them before the squirrels and chipmunks do, the hulls make a brown dye for wool or other materials. During the Civil War, Confederate uniforms were dyed with bark and roots from this tree, giving the soldiers the nickname “butternuts.” The pigments found in butternut will dye material with no additional chemicals (also known as mordants).



Butternut leaf and nut.

Cool slopes and hollows



It usually gets colder as one gains elevation. Dense cold air from these high places also flows downhill, where it settles in hollows. If those slopes and hollows face north or east, they’ll stay even colder without long or intense sun exposure. Both of these landforms, the sources and sinks of cold air, harbor natural communities composed of plants that are tolerant of the harsher conditions. The montane spruce-fir forests at higher elevations in central and southern Vermont resemble the lowland spruce-fir forest that forms the dominant community in the Northeastern Highlands and crops up in colder hollows throughout the state. Sites high on mountain slopes allow the paper birch tree, which grows widely in Vermont, to develop the thick bark prized by basketmakers. Roots of red spruce and other conifers hold bark containers together, while the tiny perennial goldthread imparts its brilliant yellow dye to ash splints and other materials.

Paper birch or white birch

Betula papyrifera, also *Betula papyrifera* var. *cordifolia* – Heart-leaved paper birch

The Abenaki call January the “Moon of the Popping Trees” – recalling stories of sap, stimulated by a mid-winter thaw, flowing under bark during sunny days and then freezing and expanding at night, causing the forests to echo with bark-splitting ‘pops’. Paper birch’s peeling white bark is said to protect it from some of this ‘popping’ by reflecting intense sunlight. During the Moon of the Popping Trees, skilled harvesters traditionally begin removing sheets of this rot-resistant material from mature tree trunks for use in baskets and other containers. Paper birch and its close relatives grow in a pearly necklace around the Northern Hemisphere, and cultures from Sweden to Lapland to Siberia to Alaska to Vermont use its wonderfully versatile bark for shoes, canoes, containers, jewelry, and decorations. The birch conk fungus *Inonotus obliquus*, often called chaga, starts fires, extinguishes migraine headaches, and has some anticancer properties. Food wrapped in birch bark will not soon spoil, and people have known this for millenia; a bark food container was found with Otzi, the 5200-year-old “Ice Man” discovered frozen in the Austrian Alps in 1991.

Paper birch grows quickly in old fields and disturbed areas

throughout Vermont, but it is often outcompeted by more shade-tolerant trees. However, the competition isn’t as stiff on exposed north- and east-facing slopes high in Vermont’s hills and mountains, where birch groves can be full of large, old trees. Basketmakers report finding the best and thickest bark from trees in these colder spots; they associate the colder locations with thicker and stronger bark – like wearing a heavy wool sweater rather than a cotton t-shirt.



Birch bark makuk, originally used for holding maple sugar, made from winter bark and sewn together with spruce root. From Musee des Abenakis, Odanak, Quebec. Also, a piece of winter bark.

‘Winter bark,’ named for the season when it is harvested, is composed of layers that each represent a year of the tree’s life, and is thicker than ‘summer bark’ because it still contains much of the previous year’s cambium tissue. Cambium, or inner bark, is where sap flows and nutrients travel. Harvesters cut into the tree to the layer just outside the newly formed cambium. By leaving that inner bark on the tree, people try to ensure that it will recover from harvest; many gatherers find that

bark can be harvested again after 15 or 20 years. Learning this bark-peeling technique from an expert is the best way to protect the health of birch trees.

Traditional Native American uses of bark maximize its watertight properties by turning the brown waterproof inner side to the outside of containers, canoes, and other vessels. Folk art traditions from the Adirondacks and elsewhere across the north display the white outer side of the bark. Usually, clear bark free from dark irregularities and knots is desired, though some artists prefer to incorporate the character of these features, as well as a range of bark colors, into their work. The small, horizontal lenticels rip when pierced with an awl or needle, so artisans take care to avoid these. The gum-like brown cambium on the interior side of winter bark provides a surface on which artists create designs, through selectively scraping it away. The gum removed has been used as medicine to prevent infections. Summer bark is thinner and suitable for more delicate projects; some basketmakers cut it into strips for weaving. Gray birch, which is not used for these purposes, and which usually grows in more open places, looks similar to paper birch but the bark notably does not peel.

Experienced harvesters look for an unusual quality in the bark on standing trees: they describe it as greenish, ‘pearly’, and iridescent. Bark can be made into containers right away, or gently heated



later to render it pliable. Some landowners, working with logging companies that also harvest birch bark, find that income from timber harvesting can be greatly increased if that harvest includes paper birch trees. High quality bark, carefully removed before logging in late spring and early summer, can in some cases fetch as much money as the wood. See **Artisan Species on your Land: The Next Steps** later in this guide.

“The qualities for me that make [a birch site] good are the feel. It feels dark, it feels thick, it’s cold, it’s high.” –Judy Dow

“I always look for the pearliest bark...it looks like oil in a puddle. Then I will cut around big black spots.” –Judy Dow

“I look for an iridescent color, a greenish iridescent tree.” –Tom Cady

“You go in until the tree cries, and then you pull your knife out and then you take the layer just before the tree cries.” –Judy Dow

Red spruce

Picea rubens

Red spruce is a staple of the acidic soils of the boreal spruce-fir forest; its short, sharp, squarish needles acidify the soil even more as they decompose on the ground. This tree is also tolerant of poor conditions in other forest types, and can be found in shallow, steep, rocky, or poorly drained places in warmer areas. Look for it on the tops of cliffs or in

cold hollows – or if you’re in the Northeastern Highlands, look for it everywhere! Slender red spruce roots, stripped of their bark and split in half lengthwise, provide the pale brown, flexible ‘thread’ that holds birch bark containers together and repairs tears in bark canoes and structures. Research into plant stem cells has shown that traditional harvest practices, which emphasized only harvesting small roots far from the trunk, actually stimulate new root growth. Those gathering spruce roots never dig too deeply, but find a surficial root and follow it until it becomes too entangled or thick (more than ½ inch or so) to continue. Lengths of 3 to 6 feet are ideal. Tom Cady harvests spruce roots while deer-hunting in November, and has had deer approach him while he’s immersed in this process: As he notes, “You’re not aggressive when doing that.” Roots of other conifers such as balsam fir, which often grows in association with red spruce, hemlock, tamarack, and Norway spruce can also be used for this purpose.

“I was always taught to harvest 25 feet away from the spruce tree and never bigger than your thumb, then you bury it and the next year would be new growth in the same spot.” –Judy Dow

Goldthread

Coptis trifolia

This tiny, three-leaved perennial shines on the forest floor, sprawling mat-like in small damp

hollows or on the mossy roots of trees. It’s common in spruce-fir forests but also frequently appears in acidic coniferous swamps and bogs, hemlock forests, or occasionally under black ash trees. Its half-inch wide, starlike white flower rises several inches above on a delicate stalk in late spring. Like paper birch, this plant and its close relatives encircle the northern hemisphere, spreading on golden rhizomes – creeping underground stems – through northern Japan, Siberia, the Aleutian Islands, the U.S.-Canada border region and even Greenland’s southern coast. The gold comes from potent pigments, and roots simply boiled in water will impart a golden dye to other plant fibers such as black ash as well as animal products including wool, silk, and porcupine quills. Harvesters find that a relatively small amount of material is necessary, just a few roots per quart or so depending on the project, and spread out their harvest so as not to remove an entire patch of goldthread. The Micmacs native to Quebec, Maine, and Atlantic Canada, as well as French



From left: Goldthread, red spruce branch tip.

settlers, used this dye for wool and quill decorations. The roots contain powerful antimicrobial compounds and can be chewed or boiled in teas to treat colds, ear infections, canker sores, and childrens' teething problems.

Open, light forest floors



Sunlight on a summertime forest floor is a rare thing; much of this precious energy is snagged by green plants that turn it to sugars through photosynthesis. If lots of light does reach the ground, it probably comes with a story. Perhaps a tree fell in a storm the previous winter, or there has been a recent timber harvest, creating a gap. Maybe the soil is too thin, acidic, or nutrient-poor to support lots of plant life. White pines can grow in sandy, acidic soil, and their needles

further acidify the earth as they decompose. In many old Vermont farmsteads, plantations of red pine recall a program of the Soil Conservation Service after the Great Depression. This federal agency helped farmers replant depleted pastures and fields for future timber harvest and to prevent erosion, but with farm abandonment many plantations still stand, their straight rows of trees and rectangular boundaries imposing patches of orderliness in a more fluid larger landscape.

The often-poor soils of open coniferous or mixed oak-coniferous woods, topped with acidic decaying needles, frequently grow little more than club mosses (which are not actually mosses), lowbush blueberries, dry mosses, and lichens. Late summer and fall may bring out two dye mushrooms: the surprise webcap mushroom, *Cortinarius semisanguineus*, and the dyer's polypore, *Phaeolus schweinitzii*. These can be found throughout evenly-spaced plantations or on sunnier edges – along trails and gaps – in natural forests. Though mushrooms don't photosynthesize – they obtain nutrients in other ways – gatherers associate their presence with particular light levels. For most, it's not too little, not too much. Even one year of gypsy moth attacks that defoliate trees and cause more light to fall on the forest floor can change the mushroom harvest. Similarly, rainfall frequency and intensity in a season can affect mushroom yields.

Surprise webcap mushroom

Cortinarius semisanguineus

A small mushroom with a broad habitat, the surprise webcap mushroom lives on edges. Look in pine plantations, along trails, or around forest gaps. A few hemlock boughs or witch hazel stems might blow in the breeze above it, but it's never found in deep shade. It's frequently in drier mosses, needles, or leaf litter, often accompanied by lowbush blueberries. Soils are slightly acidic, with a pH of 5-6.5. True to its common name, the surprise webcap's brown-gold top shelters deep red gills – and reds and pinks are the colors these fungi are prized for. Some mushroom dyers separate the caps and red stalk bases from the yellowish stalks to get a more intense color, while others use the entire mushroom. The cap has a small knob in the center and the mushroom can grow up to 3 inches in diameter. One needs about 3/5 of a pound of mushroom for every pound of wool to be dyed. Since it only appears in the late summer and fall, specimens can be dried for later use. Oaks, hemlocks, pines, red maples, and grasses often grow nearby.

"These things, all I can say is they glow, you'll walk along and it's got literally a glow to it, you think it's just a brown mushroom, but once you've found it, it's like the rest of the year you know it." –Karen Wittshirk

"I can get millions along this trail; I'm surprised there isn't a permanent depression"



in that moss where my dog lays down while I look.” —Anne Williams

Dyer’s polypore mushroom

Phaeolus schweinitzii

Dyers have extracted yellow color from this mushroom longer than most other fungi, whose use in modern times dates to the innovative experiments of Miriam Rice in the 1970s. Look for dyer’s polypores at the bases of big coniferous trees; New England collectors report

them from pines, hemlocks, and tamaracks. Old trees seem key for this species; many fungi associate not only with tree species but with specimens of a certain age. Dyer’s polypores emerge from the ground but actually colonize buried roots. They grow as rosettes of clam-shaped brackets, with smaller ‘petals’ emerging from the center of the rosette. The bracket tops are concentrically-striped yellow, orange, and sometimes brown, and the undersides are spongily porous, with no gills. An individual mushroom can grow up to 18 inches across.



Top: Surprise webcap mushroom.

Bottom: Wool dyed with surprise webcap mushroom.

Photos: Leena Räihelä

Tips on mushroom collecting

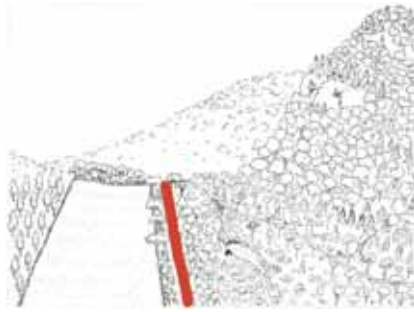
Mushrooms are mysterious creatures: the fruiting structures of much larger fungal organisms, they often grow at unpredictable intervals in space and time. Perhaps because of this unpredictability, they haven’t been a traditional dye source, though extensive research since the 1970s shows that they have a lot of pigment potential. Fungi usually dye better when they’ve started to decompose. Collecting them takes patience, keen observational skills, and a lot of looking at the ground. Many collectors gather in an open-weave basket, believing that spores, fungal ‘seeds’ of sorts, will fall through as the collecting expedition proceeds and regenerate the mushroom population. Other collectors believe this strategy isn’t worth the effort. When mushrooms do drop spores, they only do so at maturity, which is not always when they are gathered.

Fungi can actually become infected by other fungi or bacteria, so to minimize this effect on the larger organism, some collectors cut mushrooms at the base instead of pulling them out of the ground and creating an opening for disease. Regarding how much to collect sustainably, some collectors see no problem in taking all the mushrooms from a patch, likening it to taking all the apples from a tree, while others take only a certain percentage, following cultural or personal guidelines. Before you collect, consult a source like *The National Audubon Society Field Guide to North American Mushrooms*, *The Rainbow Beneath My Feet* by Arleen Rainis Bessette or *Mushrooms Demystified* by David Arora and decide how you will proceed. For edible mushrooms, guidebooks are key, but nothing can replace the affirmation of an expert. The pictures or drawings in guidebooks can be problematic, due to the variation in mushroom size and shape even in one species, so always consult multiple sources. And remember, any time you are trying a new mushroom, start with a very small piece. What might agree with someone else might not agree with you!

“I know one woman who walks with a cane and she found just as much as anybody else. She went slowly but she looked more in individual places.” —Karen Wittshirk

“I’m pretty ecologically minded and I believe in recycling and the same thing goes for mushrooms. I like to kind of leave it like I found it.” —Carlene Skeffington

Woods roads, forest gaps, and hedges



The edges created as people travel, harvest timber, and shield their homes from wind or traffic receive more light and have more compacted soils than undisturbed forest land, and receive less light and have less disturbed soils than gardens, lawns, or cultivated fields. This intermediate situation causes the species mix that thrives in edges to be different than deep in the forest or out in full sun. With a little thought, you can maximize your edges by encouraging plants that provide dyestuffs, food for wildlife, and food for you. The easy access of most edges will make you more likely to notice, visit and utilize them. A wide range of berry-bearing shrubs grow well here, and migrating songbirds will welcome the sheltered safety of the shrubs and nearby forest as well as any berries you don't harvest. Shrubs can also shelter tree seedlings in forest gaps left by logging, providing a natural middle stage in the regrowth of forest. But instead of just waiting for the forest to regain its pre-logging extent, you can benefit in the interim by harvesting dyestuffs and food. Some edges, especially

along old woods roads with small mossy banks along the sides, can harbor dye mushrooms such as *Phaeolus schweinitzii*, *Cortinarius semisanguineus*, and tooth fungi in the *Hydnum* and *Hydnellum* groups. Judy Dow even strips the thorns off that ubiquitous edge-occupier, raspberry, and weaves the flexible stems into baskets; she wears leather gloves and strips thorns the “wrong way” to efficiently remove them.

Staghorn sumac

Rhus typhina

A grove of staghorn sumac can resemble a tiny tropical forest in the ditches and dry soils where it commonly makes its home in Vermont. Its twisty, woody stems can grow up to 30 feet tall, its long compound leaves can have up to 29 lance-shaped leaflets along a central stalk, and its tiny deep red flowers and fruits, packed into long flame-shaped clusters at the ends of its branches, are unmistakable through much of the year. The fuzzy, thin bark on new growth of this shrub gives it its name – the branches resemble the new antlers of a stag, or buck deer – and contains the tannins that make it a widely-used dye material. Kate Smith cuts small (less than half an inch thick) branches before the berries come out in late summer, scrapes the bark off and boils it to get yellows and tans for dyeing wool. Judy Dow uses the entire twig for yellows to dye ash

basket material. If sumac plants must be uprooted for any reason, its roots make an even deeper dye. Native Americans across the country made use of most parts of sumac plants for dyes: pigments from the leaves, entire twigs, berries, and pith of woody trunks could be extracted, as well as from the bark and roots. The Navajo and Hopi make an intense black from boiled leaves and twigs that were processed with locally-obtained clay and pinon pine gum. Depending on the part and quantity used and method of preparation, the sumac plant can yield colors from beiges to yellows to reddish pinks to black.

Sumac has other uses as well: Judy Dow prefers to use sumac berries in a vitamin-C-packed tea rather than for dye, and notes that twined baskets can be woven from thin sumac branches. Sumacs have their male and female flower parts on separate plants, though established plants spread through creeping underground stems, or rhizomes, rather than by seed. To get berries, you'll need both male and female plants in an area.

Elderberry, also called American elder or American black elderberry

Sambucus canadensis

Elderberry is a large shrub, up to 10 feet tall, with large, opposite, pinnately-compound leaves whose 5-11 sharply-toothed leaflets taper to a narrow tip. Its creamy white



flowers bloom in large flat flower heads in June, and by early fall, that flower head supports shiny, round, purple-black berries on small purplish-red branchlets. Elderberries are high in Vitamin C and can be eaten right off the plant or made into pies, jellies, and syrups. In fact, early New England homesteaders frequently planted an elderberry bush nearby, while evidence of the European varieties, *Sambucus nigra* and *Sambucus edulis*, has been found at prehistoric archaeological sites in Switzerland and France. Archaeologists believe that the plant was used for food and medicine as well as a dye at these ancient sites. The berries are high in anthocyanins, the red pigments that give maple leaves their autumn glory. When briefly boiled, after soaking in vinegar and iron, elderberries give a range of purples and blues. Elderberries need soil that is moister and higher in nutrients than sumac, and are more frequently found in forest gaps rather than dry roadsides. If transplanted and cared for, they will spread and grow into small thickets.

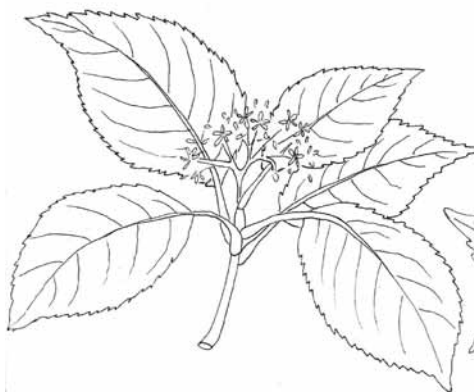


Elderberry.

Nannyberry, highbush cranberry, and other viburnums

Viburnum lentago, *Viburnum opulus* var. *americanum*, and *Viburnum* sp.

Viburnums are shrubs with opposite simple leaves, though they come in many shapes and varieties. 7 native species of viburnum grow in Vermont, and several others native to Europe and Asia sometimes escape from cultivation and grow alongside their cousins in hedges and roadsides. Their showy berries are probably the secret to their success; popular with birds as well as gardeners, viburnums spread. Nannyberry can grow up to 30 feet high, and can be recognized by its oval leaves with incurved teeth. Nannyberries are oval-shaped, bluish-black with a whitish bloom, hanging in small clusters. Highbush cranberry is not related to the mouth-puckering cranberry that's harvested from bogs on Cape Cod and in New Jersey; rather, it's a shrub with maple-like, hairy leaves and round, red fruits up to $\frac{3}{4}$ of an inch in diameter. Both of



Nannyberry.

these species grow in moist soils, either in forests where enough light reaches the floor or along roadsides and hedges. Judy Dow harvests both from her roadside hedge for pink dyes, and simply boils the material to get color. If viburnums get too tall, berries may be hard to reach or fewer may be produced as the plant puts energy into growth rather than fruiting. Pruning and maintenance of appropriate light levels can keep these plants producing the berries you can use. Other viburnums, such as hobblebush or moosewood (*Viburnum alnifolium*), common in Vermont forests can usually be recognized as such by their woody shrub growth and alternate leaves.

Virginia creeper

Parthenocissus quinquefolia

Often mistaken for poison ivy but completely benign, Virginia creeper climbs other woody plants as well as walls and posts to get to the light. This plant has compound leaves whose leaflets are arrayed like the palm of a



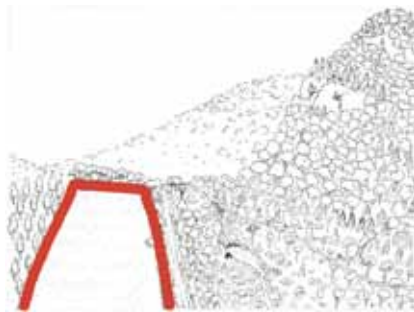
Highbush cranberry.



hand, and its branching tendrils attach themselves to surfaces with tiny round adhesive disks. Its flowers and blackish fruits form in clusters longer than they are wide, and fruits are popular with birds as well as producing pink dyes when boiled.

"I hate to use berries for dye if they're food. Virginia creeper and viburnum are food but I'm not that hard up!" –Judy Dow

Stone walls



What is the history of your land? Does a stone wall separate a lumpy, hummocky forest from one with smooth, even ground? Are the trees younger on one side than on the other? Does the wall go across or down a hillside? Is it made up of big rocks or small stones? Glaciers inching across Vermont left swaths of rocks and boulders in their wake, setting the stage for a challenging agricultural era.

Farmers worked around the biggest boulders but moved stones to the edges of fields as they cleared these areas for use. Plowing turned over and smoothed out the soil, and the loosened soil would spit out

new rocks each year through frost heaving. Farmers and their families focused on removing stones from these fields to avoid damaging their equipment. Therefore, a wall with small stones likely surrounded a cultivated field, while stone walls around early livestock pastures often contained only bigger stones. With the advent of wire fencing in the 1870s, the need for stone animal enclosures decreased, and many farmers simply left stones in pastures. When these areas grow back to forest they retain low junipers (*Juniperus communis*), plants that can tolerate compacted soil and resist grazing with their sharp needles. Groves of rot-resistant northern white cedar (*Thuja occidentalis*) were often managed for pasture fencing material, and black locust (*Robinia pseudoacacia*) was naturalized in Vermont from Pennsylvania and southward for the same purpose; it is common today in old farmsites in the Champlain Valley.

Today, stone walls outline stories of past land use but also shape populations of small mammals, reptiles, and amphibians who use them for shelter and storage. Trees that have grown along walls since they've been built often share the trait of having nuts, seeds, or fruits that appeal to small mammals, who cache their food in stone crevices and inevitably leave a few seeds behind. Those forgotten fruits sometimes make it to mature black cherry, butternut, black walnut, and basswood trees. If the original – frequently sugar

maple – trees planted by settlers remain along walls and roads, they are likely to be in slow decline, given the time since settlement and the use of road salt. They may have burls or other sections of intricately twisted grain that a woodturner can transform into bowls, spoons, or other products when the tree dies.

Stone walls don't occur everywhere in the same way, and examining them can give intriguing hints into the geological as well as the human past of your land. The prime agricultural land in Vermont's larger river valleys boasts deep, fine sediments – clays, silts, and sands – that settled out of glacial lakes at the end of the last ice age and can be hundreds of feet deep. The only stones found here are "dropstones" that may have been attached to a floating iceberg and dropped to the bottom when the ice melted. However, the land containing Vermont's strikingly beautiful yet infamously hardscrabble hill farms always sat above these lakes; their dense, compacted glacial till soils are full of rocks dragged there by glaciers. The rocks in any one place likely came from very close by, so depending on where you are in Vermont you may find chalky limestone, sparkly mica-rich schist, crystalline white quartz, reddish quartzite, blocky granite, or dark, crumbly shale. As these rocks break down into soil, they may create small nutrient-rich pockets along old walls that can support picky species like Robert's geranium (*Geranium robertianum*) or



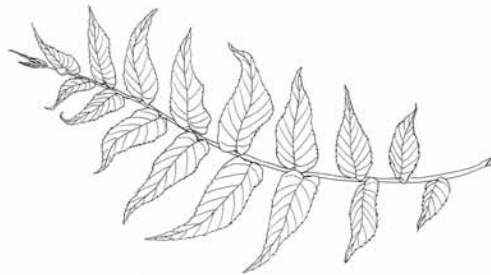
wild ginger (*Asarum canadense*). If you live in a place that has fewer stones and therefore fewer stone walls, look for other human-made edges that may have trees planted by people.

Black walnut

Juglans nigra

Kate Smith has made annual pilgrimages to a tree in the East Calais, Vermont cemetery for decades, while Susanne Grosjean frequents one in South Gouldsboro, Maine. Most of northern New England is outside of the black walnut's natural range, so yard and public trees hold special meaning for artisans who gather nuts each year to meet their dye needs. The trees grow best in rich, moist soil but

can also thrive in the relatively nutrient-poor soil of cemeteries – often sited in sandy areas to allow easy digging – and along roads and stone walls. Lots of nuts can be the sign of a healthy tree, or a tree that is stressed or diseased -- so look for branch dieback, wounds, too much mulch, or other signs of unhealthiness. Walnuts and butternuts contain a unique pigment, juglone. Dyers obtain a rich, colorfast, brown dye from walnut hulls and bark with just boiling water; no mordants or additional chemicals are needed.



Black walnut leaf.

Other specialty forest products

Carvers prefer basswood for creating duck decoys; antlers from deer and particularly moose fetch high prices for decorative home furnishings and Eastern medicines; and burls and other chunks of wood where disease has caused irregular grain patterns are coveted by woodworkers and woodturners. Artist conk fungi are palettes for drawing and sketching, end-grain chunks of apple provide the best surface for wood engravings that will make hundreds of prints, and local clay deposits can be shaped into pottery. Forests can yield unlimited provisions for the creative mind. Thacher Hurd has developed film on paper birch bark, Parker Nichols shapes veneers of worm-eaten butternut into one-of-a-kind furnishings for high-end casinos, and JoAnn Kelly Catsos weaves the shiny black stalks of maidenhair fern into striking basket accents. Black oak bark may be the yellow dye of the future. The plants and uses described in this guide are just the tip of the iceberg, or the bark on the tree, as the case may be; many of them were used historically by Native Americans, colonial Americans, and Shakers. However, the potential of forests to produce artist materials, some of which can be sold as commodities, others of which gain their value through the innovative use by a creative individual, is limited only by the imagination.

Artisan species on your land: The next steps

After reading through this guide, perhaps you now look at your land a bit differently – you see it through an artisan's eye, with certain features and species popping out to you as you ponder their uses and potential. This perspective could signal shifts in thinking about your stewardship and management activities, and also about your relationships with those in your community who use and gather forest materials. What do you do with this information?

Try it yourself!

Perhaps the most direct result of learning about species used by artisans is to try them out yourself. You could start like the first crafters did, by experimenting with different techniques and seeing what happens. If you'd like to consult a book, the resource list at the end of this guide contains how-to guides on basketry, natural dyes, and other creative pursuits. Many artisans in Vermont and New England teach classes and workshops through galleries, arts organizations, and on their own; learning from a local expert is one of the best ways to get started. The Vermont Sheep and Wool Association is a great source for finding high-quality, local wool for dye projects. See the **Resources** section of this guide for their contact information.

Support local artisans and entrepreneurs.

Even if you're not feeling so crafty yourself, you can encourage the many around you who are applying ingenuity and a creative eye to your local landscape. Many artisans operate within strong local networks; Susanne Grosjean buys wool from neighboring sheep farmers, while Sue Carpenter sells her baskets in a store down the road. Internet sales allow these people to deliver their goods to a wider appreciative market. Support them, and the sustainability of our region's forests and farms, by seeking out their work when you need a gift or unique item for your home. Information about local artisans can be found through regional organizations like the Vermont Handcrafters Guild, the Vermont Arts Council, or the Vermont Sheep and Wool Association.

Cultivate relationships with artisans, giving them access to your land.

Though some artisans gather materials from their own land, many do not own property and depend on relationships with neighbors to get the materials they need. Many of the species described above have no monetary value until they are transformed into something beautiful through hard work and specialized knowledge. And the species are often harvested in amounts too small, or on time scales too seasonal, to conceive of any market. Many people make baskets or natural dyes as

a hobby or in addition to other work, including teaching; it's hard to make a living as an artist through one's creations alone. These realities mean that most materials are obtained through nonmonetary means.

Taking dollars out of the picture opens the door to a wide variety of interesting and engaging personal relationships between landowners and artisans. For example, JoAnn Kelly Catsos designs and makes special "thank-you baskets" for the neighbors who own a productive black ash swamp, and allow her and her husband Steve to harvest a few trees annually for their work. Tom Cady, after getting permission and gathering willows from private land, always gives the first basket made from those willows to the landowner. A farmer down the road from Dona Nazarenko saves birch bark for her when a tree comes down on his property. Judy Dow has male staghorn sumac trees, while her next-door neighbor has the females. Judy harvests the berries next door, but her sumacs provide the pollen that allows those berries to form. Matt Langlais, a county forester in the Northeast Kingdom, once traded some moose antlers for a set of granite steps. Donna Kausen made a living for over a decade turning bowls from burls that logger friends would leave in her yard as they traveled south from the forests of northern Maine. These sorts of nonmonetary arrangements strengthen relationships and begin stories between neighbors and

community members, rather than reducing the bounty of the forest and the creativity of the artisan to numbers in a checkbook.

Sell materials through a broker or to an individual artisan.

Artisan materials frequently aren't used by enough people to have well-developed markets like those for timber and even well-established non-timber forest products like wild edible mushrooms and ginseng. However, a few products have a broad enough demand that a third-party may want to harvest and buy them from you. Long View Forest Contracting buys high-quality paper birch bark from trees before timber harvests. Several Northeast Kingdom brokers purchase moose antlers for home decorations and medicine. And some artisans routinely buy materials from landowners. Some ash basketmakers will pay for particularly good trees on private property, and may have relationships with loggers and foresters who identify trees on lands they are marking for timber harvest. Other basketmakers who are unable to complete the strenuous work of cutting, hauling, pounding, and separating rings from a black ash depend on others for finished basket splints that sell for up to a dollar a foot. Many basketmakers also buy sweetgrass. Gathered, packaged, and partially processed materials could find buyers through specialty craft stores or



at Native American pow-wows. It's always important, though, before investing time and energy into selling products from your land, to make sure the material is in the condition that artists need. Remember that not all birch bark, black ash, willow, or staghorn sumac is desirable, and that for many species, only very specific parts of the plant are used.

Keep learning, talking, and thinking.

The fact that artisan species and materials are frequently NOT commodities with well-developed markets and harvest infrastructure may make them more challenging to deal with, but at the same time much more interesting. Organizations like Vermont Land Trust are interested in working with landowners to develop cooperative relationships and increase landowner engagement with their property. Now that you're aware of some of these craft-worthy species and how they can be found and used, get out there and start conversations, ask questions, and experiment. There's so much potential!

For artisans: Ideas for approaching a landowner

Even though no regulations exist prohibiting the harvest of nonwoody material like goldthread, elderberries, lichens, or even paper birch bark from unposted private land, ask permission to use private property and be transparent about your goals. Showing respect in this way makes it more likely that a

landowner will give you access and probably be very interested in your work. A picture or object is worth a thousand words, so bring along a photo or example of your work to show. Explain your harvest methods, your ethical considerations, and the specific materials you'll be looking for. Jesse LaRocque hauls only the best black ash trees by hand from remote swamps; he finds that landowners are usually so impressed with his low-technology methods and the stories of his quests that they happily grant him permission. If your harvesting will result in more vigorous growth (as can happen with willow and spruce root), or have other benefits to the land, make sure you explain these. Describe when you might be visiting the property, and be sure you park somewhere that doesn't impede other activities. Ask the landowner if they prefer you check in each time you visit.

If you don't know the landowner or are uncomfortable knocking on someone's door, send a letter, make a phone call, or talk to someone that the landowner trusts regarding their property, such as their forester. Personal recommendations go a long way. And many landowners want to learn more about their land. Tom Cady, who uses dozens of plants for art, food, and medicinal purposes, suggests that artisans could take landowners on a field walk through their property, explaining the uses of different plants, in return for access. This way, everyone wins,

becoming more informed about both the land and each other. Many artisans leave a token gift – a basket or other handmade product – for the landowner in return for permission to gather. As Tom says, “Always give something back.”

For landowners: Ideas for approaching artisans

This guide can only take you so far; nothing can substitute for a walk on your own property with a person who can tell you interesting and useful things about it. Tom Cady's idea of artisans exchanging such a walk for permission to gather from private property has the potential to benefit both artisan and landowner while strengthening their relationship and engagement with the land.

If you own land and are interested in having artisans use it, first survey it using this guide to see if it has any of the species, of the right quality, that artisans may want to use. Then you'll need to find someone who wants to use them. If you don't know artisans yourself, ask around in your community to see if anyone might be interested or know someone who is. Your county forester or private consulting forester probably knows some artisans or people who use unusual forest products; ask him or her for ideas. Also, organizations that support forest land owners, such as the Vermont Land Trust, Vermont Family Forests, Vermont Coverts, or the Vermont Woodlands

Association may give you some ideas. You may find yourself using the ‘snowball method’, an actual technique used by researchers that involves following personal connections to find the kind of person you’re looking for. There are probably only a few degrees of separation between you and an artist who would be thrilled to have access to your land.

Once you meet such a person, take a walk or look at a map and let them know if there are areas you’d like them to avoid. Explain about the species you think they might want, but remember that they may have other species they are interested in as well. Be clear in your conversations if you only want them to harvest certain things, or if they can use their judgment if they find something different. Ask them about their ethical harvest practices, and then explain if you’ve got any different practices you’d prefer them to use. Ask them when they’d be likely to come, and let them know a good place to park and if you’d like them to check in when they visit. And finally, enjoy seeing your forest with new eyes!

Artisans

I am grateful to all of the artisans in Vermont, Maine, New Hampshire, and Massachusetts who spent time sharing their knowledge with me over the course of my research. It was a privilege, and a lot of fun, to learn from such talented, creative, and knowledgeable people. Thank you.

~Allaire Diamond, December 2008

Note: *The names “black ash” and “brown ash” are both used in these short biographies, according to what each artisan calls them. Both names refer to Fraxinus nigra.*

Tom Cady is a master basketmaker and teacher who uses willow, red osier dogwood, black and green ash, and a variety of other plants to make different styles of baskets. Drawing from his Ojibwe and Narragansett heritage, Tom also uses dozens of plants and mushrooms for food, medicine, and spiritual purposes. He lives in Westford, Vermont.

Susan Carpenter is carrying on family traditions of dairy farming and brown ash basketry in Cabot, Vermont. Winter means that the farm slows down, and Susan uses the extra time to weave baskets in the cool, humid climate of the dairy barn, where brown ash wood from trees harvested on her property stays fresh for months. Along with making baskets that are valued as heirlooms by people across the country, Susan teaches basketry

workshops each winter.
<http://northernfruits.com>

JoAnn Kelly Catsos makes black ash baskets and teaches basketry at craft schools and conferences across the country. She and her husband, Steve, harvest black ash trees near their home in Ashley Falls, Massachusetts, process the logs into splints, and make the wooden molds, handles, and rims needed for each basket. JoAnn’s baskets have appeared in magazines and books, and one of her woven ornaments has adorned the White House Christmas tree.
<http://joannkellycatsos.com/>

Cindy Craft enjoys experimenting with lichen dyes, using lichens she gathers near her home in Carlisle, Massachusetts.

Pam outdusis Cunningham, a Penobscot master basketmaker, makes fancy baskets using brown ash and sweetgrass. She is active in carrying on basketry, dance, and spiritual traditions within the Penobscot Indian Nation and the Maine Indian Basketmakers Alliance. Pam lives in Hampden, Maine.
<http://www.outdusis.com/index.html>

Judy Dow is a master basketmaker, teacher, and historian from Essex, Vermont. Since making her first basket during a rainy summer at age 10, Judy has spent years mastering the four techniques of basketry that are practiced by cultures all



over the world. Informed by her Abenaki ancestry, she teaches basketry and ethnobotany to students of all ages in schools and programs throughout the country and in Canada. Judy uses over 200 plants for food, medicine, and art. <http://www.unh.edu/users/unh/acad/libarts/cnec/exhibit1/dow.html>

Toby Fulwiler, writer, teacher, and bowl-turner, lives in Fairfield, Vermont, where he turns bowls from wood collected on his own land. In addition to using maple, cherry, and white ash, Toby also experiments with often-overlooked tree species such as staghorn sumac, buckthorn, and American elm.

Susanne Grosjean dyes and weaves local wool in her studio in Franklin, Maine. She grows and gathers many dye plants, including Japanese indigo, weld, madder, black walnut, and goldenrod, uses them to dye wool from sheep raised on nearby islands, and then weaves custom rugs that warm homes throughout the country. Susanne shares her expertise and extensive research into dye methods with students and apprentices. <http://www.bogbay.com/>

Jesse LaRocque seeks the perfect black ash basket trees in the swamps of Vermont, based out of his home in West Danville. Jesse makes traditional Abenaki work baskets and fancy baskets without the use of mechanized equipment. He also teaches basketmaking workshops to

children and adults, and supplies other basketmakers with ash splints. <http://www.abenakibaskets.com/>

Dona Nazarenko makes and designs baskets out of paper birch and a variety of other plant materials, and also teaches workshops at conferences and gatherings throughout the country. Dona has studied traditional American basket styles, and has developed her own style of unique contemporary basket designs. She lives in Tunbridge, Vermont, where she and her husband Warren operate Country Spirit Baskets. <http://www.countryspiritbaskets.com/>

Carlene Skeffington has favorite childhood memories of finding mushrooms on the forest floor, and today she avidly seeks out mushrooms for eating, dyeing, and papermaking. She is a member of local and regional mycology associations, and has also participated in the International Mushroom Dye Institute's biannual International Fungi & Fibre Symposia. She lives in Wilton, New Hampshire.

Kate Smith is a dyer, spinner, and weaver living in Marshfield, Vermont. She grows and gathers many of her dye sources, including black walnut, staghorn sumac, apple, and madder. Kate began her career as a fiber artist in 1979 as a student at the Marshfield School of Weaving and now operates her own business, Eaton Hill

Textile Works, which focuses on reproducing period fabrics from the 18th and 19th centuries. She also teaches historic weaving techniques, spinning and natural dyeing. <http://www.eatonhilltextiles.com/>

Anne Williams has spent years researching mushroom and plant dyes. Her home in Stonington, Maine is also her laboratory and workshop, where she tests out new mushroom species for their color potential, and knits with unusual fibers such as dog fur. Anne teaches occasional workshops and her annual display at Maine's Common Ground Fair is eagerly awaited by the Maine fiber arts community.

Karen Wittshirk has always loved mushrooms as well as traditional fiber arts, and combines these passions through the art of mushroom dyeing. She is active in regional spinning and weaving guilds as well as mycology groups near her home in Huntington, Massachusetts, and she occasionally travels as far afield as California and Finland for the International Mushroom Dye Institute's Fungi & Fibre Symposium.

Stephen Zeh began making brown ash baskets while working as a fur trapper in the Maine woods in the early 1970s, learning the art of traditional pack baskets from Penobscot Indian Eddie Newell. Today, Stephen works from his home in Temple, Maine, making full-size and miniature

baskets. Martha Stewart is among his customers – sometimes she is photographed wearing her Stephen Zeh pack basket! Stephen’s work has been featured in DownEast, Country Living, and Martha Stewart Living magazines.

<http://www.stephenzeh.com/>

Resources

The following books, pamphlets, and websites may help you further explore some of the concepts from this guide.

Vermont and New England Landscapes: History and Interpretation

The Nature of Vermont: Introduction and guide to a New England environment

Charles Johnson

University Press of New England, 1998

A detailed and well-written guide to the natural features of the Vermont landscape, such as rivers, bogs, and alpine communities.

Reading the Forested Landscape: A natural history of New England

Tom Wessels and Brian D. Cohen

Countryman Press, 1997

Brian Cohen’s etchings illustrate landscape stories, such as beaver meadows, hurricanes, and old fields, which are thoroughly yet accessibly described by Tom Wessels.

Wetland, Woodland, Wildland: A guide to the natural communities of Vermont

Elizabeth Thompson and Eric Sorenson

University Press of New England, 2000

Describes and shows 80 Vermont natural communities. This easy-to-use and illustrated book is the basis for natural community designations used by the state’s Nongame and Natural Heritage program, the Nature Conservancy, and the Use Value Appraisal program.

Hands on the Land: A History of Vermont’s Landscape

Jan Albers

MIT Press / Orton Family Foundation, 2000

A beautifully-illustrated and well-researched history of Vermont centered on its landscape.

A Wabanaki Guide to Maine

The Maine Indian Basketmakers Alliance

PO Box 3253

240 Main Street

Old Town, ME, 04468

<http://www.maineindianbaskets.org/>

A unique and beautiful volume highlighting landmarks, galleries, and communities of Maine’s Wabanaki people: the Micmac, Maliseet, Penobscot, and Passamaquoddy tribes.

Identification Guides

Newcomb’s Wildflower Guide

Lawrence Newcomb

Little, Brown, & Co., 1989

Helpful guide to native and non-native wildflowers based on flower, leaf, and plant characteristics.

National Audubon Society Field Guide to North American Mushrooms

Gary Lincoff

Random House, 1981

There are many mushroom guides available, but most mushroom hunters I spoke with use and recommend this one for use in the field.

A Field Guide to Trees and Shrubs: Northeastern and North-Central United States and Southeastern and South-Central Canada

George A. Petrides

Houghton Mifflin, 1972

A helpful guide to woody plants based on leaves.

Mushrooms Demystified: A Comprehensive Guide to the Fleshy Fungi

David Arora

Ten Speed Press, 1986

This 1000+ page book contains details about each mushroom, written in Arora’s unorthodox yet knowledgeable style. Written



with Western mushrooms in mind, though most are also found in the Northeast.

The Rainbow Beneath My Feet: A Mushroom Dyer's Field Guide

Arleen Rainis Bessette and Alan E. Bessette
Syracuse University Press, 2001

A field guide to dye mushroom identification as well as directions for achieving particular colors with different mordants.

Artisans, Studios, Workshops, and Events A Wabanaki Guide to Maine

See description above. Note that many of the individuals listed in the book have passed away; the Maine Indian Basketmakers Alliance would like readers to call their gallery and check before calling any individuals, so as not to upset families.

HandMade in the Northern Forest: A guide to fine art and craft traditions in Maine, New Hampshire, Vermont, and New York

Northern Forest Center, 2006

<http://www.handmadeinthenorthernforest.com>

A guide to artisans, galleries, and arts events in northern New England and New York.

Frog Hollow Vermont State Craft Centers

<http://www.froghollow.com>

802-388-3177

Frog Hollow galleries in Burlington, Manchester, and Middlebury feature Vermont artisans and offer classes.

Vermont Hand Crafters, Inc.

<http://www.vermonthandcrafters.com>

(800) 373-5429

Maintains a directory of artisans and sponsors annual December craft show.

Vermont Arts Council

<http://www.vermontartscouncil.org>

802-828-3291

State agency that advocates for the arts, maintains a directory of artisans and teachers, and holds a variety of events.

Maine Fiber Arts

<http://www.maineiberarts.org>

207-721-0678

Gallery in Topsham, Maine and a comprehensive resource for the wide fiber community in Maine.

Vermont Sheep and Goat Association

<http://www.vtsheepandgoat.org>

802-434-5646

Clearinghouse for information about wool suppliers, spinners, weavers, and dyers in Vermont. The organization puts on the Vermont Sheep and Wool Festival each September.

Forest Health and Land Stewardship

Vermont Division of Forestry: Forest Health, Insects and Diseases

<http://www.vtffpr.org/protection/idfrontpage.cfm>

802-241-3678

Includes County Forester and Forest Health programs, with extensive public outreach. The website has current news and updates about forest insect and disease threats, as well as links to pamphlets on forest insects and diseases.

The Place You Call Home: A Guide to Caring For Your Land in Vermont

Northern Woodlands Magazine, 2008

<http://northernwoodlands.org/submissions/pycbvt/>

This compilation of articles from Northern Woodlands Magazine is aimed at landowners who own more than 10 acres, and available for free from the website above.

Vermont Land Trust

8 Bailey Avenue

Montpelier, VT 05602

802-223-5234

<http://www.vlt.org>

Legal, technical, mapping, stewardship, and financial services for directly conserving land through conservation easements.

Artisan Plants, Mushrooms, and Lichens Celebrating Birch: The lore, art, and craft of an ancient tree

North House Folk School, 2007

Contains craft-oriented history, biology, and ecology of the

paper birch tree, as well as 25 unique projects using many parts of the tree, from teachers at the North House Folk School in Minnesota.

Strength of the Earth: The classic guide to Ojibwe uses of native plants

Frances Densmore and Brenda J. Child
Minnesota Historical Society Press, 2005

Frances Densmore spent many years among the Ojibwe in the early decades of the 20th century, and reported her detailed, thoughtful observations of uses of plants for food, medicine, and crafts for the Bureau of American Ethnology in 1928. This information-packed book is a reprint of those findings, with a new introduction by Ojibwe writer Brenda Child.

Dye Plants and Dyeing – A Handbook

Brooklyn Botanic Garden, 1982 (out of print, available used)

This slim volume contains articles about historical and modern dyes from around the world, with information about how to grow dye plants and make dyes. Most of the natural dyers I interviewed spoke highly of it.

Natural Dyes: Sources, Tradition, Technology and Science

Dominique Cardon
Archetype Publications, 2007

The definitive compendium of natural dye information and research. Dominique Cardon is a natural dye scholar and grower who has coordinated international workshops for UNESCO, supplied dyestuffs for Chanel, and been at the forefront of the European Union's efforts to revitalize natural dyes. This encyclopedic, nearly 800-page volume contains a detailed history of use, growth and identification information, and a synopsis of scientific research about each plant, mushroom, lichen, and animal dye source described.

A Lichen Dye Source Book

Karen Casselman
Dover Books, 2001

History and techniques of lichen dyes.

Mushrooms for Dyes, Paper, Pigments, & Myco-Stix

Miriam Rice and Dorothy Beebee
Mushrooms for Color Press, 2007

The latest handbook from nonagenarian mushroom dye

*innovator Miriam Rice and illustrator Dorothy Beebee. This book updates mushroom dye information contained in the 1980 book *Mushrooms for Color*, now out of print, and includes directions for making paper from fungi as well as dyes for wool and other fibers.*

Handbook for black ash preservation, reforestation, regeneration

Les Benedict and Richard David
Mohawk Council of Akwesasne, Department of the Environment, 2004

rdavid@akwesasne.ca, les_benedict@srmtenv.org
A guide to black ash conservation developed by environmental professionals in the Akwesasne Mohawk Nation. Details techniques for collecting seed and growing plants, as well as a history of ash basketry.

The Handmade Basket Book

Rebecca Board
Krause Publications, 2002

Clear, well-illustrated directions for weaving many types of baskets out of a variety of materials.

Suppliers and Brokers

JoAnn and Steve Catsos

90 Polikoff Rd.
Ashley Falls, MA 01222
<http://www.joannekelycatsos.com>
catsos@roadrunner.com
413-229-2655

Black ash splints, directions, kits, and other basket supplies for sale.

Jesse LaRocque

West Danville, VT
<http://www.abenakibaskets.com>
info@abenakibaskets.com
Black ash splints for sale.

Long View Forest Contracting, Inc.

221 Main Street
PO Box 1202
Charlestown, NH 03603
603-826-4030
Birch bark buyers.

