Smithsonian Associates Autumn Hiking: Sugarloaf Mountain November 8, 9, 10, 10:00 AM-1:30 PM

Melanie Choukas-Bradley, Study Leader Author of Sugarloaf: The Mountain's History, Geology & Natural Lore and An Illustrated Guide to Eastern Woodland Wildflowers & Trees: 350 Plants Observed at Sugarloaf Mountain, Maryland

Sugarloaf Mountain, rising some 800 feet above a rural landscape to a height of 1,282 feet, has been designated a Registered National Landmark because of its geological interest and natural beauty. Geologically, Sugarloaf is known as a monadnock, a mountain that stands alone after the erosion of the surrounding land. The rugged and scenic cliffs at the summit are composed primarily of quartzite. The mountain's upland forests feature oaks, hickories, black birch, mountain laurel and the intriguing table mountain pine, among many other woody plant species. Sugarloaf Mountain mammals include white-tailed deer, flying squirrel, red fox, eastern cottontail, raccoon and the occasional black bear. Covotes reside in the surrounding countryside. Birds include the common raven, great horned owl, pileated woodpecker, and red-tailed hawk. During the spring and fall, numerous migratory species of songbirds visit Sugarloaf and wood thrushes are among the many birds who nest on the mountain. The mountain trails offer wonderful views of the Monocacy and Potomac River valleys. This rural mountain treasure crowning a pastoral patchwork of farms and villages is an hour's drive northwest of Washington, DC. In the mid-20th century a man named Gordon Strong created the private nonprofit corporation Stronghold, with the mission to administer the mountain as a place of public enjoyment and education in "out-of-door beauty." Strong thwarted the mountain plans of two of the century's most prominent and forceful personalities: Frank Lloyd Wright and Franklin Delano Roosevelt. Our study leader will share some of this fascinating history during our hike.

SUGARLOAF AUTUMN PLANT LIST

Woody Plants

Trees

Tulip-Tree (*Liriodendron tulipifera*). Leaves usually 4-lobed. "Duck bill-shaped" terminal bud; stipular scars encircling the twig. Winged samaras in upright clusters

Chestnut Oak (Quercus prinus; Q. montana) Leaves with small, shallow, rounded lobes or large teeth. Chunky vertically and horizontally broken bark (ridge and valley pattern). Upland tree found in rocky woods. Lateral buds clustered near terminal bud; twig and buds orange-brown; long acorn with thin bowl-shaped cap.

White Oak (Q. alba) Leaves with deeper rounded lobes than chestnut oak's. Pale gray scaly bark that becomes shaggier higher up the tree. Lateral buds clustered near terminal bud. Acorn with thick, nubbly cap.

Red Oak (*Q. rubra*) Bristle-tipped leaves. Dark gray bark with paler "ski tracks" high on tree. Lateral buds clustered near terminal bud. Acorn has a shallow, flat cap that looks like a beret.

Black Oak (*Q. velutina*) Bristle-tipped glossy dark green leaves usually with some scurfiness on underside of blade and rusty hairs in axils (although often lessened this time of year). Acorn cap scaly, covers half the nut and looks like a ski cap. Bark dark.

Black Jack Oak (*Q. marilandica*) Leathery leaves. Rusty woolly buds. Small trees at summit.

American Beech (*Fagus grandifolia*) Evenly toothed and parallel-veined leaves. Long, slender, pointed, chestnut-colored buds; smooth gray bark. 2-3 small nuts in a prickly husk.

American Chestnut (*Castanea dentata*). Sharply toothed leaves. Edible nuts within a spiny burr. Twigs reddish brown, sharply toothed leaves. Chestnut blight kills most mature trees but there have been some specimens on Sugarloaf large enough to produce fruit.

Sassafras (Sassafras albidum) Leaves unlobed, 2-lobed (mitten-like) and 3-lobed, all on the same tree. Green twigs with strong fragrance.

Black Birch (*Betula lenta*) Sharply toothed leaves. Slim pointed buds, many on spur shoots; twigs with wintergreen fragrance. Smooth bark with horizontal lenticels on young trees. Older trees have broken bark. Winter catkins & cone-like clusters of small dry fruits.

Black Cherry (*Prunus serotina*) Sharply toothed leaves with glands often at base of leaf/top of petiole. Twigs with bitter almond odor; young bark has lenticels and bark on older trees looks like burnt potato chips.

Pignut Hickory (*Carya glabra*). Hickory with usually 5 glabrous leaflets, nuts covered in relatively thin pear-shaped husk usually splitting partway to base, and medium-sized brown terminal buds.

Mockernut Hickory (*Carya tomentosa*; *C. alba*). Hickory with 7-9 fragrant leaflets, densely pubescent below and along petiole, large nut with thick splitting husk, and large pale terminal buds.

Tupelo (Black or Sour Gum) (*Nyssa sylvatica*) Leaves unlobed and often wider at the apex. Narrowly fissured blocky bark. Branchlets growing in fish-bone pattern with many small horizontal branches. Fruit a small blue berry-like drupe. **Common Witch-Hazel** (*Hamamelis virginiana*) Leaves with large scalloped

teeth and oblique bases. Yellow flowers in fall & early winter. Fruit a woody capsule.

Red Maple (*Acer rubrum*) 3 to 5-lobed leaves are oppositely arranged and buds are often reddish; light gray smooth bark on young trees and new branches; broken bark on older trees. Vivid autumn color variable: yellow, orange and red. **Sugar Maple** (*Acer saccharum*) Planted near parking lot. Vivid color. Pointed winter buds.

Persimmon (*Diospyros virginiana*) Untoothed leaves. Bark very chunky and broken into small thick squares; orange globose fall/winter fruit. Edible after cold weather sets in.

White Ash (*Fraxinus americana*). Opposite pinnately compound leaves, dark gray bark with deep diamond shaped grooves. Samaras look like canoe paddles with thick seeds at the top of the wings.

Table Mountain Pine (*Pinus pungens*) Needles in twos, thick and twisted. Large round cones with stiff spines. Trees often sculpted-looking on high rocky outcrops.

Scrub Pine (*Pinus virginiana*) Needles in twos. Smaller cones than previous species with smaller spines.

Eastern White Pine (*Pinus strobus*). Needles in fives. Long, thin cone with flexible scales.

Eastern Hemlock (*Tsuga canadensis*) Short flat needles with pale bands below; small cones. Many are dying because of woolly adelgid.

Shrubs

Blueberry, Deerberry (*Vaccinium*) Usually green, reddish green or reddish twigs; no resinous dots on leaf.

Huckleberry (*Gaylussacia*) Twigs usually not green; resinous dots on leaf. **Mountain laurel** (*Kalmia latifolia*) Evergreen leaves. Next spring's flower buds and this year's round woody capsules present.

Pinxter Flower (Pink Azalea) (*Rhododendron periclymenoides*) Leaves deciduous. Next spring's flower bud's and this year's small tulip-shaped woody capsules present.

Spicebush (*Lindera benzoin*) Large untoothed leaves. Little round opposite buds, fragrant twigs; small red drupes.

Wintergreen (*Gaultheria procumbens*) Evergreen leathery leaves with strong wintergreen flavor. Bright red, berry-like fruit. "Sub-shrub."

Trailing arbutus (*Epigaea repens*) Evergreen leathery leaves forming a mat. Flower buds present. "Sub-shrub."

Herbaceous Plants

Aster or Daisy Family Goldenrods:

Silverrod (Solidago bicolor)

Blue-Stemmed Goldenrod (S. caesia)

Canada Goldenrod (S. canadensis) and other species

Asters (scientific names of asters have changed):

White Wood Aster (Aster divaricatus; Eurybia divaricata)

Bushy Aster (Aster dumosus; Symphyotrichum dumosum)

Calico Aster (A. lateriflorus; Symphyotrichum lateriflorum)

Heart-Leaved Aster (Aster cordifolius; Symphyotrichum cordifolium)

Purple-Stemmed Aster (A. puniceus; Symphyotrichum puniceum)

Flat-Topped White Aster (A. umbellatus; Doellingeria umbellata) and other species

Eupatoriums (some species with new scientific names):

Hollow Joe-Pye-Weed (Eupatorium fistulosum; Eutrochium fistulosum)

Mistflower (E.coelestinum; Conoclinium coelestinum)

Round-Leaved Thoroughwort (*E.rotundifolium*)

Boneset (E. perfoliatum)

White Snakeroot (E. rugosum; Ageratina altissima)

Other Aster or Daisy Family Members:

Sow thistles (Sonchus spp.)

Gall of the Earth (Prenanthes serpentaria)

Pilewort (Erechtites hieracifolia)

Panicled Hawkweed (*Hieracium paniculatum*)

Wingstem (Verbesina alternifolia)

Beggar-ticks or Sticktight (Bidens frondosa)

Spanish Needles (Bidens bipinnata)

Mint Family

Dittany (Cunila origanoides)

Horsebalm (Collinsonia canadensis)

Perilla (Perilla frutescens)

Heal-All (Prunella vulgaris)

American Pennyroyal (Hedeoma pulegioides)

Nettle Family

Stinging Nettle (*Urtica dioica*)

False Nettle (Boehmeria cylindrica)

Clearweed (Pilea pumila)

Wood Nettle (Laportea canadensis)

Other Late Summer-Fall Wildflowers

Great Blue Lobelia (Lobelia siphilitica)

Cardinal Flower (Lobelia cardinalis)

Smartweeds (*Polygonum* spp., including Jumpseed *P. virginianum*, *Tovara virginiana* or *Persicaria virginiana*)

Jewelweeds (Orange or Spotted *Impatiens capensis*; Yellow or Pale *I. pallida*)

Asiatic Dayflower (Commelina communis)

Turtlehead (Chelone glabra)

Common Witch-hazel (Hamamelis virginiana)—shrub or small tree

Showy Autumn Fruit:

Spicebush, Dogwood, Tupelo, Viburnum spp., Jack in the Pulpit, Seedbox,

Partridgeberry, Indian Cucumber Root, Pokeweed, Enchanter's Nightshade, Wintergreen, Striped wintergreen.

Ferns

Hay-Scented Fern (Dennstaedtia punctilobula)
Bracken (Pteridium aquilinum)
Christmas (Polystichum acrostichoides)
Royal (Osmunda regalis)
Cinnamon (Osmunda cinnamomea)
Rock Polypody (Polypodium virginianum)
New York (Thelypteris noveboracensis)