Wildflower in Focus

Text by Melanie Choukas-Bradley Artwork by Tina Thieme Brown

Round-lobed Hepatica

Hepatica americana (DC.) Ker Gawler (Hepatica nobilis Schreb. var. obtusa (Pursh) Steyerm.) (Anemone americana (DC) H. Hara) Buttercup Family (Ranunculaceae)



Hepatica is an early spring wildflower, variously colored pink, blue, lavender or white. When I was growing up in Vermont, my siblings and I searched the woodlands near our home for hepaticas as soon as the snow melted each spring. My sister, brother and I were enchanted by their pastel hues and leathery leaves. Two Maryland Native Plant Society former presidents and longtime board members share my affinity for this wildflower. In Montgomery County Forest Ecologist and teacher Carole Bergmann's words: "Finding a hepatica in bloom is one of my favorite late winter hike experiences! And of course, I'm always happy to spot the leaves in the off-bloom

season, and point them out on hikes whenever I see them." Author, botanist and educator Cris Fleming has a long-standing tradition of searching for hepaticas each March 23rd, her daughter Molly's birthday.

The plant gets its name from the leathery purplebrown basal leaves, which resemble the liver (see herbal lore, below). Hepatica shares its linguistic roots with "hepatitis." The species most common in Maryland is the round-lobed hepatica (*Hepatica americana*). However, some botanists now lump this species with the sharp-lobed hepatica (*Hepatica acutiloba*) as separate varieties of the single species: *H. nobilis*. Round-lobed hepatica is designated *H. nobilis* var. *obtusa* and sharp-lobed is called *H. nobilis* var. *acuta*. Other botanists include the plants in the genus *Anemone*. Round-lobed hepatica: *A. americana* and sharp-lobed: *A. acutiloba*.

Flowers: 1/2 - 1" wide, with 6 - 12 blue, pink, white, lavender, or purple petal-like sepals. Slightly cup-shaped to nearly flat with 3 sepal-like bracts beneath the petal-like sepals and a reddish pubescent stem. One flower per stem.

Leaves: Very distinctive basal leaves only, each with 3 rounded lobes and heart-shaped base. Petiole pubescent.

Height and Growth Habit: 3 - 7" high; flowers upright or slightly nodding, leaves recumbent or partially upright.

Locations: Round-lobed hepatica grows throughout Maryland but it is not common on the coastal plain. I have found a few specimens in Rock Creek Park and along Sugarloaf Mountain's Bear Branch. Carole Bergmann says: "I do know that I can regularly find round-lobed hepatica in Rachel Carson Conservation Park, Little Bennett Regional Park, Hoyles Mill Conservation Park, Cabin John Stream Valley Park, and Northwest Branch Stream Valley Park. However, you don't often find hepaticas in Montgomery County anymore. I have seen them at Snyders Landing, in Frederick Watershed forests, in state park acreage along the Patuxent, near Great Falls on Bear Island, in Virginia at Scott's Run and Difficult

Run. Again, never in any great number—usually just one or two on a hike." According to Cris Fleming: "The only reliable places I now find hepatica [near Washington] are on the Marsden Tract on the C&O Canal and along Difficult Run in Great Falls, Virginia Park. There is still plenty of it at Snyders Landing. I see lots of leaves although I always get there after it has flowered. I certainly think it is less common on the coastal plain and I remember being surprised to see several clumps at the Jug Bay Area of Patuxent River Park many years ago."

Habitat and Range: Upland woods; eastern Canada south to Georgia and Missouri. According to plant ecologist, former MNPS president and longtime board member Rod Simmons: "A good list of places from Cris and Carole. As you know, Snyders Landing is a limestone outcrop community and Hoyles Mill a diabase community - Basic Oak-Hickory Forest. In fact, there are a good number of *H. americana* easily seen growing amongst diabase boulders along Sugarland Run at Runnymede Park in Fairfax County, Virginia - also Basic Oak-Hickory Forest.

Most other piedmont and fall line sites with hepatica, on either side of river, mentioned by Carole and Cris, will be Mesic Mixed Hardwood Forest, with richer coves and slopes in certain areas of the Potomac Gorge being Basic Mesic Forest.

As one travels east, towards and into the coastal plain, hepatica becomes quite rare to absent. In some cases on colluvial slopes below Terrace Gravel Forests (Oak-Heath Forest) along the fall line, where ancient, highly weathered clays (probably montmorillonite) of the Potomac Formation are exposed, one or two hepatica plants are often found in small microniches with an amazing diversity of plants typical of Basic Forests and acidic Oak-Hickory Forests of the Triassic Basin. Hepatica is fairly well distributed, even today, in these remaining woodlands along the fall line, but is very rare. Natural Resource Inventory surveys in Arlington County and the City of Alexandria, Virginia have uncovered two very isolated occurrences of hepatica from upland colluvial slope forest communities, at Barcroft

Park in Arlington and a nearby similar site in Alexandria.

Hepatica is very rare to absent on the coastal plain, but we found a couple of old specimens years ago at Chapman Forest in Charles County, Maryland growing amidst calcareous marine sands and fossil shells in a steep ravine in Shell-Marl Ravine Forest (Basic Mesic Forest)."

Wesley M. Knapp, Eastern Region Ecologist/Botanist for the Maryland Natural Heritage Program reports: "In Maryland, [roundlobed hepatica] *Anemone americana* is widespread and gets onto the Outer Coastal Plain where it is rare on the Eastern Shore south to Talbot County.

[Sharp-lobed hepatica] *Anemone acutiloba* is reported from Garrett and Prince Georges Counties, MD. The Garrett Co. report is Luttman 1935 (unpublished masters thesis on the Flora of Garrett Co.) and the PG Co. report is reportedly backed by a specimen at MARY."



Hepatica americana

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Herbal Lore: American Indians used leaf tea of this and the similar sharp-lobed hepatica or liverleaf (*H. acutiloba*) for a variety of ailments,

including coughs, fevers and liver complaints. Alonso Abugattas, Arlington County naturalist and Director of the Long Branch Nature Center tells "Wildflower in Focus" that of the myriad common names circulating for this wildflower, "many point to the doctrine of signatures, its appearance, and such: Liverwort, liver-leaf, squirrel cup, snow trillium, mayflower, blue anemone, choisy, edellbare, liver-moss, mouse-ears, crystalwort, golden trefoil, ivy flower, herb trinity, kidneywort, and Paas-blumes (from the Dutch for 'Easter Blooms'). Both forms were used extensively for a variety of medical problems (abdominal aches, as a contraceptive, inducing childbirth, breathing problems, convulsions, as a laxative, as well as to treat hemorrhoids, convulsions, ringworm, bruises, dysentery, etc) by Native American Indian tribes (including for liver type problems by the Cherokee among others). Unusual uses included the Iroquois using it for fortune-telling, the Chipewa as charms to help trap furbearing animals, the Potawatomi as a dye, and the Meskwaki as a wash for crossedeves. The Cherokee supposedly used it to induce vomiting and thus eliminate "bad snake dreams". Linneaus even listed it as a medicinal plant in his Materia Medica. According to more country folklore, its powdered leaves could be spread on an intended's clothing as a love spell of sorts. Hepaticas use ants to distribute their seeds (myrmecochory) and are also found in Eurasia. According to author Jack Sanders, hepatica was used in a commercial medicine called "Dr. Rogers' Liverwort and Tar" in the 1800's. According to Sanders, more than 200 tons of hepatica leaves were imported to Europe in 1883 alone."

Similar Species: Rue-anemone (Anemonella thalictroides) is generally more common than hepatica and it has stem leaves as well as basal ones. Bloodroot (Sanguinaria canadensis) has larger flowers and variously lobed (not strictly 3-lobed) basal leaves. All 3 species grow along Bear Branch at Sugarloaf Mountain and bloom simultaneously. Sharp-lobed hepatica (H. acutiloba) has leaves with pointed, rather than rounded, lobes. It grows in the mountains of far western Maryland, according to Brown and Brown's Herbaceous Plants of Maryland. See also Knapp quote above.

Blooming Time: March - April.

Alonso Abugattas, Carole Bergmann, Marney Bruce, Cris Fleming, Tony Fleming, Kirsten Johnson, Wesley M. Knapp, Mary Pat Rowan, Rod Simmons, and Louisa Thompson contributed to this article.

For more hepatica locations consult: **Finding Wildflowers in the Washington-Baltimore Area** (Fleming, Lobstein and Tufty, Johns Hopkins University Press, 1995).

"Wildflower in Focus" is adapted from An Illustrated Guide to Eastern Woodland Wildflowers and Trees: 350 Plants Observed at Sugarloaf Mountain, Maryland (Choukas-Bradley and Brown, University of Virginia Press, 2008).