



Seasonal Highlights

Focus on Buds and Bark



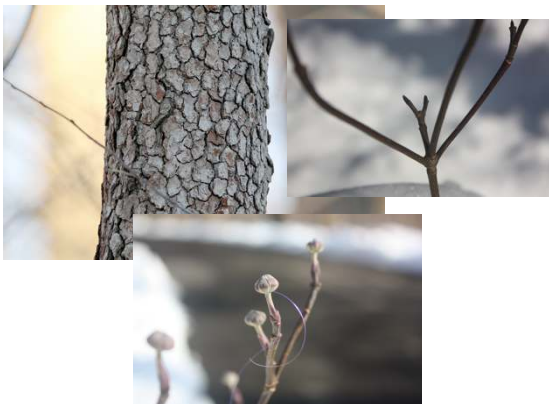
Eastern Red Cedar *Juniperus virginiana*. This small evergreen tree is often called a pioneer plant since it is one of the first trees to populate a fallow field or meadow. The reddish-brown bark shreds in long strips that is encouraged by squirrels who often use the bark to line their nests called *drays*. You may notice the cedar trees in Penns Woods don't look as healthy as the ones growing near the new pond. Once the hardwood forest is established, they shade out the cedar trees which then begin to die off. This is called *succession* and is a natural process in the mid-Atlantic forests. If you visit the Audubon Bird Observatory off the Audubon trail, notice the cedar posts surrounding the platform. Those were harvested from the Preserve and serve as a reminder of cedar woods' resistance to pests and rot.



Common Hackberry *Celtis occidentalis*. With its warty protuberances, the bark of this small tree is extremely distinctive. As the tree ages, the ridges grow further apart giving the tree the appearance of mountain ranges and valleys. The fruit of hackberry are eaten by many small mammals and birds such as cedar waxwings and robins. After consumption, the birds distribute the seeds in their droppings. Hackberry leaves are the larval food plant of the hackberry emperor butterfly. The example pictured here is of a young tree growing along President's Drive.



American Beech *Fagus grandifolia* The American beech has thin, smooth, light gray bark that reflects the winter sun. Easily identified as you scan the forest beech trees often hold onto their brown leaves well into early spring. Known as marcescence, it is not fully understood as to why some trees do this, but it certainly offers texture and beauty to the winter landscape of the Preserve. You may find the empty prickly nut hulls under the beech trees. The twin triangular nuts are prized for their sweetness and nutrition and therefore rarely found by late winter.



Flowering Dogwood *Cornus florida* A beautiful understory tree with a short trunk and wide horizontal branches, the flowering dogwood is a welcome addition to a diverse ecological landscape. Its bark is ash gray and breaks into small rectangular blocks resembling an alligator's back. The smooth, glossy twigs are dark red to purple, and end in one of two types of buds. Small, red triangular buds house the leaves, while the flower buds are reminiscent of a pincushion. Though the fruits are long gone by late winter, they provided much needed fat and protein to more than 50 wintering birds.



Skunk Cabbage *Symplocarpus foetidus*. Anxious for spring, skunk cabbage thrusts its large purplish-brown and green mottled hood-like spathe through icy soil in late winter. Inside is a knob-like spadix covered with tiny flowers that bears both stamens and pistils (male and female flower parts). As the name suggests, the plant emits a fetid odor, which attracts beetles, flies, and ants who gamely aid in its pollination. At home in wet soil, the plant's cellular respiration gives off enough heat to melt the snow and ice around its tender shoots, thereby allowing it to stake out its territory as its broad leaves of up to 2 feet uncoil after the flowers are pollinated.



Shagbark Hickory *Carya ovata*. A member of the walnut family, this hickory's unmistakable rough shaggy bark separates into long, narrow curved strips that are loosely attached in the middle. The stout, downy, light gray twigs feature large, shield-shaped leaf scars, and terminate in brown, scaled, furry buds. Like most species of hickories that grow at the Preserve, the shagbark hickory produces nutritious nuts for mammals and birds.



American Hornbeam *Carpinus caroliniana*. The smooth, gray trunk and larger branches of mature trees exhibits distinctive muscle-like striations that has given rise to another common name for this tree, musclewood. Hornbeam is one of the densest woods in mid-Atlantic forests and has been used to make bowls, tool handles and ox yokes. When you pass one of the Preserve's many examples growing along Marsh Marigold, Azalea by the Bridge or Gentian Trails, make sure to take your gloves off and feel the strength of this gorgeous tree.



American Sycamore *Platanus occidentalis*. The unmistakable sycamore can be seen and identified from a great distance appearing white among the gray forest trees. Up close though, you will notice the bark peels off in large irregular patches revealing green, gray, reddish and brown, often described as resembling camouflage. The twigs are zigzagged and stout, ending with large, reddish-brown buds with a single visible scale. One-inch seed clusters, called buttonballs, hang on the tips of the branches well into winter.



Tulip Tree *Liriodendron tulipifera*. One of the tallest and fastest growing eastern hardwoods, the tulip tree, or tulip poplar has a straight trunk with few lateral branches and a narrow canopy that spreads with age. The bark is dark gray and furrowed into close, interlacing rounded ridges separated by deep crevices. The young reddish-brown twigs are slender and end with flattened buds that look like a duck's bill. Look high in the canopy for the light beige, candelabra-like winter seeds, reminding us of the flowers soon to come.