

## **“The Common Spicebush and Spicebush Swallowtail Butterfly”**

by Sally Cureton

One of the more prolific plants in the Rockingham Springs Arboretum with a spicy aroma and flavor is the **Common Spicebush** (*Lindera benzoic*). Named after the Swedish botanist, Johann Lindler, the “benzoic” comes from an Oriental gum. This is an understory shrub that grows in moist woods and around streambeds, since it tolerates a high water-table. Native to the eastern United States, it is a member of the laurel family and very hardy, found from Maine to Michigan and into the South to Florida and Texas. Close relatives include sassafras, bays, avocado, cinnamon, camphor tree and anise.

Spicebush is a plant that many people miss noticing when walking in the woods. Early in the spring it will produce dense clusters of lemon-fragrant yellow flowers. These are pollinated by early solitary bees, ladybug beetles and bee flies. Soon leaves which are light green, smooth and untoothed will appear. They are glossy, up to 6 inches long and about 2½ inches wide. The bark is smooth and the twigs are slim and brittle most times of the year. In the fall, spicebush can be identified by its bright red berries which are lovely to look at. They provide food for birds and other wildlife. Birds such as robin, Northern bobwhite quail, gray catbird, Eastern kingbird and the great crested flycatcher as well as squirrels will eat them. They are especially relished by the veery and the wood thrush (one of my favorite birds).

Fortunately for us, it is not a favored food of deer, making it a great choice for Massanutten residents. Also, it is a fast-growing shrub that will be no taller than about 12 feet. A small amount of sun will produce a bush with better form and more berries. This is a plant with no serious disease or insect problems. A great plant for your yard if it is moist enough. Both the fruit and the foliage are aromatic. Spicebush is both an attractive and a wonderfully scented plant to have around.

The Common Spicebush has a long history of medicinal and culinary uses. A mildly astringent and stimulating tea can be made from the leaves, twigs and bark. This is done by steeping them for about 15 minutes. During the Civil War, spicebush tea was often used as a coffee substitute. The tea had medicinal properties and was used to reduce fever, relieve colds and dysentery. In addition, the oily berries can be used as a substitute for allspice or cinnamon if they are dried and powdered. The oil can be used to add a spicy fragrance to perfumes.

The **Common Spicebush** even has its own butterfly, the **Spicebush Swallowtail** (*Papilio Troilus*). Swallowtail butterflies have two “tails” on their hind wings which resemble the tails of swallows. Birds looking for

a meal interpret the tails to be antennae. There are also bright red spots on each tail that appear as eye spots to predators. Both of these features make it appear that the back end of the butterfly appears to be the front. If you see a swallowtail butterfly with a tail missing, the likely cause is a bird that flew away holding a tail in its beak. The large size and gorgeous colors of all swallowtail butterflies make them a favorite for many. The Spicebush Swallowtail butterfly is one of the most common and is found throughout the eastern half of the United States, generally wherever the spicebush is found. Its favorite flowers also include honeysuckle, lantana, azalea, butterfly bush, and sassafras. The adult is mostly black. The front of the first set of wings has a row of light yellow spots and on the front of the hind ones is another row light green in color. These dots are what set them apart from other swallowtail butterflies.

The female caterpillar will almost always lay its eggs on the plant that the newly hatched caterpillar will eat. So for the spicebush swallowtail, that would be the common spicebush. Once the light green eggs hatch, food is there. Many young caterpillars, including these, look like bird droppings. They are dark with irregular white markings across their backs. As they grow, they become green, which camouflages them against the leaves which they are eating. The caterpillars of the Spicebush Swallowtail have a bright orange scent gland that releases a concentrated spicebush odor when they are bothered by predators. Their defenses also include large fake eyespots near their heads that make them look like small snakes. This caterpillar has a unique feeding pattern. It will make a tube out of a leaf to which it returns between nighttime feedings on surrounding leaves. This has the added benefit of providing a hiding place from predators. It takes approximately one month for it to mature from egg to pupa, or chrysalis stage.

When ready to pupate, it changes color from bright green to bright yellow. The chrysalis will be brown or green, or something in-between. After about three weeks in the summertime, this chrysalis will split open and the adult butterfly will emerge. After the sun has warmed and dried its wings, it will fly off. Its life is often brief. Most butterflies live for only one or two weeks as an adult. The Spicebush Swallowtail will produce several generations each summer. A sure winner to be seen in the Arboretum this summer.