



Sequatchie Valley Institute

Self-Guided Forest Nature Trails

Information for Hikers and Trail Guides

Please return this booklet to the Gallery.

Don't forget to leave this brochure at the Gallery! Thanks for visiting us and come back soon!

Find out more about Sequatchie Valley Institute at the Gallery. You can become a member for \$25/person; \$35/family; \$15/senior/student. Benefits include hiking, 10% discount on events, and camping (for an additional fee). Watch our Facebook pages and Websites for upcoming events and join our mailing list on the SVI website.

Barking Beetle is available for events and overnight camping. We also conduct guided tours for adults, scouts, school groups, and college classes.

Contacts

www.SVionline.org; www.Liquidambarsvi.wordpress.com

Facebook: Sequatchie Valley Institute; Liquidambar Gallery

Phone: 423-949-5922/4598

Hemlock Grove Trail

Carol's pottery signs along this trail are made with impressions of Queen Ann's Lace flowers. The lower half of the trail follows Hick's Creek and is easy hiking. Continue on up a moderate climb to Moonshadow, where you can explore the Arboretum circle trail and then return to the Gallery by Kodai Trail.

You can make a shorter but beautiful round trip from the Gallery by returning on the gravel road at the cave (a side trail from Stop 8) or from the Glade at Stop 15.

Geology of the Area

The lower strata of rock here in the Sequatchie Valley consist of limestone. The calcium carbonate that makes up the rock was laid down 340 million years ago when this area of North America was covered with a shallow sea. The sandstone layer above the limestone was formed as the Appalachian Mountains began to form. Over millions of years the rocks in the rising mountains eroded and washed down into the drying seas. Three hundred million years ago this erosion formed the sandstone in the bluffs bordering the valley. A geologic anticline folded the rocks, producing the present-day Sequatchie Valley. The sandstone rocks in the creek bed eroded out of the sandstone layers above the limestone and over time were slowly smoothed and rounded as they were moved downstream by rushing waters. Some of the eroded sands from the Appalachian Mountains traveled to the Gulf of Mexico, forming the beautiful beaches of north Florida in Apalachicola and Destin. Fossils of ocean creatures in the limestone and plant fossils in the sandstone hint at what the earth right under your feet was like in the past. On the hike today you will be looking at the present (trees, flowers) and the past (rocks, fossils).

1. Shagbark Hickory—the best species for nuts. You can't miss that shaggy bark! To your left, look for a tall, slim white-barked tree, a sycamore. The vine growing up it is a Crossvine, which has yellow blooms in the Spring. Walk through Uno, our first garden here in 1971.

2. The raised ridge prevents the creek at flood stage from entering and eroding the garden. The small tree is a redbud which has lovely and edible pink blooms in early spring. Lots of spring flowers bloom here: Blue Phlox; Golden Ragwort; Toothwort; Trout Lily; Meadow Parsnip.

3. Sweetgum—*Liquidambar styracifolia*. Note the genus name is also our gallery name. We named the area at the bridge "Sweetgum" when our family first walked across the creek in 1971 because of the abundance of these fast growing trees.

4. The woody shrub is in the Blueberry (*Vaccinium*) family. Some varieties produce edible berries. You are walking along Hicks Creek, which usually runs from November to May, then goes underground into the limestone rock.

5. Ironwood tree. The limestone rocks exposed here have been dissolved by rain (which is slightly acid) into strange shapes. Look for Hepatica in the limestone crevices—the trilobed leaves have the form of the liver. The lovely blooms come very early in February.

6. The big limestone rocks jutting into the creek form a nice swimming hole when the creek is running. Caves and sinkholes often form in the limestone--notice sunken areas by the trail. The dead pines slowly rotting here are a result of damage from the Southern Pine Beetle, which killed many of our pines in 2000. Stress from drought and heat probably made the trees more susceptible.

7. Beech trees with their white bark grow thickly here. You can identify them easily in the winter because they hold their golden leaves till Spring. Beeches are very sensitive to forest fires—large ones show that there have not been any fires in this area for decades.

8. Wild Black Cherry. The inner bark was once used as cough syrup but frostbitten leaves can kill livestock. The side trail to your right (marked with blue and white strips) leads you to the entrance of McIntyre Cave which dives into the same limestone strata. The cave temperature is under 60 degrees F year-round. Jump down into the

entrance to feel the “cool” air in the summer and “warm” air in the winter. You may see an orange salamander on the moist limestone inside the entrance.

The cave is closed to visitors now because of the white-nose syndrome, a fungus which is currently killing millions of bats in the Eastern US. Our little Tricolored Bats, one of the smallest bats in the East, live in the cave and are not yet an endangered species. They catch insects in the evening, one every 2 seconds!

To the right of the cave entrance is a very large beech tree. Look closely, you may see initials of lovers carved into the bark many years ago. Now return to Hemlock Grove Trail. For a shorter hike, you can return to the gallery on the gravel road.

9. Eastern Hemlock. This low area along the creek is dominated by the beautiful hemlocks. These trees are now in danger of extinction due to a tiny insect, the adelgid, brought into the US from Europe. Climate change has also caused the hemlocks to be under stress, as they are a cool climate tree and remnants of the glacial periods over 10,000 years ago.

March-April: Yellow violets along the trail

10. Chestnut Oak. You are now walking along the creek floodplain. After heavy rains, the creek spreads out and meanders back and forth. The music of the running water is so beautiful, creating a peaceful walk. If the creek is dry, plan to come back when the water is flowing—most of the winter and after heavy summer and spring rains.

11. Sawbrier, may be called greenbrier, depending on whether you get caught on the thorns or not! Old timers know to avoid the tough thorny branches. However, these are great forage for deer in the winter and the berries feed the wild turkeys. You can eat the young growth in the spring—good trail nibblies.

Note two large trees uprooted by wind along the creek between #11 and #12. The pits produced by uprooted trees provide protection from erosion and rich areas for new growth.

12. Shortleaf yellow pine. These fine straight trees are used for lumber. Note the many dead pines in this area.

13. Hickory. Watch for the rhododendron and mountain laurel by the creek. Both have evergreen leaves. Laurel leaves are smaller. Note that the far bank is mostly round creek rock, initially washed down from the sandstone cliffs above the valley.

14. Red Maple. It's possible to make sugar from the sap. This is the first tree to bloom in the spring, with beautiful red flowers and winged seeds. The blooms tell us it is time to plant peas in the garden.

15. Just as these pines on the ground died around 2000, so did a large grove of pines to your right. This was a potato field in the 1930's owned by Old Man Mose, an African-American who raised his family here. He was also an excellent mason, using the rounded creek rocks to build houses. A few of the houses he built can still be seen in Cartwright and Daus. The rock piles around the area are possibly graves or remnants of structures. Be respectful and think about what life was like for this family. When the farm was abandoned, the pines began to grow. Some of them we used for the rafters at Moonshadow. The rest died from the beetle, so we are developing a native grass prairie for wildlife and also for parking during conferences, retreats, workshops, weddings, etc. We call it The Glade. The children call it The Savannah and hunt lions and zebras there. The creek and hemlocks are now behind you as the trail continues upwards. For a shorter hike, you may walk through the glade to the gravel road, turn right downhill, and walk back on the road to the Gallery.

16. Yellow Poplar (Tulip Tree). This is the State Tree of Tennessee. Some of the largest and oldest trees in Tennessee are poplars. The early spring flowers resemble tulips and produce excellent honey. The long-lasting green heartwood of the largest poplars was much sought after by the early settlers for log cabins and by the American Indians for canoes. The display tables in the Gallery are made from the heartwood of a Tulip Tree that fell on one of our houses! Tulip Trees are in the Magnolia family, and among the oldest of flowering plants,

dating back 80 million years. Dinosaurs may have rested in their shade.

17. The massive tree is a red oak. The smaller tree by the sign is a sourwood. Note the oval shape of the trunk, an easy way to id it. In summer, try tasting the long slim leaves. Nice and sour, they can be used in salads. Summer blooms make the famous Tennessee honey. Note a strange burl about 8 ft. up on an oak on the left side of the trail. Watch for a small American holly with evergreen spiky leaves, often used for Christmas decorations.

In April, “Bubbies” or Sweetshrub here have lovely chocolate scented blooms and form round seed pods that feed the birds in the winter. In very early spring, the small “Sarvis” (serviceberry) trees in this area produce lovely white clouds of tiny flowers followed by small edible berries.

18. Hickory. Note the “knob” about 15 feet up. These are common on hickories and a good way to identify them. In winter, you will see our old llama barn up the hill, which also housed our first art gallery. We no longer have llamas, due to an attack by dogs.

19. Chestnut Oak.

20. Mud Dauber to your left. This fairytale house was built during the first building workshops at SVI. It is constructed of cob, made with clay from the hillside, sand, and straw. Please be respectful if anyone is staying there, but feel free to look around. Note the “green” roof—in the winter it may be brown! This area was cleared over 30 years ago and is now reverting to shrubs and young trees. Mud Dauber is available for day and overnight rentals. Call Carol for information at (423) 949-5922.

21. Wild Black Cherry. The fruit is edible and the wood makes beautiful furniture. The trail continues up the hill from here. You may wish to take a side trip along the road to the right to see Alpenglow, containing Carol’s wood-fired kiln and summer studio. Keep watching the *Liquidambar* website for updates on firings.

22. Compost toilets. You may visit if necessary! After use, we add sawdust, ashes, and leaves. When the underground concrete containers are $\frac{3}{4}$ full, we move the entire structure and cover the opening for 3 years. At the end of this time composting has purified the organic waste and we can use it on non-food crops and the orchard.

23. Cob Oven. Come to a famous SVI pizza party for a special treat! We build a fire in the oven in the morning, then let it burn out. We shovel out the ashes then put in the pizzas, bread, pies, etc. Yummm.

The 3-story structure in front of you is Barking Beetle – our conference center and outdoor kitchen. Climb up to the top floor to enjoy the view. This structure was built with a grant from the Community Foundation using pine beetle-killed wood. It is available to rent for meetings, camping, retreats, weddings, and parties.

Unfiltered spring water may be available in the outdoor kitchen, and poison ivy soap. From here you can walk on up to Moonshadow, the main house and the center of Sequatchie Valley Institute. You may look around and use the picnic tables. Please respect the privacy of the homes.

You may continue up the road past the muscadine vineyard and to the Season Extension High Tunnel greenhouse, gardens, and orchard.

If you wish to explore the Pipsissewa Arboretum Trail, cross the road in front of Barking Beetle to find the first sign, a Poplar leaf with the letter “A”. This trail wanders from the gardens to the forest, the orchards, pond, and back, to Moonshadow, identifying over 100 species of trees and shrubs along the way. The id list is at the end of this booklet.

Return to the Gallery on the Kodai Trail, which begins just across the road from Barking Beetle at the rock bridge.

Kodai Trail

Pottery signs on this trail are impressed cross-sections of logs.

1. The 3-foot logs here are shiitake mushroom producing logs. The little bridge crosses a stream coming from a periodic spring. Wild irises bloom here in April. This trail is named after the trails at Kodaikanal International School in South India where Johnny and Carol Kimmons taught for 3 years. Hiking was a major part of the curriculum.
2. We have named this regal rock the Nargun. Australian aborigines say a force in the earth can give you strength and wisdom. They find this force in certain rocks they call Nargun. Pat the Nargun carefully—if angered it could be dangerous. Say Hi. Don't you feel stronger? Most of the large boulders like this one have come from the bluffs above, possibly as a result of freezing temperatures during the Ice Ages, over 10,000 yrs ago. Look back after you have walked about 20 to see the "face".
3. The blocky sandstone rocks here and along the trail are examples of the type used to build much of Moonshadow, home of the Kimmons family. As you continue down, watch for a small American Holly on the upper side of the trail,
4. Two old hickory trees fell across the trail here. Trees get old or diseased and die. It's natural. Forests consider downed trees fertilizer for the soil. Organisms from beetles to raccoons and foxes see the downed trees as food or as a place to call home. In May, you will see the beautiful native honeysuckle blooming on the uphill side as you continue.
5. You are in a grove of Sweetshrubs (also called Bubbies) which have pretty deep red flowers in the spring and produce 2-inch pods which are visible all year and feed the birds.
6. Blackgum. The wood doesn't check (split as it dries). Years ago Tennesseans used cross-cut rounds of this tree for wagon wheels, wheelbarrow wheels, and toys. Some say that if you have trouble identifying a tree, it's probably a blackgum, with its simple leaves. The small fruits feed wildlife in the fall.
7. Chestnut oak—one of the many species of trees that make up the upper canopy of the forest on the higher dry slopes.
8. Dogwood tree left of the marker. Dogwoods have very hard wood--the best wood for making a wood mallet. The leaves help sweeten forest soils and the fall berries feed migrating birds. To the right is a sassafras tree. Note the leaves; 3 lobed (ghosts), 2 lobed (mittens) and 1 lobed. The roots of this tree were once used to make tea and root beer and the dried leaves thicken Creole file gumbo. Both of these trees are understory trees, happy to live below the upper canopy.
9. This Post Oak has a group of Resurrection Ferns growing on the bark 5 feet above the ground. They don't hurt the tree, just use it for home. If it has rained, they will be green. If it has been dry the ferns will be brown and look dead.
10. A hole in this Chestnut Oak 5 feet off the ground may be the home of a flying squirrel family. These gliders of the night are nocturnal and one of the cutest animals in the world.
11. Sourwood tree. Note how deep the bark ridges are. This is one of the few trees with a trunk that is oval in cross-section. Watch for a VERY large white oak with large limbs leaning over the trail just ahead. Skullcap blooms here in May.
12. Cedar tree. You are at the top of the limestone strata. Cedars like limestone soil so they are common here. Cedar wood contains a natural preservative so they make great fence posts, furniture, and cedar chests. In the spring, lots of redbuds will be blooming.

13. In the year 2000 the southern pine beetle killed pine trees all over the southern US. Ninety percent of the pines on this land were killed. This area you are now looking at was mainly pine trees (you see many dead ones on the ground). A variety of trees have taken over as the forest recovers. A Sweetgum, for which the gallery is named, grows by the sign. They have lovely star-shaped leaves which turn glorious colors in the fall.
14. This little beech tree gives you a good look at its leaves. Beeches keep their dead golden leaves all winter. In the spring the new green leaves push the dead leaves off. To the left, you see our Wood Mizer bandsaw mill. The lumber we use for building comes from this mill. Back in 2001 (when we bought the mill) we turned many dead pines into lumber. In 2005 we built the house that is now Liquidambar Art Gallery with the lumber.
15. Years ago coal cars (carrying 12 tons of coal) ran on rails from the mines on the edge of the Cumberland Plateau down an “incline” to this concrete platform. From here the cars ran to a 3-story building (a coal tipple), where the coal was “tipped” into wagons for transport across the bridge to the railroad. We built the walking bridge on the original piers. Our workshop, which we call Tipple, was built on the old foundation of the original tipple. Resurrection Ferns grown on the platform.
16. You have arrived back at the gallery! Tipple, to your right, contains our workshop and kiln. Notice the large limestone rock in front of you. Growing on top of it is an elm tree with a tire swing hanging from it, a beech tree, and then a very large ash tree (we sure hope it doesn’t fall!). The steep steps on this slope were built by Johnny’s dad in the early 1970’s using sandstone creek rocks.

General Information for Hikers

The round trip is under 3 miles including side trails. Allow 2-3 hours for a relaxed trip with lots of stops. The trails are moderate, with some rocky areas and slopes, suitable for all ages. They traverse the typical habitats of the Southern Appalachian Bioregion with many examples of native flora and fauna, from the Sequatchie Valley floor half-way up the escarpment of the Cumberland Plateau to just below the bluffs, about 300 ft in elevation gain. You may also wish to explore the Pissisewa Arboretum Trail with over 100 named trees and shrubs.

Don’t forget!

- Trail Guide—at the Gallery or you may access the trail info on SVIonline.org and liquidambarvi.wordpress.com.
- Bamboo walking pole—free loaners at the Gallery (\$5 Donation to SVI if you want to keep yours)
- Water, Snacks—Ask at the Gallery if you need water. You may stop and picnic anywhere along the trails. At Moonshadow you may use picnic tables, compost toilets, and spring water.
- Binoculars and Camera/Cell phone
- Nature Guidebooks—Available in the Gallery Library
- Appropriate footwear and clothing. We suggest closed-toe shoes and long pants.
- Bug spray/hats

Suggestions for safe and no-trace hiking

- Look for the markers—numbered ceramic for the trail guides and colored flagging. We suggest you stay close to the trail.
- Plan to be back to your car before dark. The trail markers may not show up at night.
- Pets must be on a leash
- Observe and enjoy wildlife and plants but leave them undisturbed. No removal of plants.
- Leave no trace
- Be aware of your surroundings and watch for: Biting/stinging insects (ticks and wasps), venomous snakes, and poison ivy, all a part of our amazing biodiversity.

Pipsissewa Arboretum Trail (DRAFT)

A. American Sycamore, native

A1. Poplar, yellow tulip, native

A2. Holly-leaf Oregon-grape, native to NW US-Canada *Mahonia aquifolium* (Pursh) Nutt. Berberidaceae (Barberry Family)

A3. Elm, Slippery; *Ulmus rubra*

B. *Forsythia sp.* Eastern Asia

B1. Bee bee tree, native to East Asia; *Tetradium daniellii*

B2. Quince, Japanese, native to SE Asia; *Chaenomeles sp.*

B3. Yaupon, Holly, native SE US. *Ilex vomitoria*

C. *Viburnum sp.* Native US – view across garden

C1. Holly, deciduous, native; *Ilex decidua?*-- >view across garden behind tub

C2. Dogwood, flowering, native; *Cornus florida*

C3. Raspberry, black, cultivar; *Rubus occidentalis*

D. Blueberry, Rabbit-eye, cultivar, native SE US; *Vaccinium ashei*

D1. Oak, White, native; *Quercus alba*

D2. Redbud, native; *Cercis canadensis*

D3. Persimmon, Common American, native; *Diospyros virginia*

E. Pawpaw, native; *Asimina triloba*

E1. Juneberry, native; *Amelanchier sp.*

E2. Crepe myrtle, native to SE Asia, India; *Lagerstroemia sp.*

E3. Akebia, native to SE Asia; [*Akebia quinata*](#)

F. Jujube, native to S Asia; *Ziziphus jujuba*

F1. *Rosa rugosa*, native to SE Asia, source of edible rose hips, high in Vitamin C.

F2. *Ginkgo biloba*, native to China.

G. Goumi, native to SE Asia; *Elaeagnus multiflora*

G1. *Vitex sp.*, native to Mediterranean and Asia

G2. Grapes, Concord, cultivar, native to US: *Vitix sp.*

G3. *Schisandra sp.*, native to E. Asia, medicinal

H. Mayhaw, native, cultivar; *Crataegus sp.*

H1. Chaste Tree, native to Mediterranean; *Vitex agnus-castus*

H2. Hops, cultivar, native to Europe; [*Humulus lupulus*](#)

H3. Muscadine Grape, cultivar, native; *Vitis rotundifolia*

I. Cherry, sour, cultivar, native to SE Asia; *Prunus cerasus*

I1. Japanese Heartnut, cultivar, native to Japan; *Juglans ailantifolia*

I2. Sassafras, native; *Sassafras albidum*

J. Blackgum, native: *Nyssa sylvatica*

J1. Greenbrier (Sawbrier locally), native; *Smilax sp.*

J2. Sourwood, native; *Oxydendrum arboretum*

J3. Oak, Chestnut, native; *Quercus prinus*

K. Maple, Sugar, native; *Acer saccharum*

K1. Oak, black, native; *Quercus sp.*

K2. Cherry, Wild

K3. Locust, Black

L. Gum, Sweet, native; *Liquidambar styraciflua*

L1. Beech, American, native; *Fagus grandifolia*

L2. Bamboo, Japanese Builders, native to Asia

L3. Hydrandea, Wild, native; *Hydrangea arborescens*

M. Pine, Shortleaf

M1. Orange, Trifoliate

M2. Willow, Pussywillow, cultivar; *Salix sp.*

M3. Hemlock, Carolina

N. Persimmon, Japanese, cultivar;

N1. Plum, cultivar

N2. RedCedar

N3. Walnut, Black

O. Hickory ??, native; *Carya sp.*

O1. Poplar, yellow tulip, native

O2. Elm, American, native

O3. Hackberry

P. Ash, White

P1. Trumpet vine on P.

P2. Sassafras

Q. Pine, White

Q1. Muscadine vine, wild, native

Q2. Bamboo, large

Q3. Buckthorn, Carolina, thicket, native: *Rhamnus caroliniana*

R. Fig, cultivar, Sweet Italian-

R1. Tree-of-Heaven, native to SE Asia, invasive in SE US;

Ailanthus altissima

R2. Raisin Tree, native to SE Asia; *Hovenia dulcis*

R3. Maple, Red, native

S. Hickory, Shagbark, native

S1. Virginia Creeper vine growing up Shortleaf Pine, native

S2. Devil's Club, native; *Aralia spinosa*

S3. Buckeye, Yellow, native

T. Elderberry, native

T1. Serviceberry, native cultivar

T2. Linden, native to Europe

T3. Hawthorne, Downy, native, *Craetagus sp.*

U. American Strawberry Bush, locally Hearts a bustin', native;

Euonymus americanus

U1. Poison Ivy on Chestnut Oak, native

U2. Elm, Winged, native—near pond edge

U3. Huckleberry (local name), native; *Vaccinium sp.*

V. Bamboo, Yellow Groove, native to East Asia

V1. Hickory ?, native

V2. Paw paw, native

V3. Apple, wild ? , native

W. Azalea, native

W1. Autumn olive, native to Russia, invasive in SE US

W2. Kiwi grove, native to New Zealand; *Actinidia arguta*

W3. Mulberry, Red, cultivar, native

X. Pine, Virginia, native

X1. Willow ??, native, below rock by pond

X2. Russian olive, native to Russia, invasive in SE US

X3. Oak, Northern Red, native

Y. Beauty Bush, native

Y1. Peach, cultivar

Y2. Pomegranate, Dwarf, cultivar, native to Mediterranean;

Punica granatum

Y3. Boxwood, cultivar, native to Europe; *Buxus sp.*

Z. Sinicuichi, native to North America; *Heimia salicifolia*

Z1. Hydrangea, Oakleaf, native

Z2. Virgin's Bower, native; *Clematis sp.*

Z3. Rose, cultivar; *Rosa sp.*