

**MERRILL LINN LAND &
WATERWAYS CONSERVANCY**

Shamokin Mountain Trail



**P.O. Box 501
Lewisburg, PA
17837**

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Welcome to the Shamokin Mountain Trail

Welcome to the Shamokin Mountain Trail. This Trail has been created and is maintained for the observation of natural biological, geological, and scenic features. The Trail winds through private lands owned by Warren and Chris Abrahamson, Wayne McDiffett and Ruth Burnham, and crosses a portion of Pennsylvania State Game Land Number 193. Respect the rights of these private land owners and help maintain the stewardship of our public lands. We hope that you enjoy your hike but we ask that you observe the restrictions listed on the adjacent panel. These rules are intended to preserve the value of this site for present and future generations.

If you are not a member of the Linn Conservancy, please join and support this Trail and Conservancy through your membership.

The Trail's Story

Geology

The story of **Shamokin Mountain** begins well over 400 million years ago (mya) during the Silurian Period. During this time, large deposits of sandstone were laid down over the central Pennsylvania landscape and subsequently these deposits were buried by thick layers of shale. Approximately 250 mya, the continental land masses of Africa and North America collided due to continental drift. This resulted in the so-called **Allegheny Orogeny** that produced the topography that we see today.

Consequently, two main deposits underlie Shamokin Mountain. The first deposit, the **Tuscarora Sandstone**, is approximately 500 ft thick and dates to roughly 400 mya. This layer is not evident along the Trail. Outcrops of Tuscarora Sandstone are seen north of the Trail along Stein Lane.

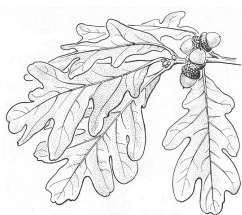
The second, more recent deposit is the **Rose Hill Shale**. This shale, originally a green color, became orange-red due to weathering as iron within the shale oxidized. Burrowing animals have excavated chips of this shale along the Trail. If you look closely, you may find trace fossils of the burrows of ancient creatures.

Shamokin Mountain soils are strongly acidic (pH 4.5-5.1) and nutrient-poor. The underlying bedrock typically starts at a depth of 18" to a few feet and limits the rooting depth of shrubs and trees. The soil is generally very well drained and is prone to become droughty

during rain-free periods. However, specific sites have restricted drainage and several springs are located along the lower portions of the Trail.

Vegetation

The forest is typical of what is seen today throughout the central **Pennsylvania Ridge and Valley Province**. However, today's forest is quite different from the forests that this region's native Americans knew. Heavy logging during the 19th and early 20th centuries, the chestnut blight that arrived in the early 1900s and recently the hemlock woolly adelgid and emerald ash borer have markedly altered our region's vegetation. Once an oak-chestnut dominated forest, the canopy is now a mixed



White Oak

deciduous forest. The area was logged repeatedly during the 19th and 20th centuries. It was last logged

in the mid-1950s. Consequently, the vegetation along the Trail is an example of an association that develops 60-70 years after a selective-logging event. While there are trees well over 100 years old scattered through the forest, most are younger. Currently, the three most dominant tree species in the forest are chestnut oak, red oak, and black oak. If you look closely at the forest's sub-canopy you will see red maple, sugar maple, black cherry, white pine, and others, are actively recruiting. Oak, hemlock, and ash canopy trees are declining as more competitive maples and cherries grow

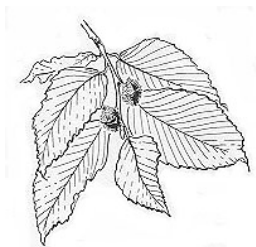
and as storms take their toll on the tallest and older trees. Storm-toppled and lightning-damaged trees can be seen along the Trail. As this forest progresses toward an old-growth forest state.

In addition to land-use history, topography and aspect strongly impact the vegetative patterns along the Trail. North-facing slopes have mixed populations of coniferous white pine and deciduous trees while the south-facing slopes have populations of deciduous trees, primarily oaks and hickories with few coniferous trees.

Introduced pest species such as the hemlock wooly adelgid and emerald ash borer have markedly reduced the growth and reproduction of eastern hemlocks and virtually eliminated ash in recent years. Invasive plants, such as bush honeysuckles, autumn olive, garlic mustard, Japanese stilt grass, are a huge threat to native plants. Overpopulation of deer are reducing tree recruitment and herbs.

There are over 20 tree species growing along the Trail. In addition to oaks and red maples, the Trail passes under pignut and mockernut hickory, beech, black and sweet cherries,

big-toothed aspen,



Beech

The Trail's Story

(continued)

yellow poplar or tulip tree, sassafras, and moosewood.

Several areas along the Trail are dominated by coniferous trees. White pine is present in several areas along the Trail and is making a strong invasion east of the power line, where the incomplete oak canopy is allowing pine invasion. The ages of these pines tell us that they invaded shortly after the last logging event in the mid-1950s and yet most are small.

The understory varies from place to place along the Trail. Shadbush and sassafras are the most common understory trees, along with saplings of potential canopy trees. Several shrubs are common including the evergreen mountain laurel, our state flower. The understory of the eastern-most portion of the Trail has been invaded by multiflora rose. This species was introduced by the Pennsylvania Game Commission to provide ground cover for wildlife but this alien species proved a poor choice for it has now invaded numerous native habitats including the adjacent power line and for-

ested areas. Multiflora rose is now listed as a noxious weed.

The mayapple is a wildflower that grows in well-lighted areas



Mayapple

throughout the forest. Other wildflowers include wood aster and crooked-stem aster and several goldenrods. If you walk the Trail in early spring, you will see the beautiful round-lobed hepatica, rue-anemone, and trailing arbutus.

Fauna

The Shamokin Mountain Trail offers excellent opportunities to see different species of mammals. Gray squirrels are abundant because of the availability of acorns and other forage. During the warmer months, the eastern box turtle, garter snake, black rat snake, woodchuck, red fox, striped skunk, white-tailed deer, and eastern black bear are seen near the Trail.

One of the most spectacular aspects of the Shamokin Mountain area is its avifauna. The beautiful pileated woodpecker is often heard or seen in the area, and its elongated chisel holes frequent trees on the property. Other woodpeckers include the hairy, downy, and red-bellied woodpeckers. Other resident birds include the black-capped chickadee, tufted titmouse, and the white-breasted nuthatch. During an evening stroll, you may hear or even see the small eastern screech owl or its large cousin, the great horned owl. During spring evenings, the drama of the woodcock's sky dance is enacted in the old field adjacent to the yellow-blazed loop.

Birds that migrate from tropical regions to Pennsylvania to breed during summer include the yellow-bellied sapsucker. Although the sapsucker is rarely seen, its horizontal rows of peck holes occur on several trees near the Trail. The wood thrush, which winters in the rainforests of Latin America, punctuates the morning and evening stillness of late spring and summer with its melodic flute-like song. Other migratory birds include the phoebe, Carolina wren, gray catbird, ruby-throated hummingbird, yellow-billed cuckoo, and the spectacular scarlet

tanager.

Bird Populations in Decline

The populations of many of the migrant birds that breed in central Pennsylvania are in danger due to the destruction of their habitat. Wood thrush populations, for example, have declined by more than 25% since 1980. One of several causes of this decline is habitat fragmentation, which by increasing habitat edges facilitates nest parasitism by the brown-headed cowbird. Forest-dwelling migratory birds are also threatened by the loss of forest corridors between temperate and tropical areas. Wintering habitats in the tropics are also being destroyed as forests are converted to agriculture. Conservation efforts in both North and South America will be crucial to the long-term protection of our migrant birds. These are reasons why the Linn Conservancy's Linking Landscape Initiative is so important.

If You Enjoy Our Trail — Support the Linn Conservancy

If you're not already a member of the Linn Conservancy, please visit our website linnconservancy.org for information on how to support our work.



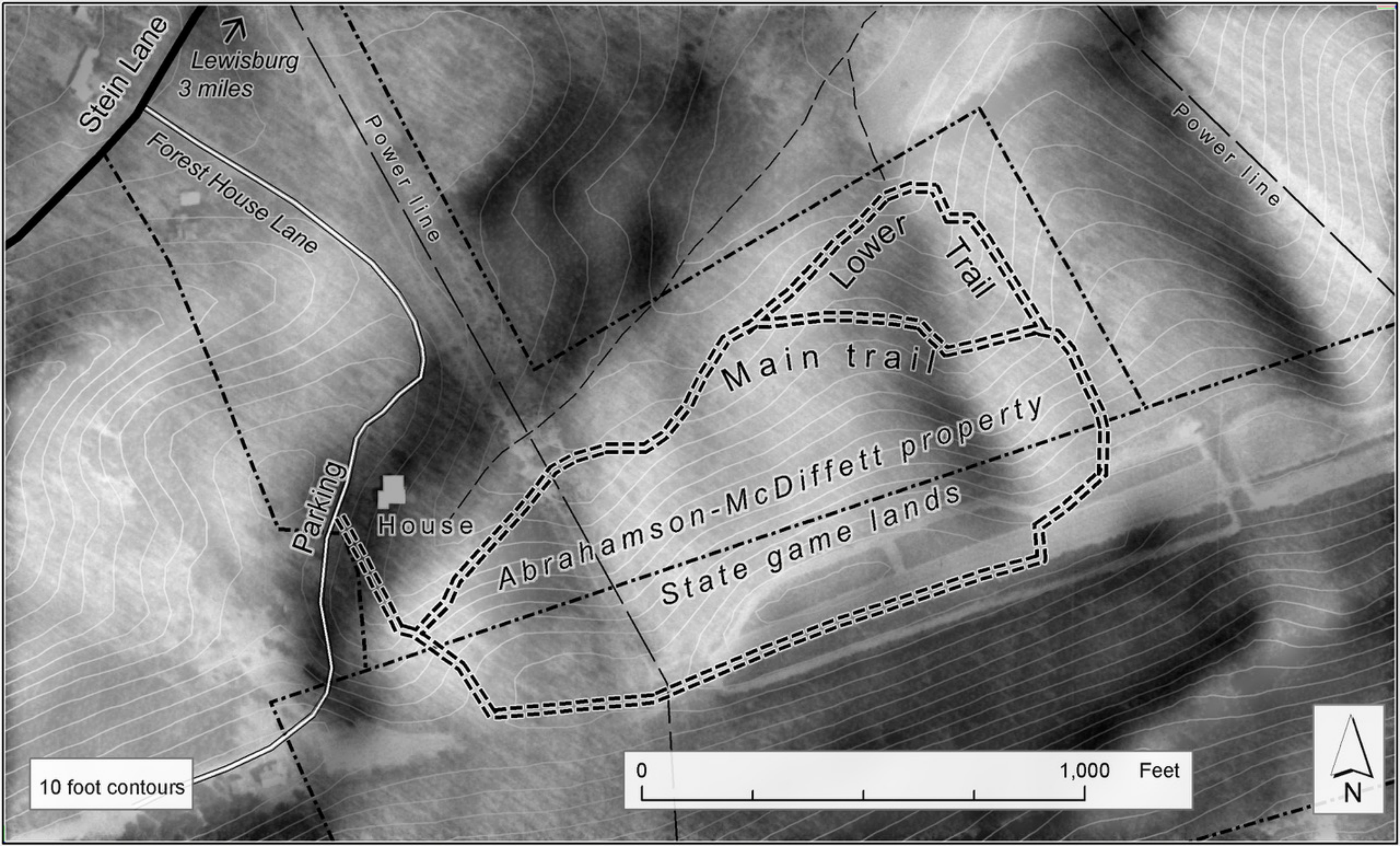
Sassafras in fruit

- **Please Respect Our Land**
- **Respect Private Property**
- **Trail Use is a Privilege**
- **Foot Traffic Only**
No horses or bikes
- **Pet Waste Must Be Picked Up**
- **Keep Pet on Leash** if it's aggressive to dogs or people
- **No Collecting** of any sort
- **Help Maintain our Trail**, remove fallen debris from trail
- **Leave Our Forest Undisturbed**
- **Leave Only Footprints**
- **Support Linn Conservancy with Your Membership**

**Please Return
Brochure for Reuse**

M E R R I L L L I N N
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C O N S E R V A N C Y

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Stein Lane

Lewisburg
3 miles

Forest House Lane

Power line

Power line

Lower Trail

Main trail

Parking

House

Abrahamson-McDiffett property

State game lands

10 foot contours

0 1,000 Feet

