

Dedicated to the aesthetic appreciation, conservation, and scientific study of nature.

**73 Acres of Fields and Forest
Geology Garden
Pond, Marsh, and Stream
51 additional forested acres
All linked by easy trails**

**OPEN DAILY 8-6
Admission Free
463 County Road
New London, N.H. 03257**

Please sign the guest register at the entrance kiosks

WELCOME TO KNIGHTS HILL NATURE PARK

The park is a seventy-four acre natural habitat set aside as a sanctuary for the protection of wildlife in the center of New London. It has a secondary purpose as a quiet and peaceful retreat for people to enjoy the aesthetic and scientific study of nature. The Field House is open during the summer and staffed by a naturalist who can answer many of your questions and leads programs during their tenure. For the naturalist in you there are checklists available at the Field House to record your finds as you travel the trails.

We invite you to follow the interpretive trail, starting at the Field House and proceeding through stations numbers 1 thru 10. Each station is listed in this brochure to help you discover what nature has to offer in this sanctuary. The map details the location of each station and a few other points of interest in the park.

1. Fern Garden

All the ferns you see are native to this area. Some have been transplanted to this spot to provide an opportunity to compare different species. Notice the differences and practice that awareness as you walk the trails. Seeing the differences in species helps to identify many varieties of plants and fauna in the forest. There are twenty-one different species of ferns in the park ranging from common to quite rare.

2. Evergreen Forest

This area is mainly a pine and fir forest, dominated by the White Pine (*Pinus strobus*). This combination of several native conifers (evergreens) growing close to one another allows you to see the features that help tell them apart. There are examples of Red Spruce (*Picea rubens*), Eastern Hemlock (*Tsuga Canadensis*), and Balsam Fir (*Abies balsamea*). Notice the understory that consists of rather small, low-growing plants, the result of the tall conifer canopy which limits the amount of sun-

light reaching the forest floor. In other areas where a branch has fallen, or a whole tree, notice there are young deciduous (leaf bearing) trees growing in the sunlight.

3. Hardwood Forest

Continuing on your tour turn left onto the Glen Loop Trail. Pay attention to the thicker ground cover of club mosses and ferns. What is happening to the evergreen forest as you travel? You might notice the thinning of the pines and the emergence of hardwoods, or deciduous trees. The species in this area are Sugar Maple (*Acer saccharum*), Red Maple (*Acer rubrum*), American Ash (*Fraxinus americana*), and some Birches (the *Betula* genus). Red Maples thrive with wet feet and will be near to water (streams, marsh, and springs) whereas Sugar Maples do better with drier feet (uplands). Ash trees may look ragged due to the emergence of the Emerald Ash Borer (*Agrilus Planipennis*), an invasive beetle beginning to thrive in New England.

4. Wetland Plants

At the junction of the Glen Lop Trail and the Lyon Brook connector, observe the plants especially adapted to wet conditions on your right. You might notice False Dragonhead (*Physostegia virginiana*), Turtlehead (*Chelone glabra*), Spotted Jewelweed (*Impatiens capensis*), and Male, Cinnamon and Sensitive Fern (*Dryopteris filix-mas*, *Osmundastrum cinnamomeum* and *Onoclea sensibilis* respectively). Look to the left for a split boulder where you might see an evergreen fern which is Common Polypody (*Polypodium vulgare*), a fern that prefers to grow on rocks.

5. Marsh (Beavers?)

Traveling onto the Lyon Brook connector, you may encounter a flooded trail and not be able to reach the bridge ahead due to renewed beaver activity in 2023. Look to your left and see the variety of plants growing in and around the marsh. The main factor for beavers is an adequate food source. Looking into the marsh you may notice a large number of Cattails (the *Typha* genus). The roots (rhizomes) are edible, but some are toxic to humans and need to be

treated first. The tops can be used to make flour, evidence of preserved starch grains on grinding stones suggests they were already eaten in Europe 30,000 years ago. Beavers will also eat fish and the cambium layer underneath the bark of many hardwood species. Beavers are tenacious lumberjacks and expert builders. See if you can find the results of these skills along the trail.

6. Vernal Pool (seasonal depressional wetlands)

A very special kind of wetland that is short lived (ephemeral) and not fed by a stream. A vernal pool is formed from snow melt and during the summer the water level is determined by the amount of rainfall during the season. Some of our lesser known amphibians live here, such as the yellow Spotted Salamander (*Ambystoma maculatum*), the noisy Wood Frog (*Rana [Lithobates] sylvaticus*), and the secretive Northern Two-lined Salamander (*Eurycea bislineata*). There are several other species of aquatic invertebrates (species lacking a backbone) living in vernal pools. If it is spring or early summer, can you locate evidence of eggs or tadpoles?

7. Selective Logging

Deciduous hardwoods dominate at this location because almost all of the coniferous softwoods have been logged off. The clearing of this part of the forest was done between 35 and 45 years ago, the forest is free of understory but not yet fully mature. The softwoods are making a comeback since they are the precursor to a climax forest. A forest is at climax when there is no appreciable ground cover and the overstory is Eastern Hemlock. You can find areas like this along the CORE Loop trail. Turn left at the junction with the Glen Loop trail.

8. Historic Apple Orchard

This historic apple orchard is being restored by planting heirloom apple varieties to supplement the existing old trees. The apples, as well as other fruits of the field (strawberries, blueberries, elderberries, blackberries, and raspberries), provide nutritious food to a variety of wildlife including Turkeys (*Meleagris gallopavo*), White Tailed

Deer (*Odocoileus virginianus*), American Black Bears (*Ursus americanus*), Red Fox (*Vulpes vulpes*), Gray Fox (*Urocyon cinereoargenteus*), Coyote (*Canis latrans*), and Bobcat (*Lynx rufus*). The rotting fruit is home to a large array of insects which themselves become food for birds and mammals alike. Oriental Bittersweet (*Celastrus orbiculatus*) is an aggressive non-native vine that can be seen choking the life out of trees in and around the orchard. While it's berries are decorative and a food source for many birds, it is an invasive species and needs to be managed so that the native trees can survive and thrive.

9. Pond

Here you can find many plants and animals found nowhere else in the park. The pond is dominated by Narrow-leaved Cattail (*Typhus angustifolia*), a wetland plant that provides valuable cover and food for a wide range of species. Several kinds of dragonflies and butterflies use the pond as their primary feeding and breeding ground. The magical Question Mark butterfly (*Polugonia interrogationis*) has bright orange on the upper surface of its wings. When it folds its wings, the cryptic, brownish-gray under-wing coloration makes this insect suddenly seem invisible. Look for the Twelve-spotted Skimmer dragonfly (*Libellula pulchella*) hovering over the pond's waters.

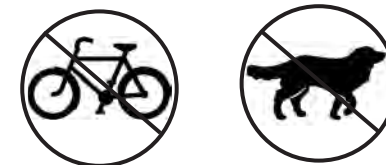
10. Fields

Turn and face the Field House. The dominant shrubs in this field (Field #1) are wild blueberries – both Highbush (*Vaccinium corymbosum*) and Lowbush (*Vaccinium angustifolium*) species. Blueberries are an important food source for birds and bears alike. It is tempting for humans to eat blueberries in the park, but be aware that a bear might be on the other side of that bush or the bush next to you (true story).

The left side of the field contains a wide variety of wildflowers and flowering grasses, home to the pollinators and butterflies of the park. Volunteers work to supplement these plants

with additional native shrubs, including American Hazelnut (*Corylus americana*) and Beach Plum (*Prunus maritima*), all favored by wildlife.

The four fields in the park are mowed on a rotating basis in order to encourage the growth of the many grasses and wildflowers that support invertebrate animals, such as insects, spiders, or crustaceans (phylum: *Arthropoda*), known collectively as arthropods. These creatures become the food supply for birds and other small animals. The young trees along the forest edges are preferred nesting and feeding sites. More bird species can be viewed along these field edges than anywhere else in the park.



In 1975 Knights Hill Nature Park was made possible by a generous donation of 69 acres of land by New London residents Lamont and Henrietta Moore. In the mid-1980s, neighbor Thomas Wistar made an additional gift of 4 acres bringing the total acres of the park to 73.

Knights Hill Nature park is a property of the Outing Club and through a variety of cooperative community efforts an additional 56 acres are now available for hiking trails.

**We hope you enjoyed your visit to Knights Hill Nature Park!
Come again and bring a friend.**