



Vermont Fish and Wildlife Habitat Fact Sheet

The word swamp conjures up impenetrable jungles of vines, Spanish moss, underbrush, and fallen trees with snakes dripping off branches and the waters dark with sinister, unseen dangers. This may be the picture of tropical swamps, but Vermont swamps are nothing of the sort. Rather, they are a wetland and a type of forest all their own. Southern swamps are generally deep-water and can be explored well only by boat. Northern swamps as we have here, however, are shallow-water, usually more suited to foot-slogging than boating.

Swamps are considered wetlands because they are saturated most of the year. They differ from marshes in that they contain woody vegetation-shrubs, trees, or both. In many cases, swamps are the final stages of the filling in of a pond. Although technically swamps are the penultimate product of changes in the landscape proceeding from open water to marsh to shrubs and trees and finally to dry land, because of water saturation the final stage may never be reached-or at least it may be extremely slow in evolving-so for all intents and purposes the swamp is in fact the end product of this evolution.

Swamps exist in either boreal-or deciduous-forest regions. Some of the best-developed and most extensive swamp systems in Vermont occur in the spruce-fir regions of the Northeastern Highlands, where they are composed largely of tamarack,

black spruce, balsam fir, and a smattering of white cedar, all trees typical of certain types of bogs. Deciduous areas with floodplains, riverbanks, deltas at the mouths of rivers, and edges of marshes support swamp white oak, silver maple, cottonwood, red maple, black ash, and elm, their proportions in the forest depending on locale. Pure hemlock swamps are also frequent, especially in cool, shaded ravines. Some of the finest deciduous swamps are in the Champlain Valley, tied closely to the large marsh and river systems there. Green ash is an important component.

Plants

Bushes and shrubs are strangely lacking in many treed deciduous swamps of Vermont, but herbaceous vegetation is usually lush. It grows atop the hummocks of fallen trees, where it can get a foothold, as well as relief from saturation. Sphagnum mosses, true mosses, and ferns-tall cinnamon and royal ferns - are particularly luxuriant. Jewelweeds, nettles, the early-blooming marsh marigold and late-blooming turtlehead are common rooted flowering plants. Tiny duckweeds, whose flowers are almost microscopic, float like a dense algal mat in the many pools, dangling their free roots into the water.

In shrub swamps, the vegetation may be thick and difficult to get through. Viburnums are well represented, with withered,

nannyberry, and arrow-wood all to be found. Speckled alder, winterberry, whose berries stay bright orange red through the snow season, and many species of willow may also be present. The fragrant sweet gale (one of the bayberry family), leatherleaf, and mountain holly are common to many shrub or boglike coniferous swamps in central and northern parts of Vermont.

Wildlife

Wildlife in a Vermont swamp has not the distinction of a Dismal or an Okefenoke. For the most part, animals in our state's swamps either are typical of a wet woods or are passing through the area while foraging or hunting. When the swamp is located next to a lake, however, many water-based birds and mammals may take refuge or come to nest in the swamp. This is a perfect habitat for minks (sometimes called water weasels) and raccoons. Both make their meals of fish, frogs, or other aquatic animals, as well as land prey. Raccoons, in addition, take advantage of the fruitful offering of trees and shrubs.

Swamps house many mammal species that live in other habitats as well. The woodland jumping mouse, with its long tail and kangaroolike feet, is not uncommon in many wet-woods situations and may be quickly identified by its very long jumps-almost leaps-over fallen trees and plants. The smallest mammal in the world, weighing 1/9

ounce, the pygmy shrew is busy hunting its food day and night, summer or winter, in swamps and other forest areas here and across northern North America: this little insectivore must

keep up a feverish weight per day. Red squirrels, snowshoe hares, otters, fishers, bobcats, black bears, and white-tailed deer are present in varying numbers in the larger, more remote, and especially coniferous swamps, either residing there or traversing the area in their forays for food.

Birds

The barred owl and red-shouldered hawk nest in many swamps, along with a multitude of songbirds.

Where conifers are abundant, the yellow-bellied, olive-sided, and alder flycatchers are three of that family to be seen or heard. Also, without much trouble, one may view sizable flocks of rusty blackbirds and hear the vociferous winter wren and northern waterthrush. The last is a warbler that is more "swampish" than most others in its family, walking around the fallen logs and hummocks, building its nest on the ground, and issuing a strident song that rings through the swamp.

Perhaps the most notable birds of the larger swamps near Lake Champlain are the herons. There they congregate for nesting. The large great blue heron we often see stab-fishing in river shallows, marshes, or the edges of ponds, but the smaller green heron, more oriented to the swamp or marsh, stays away from the eyes of the average visitor.

Excerpted from Charles Johnson's book
Nature of Vermont