“Is This Poison Ivy?”

Written by BHHT Board Member Pamela Johnson, October, 2009

This question is frequently asked during our various Walks and Talks programs on Blue Hill Heritage Trust properties. Most of the trifoliate suspects are not poison ivy, though the plant is now common on the Blue Hill Peninsula and can certainly be found on some of the Trust’s lands.

“Leaves of three, let it be!” “One two three, don’t touch me.” “If butterflies land there, don’t out your hand there.” “Hairy vine, no friend of mine.” These are some of the mnemonics inspired by poison ivy.

Toxicodendron radicans (formerly, *Rhus radicans*), or poison ivy, is a native vine (*see note*) that has a deservedly fearsome reputation, although its “poison”, or allergen (the skin irritant urushiol) is only toxic to some humans and a few other primates. Deer and livestock eat the plant’s leaves with impunity, while birds eat the fruit and use the plants for cover. Indeed the fruit, or soft mat, of the T. radicans plant ranks among the most important and abundant foods for a wide variety of resident and migratory wildlife. Unlike the strangling invasive plant bittersweet, now ubiquitous in our fields and woodlands, the adventitious roots of poison ivy climb trees without smothering them. Poison ivy is even deployed in wetlands for erosion control. In Britain the plant’s foliage is considered attractive enough to be used ornamentally in gardens!

Wildlife value for food and shelter doesn’t diminish the plant’s danger to those who react badly to its resins, which is contained in ducts and released as a sap when the plant’s phloem is broken. Strong soap will remove the plant’s oils if washing occurs soon after contact, but this remedy is effective only within a couple of hours of contamination. Interestingly, the sap of another native plant, jewelweed *(Impatiens capensis)*, as well as an extract from native witch-hazel *(Hamamelis virginiana)* are folkloric applications thought to neutralize poison ivy resins. Both antidotal plants can be found locally, usually growing where poison ivy thrives.

Research conducted by Duke University, published in 2006, in the *Proceedings of the National Academy of Sciences,* exposed poison ivy plants to carbon dioxide levels expected in the year 2050. The plants growth rates tripled, as did the production and strength of urushiol. The report states that the fertilizing effects of rising carbon dioxide levels and a shift toward a more allergenic form of urushiol have important impacts for future health of both humans and forestry. In other words, our warming climate will encourage the spread and toxicity of poison ivy.

Still, if it is “let be” where it will benefit wildlife and not be disturbed by humans, poison ivy has an important and legitimate place in the landscape.

NOTE: A shrub form of poison ivy, *T. rydbergii,* is also found in Maine. Arthur Haines’ The Flora of Maine contains accurate taxonomy and the botanical descriptions of both forms of poison ivy. Northeastern field guides should be consulted for further identifying characteristics.