

Brief report of field review of proposed mountain bike trail route through the Goodwin Town Forest, Hanover, NH

Date/time of visit: 18 May 2011 approx. 8:45am – 3:15pm

Botanical review by Alice Schori in consultation with & guided by John Taylor of UVTA

No State-listed rare, threatened or endangered plants were observed during this spring review of the outer flagged trail loop at Goodwin Town Forest. The presence of rare species that would appear later in the season cannot be ruled out by this visit but seems unlikely.

The only **invasive alien species** seen was coltsfoot (*Tussilago farfara*), which is abundant in the wet log landing area adjacent to Goose Pond Road. Since this population is not affecting a rare plant population, the considerable and sustained effort it would take to get rid of it is probably not worth the effort.

Two additional trail sections that parallel Goose Pond Road from the log landing to Tunis Road, and one further upslope and marked in blue on a field map, were not reviewed. Those trail sections are not proposed for work in 2011.

There were a few **suggested minor edits** of the trail to accommodate findings of rich soil indicator plant species [blue cohosh (*Caulophyllum thalictroides*), downy yellow violet (*Viola pubescens*), baneberry (*Actaea* sp.), and miterwort (*Mitella diphylla*)] and a moderate edit already proposed by UVMBA due to additional water crossings and rocky terrain on the eastern slope that had a higher incidence of moose sign suggesting a possible yarding area under hemlocks.

Additional observations:

Although no rare species were found, some of the rich soil indicator species are somewhat uncommon in New Hampshire, so it is nice to avoid going through patches of them, if possible.

There is a nice **diversity of habitats** in the areas traversed by the proposed trail, with mixed northern hardwoods, some at least semi-rich mesic forest with much sugar maple (*Acer saccharum*) and yellow birch (*Betula alleghaniensis*), areas dominated by beech (*Fagus grandifolia*), hemlock (*Tsuga canadensis*) groves, younger areas dominated by white birch (*Betula papyrifera*) and striped maple (*Acer pensylvanicum*), some spruce-fir (*Picea rubens* and *Abies balsamea*) areas, and occasional red oak (*Quercus rubra*), white pine (*Pinus strobus*), and black cherry (*Prunus serotina*). Old stone walls, occasional rock outcrops, old snags, and the occasional fallen, hollow log add interest for visitors and habitat for various animals.

The forest has a **good variety of shrubs, wildflowers, and ferns**, so the trail should be of interest to pedestrians as well as bikers. Some of the species observed include:

Shrubs –

beaked hazelnut (*Corylus cornuta*), bush honeysuckle (*Diervilla lonicera*), fly honeysuckle (*Lonicera canadensis*), hobblebush (*Viburnum lantanoides*), maple-leaved viburnum (*Viburnum acerifolium*), witch hazel (*Hamamelis virginiana*)

Flowers –

blue-stemmed goldenrod (*Solidago caesia*), bristly sarsaparilla (*Aralia hispida*), bunchberry (*Cornus canadensis*), Canada mayflower (*Maianthemum canadense*), dwarf raspberry (*Rubus pubescens*), false Solomon's seal (*Maianthemum racemosum*), foamflower (*Tiarella cordifolia*), goldthread (*Coptis trifolia*), Indian cucumber-root (*Medeola virginiana*), Jack-in-the-pulpit (*Arisaema triphyllum*), painted trillium (*Trillium undulatum*), partridgeberry (*Mitchella repens*), pink lady's-slipper (*Cypripedium acaule*), rattlesnake-root (wild lettuce) (*Nabalus/Prenanthes* sp.), red trillium (*Trillium erectum*), Solomon's seal (*Polygonatum pubescens*), starflower (*Trientalis borealis*), twinflower (*Linnaea borealis*), trout lily (*Erythronium americanum*); violets: arrow-leaved (*Viola sagittata*), common blue (*V. sororia*), dog (*V. labradorica*), downy yellow (*V. pubescens*), round-leaved (*V. rotundifolia*), smooth or northern white (*V. pallens*), sweet white (*V. blanda*); white wood aster (*Eurybia divaricata*), whorled aster (*Oclemena acuminata*), wild oats (*Uvularia sessilifolia*), wild sarsaparilla (*Aralia nudicaulis*), wintergreen (*Gaultheria procumbens*)

Ferns and clubmosses –

bracken (*Pteridium aquilinum*), Christmas fern (*Polystichum acrostichoides*), evergreen woodfern (*Dryopteris intermedia*), interrupted fern (*Osmunda claytoniana*), lady fern (*Athyrium filix-femina*), long beech fern (*Phegopteris connectilis*), New York fern (*Thelypteris noveboracensis*), oak fern (*Gymnocarpium dryopteris*), sensitive fern (*Onoclea sensibilis*), common (or wolf's claw) clubmoss (*Lycopodium clavatum*), princess pine (*Dendrolycopodium dendroideum*), shining clubmoss (*Huperzia lucidula*), southern ground cedar (*Diphasiastrum digitatum*), and along the road also cinnamon fern (*Osmundasterum cinnamomea*) and ostrich fern (*Matteuccia struthiopteris*).