

Toby Run Ravine

This **locally significant site** is primarily on the Danville State Hospital grounds, and includes the narrow ravine of Toby Run. This hemlock-dominated ravine has an interesting and diverse assemblage of primarily native vegetation. The thick hemlock-northern hardwood canopy creates a cool shaded habitat for a thick cover of ferns and typical woodland wildflower species. Large tree specimens such as hemlock, tulip poplar, sugar maple and beech frequent the slopes and bottomland of this gorge. Additional surveys of this and adjacent areas for species of concern are recommended.

Threats and Disturbances

The area has been degraded by the gradual but persistent invasion of introduced plants such as Norway maple, tree-of-heaven, autumn olive, multiflora rose and garlic mustard. A devastating introduced insect pest, the hemlock woolly adelgid, has infested the hemlocks of this forest. Left unchecked, this pest could destroy the hemlock component of the forest, which would likely dramatically alter the present habitat conditions, allowing increased sunlight, and with it, more introduced species to colonize this habitat.

Conservation Recommendations

The PA Bureau of Forestry has released a biological control for the hemlock woolly adelgid in several locations statewide. Its effectiveness at controlling this destructive insect pest in the state is, as yet, uncertain. Chemical controls for this pest are expensive and fairly impractical for large areas. There may be no viable solution to this infestation, and it may need to “run its course”. Control of the invasive plants can be similarly labor or cost intensive. Aggressive removal of pioneer populations early in their colonization can be the most effective way of reducing the impact of these species on natural habitats.