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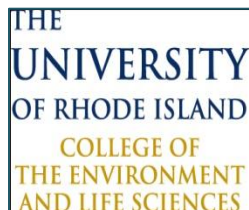
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Concept for Forest Management Demonstration, Peckham Farm, University of Rhode Island

Concept for Forest Management Demonstration Peckham Farm University of Rhode Island



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<http://nrs.uri.edu/ce/Forestry.html>

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1. Introduction

The University of Rhode Island is considering establishing a forest management demonstration at Peckham Farm, which contains 182 acres of forest and shrubland. The objective would be to demonstrate the impact of forest management activities on improving wildlife habitat and increasing populations of threatened wildlife species. The demonstration would be used for training URI students and private landowners, and for conducting applied research which will strengthen forestry outreach programs. In addition to improving wildlife habitat, the harvesting operations would enhance the productivity and health of the forest, and increase the future timber value.

This preliminary report is based on a GIS analysis of the site and a short field visit. The land use analysis is based on the RI Forest Habitat dataset recently developed at URI. The age of the forests was estimated roughly by checking the 1939 imagery available on RIGIS. The next step in planning the demonstration would be to conduct a detailed forest inventory of the property and develop a ten year forest management plan following NRCS guidelines.

Peckham Farm is located on the south side of Rt.138 opposite the entrance to the URI Boss Ice Area, and includes approximately 346 acres. Most of the property (53%) is forested, while 44% is agriculture/grassland and 3% is developed for farm buildings and the graduate housing complex (Table 1 and Map 1).

Table 1. Area of Peckham Farm by General Land Use Category

Land Use	Acres	Percent of total Property
Forest and Shrubland	182	53%
Agriculture and Grassland	153	44%
Developed	10	3%
Wetland Freshwater Emergent	1	0%
Total	346	100%

2. Forest Resources and Potential Forest Management Activities

The forests in Peckham Farm can be subdivided into seven major categories. Table 2 summarizes the extent of the various forest categories, while Map 2 provides potential locations for some forest management activities.

Map 1. Land Use of Peckham Farm

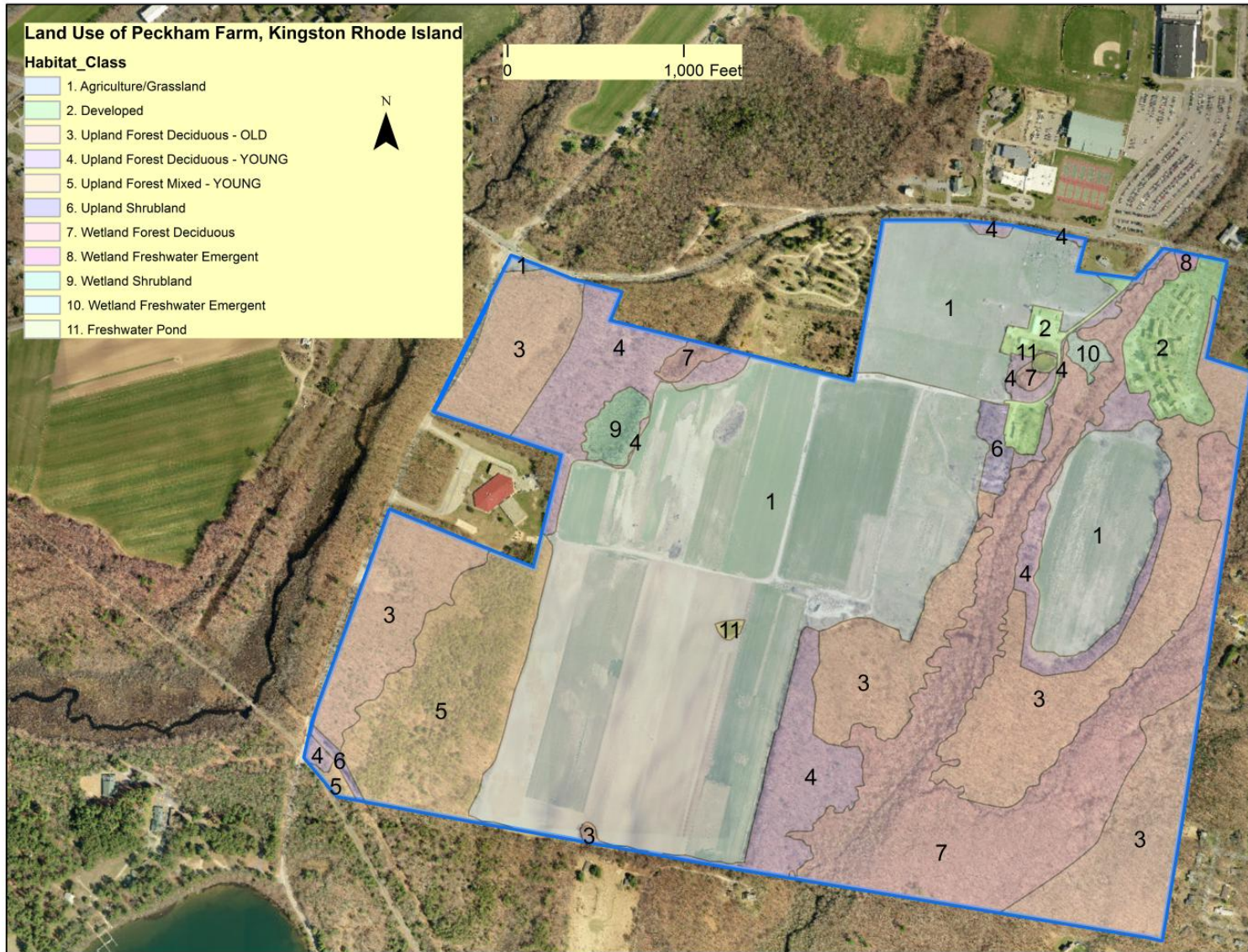


Table 2. Area of Forests in Peckham Farm by Land Use Category

Forest Category	Acres	Percent of total Forest and Shrub
Upland Forest Deciduous (old)	72	39%
Upland Forest Deciduous (young)	30	16%
Upland Forest Mixed	23	13%
Upland Shrubland	2	1%
Wetland Forest Deciduous	52	29%
Wetland Shrubland	3	1%
Total Forest and Shrub	182	100%

- Upland Forest Deciduous:** Most of the forested portion of the property is upland deciduous forest (102 acres, dominated by oak, hickory and maple. This includes and 30 acres of younger forest that was still very shrubby in 1939, and 72 acres of older forest that was already forested in 1939. The younger forest is probably less diverse than the older forest, and may be appropriate for intensive forest management to create early successional habitat (ESH) for species such as American woodcock and New England cottontail. This area could also be considered for forest grazing. The older forest probably supports greater biodiversity of flora and fauna, even though the absence of large trees in some stands implies logging in the past. Nevertheless, these stands may be worth managing for old growth characteristics through selective harvesting.
- Shrubland Forest:** The property includes a small amount of upland shrubland (2 acres) and wetland shrubland (3 acres) which provides valuable habitat for many species. The extent of this habitat could be increased by more intensive management of the upland deciduous forests.
- Upland Forest Mixed:** The property includes 23 acres of upland mixed forests, which are dominated by pitchpine, white pine and oaks. This is young forest that was still very shrubby in 1939. Portions of this forest may be worth managing for pitchpine barren habitat, which is critical for many wildlife species. This would involve harvesting the hardwood and white pine trees and scarifying the ground to promote regeneration of pitchpine seedlings. Controlled burning, which would enhance pitchpine regeneration, is probably not an option due to the proximity of the West Kingston Elementary School.
- Wetland Forest Deciduous:** The property includes 52 acres of wetland deciduous forests which would be left with little or no management.

Map 2. Forests of Peckham Farm and Potential Forest Management Activities

