

Office of Natural Lands Management Endangered Plant Species Program



Lupine (*Lupinus perennis*)

Photograph by David Snyder

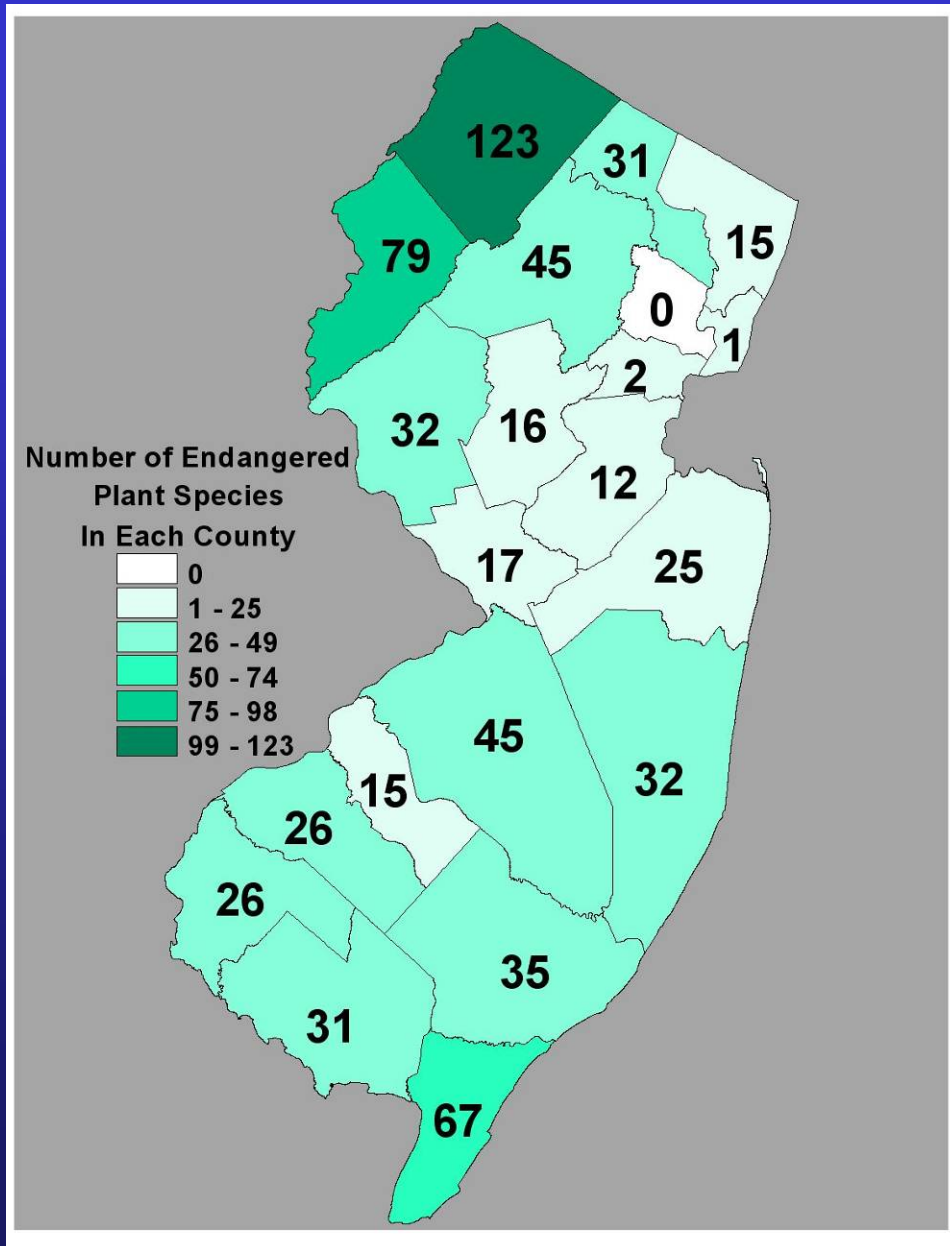
Statutory Purpose

“The Legislature finds...that the perpetuation of many plant species native to New Jersey or the United States is in jeopardy; and that **a definitive, officially recognized State list of endangered plant species is needed** to eliminate the confusion resulting from various existing unofficial lists...and is a necessary precondition to more effectively and efficiently incorporate the preservation of our State’s natural diversity into government planning functions.”

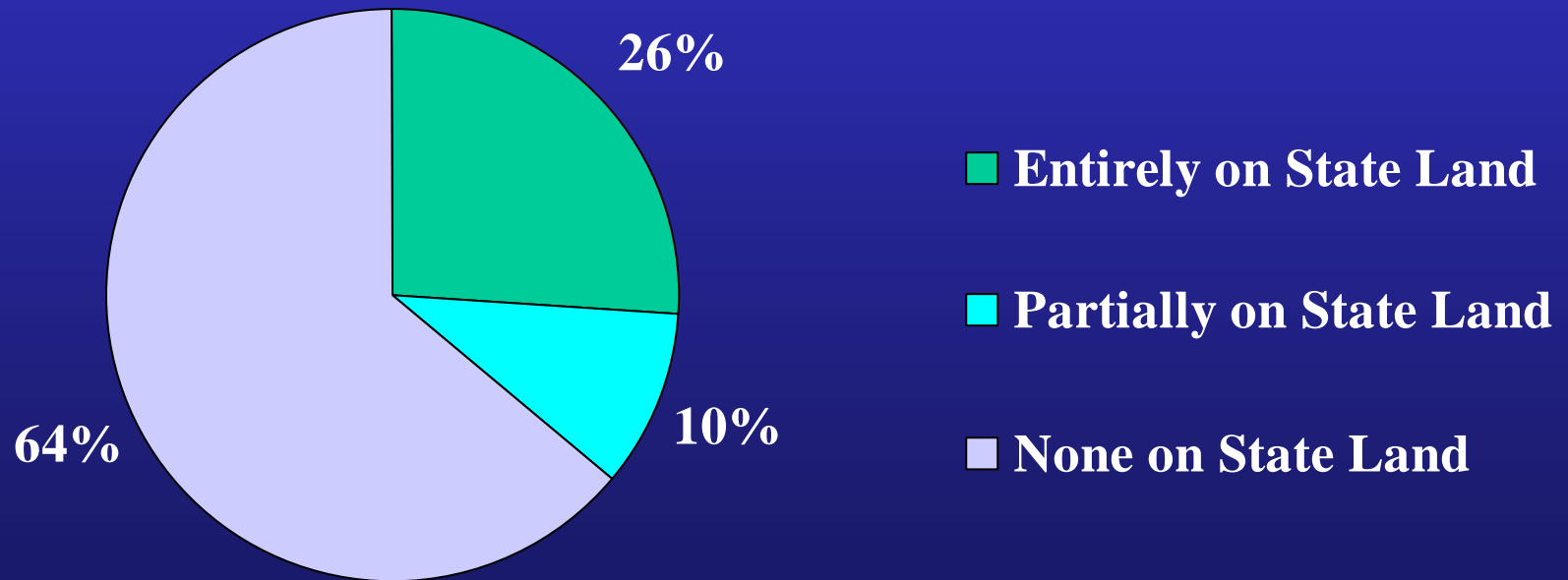
Plant Species Rarity In New Jersey

- Number of native plant species 2,134
- Number of plant species of conservation concern 825
- Number of State Endangered plant species 339
- Number of “threatened” plant species 486
- Number of globally rare plant species 52
- Number of S1.1 plant species 30
- Number of federally listed NJ plant species 8
- Number of plant species endemic to NJ 5

Diversity of Endangered Plant Species by County

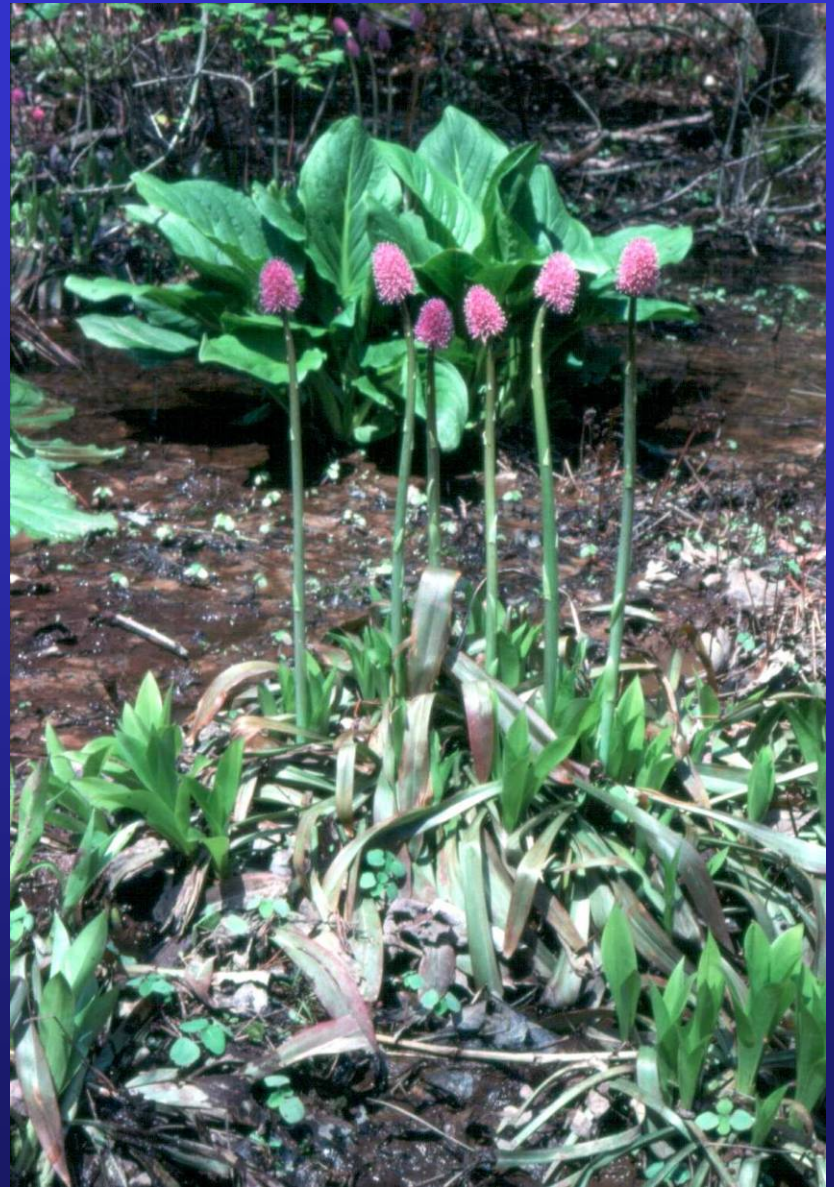


Locations of State Endangered Plants on State and Non-state Lands

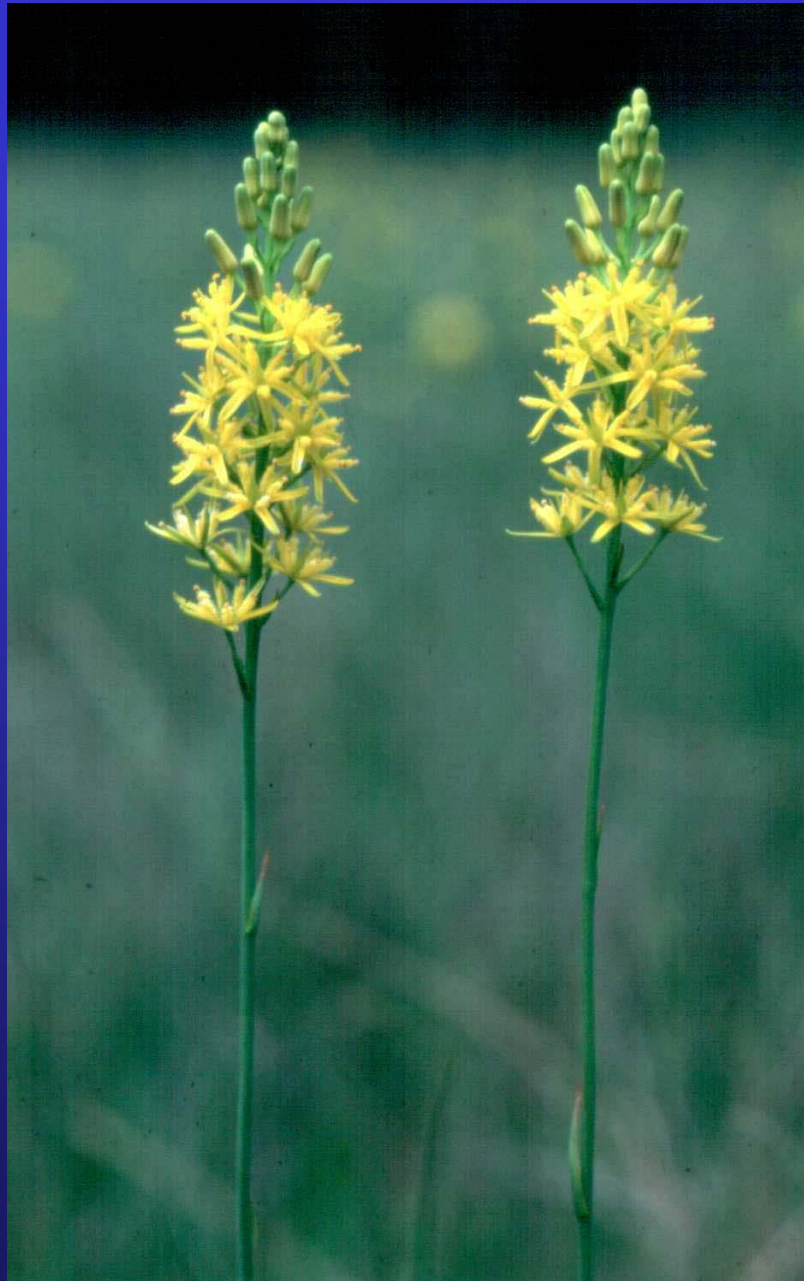


Swamp Pink
(*Helonias bullata*)

Federally Threatened
State Endangered



Photograph by David Snyder



Bog Asphodel

(Narthecium americanum)

Endemic to New Jersey

Restricted to a globally rare
endemic ecological
community in the Pine
Barrens





Hammond's Yellow Spring Beauty

(*Claytonia virginica* var.
hammondiae)

Endemic to New Jersey

Known from a single
location worldwide

Spreading Globe Flower

Trollius laxus ssp. *laxus*

State Endangered



Listing Criteria

- It is listed, proposed, or under review by the Federal government as endangered or threatened throughout its range in the United States pursuant to the "Endangered Species Act of 1973," P.L. 93-205 (16 U.S.C. section 1533 et seq.), as amended;
- It is known or believed to be rare throughout its worldwide range;
- It has five or fewer extant populations in the State; and/or

Listing Criteria - Continued

- The Department makes a determination that its survival in the State or nation is in jeopardy based on the best available scientific information, including, but not limited to:
 - i. The number of apparently secure populations in the State as compared to the number of populations vulnerable to decimation by natural or man-made factors;
 - ii. The total number of individuals or number of individuals per population of the species in the State; or
 - iii. The inherent ability of the species or population to perpetuate itself in the State.

37 Species Proposed for Addition

- 35 - Have 5 or fewer extant populations in the State
- 3 - Ranked by Natural Heritage Program as globally rare

(One species 5 or fewer and globally rare)

20 Species Proposed for Deletion

- 3 - No longer considered valid species
- 7 - Determined to be more abundant than previously thought (more than 5 extant occurrences in State)
- 10 - No longer exist in State (extirpated)

Net Addition of 17 Species

356 species to be listed as Endangered

Estimated Area of Species Additions

- The 37 species proposed for addition are comprised of 145 occurrences*
- 51 of the 145 occurrences are S-precision and total 313 acres (average acreage per occurrence = 6)
- Extrapolating to the remaining 94 occurrences results in 714 additional acres added
- Total estimated acreage of species additions = 1,027

* Excludes 21 extirpated occurrences

Estimated Area of Species Deletions

- The 20 species proposed for deletion are comprised of 96 occurrences*
- 55 of the 96 occurrences are S-precision and total 1,022 acres (average acreage per occurrence = 18.6)
- Extrapolating to the remaining 41 occurrences results in 498 additional acres deleted
- Total estimated acreage of species deletions = 1,520

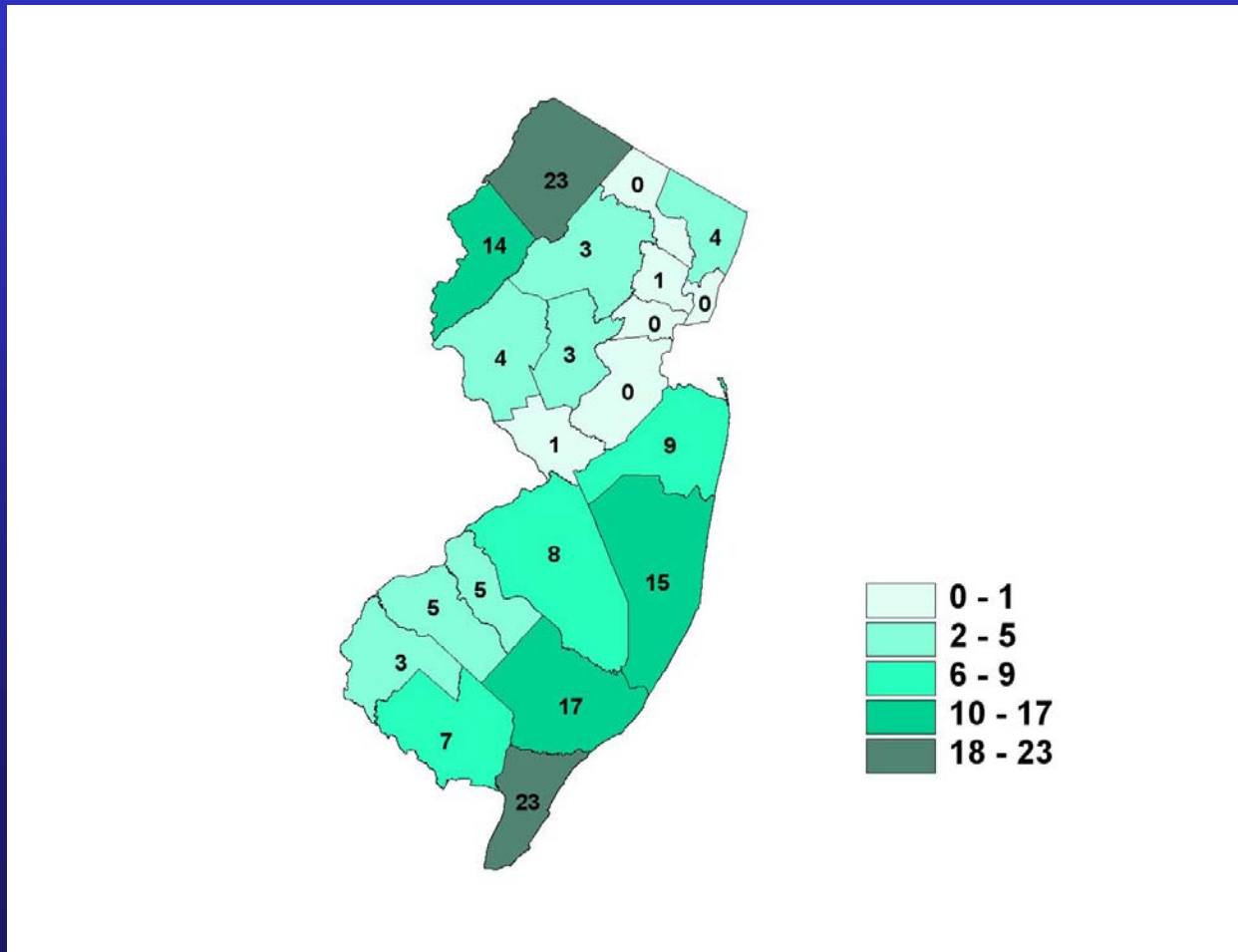
*Excludes 18 extirpated occurrences

Location on Public vs. NGO Lands

Of the 51 S-precision extant occurrences for the 37 proposed species additions:

- 23 - Occur on public (federal and state) lands or waters
- 28 - Occur on non-public (private, NGO, ROW, etc.) lands

Distribution of the 145 Occurrences for the 37 Species Proposed for Listing



DLUR Applications and Current EPS List

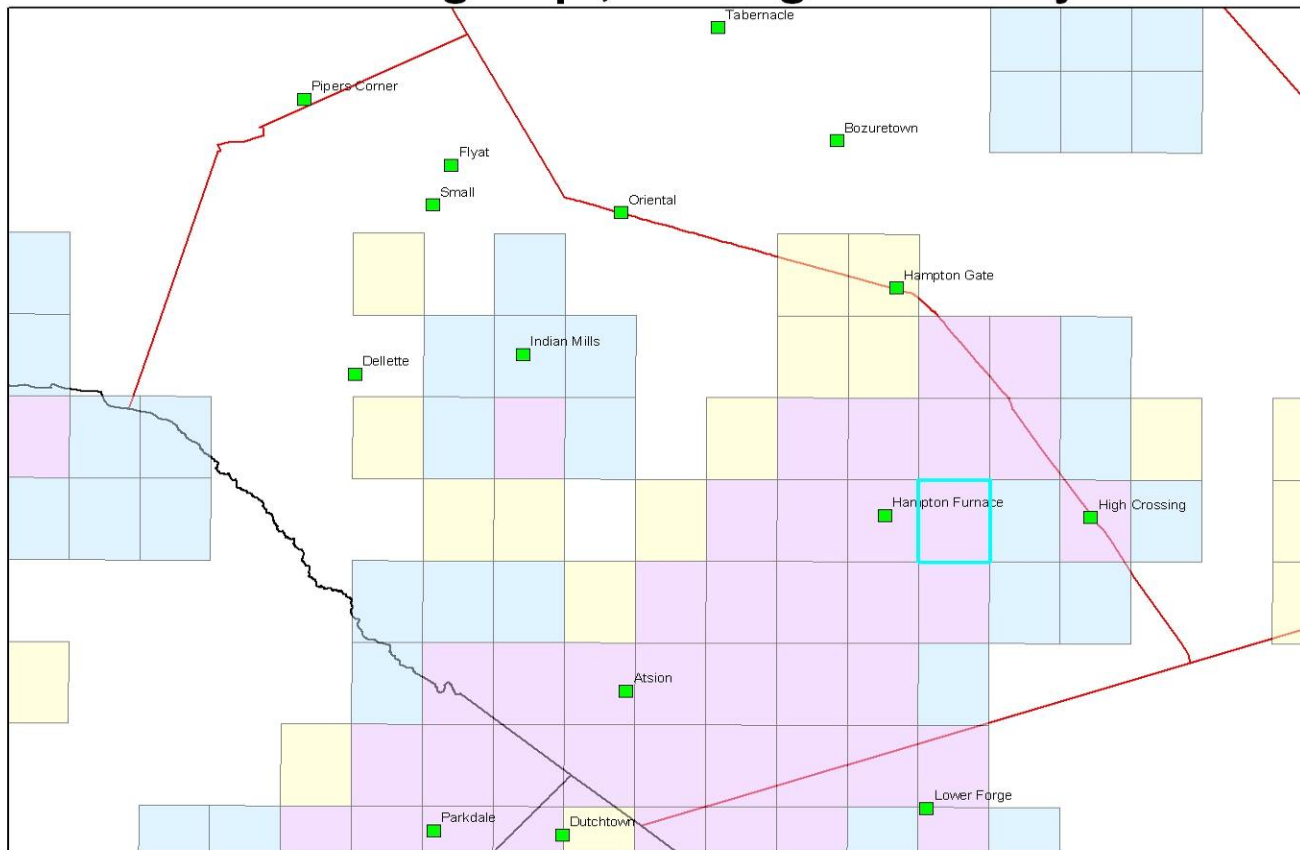
Between April 1, 2009 – December 31, 2010:

- 8916 - applications submitted to DLUR*
- 80 - apps. reviewed for plant related issues
- 35 - apps. involved federally listed plants only
- 45 - apps. related to State EPS list
- 6 - apps. EPS present or recently observed
- 3 - apps. in conflict with applicant's proposal

* Between March 1, 2009 and Nov. 30, 2010.

NJ-GeoWeb and Natural Heritage Grid Map

Shamong Twp., Burlington County



■ Place Names

■ BOTH - Both 'M' and 'S' Occurances

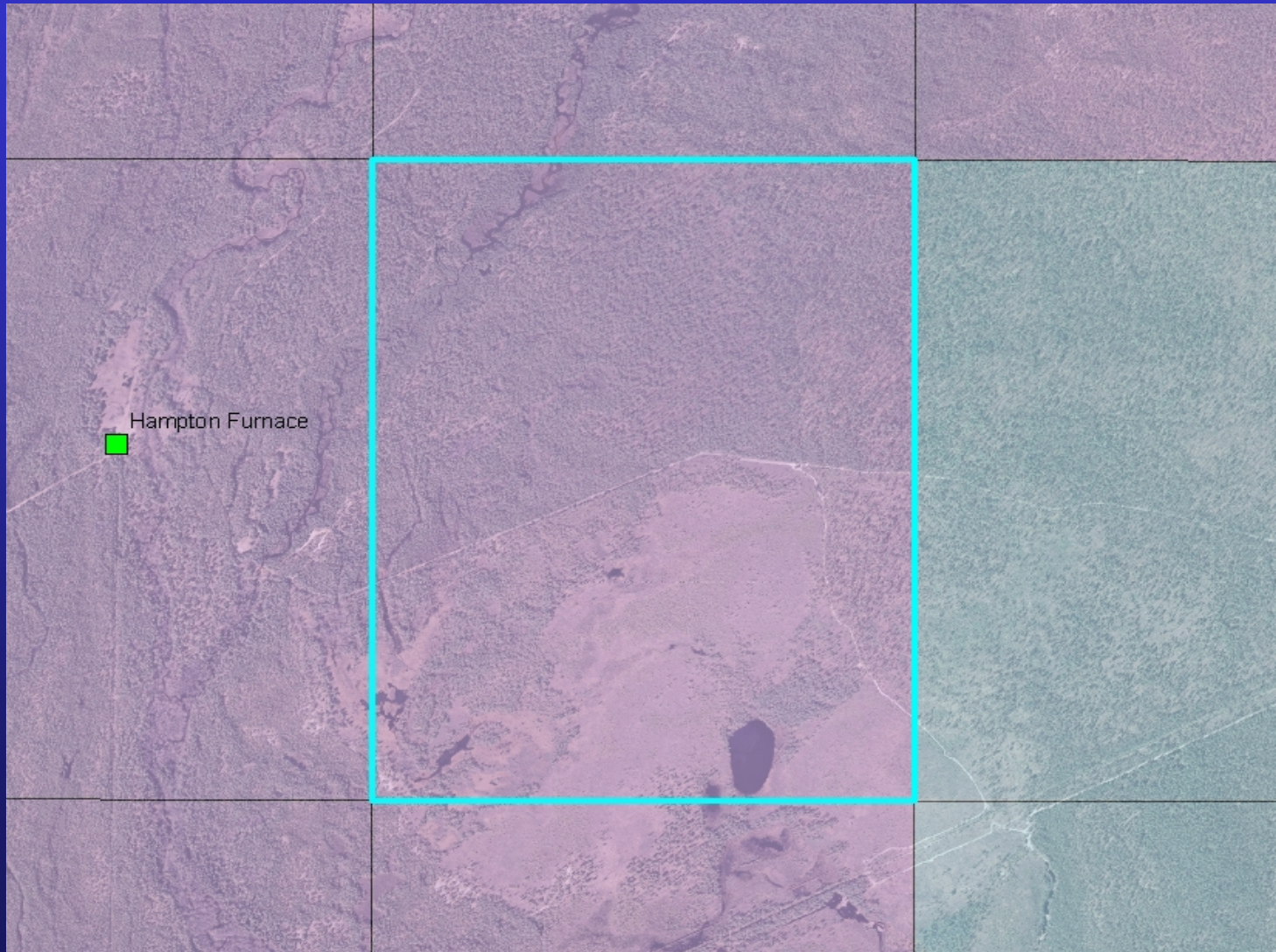
■ M- Documented Location Known Within 1.5 Miles

■ S - Documented Location Known Precisely

□ Counties

□ Municipalities

Detail of Selected Grid With 2007 Imagery



Rare Plant Species and Communities at Selected Grid

Element_Class	Precision	Name	Common_Name	Federal_Status	State_Status	Regional_Status	Global_Rank	State_Rank	Habitat
Vascular plant	S	Data Sensitive Species or Ecological Community	Data Sensitive Species or Ecological Community	C	E	LP, HL	G1	S1	PALUSTRINE
Vascular plant	S	Lobelia canbyi	Canby's Lobelia			LP, HL	G4	S3	PALUSTRINE
Vascular plant	S	Muhlenbergia torreyana	Pine Barren Smoke Grass			LP, HL	G3	S3	PALUSTRINE
Vascular plant	S	Muhlenbergia torreyana	Pine Barren Smoke Grass			LP, HL	G3	S3	PALUSTRINE
Vascular plant	S	Nymphoides cordata	Floatingheart			LP, HL	G5	S3	LACUSTRINE; PALUSTRINE; RIVERINE
Vascular plant	S	Rhynchospora nitens	Short-beaked Bald-rush			HL	G4?	S2	PALUSTRINE
Vascular plant	S	Scirpus longii	Long's Woolgrass		E	LP, HL	G2G3	S2	PALUSTRINE
Vascular plant	M	Asclepias rubra	Red Milkweed			LP, HL	G4G5	S2	PALUSTRINE
Vascular plant	M	Asclepias rubra	Red Milkweed			LP, HL	G4G5	S2	PALUSTRINE
Vascular plant	M	Data Sensitive Species or Ecological Community	Data Sensitive Species or Ecological Community	LE	E	LP, HL	G2G3	S1	PALUSTRINE; TERRESTRIAL
Vascular plant	M	Gentiana autumnalis	Pine Barren Gentian			LP, HL	G3	S3	PALUSTRINE; TERRESTRIAL
Vascular plant	M	Muhlenbergia torreyana	Pine Barren Smoke Grass			LP, HL	G3	S3	PALUSTRINE
Vascular plant	M	Schizaea pusilla	Curly Grass Fern			LP, HL	G3G4	S3	PALUSTRINE
Vascular plant	M	Uvularia puberula var. nitida	Pine Barren Bellwort		E	LP, HL	G5T3?	S2	PALUSTRINE
Ecological community	S	Eleocharis (olivacea, microcarpa, robbinsii) - xyris (difformis var. difformis, smalliana) herbaceous vegetation	Spikerush (Smallfruit, Bright Green, Robbin's) - Yelloweyed Grass (Bog, Small's) Coastal Plain Intermittent Pond Herbaceous Vegetation				G2	S2	NO DATA AVAILABLE
Ecological community	S	Muhlenbergia torreyana herbaceous vegetation	Pine Barrens Smokegrass Coastal Plain Intermittent Pond Herbaceous Vegetation				G2	S1	NO DATA AVAILABLE