

# Frequently Asked Questions About The Natural Heritage Priority Sites GIS File

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## **What are Natural Heritage Priority Sites?**

Through its Natural Heritage Database, the Office of Natural Lands Management (ONLM) identifies critically important areas to conserve New Jersey's biological diversity, with particular emphasis on rare plant species and ecological communities. The database provides detailed information on rare species and ecological communities to planners, developers, and conservation agencies for use in resource management, environmental impact assessment, and both public and private land protection efforts.

Using the database, ONLM has identified 343 Natural Heritage Priority Sites, representing some of the best remaining habitat for rare species and rare ecological communities in the state. Although the primary focus of these sites is rare plant species and ecological communities, the DEP Endangered and Nongame Species Program also provided key information and assisted with the delineation of a number of the sites that encompass significant habitats for rare animals. These areas should be considered to be top priorities for the preservation of biological diversity in New Jersey. If these sites become degraded or destroyed, we may lose some of the unique components of our natural heritage.

## **How are Natural Heritage Priority Sites used in conservation of biological diversity?**

Natural Heritage Priority Site maps are used by individuals and agencies concerned with the protection and management of land. The maps have been used by municipalities preparing natural resource inventories; public and private conservation organizations preparing open space acquisition goals; land developers and consultants identifying environmentally sensitive lands; and public and private landowners developing land management plans. However, the coverage was not developed for regulatory purposes, and should not be used as a substitute for the on-site surveys and Natural Heritage Database searches required by regulatory agencies.

Natural Heritage Priority Sites contain some of the best and most viable occurrences of rare plant species and ecological communities, but they do not cover all known habitat for these elements or most rare animal species in New Jersey. Most of the state has not been surveyed for rare species and ecological communities. If information is needed on whether or not endangered or threatened species have been documented from a

particular area, a Natural Heritage Database search can be requested by contacting the Office of Natural Lands Management.

## **What do the boundaries of the sites contain?**

The boundaries of each Natural Heritage Priority Site are drawn to encompass critical habitat for the rare species or ecological communities. Often the boundaries extend to include additional buffer lands that should be managed to protect this critical habitat. A justification for the boundary is provided for each site.

Boundaries of site polygons may overlap. Site polygons may also be nested so that one site may be found entirely within a larger site. When viewing the shape file, a larger site may sometimes obscure a smaller site within it. Such confusion can be eliminated by highlighting the area of interest and checking the attribute table to reveal all sites within the selected area.

## **How was the GIS coverage developed?**

The coverage was originally developed as lines on USGS topographic paper maps and subsequently edited to fit on either 1995/97 color infrared aerial imagery, 1991 black and white aerial imagery or scanned USGS 1:24,000 topographic maps as an ArcView shape file (NJ State Plane Coordinate System, NAD83). Within the Highlands Region the coverage was developed using the NJDEP 2002 Land use/Land cover: Highlands Study Area (DRAFT) coverage, and then subsequently edited using 2002 High Resolution Orthophotography, as well as scanned USGS 1:24,000 topographic maps, as references.

## **What attributes are included with the shape file?**

(Note: Text fields in the attribute table are truncated at 254 characters. Therefore, some text may be deleted from the attribute table of some of the sites. The complete text for all the site records is contained in the **Prisites.rtf** file that is included in the Prisites Winzip distribution file.)

Identifying attributes – The Sitecode and Sitename fields are assigned by the Office of Natural Lands Management to track each site by a unique alphanumeric code and name. The Version field indicates the year and month of the current version of the Natural Heritage Priority Sites coverage.

Locational attributes – Information about where each

site is located can be found in the County, Quadname (US Geological Survey 7.5 minute topographic quadrangle map) and Municipality fields. More detailed information can be gathered by overlaying county and municipal coverages that are available from NJ DEP.

Descriptive attributes – A description of the site can be found in the Descriptio(n) field, while the Boundjust field contains a written justification for the site boundaries.

Significance attributes – The relative significance of each site is determined by assigning a biodiversity significance rank (Biodivrank). Justification for the rank can be found in the BiodivComm(ents) field. The Siteclass field indicates whether the site is categorized as a macrosite or a standard site. Standard sites are smaller in size (usually less than 3200 acres in size), while macrosites tend to be larger (usually greater than 3200 acres in size). It is not unusual to find several standard sites entirely contained within the boundaries of a macrosite.

### **What is the biodiversity significance rank and how is it used?**

Each site is ranked according to its significance for biological diversity using a scale developed by The Nature Conservancy, the network of Natural Heritage Programs and the New Jersey Natural Heritage Program. The ranks can be used to distinguish between sites that are of global significance for conservation of biological diversity vs. those that are of state significance. The global biodiversity significance ranks range from B1 to B5. Within the Highlands Region the global biodiversity significance rank has been combined with a state biodiversity significance rank which provides information about the significance of the site on a state level. The state biodiversity significance ranks for sites in the Highlands Region range from V1 to V5. Therefore, all sites have been assigned a global biodiversity rank (B rank), but not all sites have been assigned a state biodiversity rank (V rank). The specific definitions for each rank are as follows:

**B1** - Outstanding significance on a global level, generally the “last of the least” in the world, such as the only known occurrence of any element (species or ecological community), the best or an excellent occurrence of an element ranked critically imperiled globally, or a concentration (4+) of good or excellent occurrences of elements that are imperiled or critically imperiled globally. The site should be viable and defensible for the elements or ecological processes contained.

**B2** - Very high significance on a global level, such as the

most outstanding occurrence of any ecological community. Also includes areas containing other occurrences of elements that are critically imperiled globally, a good or excellent occurrence of an element that is imperiled globally, an excellent occurrence of an element that is rare globally, or a concentration (4+) of good occurrences of globally rare elements or viable occurrences of globally imperiled elements.

**B3** - High significance on a global level, such as any other viable occurrence of an element that is globally imperiled, a good occurrence of a globally rare element, an excellent occurrence of any ecological community, or a concentration (4+) of good or excellent occurrences of elements that are critically imperiled in the State.

**B4** - Moderate significance on a global level, such as a viable occurrence of a globally rare element, a good occurrence of any ecological community, a good or excellent occurrence or only viable state occurrence of an element that is critically imperiled in the State, an excellent occurrence of an element that is imperiled in the State, or a concentration (4+) of good occurrences of elements that are imperiled in the State or excellent occurrences of elements that are rare in the State.

**B5** - Of general biodiversity interest.

**V1** - Outstanding significance on a state level. Only known occurrence in the state for an element **or** Site with an excellent occurrence or the best occurrence in the state for an element ranked critically imperiled in the state **or** a concentration (4+) of good or excellent occurrences of elements that are imperiled or critically imperiled in the state.

**V2** - Very high significance on a state level. Includes sites containing other occurrences of elements that are critically imperiled in the state **or** a concentration (4+) of other occurrences of state imperiled elements and/or good or excellent occurrences of state rare elements.

**V3** - High significance on a state level. Includes sites containing the best occurrence in the state or an excellent occurrence of a state imperiled element **or** multiple (2+) other occurrences for state imperiled elements and/or excellent, good or moderate quality occurrences of state rare elements.

**V4** - Moderate significance on a state level. Includes sites containing the best occurrence in the state or an excellent occurrence of a state rare element **or** any site with other occurrences of a state imperiled element **or** multiple (2+) other occurrences of state rare elements.

**V5** - Any site with any other occurrence of a state rare element.

### **How can I obtain Natural Heritage Priority Site maps for an area of interest to me?**

Natural Heritage Priority Site hard copy maps can be obtained by submitting a written request accompanied by a check or money order made payable to the Office of Natural Lands Management at the following address:

Office of Natural Lands Management  
P.O. Box 404  
Trenton, NJ 08625-0404  
Phone: 609-984-1339; Fax: 609-984-1427

Individual 8.5" X 11" maps are available at the following rate:

1 - 10 site maps & reports:	\$1.50/site
11 - 20 site maps & reports:	\$1.00/site
> 20 sites:	\$0.50/site

#### *Digital GIS Coverage of Natural Heritage Priority Sites*

A digital version of the ArcView GIS file of Natural Heritage Priority Sites is also available. The 2007 version of Natural Heritage Priority Sites will be sent as an email attachment upon request. There is no charge for emailing the GIS data.

#### **How often are the maps updated?**

The Natural Heritage Priority Site information is constantly being updated in the Natural Heritage Database. A new edition of the maps will be made available after significant revisions or additions to the Database.

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NJ Department of Environmental Protection  
Division of Parks and Forestry

Natural Lands Management