Shapefiles: NYNHPBDY\_xxx

<u>Description</u>: All shapefiles represent locations of element occurrences recorded in the New York Natural Heritage Program=s Biological and Conservation Database (BCD). Element occurrences are occurrences of rare plants, rare animals, rare or significant ecological communities, and concentration areas of groups of animal species. The shapefiles also contain selected data fields associated with these occurrences.

\*\*\* In all shapefiles, for records dealing with those species <u>most</u> subject to collection and disturbance if their identity and location are publicized, the item **SENSITIVE\_DATA** in the attribute table has the value "Y" and information relating to the identity and location of the element is sensitive and should not be made available for public use. \*\*\*

NYNHP**BDY**\_xxx represents the spatial extents of element occurrences as shapes (one or more polygons). The element occurrence is located either throughout the area covered by the shape or at just some portion of that area. The shape associated with each element occurrence depends on how precisely the location of the element is known. More specific interpretations follow.

#### Circle:

The element occurrence is, or was, located somewhere within the circle:

The size of the circle corresponds directly with the uncertainty of the location of the occurrence. A precisely known location is represented with a very small circle; the larger the circle, the more uncertain the actual location of the occurrence. For occurrences represented by very large circles, the actual location is presumed to be, or have been, somewhere within the circle. (Most occurrences represented by a circle with a radius of 2400 m (about 1.5 mile) or greater, are historical records.)

## Rectangle:

The locations of element occurrences represented with rectangles are known, but have not been precisely digitized. The rectangles are approximations of the element occurrence's known spatial extent, and are defined by the occurrence's northernmost, southernmost, easternmost and westernmost extents; the actual boundaries of the occurrence are within the rectangle.

# Irregularly shaped polygon:

For ecological communities with irregular polygons, the polygons are always the known spatial extent of that community occurrence.

For animal and plant species with irregular polygons, the element occurrence occurs throughout the area of the polygon, or it occurs somewhere within the area of the polygon. To determine how precisely the element's location is known, it is helpful to look at data fields such as Location and MostRecentReport.

For definitions and explanations of values in data fields, see next page.

### Usage Notes:

- 1. These shapefiles are a static version of a database that is updated continuously. It does not contain Heritage records added after the date it was created. For current records the New York State Natural Heritage Program must be contacted.
- 2. More than one record may occur at a single location: one polygon on the screen may represent more than one element occurrence.
- 3. Long text fields and multi-valued fields from the Natural Heritage Program=s BCD database

may be truncated.

4. Elements without boundaries or with a very small boundary will be represented by small polygons on the boundary shapefile. *Unless you are zoomed in quite close, the polygon may not be visible*.

Completion Date: June, 2003

<u>Projection and Map Units</u>: NYTM in meters, NAD **83** (NYTM -- New York Transverse Mercator -- equals UTM Zone 18 between longitudes 72° and 78°; east and west of UTM Zone 18, NYTM is an extension of Zone 18).

Scale of source data: 1:24,000, 1:12,000, or 5-meter-accuracy GPS

Source: Based on information and maps from field surveys, museum specimens, and project reports, the location and boundaries of an element occurrence are determined as precisely as the available information allows. These locations and boundaries are mapped in one of four ways: 1) Locations and boundaries are recorded in the field with GPS; 2) Locations and boundaries are screen digitized using digital 1:12,000 orthophoto guarter guads or digital 1:24,000 topo map images; 3) Locations and boundaries of element occurrences are drawn on paper copies of USGS 1:24000 or 1:25000 topographic quadrangles; then the boundaries and/or centrum coordinates are tablet digitized from the copies of USGS quads overlaid on registered 1:24000 NYS DOT planimetric quadrangle maps; 4) Locations and boundaries of element occurrences are drawn on paper copies of USGS 1:24000 or 1:25000 topographic quadrangles; a mylar grid overlaid on the USGS quadrangle map is then used to calculate either the latitude and longitude of a centrum point, which is buffered to produce a circle, or the latitude of the northernmost and southernmost extents and the longitude of the easternmost and westernmost extents, which are used to produce a rectangle. All boundaries and centrum locations are stored in an ArcView shapefile. The features in this shapefile are used to build point and regions coverages in Arc/Info. Values for fields documenting location, biology, and management of the occurrence are entered into the Natural Heritage Program=s database, the Biological and Conservation Data System (BCD). These fields are exported from BCD to populate the attribute tables of the coverages. Records from specific areas are selected from these coverages to create shapefiles.

<u>Items in Table</u> (Additional information on codes and their interpretation can be obtained from the New York Natural Heritage Program):

SCIENTIFIC: (Scientific Name) The New York State scientific name of a plant species or an animal species; or the formal name of an ecological community type, per <u>Ecological Communities of New York State</u>.

For next two fields, see Explanation of Ranks and Codes below.

GLOBAL\_RAN: (Global Rank) The global rank of the element.

NY STATE R: (NY State Rank) The state rank of the element.

LOCATION: Natural Heritage Program name of the site where the element occurrence is located. This field contains only the first name of many possible synonyms.

MOSTRECENT: (Most Recent Report) The year that the element occurrence was last observed.

- SITE\_DESCR: (Site Description) A description of the general area where the element occurrence is found.
- EORANKCOM: Comments regarding the quality and significance of the occurrence.
- EODATA: A description of the vegetation structure of the occurrence, often including dominant species.

## **EXPLANATION OF RANKS and CODES used by NEW YORK NATURAL HERITAGE**

**HERITAGE GLOBAL AND STATE RANKS**: Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world; the state rank reflects the rarity within New York State. Infraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = a question exists about the rank. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

#### GLOBAL RANK:

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.
- G2 = Imperiled globally because of rarity (6 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.
- G3 = Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.
- G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 = Demonstrably secure globally, though it may be quite rare.
- GH = Historically known, with the expectation that it might be rediscovered.
- GX = Species believed to be extinct.

#### STATE RANK:

- S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.
- S2 = Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.
- S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.
- S4 = Apparently secure in New York State.
- S5 = Demonstrably secure in New York State.
- SH = Historically known from New York State, but not seen in the past 15 years.
- SX = Apparently extirpated from New York State.
- SZ = Present in New York State only as a transient migrant. SA = Accidental in New York State; not of conservation concern.