## **INTRODUCTION**

The West Virginia Wildlife Diversity Unit (WDU) is an on-going, computer assisted ecological inventory. A part of the WV Division of Natural Resources, Wildlife Resources Section, the WDU follows methodologies used nationally by NatureServe's Natural Heritage Network. It maintains files on rare, threatened and endangered plants and animals, as well as natural communities. It is hoped this data may be used to conserve West Virginia's outstanding biodiversity.

Before a taxon can be added or deleted from our rare species lists, a set of criteria must be met. All species that are rare on a global basis (G1, G2, G3) are tracked, as well as species that are federally listed, proposed listed or are candidates with the U.S. Fish and Wildlife Service under the Endangered Species Act. Some species are widespread globally, but are uncommon within West Virginia. Species that are at the edge of their global ranges and are in the state are generally tracked to conserve genetic diversity that often exists at the margin of a species' range. Several species are tracked because they require unique habitats, such as shale barrens, wetlands or high elevation spruce forests.

#### **ORGANIZATION OF THE LIST**

This list is ordered by scientific name. Scientific names are largely those designated by NatureServe. In general, NatureServe chooses one standard source for each taxonomic group within a particular geographic area. The standard source is usually a major published list or widely-used taxonomic reference. Common names are not standardized and may vary.

Due to changes in global and state rarity, this list is dynamic. This list will change as new information becomes available.

# **EXPLANATION OF STATE, GLOBAL & FEDERAL RANKS**

# **GLOBAL RANK**

- G1 Critically Imperiled Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction. Typically 5 or fewer occurrences or very few remaining individuals (<1,000) or acres (<2,000) or linear miles (<10).
- G2 Imperiled Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction or elimination. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000) or acres (2,000 to 10,000) or linear miles (10 to 50).
- Vulnerable Vulnerable globally either because very rare and local throughout its range, found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extinction or elimination.

  Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
- G4 Apparently Secure Uncommon but not rare (although it may be rare in parts of its range, particularly on the periphery), and usually widespread. Apparently not vulnerable in most of its range, but possibly cause for long-term concern.

  Typically more than 100 occurrences and more than 10,000 individuals.

- G5 Secure Common, widespread, and abundant (although it may be rare in parts of its range, particularly on the periphery). Not vulnerable in most of its range.
   Typically with considerably more than 100 occurrences and more than 10,000 individuals.
- GH Possibly Extinct Known from only historical occurrences, but may nevertheless still be extant; further searching needed.
- GX Presumed Extinct Believed to be extinct throughout its range. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- G#G# Numeric range rank (with range no greater than 2); greater uncertainty about a rank is expressed by indicating the full range of ranks which may be appropriate (for example, a G1G3 rank indicates the rank could be G1, G2, or G3).
- T# Rank of subspecies or variety.

## **STATE RANK**

- Critically Imperiled Critically imperiled in the state because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from the state. Typically 5 or fewer occurrences or very few remaining individuals (<1,000).
- S2 Imperiled Imperiled in the state because of rarity or because of some factor(s) making it very vulnerable to extirpation from the state. Typically 6 to 20 occurrences or few remaining individuals (1,000 to 3,000).
- Vulnerable Vulnerable in the state either because rare and uncommon, or found only in a restricted range (even if abundant at some locations), or because of other factors making it vulnerable to extirpation. Typically 21 to 100 occurrences or between 3,000 and 10,000 individuals.
- S4 Apparently Secure Uncommon but not rare, and usually widespread in the state. Possible cause of long-term concern. Usually more than 100 occurrences and more than 10,000 individuals.
- Secure Common, widespread, and abundant in the state. Essentially ineradicable under present conditions. Typically with considerably more than 100 occurrences and more than 10,000 individuals.
- SH Historical Species occurred historically in the state, and there is some expectation that it may be rediscovered. Its presence may not have been verified in the past 20 years.

- SX Presumed Extirpated Species is believed to be extirpated from the state. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
- S#S# Range Rank: A numeric range rank (e.g., S2S3) is used to indicate the range of uncertainty about the exact status of the species. Ranges cannot skip more than one rank.
- SNA Not of conservation value (accidentals, hybrids, etc.)

#### CHARACTERS RELATED TO GLOBAL & STATE RANKS

- B Breeding populations
- N Non-breeding populations
- NR Not ranked; status has not yet been assessed.
- Q Questionable taxonomy
- ? Inexact numeric rank; a question mark added to a rank expresses an uncertainty about the rank in the range of 1 (i.e., +/- 1 rank either way on the 1-5 scale).
- U Unrankable; status cannot be determined at this time.

### **FEDERAL STATUS**

- LE Listed as endangered.
- LT Listed as threatened.
- PE Proposed to be listed as endangered.
- PT Proposed to be listed as threatened.
- C1 Candidate for listing.

We welcome your questions, comments and suggestions. Feel free to contact us at the following address: Wildlife Diversity Unit, P.O. Box 67, Elkins, WV 26241; 304/637-0245; barbara.d.sargent@wv.gov.