## **WVMN Class Description**

Title: NAMES, CLASSIFICATION, AND IDENTIFICATION

Make students comfortable with scientific names and phylogenetic

**Objectives:** classification. Give students the ability to identify plants and animals using

taxonomic keys.

Class type: Core curriculum

Time: 1 hour Optimal season: Any

**Materials:** Printed keys, a selection of field guides and manuals, rulers, 10x magnifiers.

**Expected outcomes:** The student will gain a basic understanding of

scientific names, their proper form, use, and pronunciation.

1. the concept of phylogenetic classification, and learn the major

taxonomic ranks (levels).

2. techniques to identify plants and animals using taxonomic keys.

## **WVMN Class Outline**

- 1. Necessity of having a system of names and a classification
- 2. Species definitions
  - a. Morphological
  - b. Biological
  - c. Cladistic
  - d. Cronquist's pragmatic definition
- 3. Hierarchical system of classification
  - a. Names and positions of levels, e.g., species, genus, family
  - b. Phylogenetic (natural) classification
- 4. Scientific names
  - a. Universal and unique
  - b. Structure and characteristics
  - c. Proper use
  - d. Pronunciation
- 5. Common names
- 6. Identification
  - a. Field guides, floras, manuals, etc.
  - b. Collections
  - c. Can be sent to a specialist for ID
- 7. Use of keys
  - a. Construction and use of taxonomic or dichotomous keys
  - b. Computer keys