

Species Category

Current Knowledge

**Vertebrates**

Animals with backbones, including mammals, birds, fish, amphibians, and reptiles

- Despite their prominence, Pennsylvania's vertebrate species make up only 3 percent of the total number of species in the state.
- Discovery of new species is highly unlikely.

**Invertebrates**

Animals without backbones, including earthworms, flatworms, snails, mollusks, nematodes, spiders, ticks, beetles, butterflies, moths, flies, and other insects

- Insects and other invertebrates are the most abundant and least known multicellular organisms in Pennsylvania – less than one-half of the species in the state have been documented.
- With about 12,000 species documented for Pennsylvania, invertebrates make up almost 50 percent of the total known number of species.
- New state records and species new to science are common, especially of terrestrial insects.

**Vascular Plants**

Flowering plants, deciduous and coniferous trees, and ferns and fern allies

- Pennsylvania's vascular plant species are fairly well documented.
- Even when combined with vertebrates, these two groups comprise only about 17 percent of the animal and plant life of the state.
- Discovery of new species is rare.

**Nonvascular Plants**

Mosses, lichens, liverworts, and green algae

- Preliminary checklists have been developed for mosses, lichens, liverworts, and hornworts.

**Fungi**

Mushrooms and molds

- Very little information helpful to conservation is known.

**Bacteria and Other Microorganisms**

- Almost nothing is known about the natural diversity of this group in Pennsylvania.