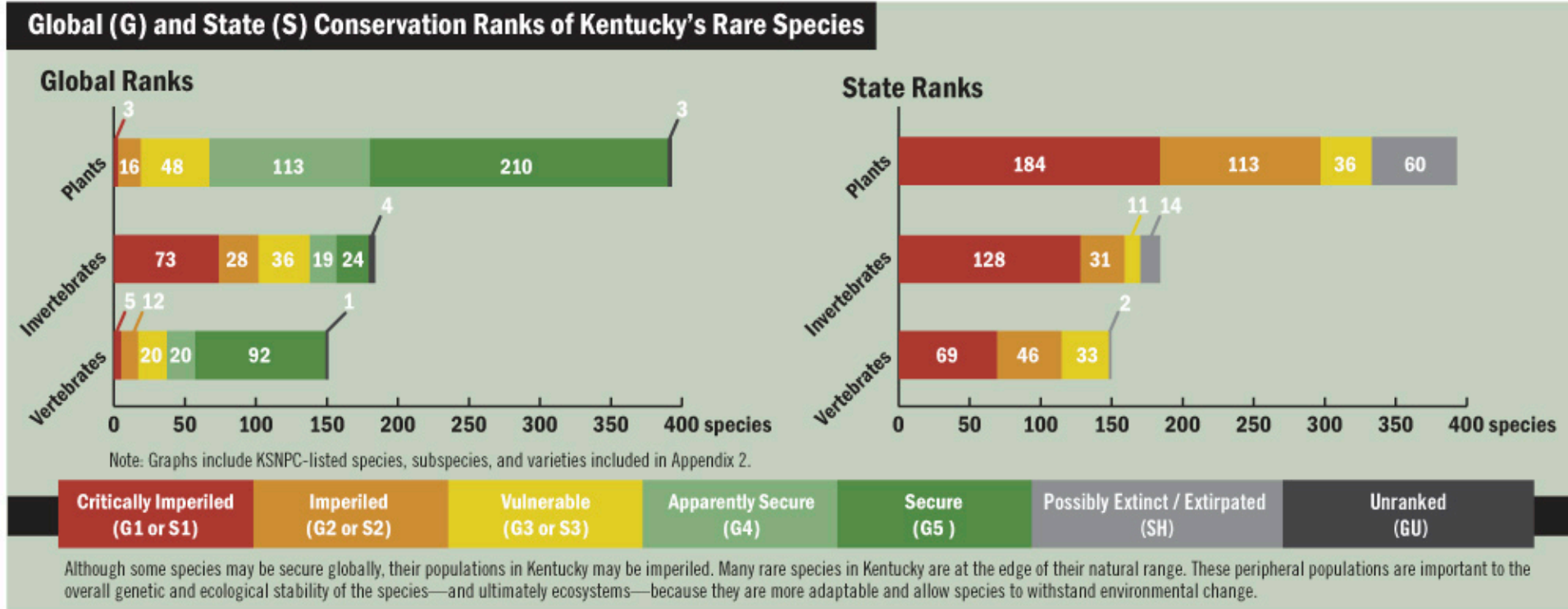




Smallscale darter males acquire brilliant colors in the spring to attract females. This gorgeous species is critically imperiled in Kentucky.
Matthew R. Thomas

SPECIES ON THE BRINK

Hundreds of taxa are perilously close to joining Kentucky's list of extirpated species. Currently, 727 (one lichen, 392 plants, and 334 animals) taxa are rare and KSNPC-listed (Appendix 2); however, more species are added to the list nearly every year. Of the 727 KSNPC-listed taxa, 381 (52%) are critically imperiled (S1), and 190 (26%) additional taxa are imperiled (S2). Furthermore, 76 of the 727 (10%) have not been seen in the state in 20 or more years (SH) and may have already been extirpated. The highest priority for conservation efforts should be given to critically imperiled species. Each population has the potential to contribute to the species' genetic diversity and may ultimately be vitally important to its survival.



NATURAL COMMUNITIES

Kentucky's rich biological diversity is also expressed by the variety and variability of the natural communities in the state. Simply defined, natural communities are distinct assemblages of plants, animals, and other organisms that tend to be repeated across the landscape where similar environmental conditions occur. The major natural community systems are terrestrial, wetland, aquatic, and subterranean.⁹²⁻⁹⁴ Terrestrial communities range from

dry, rocky glades to rich mesic forests, while wetland communities include bald cypress swamps and bottomland hardwood forests. Aquatic communities range from shallow floodplain lakes to high-gradient mountain streams. Subterranean communities include underground streams, huge caverns, and small caves.

Many factors are used to classify natural communities. Terrestrial and wetland communities are classified by factors such as vegetation, hydrology, soils, and geology. These communities usually are

