CONSERVATION GENETIC ANALYSIS OF OZARK MILKVETCH (*ASTRAGALUS DISTORTUS*; FABACEAE). Emily Poindexter1, Ashley Morris2 & Andrea Weeks1, 1George Mason University, 2Furman University. Ozark Milkvetch (*Astragalus distortus* Torrey & A. Gray; Fabaceae) is a small, herbaceous perennial that is native to the south-central United States and Maryland, Virginia, and West Virginia. Across the south-central U.S. the species is commonly found in sunny glades and grasslands, whereas in the mid-Atlantic states it grows exclusively on shale barrens and is Imperiled (Maryland, West Virginia) and Critically Imperiled (Virginia). This project uses comparative genetic methods to resolve questions about the species’ taxonomy, genetic diversity, and evolutionary history. Presently, two taxonomic varieties of Ozark Milkvetch are recognized. *Astragalus distortus* var. *engelmannii* can be found in Texas, Louisiana, and Arkansas, overlapping with *A. distortus* var. *distortus*, which spans the species’ entire range. A population genetic analysis will show if these varieties are genetically distinct and evolutionarily separate groups and will determine if the Mid-Atlantic metapopulation warrants separate taxonomic recognition. Additionally, understanding the genetic diversity within and among mid-Atlantic populations of Ozark Milkvetch will be invaluable for guiding regional and ongoing conservation efforts for this species. Recent fieldwork in the mid-Atlantic showed that Ozark Milkvetch is absent from many of its historical stations, yet also discovered new populations on other high-quality calcareous shale barrens. Therefore, continued surveying is necessary to obtain a more thorough understanding of this species’ distribution and to update the species’ conservation rankings. Author contact: epoindex@gmu.edu