

Annual Report 2010 Big Thicket National Preserve

Objectives

To obtain a species list of the Noctuoidea (Lepidoptera) of Big Thicket National Preserve. This list will then be used to generate species richness data, GIS analyses to determine if there are species that are restricted in habitat use and where these habitats are located within the Preserve, and to use specimens collected in various taxonomic revisionary studies. The data gathered at Big Thicket National Preserve will be compared with either completed or ongoing studies at Great Smoky Mountains National Park and Valles Caldera National Preserve.

Findings

The Noctuoidea includes 6 families of which 5 will probably be found during this study. The study took place from Oct. 19 to Oct. 23, 2010 in Turkey Creek Unit and Hickory Creek Savannah Unit. The overall assessment of the collecting would be considered poor. This probably has to do with the time of year the collecting was conducted. A total of 53 species were collected in the following families: 1) Erebidæ—33 species, 2) Noctuidæ—18 species, 3) Nolidae—1 species, 4) Notodontidae—1 species. The Erebidæ makes up 26% of the North American fauna, but at Big Thicket they represented 62% of the total species collected. The Noctuidæ make up 69% of the North American fauna, but only 34% at Big Thicket. This may indicate that the Erebidæ are more abundant during the fall. A total of 292 specimens were collected. The species, *Exyra semicrocea* (Guenée), is a pitcher plant specialist and was collected in a pitcher plant bog in Turkey Creek Unit.

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