

CONSTRUCTION OF A NON-NATIVE INVASIVE SPECIES DATABASE FOR ELEVEN SOUTHERN ILLINOIS COUNTIES. Jason R. Inczauskis, Molly S. Hacker, Loretta L. Battaglia, and David J. Gibson, Graduate student, Undergraduate student, Assistant professor, and Professor, Department of Plant Biology, Southern Illinois University Carbondale, Carbondale, IL 62901.

Non-native invasive species (NNIS) are a major threat to the ecological function and biodiversity of many native communities. The full distribution of these species is still uncertain, however. The objective of this study was to determine the extent of NNIS in the eleven southernmost counties of Illinois, in terms of the number of invasive species and their distribution. We extracted information from published literature, Illinois Critical Trends Assessment Program (CTAP), informants, and herbaria records from Southern Illinois University Carbondale (SIUC), the Shawnee National Forest, and the Illinois Natural History Survey (INHS), and used this information to construct a database in Microsoft Excel that can be queried for location of occurrence, general habitat, landscape features, and year of documentation. Information from these records was used to determine more specific locations on a map to obtain the most spatially accurate UTM coordinates possible. Each record documented in this way was also assigned a resolution category based on how accurate a location could be obtained from the available data. Most of the records have been placed within several km of their estimated point of origin, based on location data available in each record. Our database currently contains over 8,700 records and over 550 non-native species. This database will give us a greater understanding of non-native species expansion patterns, allowing us to pinpoint NNIS hotspots, and aid in future attempts at NNIS control.