Final Report on the Mead's Milkweed Search Project

Conducted by Biotic Consultants, Inc.

for the Illinois Department of Conservation

August 29, 1991

Biotic Consultants, Incorporated, conducted a search of the Federally threatened Mead's milkweed (Asclepias meadii) in Pope and Saline counties, southern Illinois, under contract with the Illinois Department of Conservation, between the period of May 28 - August 29, 1991.

On May 28, 1991, Dr. Robert H. Mohlenbrock and Mr. David Ketzner, of Biotic Consultants, met at the Shawnee National Forest headquarters in Harrisburg, Illinois, with Mr. John Schwegman, project co-ordinator, and Mr. Robert Lindsay, both with the Illinois Department of Conservation, and Dr. Lawrence R. Stritch and Mrs. Beth Shimp, of the Shawnee National Forest. At this meeting, Mr. Schwegman went over the requirements for the project and provided Biotic Consultants with maps of the study area. Mr. Schwegman presented a historical discussion of Mead's milkweed in southern Illinois and indicated prior searches for this species. He noted potential areas in Saline and Pope counties where this species may still occur.

Mead's milkweed was first collected in southern Illinois at Stone Face in Saline County in May, 1951, by Mr. Eugene Sands, a student at Southern Illinois University, Carbondale. Mr. Sands showed the population to Robert Mohlenbrock the following year. Since that time, two or three plants have come up each year at the Stone Face site. These plants usually flower during late May and early June before the plants wither and die back by the first of August. Subsequent

searches in the Cave Hill area northwest of Stone Face revealed two additional wild, small populations of Mead's milkweed. These colonies, also with flowering stems, exist today at these sites.

When Mead's milkweed became a Federally listed threatened species on September 3, 1988, it became eligible for funding from the Federal government to conduct a detailed study of Mead's milkweed. One aspect of the study was to search likely looking habitats in Saline and Pope counties, southern Illinois, for the occurrence of the species.

On May 28, 1991, Schwegman, Stritch, Shimp, Lindsay, Ketzner, and Mohlenbrock visited the Stone Face site in Saline County to locate existing known populations and to observe them in the field. From May 29 through July 31, numerous search trips were conducted by Mr. Ketzner and Dr. Mohlenbrock in selected areas in Saline and Pope counties. (These areas are evaluated later in the report and marked on the accompanying maps). Dr. Fran Menapace, botanist with Biotic Consultants, and Mr. Steve Olson of the Wayne-Hoosier National Forest, assisted in the search on occasions.

One new colony of Mead's milkweed was found during the study in Dennison Hollow, less than one mile southeast of the Stone Face site. The population consisted of three adult plants and two juvenile plants. There was evidence that the adult plants had flowered a few days before the plants were discovered. All five plants appeared to have good vigor and were flourishing. By late July, however, all had withered and were difficult to find.

The habitat for the new population was a dry, forested slope. Associated species at this site were Carya texana, Quercus

marilandica, Quercus stellata, Cunila origanoides, Panicum laxiflorum, Antennaria plantaginifolia, Ipomoea pandurata, Rubus flagellaris, Carex hirsutella, Helianthus divaricatus, Parthenocissus quinquefolia, and Prunus serotina.

Following discovery of the new colony of Mead's milkweed at Dennison Hollow, Biotic Consultants personnel led Dr. Stritch and Mrs. Shimp to the site so that these persons with the Shawnee National Forest could see the plants and their habitat.

Although many other localities were thoroughly searched in Saline and Pope counties, no additional populations of Mead's milkweed were discovered, although several likely sites do exist. The search sites are listed below, from north to south in the project area.

"Knob" southeast of Sulphur Springs Church. Somewhat disturbed and unlikely site for Mead's milkweed.

Blue Springs Hollow. A few potential sites for Mead's milkweed are present, but the expected associated species are not well represented.

Horseshoe Hollow. Biotic Consultants evaluates this large area as having the most potential for other populations of Mead's milkweed. All of the associated species are present, the habitat is relatively undisturbed, and the right conditions seem to prevail.

Cave Hill. Although this area was thoroughly searched for Mead's milkweed unsuccessfully, many micro-habitats occur here that could harbor this species. Continued search in this area is recommended.

Forwe Hollow and area immediately west of Forwe Hollow. Biotic Consultants evaluates this as a poor area for the possible occurrence

of Mead's milkweed. Several of the associated species are not present.

Stone Face. The site of the original collection in southern Illinois still has areas of great potential for additional populations.

Dennison Hollow. This large area contains many sites where Mead's milkweed could occur. All of the associated species are present, and the habitat is fairly undisturbed.

Bald Knob. A heavily forested area with little likelihood for the occurrence of Mead's milkweed.

Horton Hill. Although large in extent, this site does not seem to contain the requisites for the occurrence of populations of Mead's milkweed.

Wamble Mountain. The west side of Wamble Mountain has habitat that may be appropriate for the occurrence of Mead's milkweed.

Gibbons Creek, at the southwest corner of Section 4. Several suitable sites for Mead's milkweed appear to be in this exquisite area, although no plants of Mead's milkweed were discovered during this survey or by previous botanists who have explored Gibbons Creek Barrens extensively.

Ridges between Williams Hill and the Gibbons Creek area. These ridges, while possessing some of the associated species of Mead's milkweed, do not seem to have the quality necessary to sustain a population of Mead's milkweed.

Williams Hill. A poor, highly disturbed area, very unlikely to support a population of Mead's milkweed.

Gyp Williams Hollow. A fine forested area with some suitable appearing sites for Mead's milkweed. Biotic Consultants recommends further study of this area.

Beartrack Hollow. Similar to Gyp Williams Hollow, Beartrack Hollow may have potential for the occurrence of additional populations of Mead's milkweed.