

**INSECT SURVEY**

**for**

**SIBLEY'S BURR OAK GROVE**

Sibley, Ford County, Illinois

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1996

Funded by Illinois Department of Natural Resources  
Small Projects Program

## **Introduction**

In October on 1995 the Nature Conservancy (TNC) received a land donation of a Burr Oak Grove in Ford County, near the town of Sibley, Illinois. At that time management started with removal of non-native species of trees. Aging of windfallen oaks in the grove started in early 1996 with the assistance from William McClain from the Illinois Department of Natural Resources (IDNR). One individual Bur Oak (100cm.) was aged at 325 years old. This resulted in a timber inventory conducted by McClain and John Ebinger, Ph.D from Eastern Illinois University in 1996. It was determined that 38 acres of old growth timber were present. This, combined with the age of the trees, made Sibley's Bur Oak Grove the only example of a pre-settlement prairie grove in Central Illinois. Before controlled fires could be introduced, an insect survey was conducted by the author and was funded by IDNR's Small Project Program.

## **Methods**

Between May to October, 1996, 15 day and nocturnal surveys were conducted. Day surveys were conducted by random routes through the grove and wetlands by observing insects and capturing species with aerial nets for identification. Nocturnal surveys were performed between dusk to 1:00 to 2:00 AM, and consisted of suspended white sheets illuminated with portable batteries and 15 watt blacklights. Suspended white sheets also were illuminated with a generator and a 400 watt metal-halide light. Sugar baiting was used for Noctuid Moths. This was performed by mixing beer, brandy, brown sugar and rotten fruit. This mixture was left to ferment for two months, then thickened with more brown sugar and painted onto trees and posts in the grove. Individuals were collected off painted areas by capturing with collecting jars. Voucher specimens were collected and preserved. These specimens were deposited at the Illinois State Museum Zoology Department, Springfield Illinois.

## **Results**

During this survey 10 species of Odonates were documented. All determinations were made by Tim Vogt, Of The Illinois State Museum, Springfield, Illinois. For Lepidoptera 58 species were found, and 46 of these confirmed to species. A total of 56 other insects were collected and identified to family consisting of 11 orders. These are being sent off for further consulting from specialist in their field.

## INSECTS OF SIBLEY'S BURR OAK GROVE

### ODONATES

Dragonflies and Damselflies are insect that live in wetlands and timbers throughout Illinois. As larvae these insects live in aquatic systems for an average of two to three years, before they emerge as adults. In fishless ponds or wetlands they are the primary predators. They feed on aquatic insects as larva and as adults they prey on other flying insects. Many of these species are not very tolerable to pollutants and can be used as indicators of water quality.

#### Species

*Ischnura verticalis*  
*Eitheca (Tetragoneuria) cynosura*  
*Lestes unguiculatus*  
*Libellula pulchella*  
*L. lydia*  
*L. quadrimaculata*  
*Epiteha (Epicordulia) princeps*  
*Sympetrum rubicundulum*  
*Anax junius*  
*Pachydiplax longipennis*

#### Dates observed

15-June-96, 31-July-96  
15-June-96, 29-June-96  
15-June-96, 31-July-96  
15-June-96  
31-July-96  
15-June-96  
29-June-96  
31-July-96  
31-July-96  
31-July-96

### LEPIDOPTERA

Approximately 2000 species of Lepidoptera (Butterflies and Moths) occur in Illinois. These species are important to the ecosystem because of their association with flora of this area. The caterpillars are primary consumers, and the adults stages are pollinators. In addition, they are common food resource for many species of birds, mammals, and other arthropods. Many species, especially those with restricted hostplants requirements, serve as indirect indicators of habitat quality (LaGesse, et. al. 1996). With the current interest in land management and in maintaining plant and animal diversity, a formal survey was initiated in 1996 to document the Lepidoptera fauna in Sibley's Burr Oak Grove.

### BUTTERFLIES

#### **Hesperiidae**

*Pholisora catullus*  
*Ancyloxypha numitor*  
*Atrytone logan*

Common Sooty Wing Skipper  
Least Skipper  
Delaware Skipper

#### **Papilionidae**

*Papilio polyxenes*  
*Pterourus glaucus*

Black Swallowtail Butterfly  
Tiger swallowtail Butterfly

#### **Pieridae**

*Atrogeia rapae*

European Cabbage Butterfly

**BUTTERFLIES cont.**

*Colias philodice*

*Colias eurytheme*

**Lycanidae**

*Everes comyntas*

*Celastrina argiolus*

**Nymphalidae**

*Phyciodes tharos*

*Polygonia interrogationis*

*Nymphalis antiopa*

*Vanessa cardui*

*Basilarchia arthemis*

**Apaturidae**

*Asterocampa celtis*

**Satyridae**

*Megisto cymela*

**Danaidae**

*Danaus plexippus*

Clouded Sulphur Butterfly

Alfalfa Butterfly

Eastern-Tailed Blue Butterfly

Spring Azure

Pearl Crescent Butterfly

Question Mark Butterfly

Mourning Cloak Butterfly

Painted Lady Butterfly

Red-Spotted Purple Butterfly

Hackberry Butterfly

Little Wood Satyr Butterfly

Monarch Butterfly

**Moths**

**Sphingidae**

*Ceratomia hageni*

*Paonias myops*

**Arctidae**

*Hypoprepia miniata*

*Grammia oithona*

*Pyrrharctia isabella*

**Noctuidae**

*Schinia rivulosa*

*Spodoptera ornithogalli*

*Galgula partita*

*Acronicta ovata*

*Anagrapha falcifera*

*Scroliopteryx libartrix*

*Zale lunata*

*Zale aeruginosa*

*Catocala ultronia*

*Catocala cara*

*Catocala dejecta*

*Pachypolia atricornis*

*Acronicta hasta*

*Abargrotis alternata*

*Bellura Sp.*

*Ogdoconta cinereola*

Osage Orange Sphinx Moth

Small-Eyed Sphinx Moth

Scarlet-Winged Lichen Moth

Straight-Lined Tiger Moth

Isabella Tiger Moth

Ragweed Flower Moth

Yellow-Striped Armyworm Moth

The Wedgeling Moth

Ovatate dagger Moth

Celery Looper Moth

Herald Moth

Lunate Zale Moth

Green-Dusted Zale Moth

Ultronia Underwing Moth

Darling Underwing Moth

Dejected Underwing Moth

Pachypolia Moth

Speared Dagger Moth

Greater Red Dart Moth

NA

Common Pinkband Moth

**MOTHS cont.**

**Notodontidae**

*Nadata gibbosa*

*Heterocampa obliqua*

White-Dotted Prominent Moth

Oblique Heterocampa Moth

**Geometridae**

*Xanthotype urticaria*

*Probole americaria*

*Nematocampa limbata*

*Besma quercivoraria*

Buttercup Moth

Friendly Probole

Horned Spanworm Moth

Oak Besma Moth

**Tortricidae**

*Choristoneura rosaceana*

Oblique-Banded Leafroller Moth

**Oecophoridae**

*Mathildana newmanella*

NA