

# NOTES ON THE ALGAL FLORA OF KNOX COUNTY, ILLINOIS

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ABSTRACT.—Studies of the algal flora in two widely separated locations in Knox County, Illinois have increased the number of algal taxa known for that county to sixty-nine.

representing new records for the state of Illinois are preceded by an asterisk.

## CHLOROPHYCEAE

### Volvocales

*Eudorina elegans* Ehrenberg. Lake Storey, Knox Co., October 13, 1963.

### Tetrasporales

- Sphaerocystis schroeteri* Chodat. Green Oaks, Knox Co., November 13, 1963.  
*Gloeocystis planctonica* (West & G. S. West) Lemmermann. Lake Storey, Knox Co., October 27, 1963.  
*Tetraspora gelatinosa* (Vaucher) Desvaux. Lake Storey, Knox Co., October 13, 1963.

### Oedogoniales

- Oedogonium echinospermum* A. Braun. Lake Storey, Knox Co., November 24, 1963.  
*Oedogonium gracilius* (Wittrock) Tiffany. Lake Storey, Knox Co., November 24, 1963.  
*Oedogonium grande* Kuetzing. Lake Storey, Knox Co., November 24, 1963.

### Cladophorales

- Cladophora crispata* (Roth) Kuetzing. Lake Storey, Knox Co., October 13, 1963.

### Chlorococcales

- Pediastrum boryanum* (Turpin) Meneghini. Lake Storey, Knox Co., November 24, 1963.  
*Hydrodictyon reticulatum* (Linnaeus) Lagerheim. Lake Storey, Knox Co., October 13, 1963.  
*Ankistrodesmus falcatus* (Corda) Ralfs. Green Oaks, Knox Co., November 13, 1963.  
\**Ankistrodesmus falcatus* (Corda) Ralfs var. *mirabilis* (West & West) G. S. West. Green Oaks, Knox Co., October 2, 1963.  
*Closteriopsis longissima* Lemmermann. Green Oaks, Knox Co., March 3, 1963.

The algal taxa reported in the following checklist are the result of surveys conducted during 1963 in two widely separated locations in Knox County, Illinois: Lake Storey, situated one mile north of Galesburg on U.S. Route 150 and Green Oaks, the 760 acre Knox College Field Station, located three miles south of Victoria.

Lake Storey is a small, artificial impoundment that was constructed in 1928 by the Atchison, Topeka, and Santa Fe Railroad. Green Oaks consists largely of tailings and water filled trenches of coal mining operations which were curtailed around 1941. Since acquiring the land, an attempt has been made to restore the area to a more natural state. The algal forms reported in the checklist from this location were identified from plankton samples obtained during a recent limnological survey conducted in the station's waters.

The algal flora of Knox County is only poorly known with but a single, apparent, published record, *Euglena viridis*, in existence (Britton, 1944). Houdek (1923) reported, in a survey of the flora of Lake Knox, ten different algal genera but failed to commit any to species. During the intervening years, little, if any, algological research of a taxonomic nature has taken place in the county. With the forms presented in the subsequent checklist the total number of algal species including varietal forms recorded for Knox County now stands at sixty-nine.

## ANNOTATED CHECKLIST OF SPECIES

Nomenclature follows that of Prescott (1963) and Tiffany and Britton (1952). Taxa in the checklist are arranged according to Smith (1950). Those forms

- Scenedesmus bijuga* (Turpin) Lagerheim. Lake Storey, Knox Co., November 24, 1963.
- Scenedesmus bijuga* (Turpin) Lagerheim var. *alternans* (Reinsch) Borge. Lake Storey, Knox Co., November 24, 1963.
- Scenedesmus dimorphus* (Turpin) Kuetzing. Lake Storey, Knox Co., November 24, 1963.
- Scenedesmus obliquus* (Turpin) Kuetzing. Lake Storey, Knox Co., November 24, 1963.
- Zygnematales
- Zygogonium ericetorum* Kuetzing. Lake Storey, Knox Co., October 13, 1963.
- Spirogyra inflata* (Vaucher) Rabenhorst. Lake Storey, Knox Co., November 10, 1963.
- Closterium acerosum* (Schrank) Ehrenberg. Lake Storey, Knox Co., October 13, 1963.
- Closterium acerosum* (Schrank) Ehrenberg var. *elongatum* Brebisson. Lake Storey, Knox Co., October 27, 1963.
- Closterium acutum* (Lyngbye) Brebisson. Green Oaks, Knox Co., November 13, 1963.
- Closterium braunii* Reinsch. Lake Storey, Knox Co., October 27, 1963.
- Closterium didymotocum* Ralfs. Lake Storey, Knox Co., October 27, 1963.
- Closterium ehrenbergii* Meneghini. Lake Storey, Knox Co., October 13, 1963.
- Closterium gracile* Brebisson var. *elongatum* West & G. S. West. Green Oaks, Knox Co., November 13, 1963.
- Closterium intermedium* Ralfs. Lake Storey, Knox Co., October 27, 1963.
- Closterium lanceolatum* Kuetzing. Lake Storey, Knox Co., October 13, 1963.
- Closterium leibleinii* Kuetzing. Lake Storey, Knox Co., October 27, 1963.
- Closterium lunula* (Mueller) Nitzsch. Lake Storey, Knox Co., October 13, 1963.
- Closterium montiferum* (Bory) Ehrenberg. Green Oaks, Knox Co., November 13, 1963.
- Closterium parvulum* Naegeli. Green Oaks, Knox Co., November 13, 1963.
- Closterium strigosum* Brebisson. Green Oaks, Knox Co., November 20, 1963.
- Closterium turgidum* Ehrenberg. Lake Storey, Knox Co., October 27, 1963.
- Cosmarium circulare* Reinsch. Lake Storey, Knox Co., November 24, 1963.
- Cosmarium cucumis* (Corda) Ralfs. Lake Storey, Knox Co., November 24, 1963.
- Cosmarium formosulum* Hoffman var. *nathorstii* (Boldt) West & G. S. West. Lake Storey, Knox Co., November 24, 1963.
- Cosmarium speciosum* Lundell. Lake Storey, Knox Co., November 24, 1963.
- EUGLENOPHYCEAE
- Euglena acus* Ehrenberg. Lake Storey, Knox Co., November 10, 1963.
- Euglena acutissima* Lemmermann. Lake Storey, Knox Co., October 27, 1963.
- Euglena deses* Ehrenberg. Lake Storey, Knox Co., October 27, 1963.
- Euglena elongata* Schewiakoff. Lake Storey, Knox Co., October 27, 1963.
- Euglena gracilis* Klebs. Lake Storey, Knox Co., October 27, 1963.
- Euglena oblonga* Schmitz. Lake Storey, Knox Co., October 27, 1963.
- Euglena oxyuris* Schmarada. Lake Storey, Knox Co., October 27, 1963.
- Euglena spirogyra* Ehrenberg. Lake Storey, Knox Co., October 27, 1963.
- Euglena spiroides* Lemmermann. Lake Storey, Knox Co., November 10, 1963.
- Euglena tripteris* (Dujardin) Klebs. Lake Storey, Knox Co., October 27, 1963.
- Phacus acuminatus* Stokes. Lake Storey, Knox Co., October 13, 1963.
- Phacus pleuronectes* (Mueller) Dujardin. Lake Storey, Knox Co., November 10, 1963.
- Trachelomonas armata* (Ehrenberg) Stein. Lake Storey, Knox Co., November 10, 1963.
- Trachelomonas hispida* (Perty) Stein. Lake Storey, Knox Co., November 10, 1963.
- Trachelomonas volvocina* Ehrenberg. Lake Storey, Knox Co., November 10, 1963.
- XANTHOPHYCEAE
- Tribonema minus* (Wille) Hazen. Green Oaks, Knox Co., November 13, 1963.
- CHRYSOPHYCEAE
- Dinobryon divergens* Imhof. Green Oaks, Knox Co., April 9, 1963.
- DINOPHYCEAE
- Glenodinium palustre* (Lemmermann) Schiller. Lake Storey, Knox Co., October 27, 1963.
- Ceratium hirundinella* (Mueller) Schrank. Green Oaks, Knox Co., April 13, 1963.

## MYXOPHYCEAE

- Polycystis aeruginosa* Kuetzing. Lake Storey, Knox Co., November 10, 1963.
- Anacystis peniocystis* (Kuetzing) Drouet & Daily. Lake Storey, Knox Co., November 10, 1963.
- Merismopedia convoluta* Brebisson. Lake Storey, Knox Co., October 27, 1963.
- Coelosphaerium collinsii* Drouet & Daily. Lake Storey, Knox Co., November 24, 1963.
- Oscillatoria chalybea* Mertens. Lake Storey, Knox Co., November 10, 1963.
- Oscillatoria curviceps* C. A. Agardh. Lake Storey, Knox Co., November 10, 1963.
- Oscillatoria geminata* Meneghini. Lake Storey, Knox Co., October 27, 1963.
- Oscillatoria grunowiana* Gomont var. *articulata* (Gardner) Drouet. Lake Storey, Knox Co., November 10, 1963.
- Oscillatoria tenuis* C. A. Agardh. Lake Storey, Knox Co., November 10, 1963.
- Lyngbya aestuarii* (Mertens) Liebmann. Lake Storey, Knox Co., November 24, 1963.
- Lyngbya birgei* G. M. Smith. Green Oaks, Knox Co., October 2, 1963.
- Aphanizomenon flosaquae* (Linnaeus) Ralfs. Green Oaks, Knox Co., October 2, 1963.

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