

NEW ALGAL RECORDS FOR HANCOCK AND HENDERSON COUNTIES FROM POOL 19, UPPER MISSISSIPPI RIVER

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ABSTRACT

Planktonic, sub-generic algal taxa were collected and identified from the main channel to the east side of Pool 19, upper Mississippi River, within the political borders of Hancock and Henderson Counties, Illinois. Eighty-three new algal records are noted for Hancock County and 86 new records for Henderson County. One species, previously unreported in the state of Illinois, was found in both Hancock and Henderson Counties.

INTRODUCTION

Algal taxa reported in the following checklist were found in monthly samples taken during the period October, 1982, to August, 1983, from Navigation Pool 19 of the upper Mississippi River.

Pool 19 is a 74.5-km river reach which divides Lee and Des Moines Counties of Iowa from Hancock and Henderson Counties of Illinois, with the main channel serving as a political border for these states. Taxa reported in this checklist were collected from the Illinois (eastern) side of the river. No taxa found only on the Iowa (western) side of Pool 19 are reported.

Voucher samples of concentrated phytoplankton are in the Algal Section of the R. M. Myers Herbarium (MWI), Western Illinois University, Macomb.

ANNOTATED CHECKLIST OF SPECIES

Nomenclature follows that of Boyer (1927), Collins (1928), Smith (1950), Drouet and Daily (1956), Prescott (1962), Cleve (1965), Cholnoky (1966), Patrick and Reimer (1966), Cleve-Euler (1968), Drouet (1968), Huber-Pestalozzi (1968), Smith (1968a and 1968b), Gerloff and Cholonky (1970), Boyer (1973), Drouet (1973), Patrick and Reimer (1975), Prescott (1978), and Bold and Wynne (1985). Determination of a county record is contingent on prior reports in Galtsoff (1924), Britton (1945), Tiffany and Britton (1971), or Dodd (1987).

Occurrence of *Nitzschia longissima* (Breb.) Ralfs constitutes the first record of this species in Illinois.

	County Record for	
	Hancock	Henderson
BACILLARIOPHYTA		
<i>Achnanthes exilis</i> Kuetz.	°	
<i>Asterionella formosa</i> Hass. var. <i>formosa</i>		°
<i>Cocconeis pediculus</i> Ehr.		°
<i>Didymosphenia geminata</i> (Lyngb.) Schmidt	°	
<i>Epithemia sorex</i> Kuetz.		°
<i>Gomphonema olivaceum</i> (Lyngb.) Kuetz.	°	°
<i>Gomphonema parvulum</i> (Kuetz.) Grun.		°
<i>Gyrosigma scalproides</i> (Rabh.) Cl.	°	°
<i>Gyrosigma spencerii</i> (Querk.) Griff. & Henfr.	°	°
<i>Hantzschia amphioxys</i> (Ehr.) Grun.	°	°
<i>Melosira italica</i> (Ehr.) Kuetz.	°	°
<i>Meridion circulare</i> (Grev.) Ag.		°
<i>Navicula cryptocephala</i> Kuetz.	°	°
<i>Navicula elginensis</i> (Greg.) Ralfs	°	°
<i>Navicula exigua</i> Greg. ex Grun.	°	°
<i>Navicula protracta</i> Grun.	°	°
<i>Navicula seminulum</i> Grun.	°	°
<i>Nitzschia acicularis</i> (Kuetz.) Wm. Sm.	°	°
<i>Nitzschia denticula</i> Grun.	°	°
<i>Nitzschia linearis</i> Wm. Sm.	°	°
<i>Nitzschia longissima</i> (Breb.) Ralfs	°	°
<i>Nitzschia palea</i> (Kuetz.) Wm. Sm.	°	°
<i>Nitzschia sigmoidea</i> (Nitz.) Wm. Sm.	°	
<i>Nitzschia vermicularis</i> (Kuetz.) Rabh.	°	°
<i>Pinnularia brebissonii</i> (Kuetz.) Rabh.		°
<i>Rhoicosphenia curvata</i> (Kuetz.) Grun.	°	°
<i>Surirella angusta</i> Kuetz.		°
<i>Surirella didyma</i> Kuetz.		°
<i>Surirella linearis</i> Wm. Sm.	°	°

	County Record for	
	Hancock	Henderson
<i>Surirella ovata</i> Kuetz.	*	*
<i>Synedra acus</i> Kuetz.	*	*
<i>Synedra rumpens</i> Kuetz.	*	
<i>Synedra ulna</i> (Nitz.) Ehr.	*	*
<i>Tabellaria fenestrata</i> (Lyngb.) Kuetz.	*	*
CHLOROPHYTA		
<i>Actinastrum hantzschii</i> var. <i>fluvatile</i> Schroed.		*
<i>Ankistrodesmus braunii</i> (Naeg.) Brunn.		*
<i>Ankistrodesmus falcatus</i> (Corda) Ralfs	*	*
<i>Carteria multifilis</i> (Fres.) Dill	*	*
<i>Chodatella ciliata</i> (Lag.) Lemm.	*	*
<i>Chodatella quadriseta</i> Lemm.	*	*
<i>Closteriopsis longissima</i> Lemm.	*	*
<i>Closterium diana</i> Ehr.	*	*
<i>Closterium ehrenbergii</i> Menegh.	*	
<i>Closterium gracile</i> Breb. var. <i>gracile</i>	*	*
<i>Closterium gracile</i> var. <i>elongatum</i> West & West		*
<i>Closterium intermedium</i> Ralfs	*	*
<i>Coelastrum microporum</i> Naeg.	*	*
<i>Crucigenia quadrata</i> Morren	*	*
<i>Crucigenia tetrapedia</i> (Kirchn.) West & West	*	*
<i>Dictyosphaerium ehrenbergianum</i> Naeg.	*	*
<i>Dictyosphaerium pulchellum</i> Wood	*	*
<i>Dispora crucigenioides</i> Printz		*
<i>Golenkinia radiata</i> (Chod.) Wille	*	*
<i>Gonium pectorale</i> Muell.	*	*
<i>Gonium sociale</i> (Duj.) Warm.	*	
<i>Kirchneriella elongata</i> C.M. Sm.	*	
<i>Kirchneriella lunaris</i> (Kirchn.) Moch.	*	
<i>Micractinium pusillum</i> Fres.	*	*
<i>Oocystis borgei</i> Snow	*	*
<i>Pandorina morum</i> Bory	*	*
<i>Pediastrum boryanum</i> (Turp.) Menegh.		
var. <i>boryanum</i>	*	*
<i>Pediastrum boryanum</i> var.		
<i>longicorne</i> Raciborski		*
<i>Pediastrum tetras</i> (Ehr.) Ralfs	*	*
<i>Phacotus lenticularis</i> (Ehr.) Stein	*	*
<i>Polyedriopsis spinulosa</i> Schmidle	*	*
<i>Pteromonas aculeata</i> Lemm.	*	*
<i>Scenedesmus acuminatus</i> (Kirchn.) Chod.		*
<i>Scenedesmus bijuga</i> (Turp.) Lag.	*	*
<i>Scenedesmus brasiliensis</i> Boblin	*	*
<i>Scenedesmus denticulatus</i> Lag.	*	

	County Record for	
	Hancock	Henderson
<i>Scenedesmus dimorphus</i> Kuetz.	•	•
<i>Schroederia setigera</i> (Schroed.) Lemm.	•	•
<i>Sphaerocystis schroeteri</i> Chod.	•	•
<i>Staurastrum gracile</i> Ralfs		•
<i>Staurastrum oxyacanthum</i> Arch.	•	
<i>Tetraedon caudatum</i> (Corda) Hansg.	•	•
<i>Tetraedon minimum</i> (A. Br.) Hansg.	•	•
<i>Tetraedon muticum</i> (A. Br.) Hansg.	•	•
<i>Tetraedon pentaedricum</i> West & West	•	
<i>Tetraedon regulare</i> Kuetz.	•	
<i>Tetraedon trigonum</i> (Naeg.) Hansg.		
var. <i>trigonum</i>	•	•
<i>Tetraedon trigonum</i> var.		
<i>gracile</i> (Reinsch) DeT.	•	•
<i>Tetrastrum staurogeniaforme</i> (Schroed.) Lemm.	•	•
CHRYSOPHYTA		
<i>Mallomonas acaroides</i> Perty		•
CRYPTOPHYTA		
<i>Cryptomonas erosa</i> Ehr.	•	•
CYANOPHYTA		
<i>Anabaena spiroides</i> Kleb.		•
<i>Anacystis incerta</i> (Lemm.) Dr. & Daily	•	•
<i>Anacystis marina</i> (Hansg.) Dr. & Daily	•	•
<i>Anacystis montana</i> (Lightf.) Dr. & Daily	•	
<i>Anacystis thermalis</i> (Menegh.) Dr. & Daily	•	•
<i>Anacystis thermalis</i> f. <i>major</i> (Lagerh.) Dr. & Daily		•
<i>Coccochloris stagnina</i> Spreng.	•	
<i>Gomphosphaeria lacustris</i> Chod.	•	•
<i>Raphidiopsis curvata</i> Fritsch & Rich	•	
<i>Schizothrix calcicola</i> Gom.	•	•
<i>Spirulina subsala</i> Oerst.	•	
EUGLENOPHYTA		
<i>Phacus acuminata</i> Stokes		•
<i>Phacus longicauda</i> (Ehr.) Duj.		•
<i>Trachelomonas hispida</i> (Perty) Stein		•
<i>Trachelomonas schauinslandii</i> Lemm.	•	•
<i>Trachelomonas similis</i> Stokes	•	
<i>Trachelomonas volvocina</i> Ehr.	•	

	<u>County Record for</u>	
	Hancock	Henderson
PYRRHOPHYTA		
<i>Peridinium quadridens</i> Stein		*
XANTHOPHYTA		
<i>Ophiocytium capitatum</i> Wolle	•	•
<i>Ophiocytium cochleare</i> (Eichw.) A. Br.	•	

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