

***Navicula palpebralis* Bréb. var. *semiplena* Greg.**

This variety was not uncommon in some of the collections from the lake at Teller. With them were a few specimens which seemed to be intermediate between this variety and *N. elegans* W. Sm.

***Navicula punctulata* W. Sm.**

This was only found in the same collections as the last mentioned species and is a freshwater form. It was slightly more numerous.

***Navicula radiosa* Kütz.**

This species was found only in one sample taken from the big lake at Bernard harbour, September, 1915.

***Navicula Shicula* Ehr.**

This species was found in small numbers in the lagoon pond at Teller, and once in the brackish pond in that locality.

***Navicula Smithii* Bréb.**

This is a marine species occurring only in a few samples obtained July, 1913, at Teller. It was not very plentiful. Some of the specimens were somewhat rhomboid in outline and may represent a new variety of the species.

Pleurosigma* W. Sm.**Pleurosigma angulatum* W. Sm. var. *strigosum* W. Sm.**

This is another of the marine forms appearing only at Teller. The oblique lines on the valves cut each other at an angle of 55° .

***Pleurosigma attenuatum* W. Sm.**

This was fairly common in some of the collections. It was found at Teller, Collinson point, Bernard harbour, and in the stomach of a fish taken at the latter place, October 4, 1915.

***Pleurosigma fasciola* W. Sm.**

This species was found a few times in the material from the brackish pond at Teller. It is normally a marine species.

***Pleurosigma hippocampus* W. Sm.**

This is a brackishwater species that appeared in a brackish pond at Teller. It was not plentiful.

Amphipora* (Ehr.) Cleve.**Amphipora ornata* Bail.**

This species appeared in collections from Teller, in the lagoon pond, in a tundra pond at Collinson point, and also in the big lake and brackish pond at Bernard harbour.

GOMPHONEMAEAE.***Gomphonema* Ag.*****Gomphonema cristatum* Ralfs**

This species appeared in very small quantities in three localities, in the *Hippuris* swamp at Herschel island, in the bed of the warm creek in northern Alaska (near Sadlerochit river), and in a bottom sample from the lake at Bernard harbour.

COCCONEIDEAE.***Cocconeis* (Ehr.) Grun.*****Cocconeis placentula* Ehr.**

This species occurred only in two collections from Bernard harbour, viz.: from the creek mouth, July, 1915, and in a mud sample from the lake bottom, February, 1916.