

## POSTER PRESENTATION

### NOTES ON IOWA DIATOMS: COMPARISON OF THE MORPHOLOGICAL RANGE OF MODERN POPULATIONS WITH SPECIMENS IN THE REIMER DIATOM HERBARIUM

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Diatomists recognize, but underreport, that diatom populations from different regions differ in size range and morphology. In this study, we examined nine taxa from collections made from Iowa in 2009. We compared our specimens with specimens in the Reimer Diatom Herbarium, located at Iowa Lakeside Laboratory (ILL). The taxa examined include *Diploneis ovalis* ssp. *arctica* Lange-Bertalot, *Gomphonema angustatum* (Kützing) Rabenhorst, *Amphora normanii* Rabenhorst, *Amphora cimbrica* var. *tenuis* Levkov, *Encyonema muelleri* var. *ventricosum* (Temp. & Perag) Czarnecki, *Neidium* sp. and others when completed. We include original descriptions and living cell images to document chloroplast structure of several of the taxa. This poster presentation by the students of the Systematics and Ecology of Diatoms course at ILL represents an effort to document the taxa and range of morphology in Dickinson County, Iowa. The summer field course has now completed documentation of a total of 41 taxa. We plan to make the taxonomic treatments available online in the future.