

## POSTER PRESENTATION

### TWO NEW PROPOSED *DIPLONEIS* AND *SYNEDRA* TAXA FROM THE EVERGRADES

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The Florida Everglades, one of the largest subtropical wetlands in the world, has an amazing variety of diatom taxa of both temperate and tropical origins. We analyzed samples from both phosphorus-enriched northern Water Conservation Area 2A (WCA-2A) and the relatively un-enriched southern WCA-2A. Samples were taken from floating algal mats, sediment cores, the epiphytic community, and submerged glass slides. The proposed new *Diploneis* species resembles *D. ovalis* (Hilse) Cleve, *D. elliptica* (Kutzing) Cleve, and *D. boldtiana* Cleve in some characteristics but differs from these described species in key ways. For example, our specimens have nearly parallel sides, weakly radiate striae in the middle of the valve that become almost circumpolar at valve ends, and narrow longitudinal canals that are slightly arched in the central area, with pores that appear to be an extension of the striae. Interestingly, Everglades specimens closely resemble images of specimens from Cuba and Uruguay, suggesting that they are part of a distinct tropical taxon. The new *Synedra* species we propose also appears to be tropical, as it resembles images of specimens collected in Jamaica, Mexico, and Central America. It has been called *S. minuscula* Grunow and *Fragilaria famelica* (Kutzing) Lange-Bertalot by other authors, but we feel that it more closely resembles *Synedra tenera* W. Smith. Still, it differs from all of these taxa by having no hyaline central area and a much narrower pseudoraphe that SEM images reveal is caused by a slight gap between median punctae. In summary, both of the new *Diploneis* and *Synedra* taxa we propose appear to be tropical taxa that differ from taxa previously described from temperate areas.