ONLINE APPENDIX

CHAPTER 17
THE FLORIDA EVERGLADES

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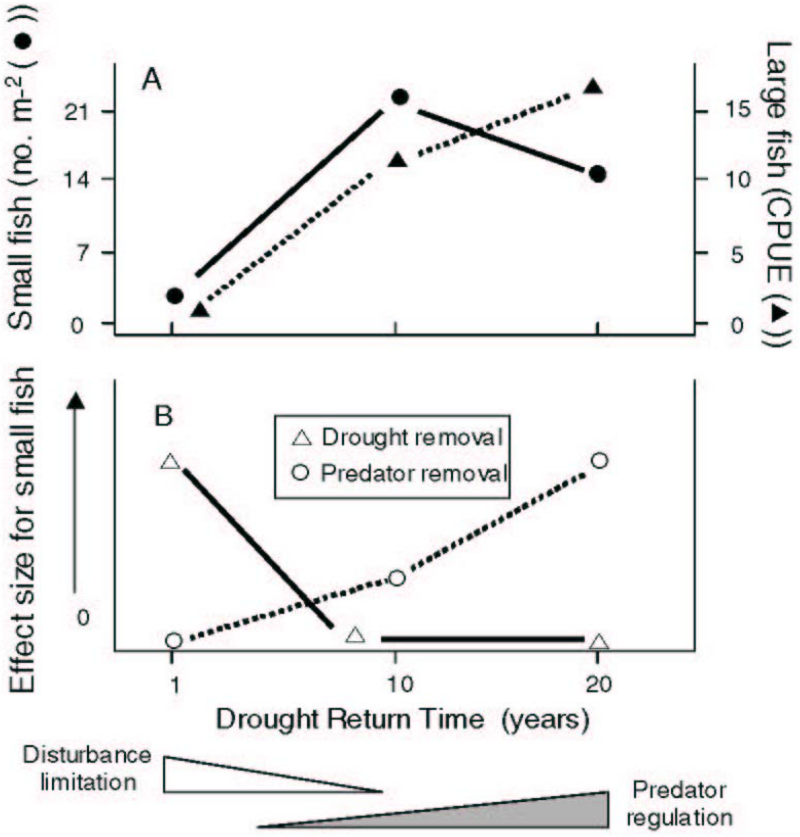
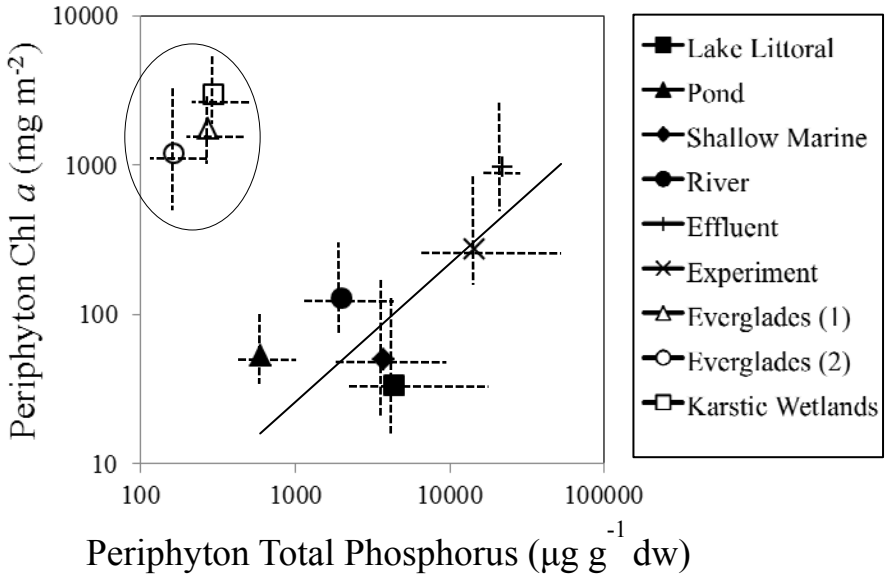


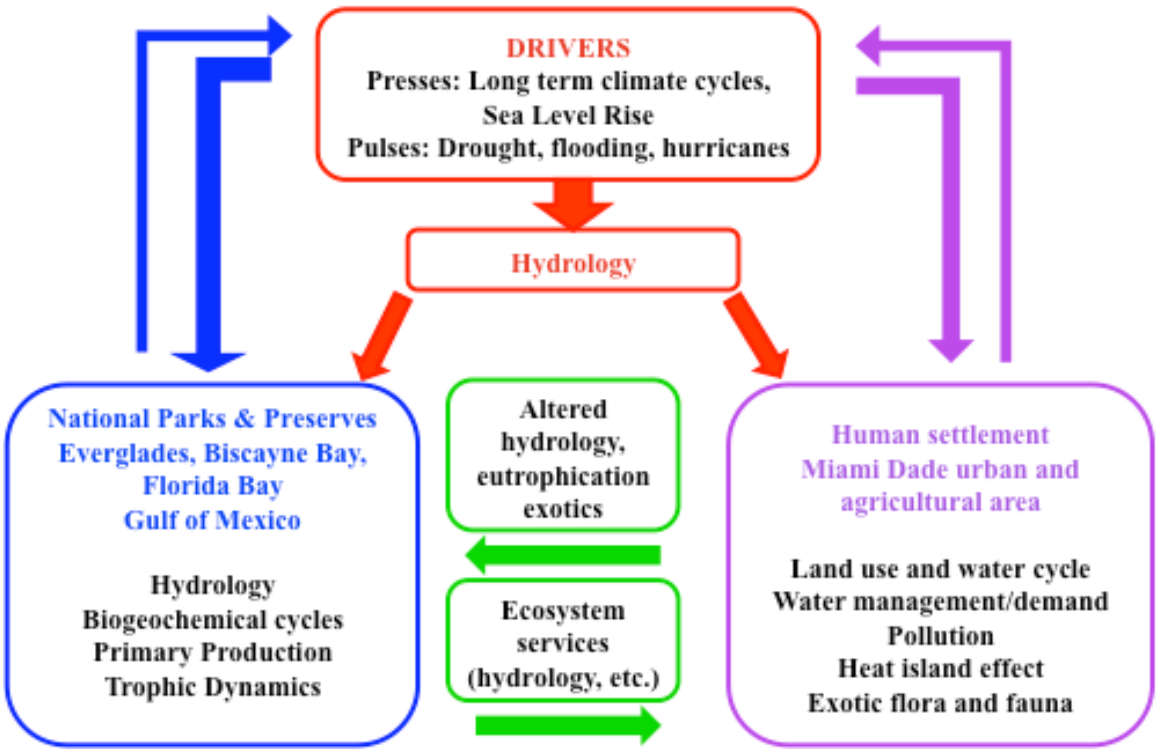
Appendix Figure 17.1. A. Conceptual pattern of fish density by size class versus time in years between drought events based on observed data. Large fish have multiyear life cycles in this system, while all small fish have one or more generations per year. B. Conceptual model of effect size for small fish from disturbance and predation in the Everglades system. Effect size is the predicted magnitude of change resulting from relaxation of predation rate or drought frequency (each while holding the other constant) at sites with the indicated drought return time. Wedges at the bottom of the figure indicate the relative importance of disturbance and predation at a given drought frequency. Note these overlap for an intermediate range of frequency.



Appendix Figure 17.2. Areal chlorophyll *a* (Chl *a*) biomass of periphyton versus the content of phosphorus in dried periphyton mat in different benthic habitats. This relationship is positive across most benthic habitats, including lake littoral zones, ponds, shallow marine environments, rivers and streams, sites receiving industrial effluent and enrichment experiments (data compiled from Vymazal, 1995 and Goldsborough and Robinson, 1996). Sites from the Everglades (1 = Gaiser (2009)), (2= studies summarized by Gaiser et al. (2011)) and other karstic wetlands in the Caribbean basin (La Hée (2010)) show much greater biomass per gram of phosphorus available to the periphyton community.

Goldsborough G, Robinson G 1996. Pattern in wetlands. In *Algal Ecology: Freshwater Benthic Ecosystems*, RJ Stevenson, ML Bothwell, RL Lowe (eds), New York: Academic Press

Vymazal J 1995. *Algae and Element Cycling in Wetlands.* Boca Raton FL: CRC Press



Appendix Figure 17.3. Conceptual diagram showing the feedbacks among external climate drivers (in red, which can have sustained "press" or episodic "pulse" characteristics), the hydrology, chemistry and biology of South Florida ecosystems (blue), attributes of the neighboring built urban and agricultural system (purple) and their interactions through provisioning of ecosystem services and the maintenance of them (green). [Redrawn from the Florida Coastal Everglades Long-Term Ecological Research program with permission from C. Saunders].