Some of the Less Discussed Negative Impacts of Hydrilla

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Allowing Hydrilla to Establish Can Have Unforeseen Consequences

- Advocacy groups will form if you let hydrilla become established
  - Especially if it creates novel habitat
  - Fishing interests, waterfowlers, anti-management groups
- Can result in a charged political environment
  - Too much/Too little; expectation the plant will behave
  - Management decisions not optimal in this environment
- Often results in “all or none” mgmt. scenarios
  - Grass carp or do nothing

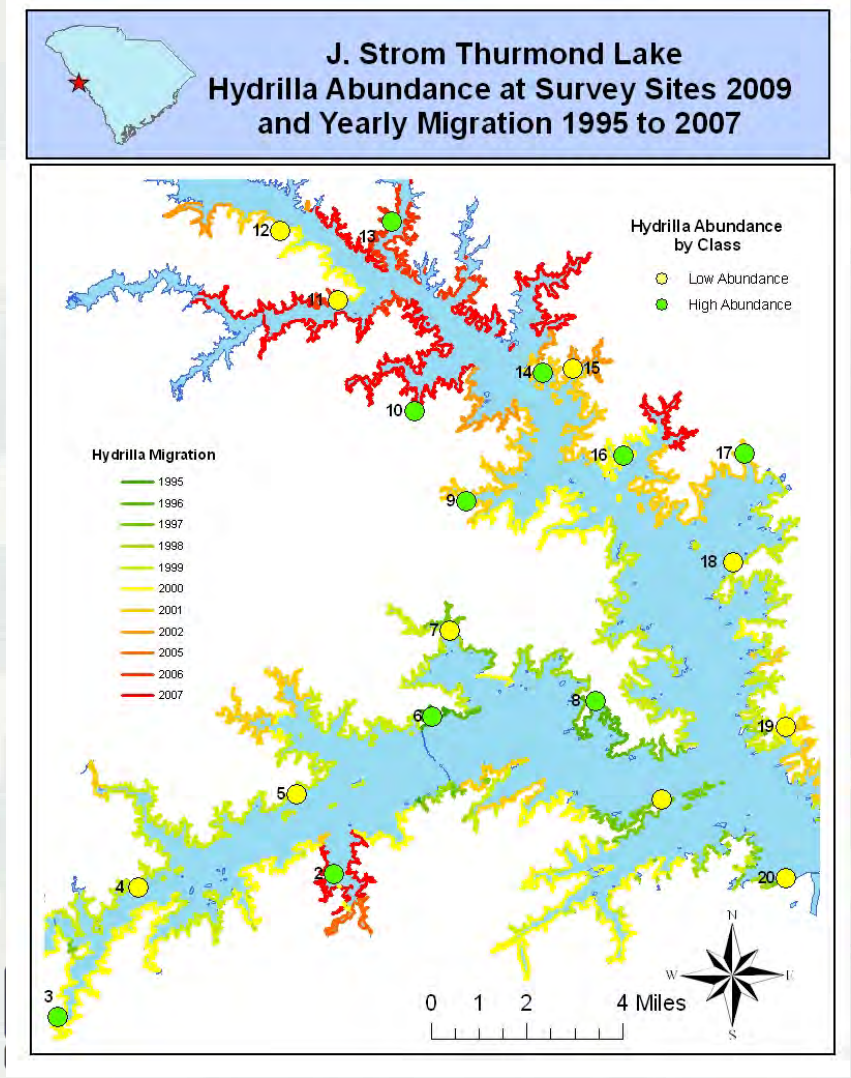
Hydrilla is perceived by some as providing Ecosystem Services

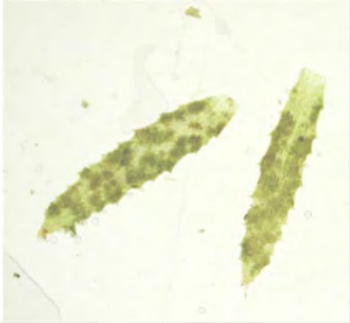
- challenges come when hydrilla growth gets out of control
- negative impacts from excessive hydrilla or large-scale mgmt.

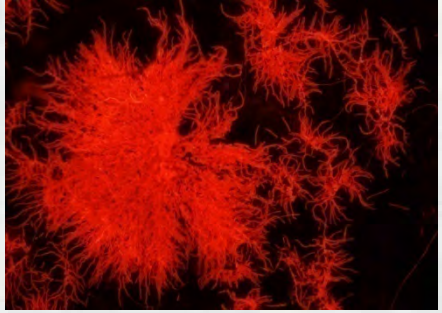
Some Publications Suggest Hydrilla Provides Ecosystem Services

- Hoyer et al. 2009 – Lake & Res. Manage.
  - No detriment to fish, birds, native plants in FL
- Hershner & Havens 2008 – Conserv. Bio.
  - Hydrilla and Ecological Service in Wetlands
- Rybicki et al. 2007 – Limnol Oceanogr.
  - Hydrilla with a positive function in the Potomac River – Habitat for birds and fish

Unintended Consequences – Monoecious Hydrilla

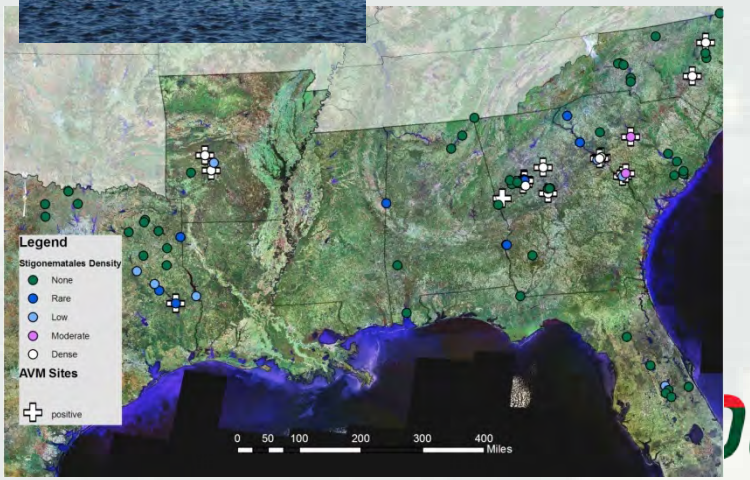






Aetokthonos hydrillicola

- algae
– produces a novel toxin



Kissimmee Chain of Lakes, Florida

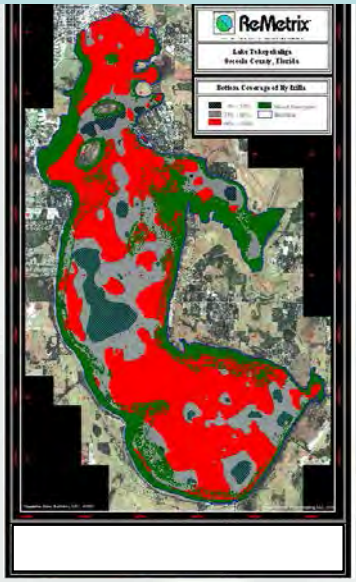
– Headwaters- C&SF Flood Control Project

- Extensive hydrilla management

Endangered snail kite

Invasive apple snail

Large hydrilla infestation

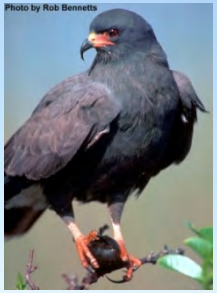


Allowing hydrilla to establish = complex management scenarios

In a cruel twist of irony – Florida DEP declared Lake Toho impaired for nutrients due to Excessive Macrophyte Growth (HYDRILLA)

Native habitat

Flood Control/Storage



Endangered species

Harmful algae/avian tox

Large-scale herbicides = Stakeholder concern

Fishing

Grass Carp = all or None

Duck Hunters
Real Estate
Regulatory (NPDES)
Funding