Fish & Critters in Your Pond

Presented By Rob Burnes
Environmental Scientist
Good Habitat/Bad Habitat

Good Habitat

Bad Habitat
What Makes Good Habitat

In the Littoral Zone
You Want to…
• Maintain Variety
• Emphasize Edge Effect
• Maintain 30-50% Area Coverage of Plants
Butterflies (Order Lepidoptera)

- Pollinate 75% of Staple Crops and Flowers.
- 2nd Only to Bees as Pollinators
- Environmentally Sensitive, so They are Good Ecological Indicators
Dragonflies (Order Odonata)

- Tied to water due to early life stages
- Eat mosquitoes
- Excellent prey for fish
- Ecological indicator of low dissolved oxygen
Lady Bugs  (*Hippodomia convergens*)

- Love to eat aphids
- Excellent natural pest control
Apple Snails *(Pomacea spp.)*

- Eat algae and detritus
- Help to improve water quality
- Important food source for the Everglades Kite, also known as the Snail Kite
Exotic Apple Snails

- Much larger than natives
- Can outcompete natives
- Found to have negative impacts on Snail Kites feeding
Frogs *(Order Anura)*

- Indicator of good water quality
- Eat nuisance insects
- Extremely susceptible to pollutants
- Provide food for fish
Turtles (Order Testudines)

• Help stimulate plant growth by eating plants
• Habitat loss and genetic mixing are the biggest threats to Florida native species
Small Fishes

Mosquitofish
*(Gambusia holbrooki)*
- Usually 1-3 inches long
- Great food source for larger fish and wading birds
- Effective in controlling mosquito larvae
- Tolerant of poor water quality

Brook Silverside
*(Labidesthes sicculus)*
- Usually 2-3 inches long
- Great food source for larger fish and wading birds
- Eat zooplankton and insect larvae
- Prefer clear water, intolerant of highly turbid water
Grass Carp (*Ctenopharyngodon idella*)

- Only triploid grass carp are allowed in Florida
- Must apply for an application through FFWCC
- Benefits of Grass Carp are that they provide long-term management of vegetation as long as they are stocked correctly
- A drawback is that they are not very selective and will eat a variety of plants

FFWCC Grass Carp Website:
http://myfwc.com/license/FreshwaterPermit_grasscarp.htm
Sunfishes \((Family \text{ Centrarchidae})\)

- Beloved by recreational anglers
- Fishes of this family are tolerant of environmental stressors and pollutants
- Prefer the cover of plants and woody debris
Herons (Family Ardeidae)

**Little Blue**
*(Egretta caerula)*
- 22-29 Inches
- Eat Small fish, amphibians, and aquatic invertebrates
- Most serious threat is habitat loss

**Green**
*(Butordies viregrens)*
- 16-18 Inches
- One of the few tool using birds
- Winters in coastal areas

**Tricolored**
*(Egretta tricolor)*
- 24-28 Inches
- Can be distinguished by white belly
- Feed mainly on small fish
Cormorants and Anhingas
(Order Pelecaniformes)

- Common to this area
- Eat fish
- Look similar to one another
  - Cormorants have a shorter tail and shorter blunter and hooked bill
  - Anhingas have a longer pointy bill and their head is the same size as their neck
Questions?