

Fish & Critters in Your Pond

Presented By Rob Burnes
Environmental Scientist



6.23.2000

Good Habitat/Bad Habitat

Good Habitat



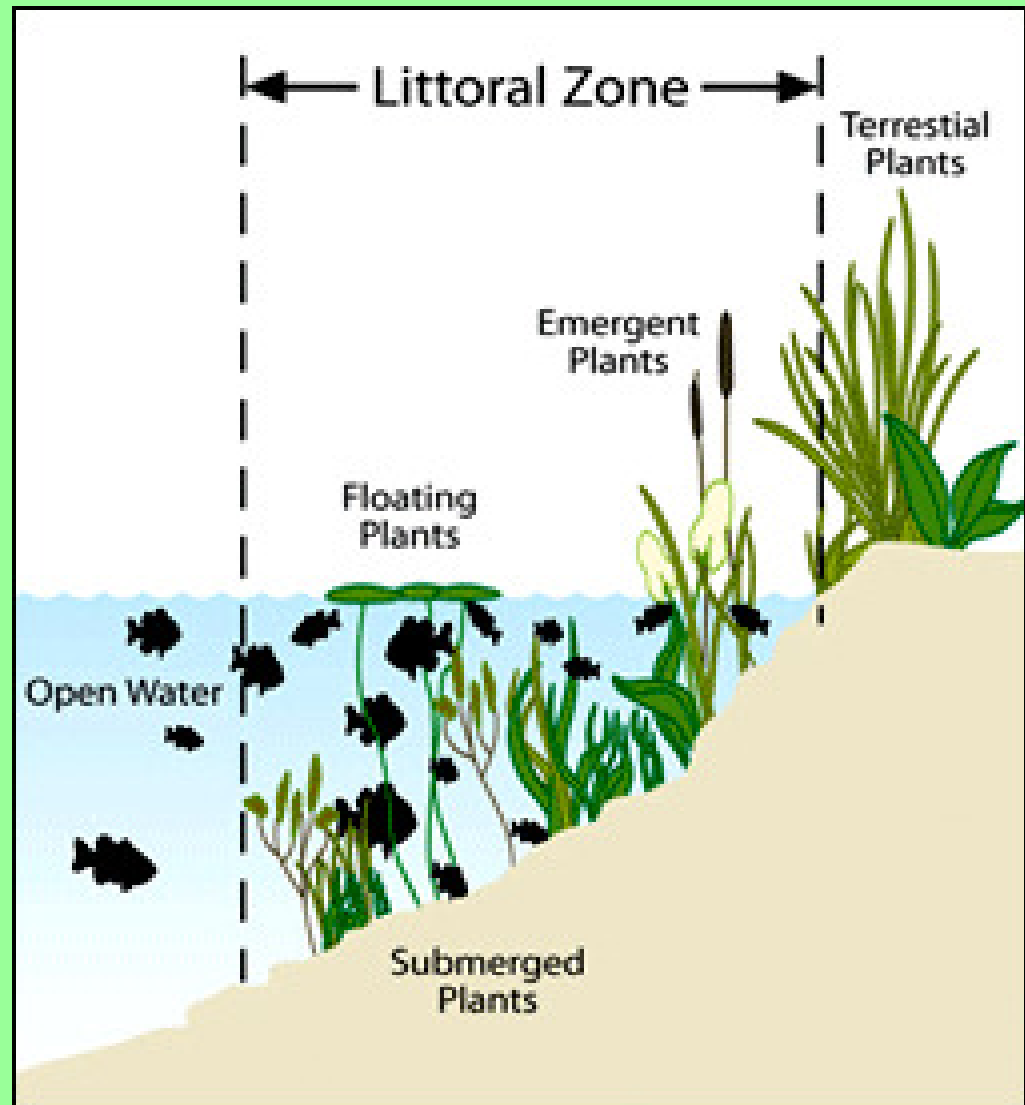
Bad Habitat



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



Swallowtail Butterfly



Monarch Butterfly

Dragonflies (Order Odonata)

- Tied to water due to early life stages
- Eat mosquitoes
- Excellent prey for fish
- Ecological indicator of low dissolved oxygen



Copyright John Kimbler

Lady Bugs (*Hippodamia 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



Florida Cooter



Yellow belly slider

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*)



FFWCC Grass Carp Website:

http://myfwc.com/license/FreshwaterPermit_grasscarp.htm

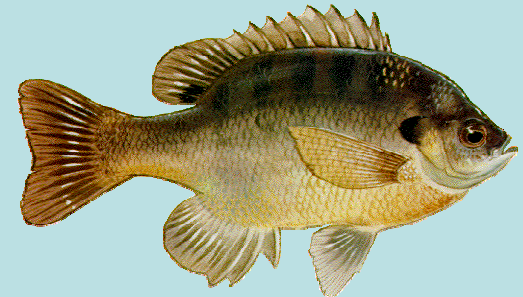
- Only triploid grass carp are allowed in Florida
- Must apply for an application through FFWCC
- Benefits of Grass Carp are that they provide long-term management of vegetation as long as they are stocked correctly
- A drawback is that they are not very selective and will eat a variety of plants

Sunfishes (*Family Centrarchidae*)

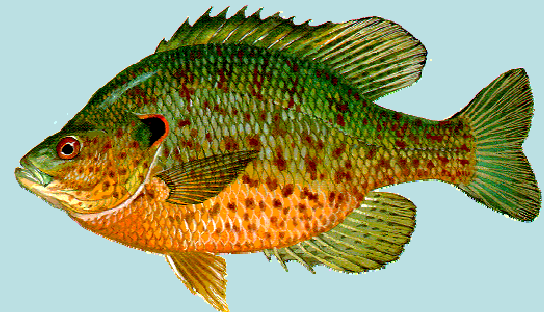
- Beloved by recreational anglers
- Fishes of this family are tolerant of environmental stressors and pollutants
- Prefer the cover of plants and woody debris



Largemouth Bass



Bluegill



Redear Sunfish

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 viregrems*)

- 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



Anhinga



Cormorant

A photograph of a dense field of tall green grasses with numerous purple iris flowers in bloom. The flowers are scattered throughout the field, some in full bloom and others as buds. The grasses are long and slender, creating a textured background for the flowers.

Questions?

3.23.2004