

Recreational Pond Management

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Frequent Management Issues

- Construction and leaky ponds
 - Lime and Fertilizer
 - Weeds
 - Stocking
 - Muddy water
 - Fish Kills

Pond Construction



Pond Construction



Pond Construction



Pond Construction

Do it right the first time

- soils
- spillways
- proper sized pipes
- follow good construction techniques

Get design assistance from the NRCS



Leaky Ponds

Build it right the first time

Proper soils

Best solution for leaky bottoms

- Drain pond

- Truck in clay soil(20%)

- One foot layer

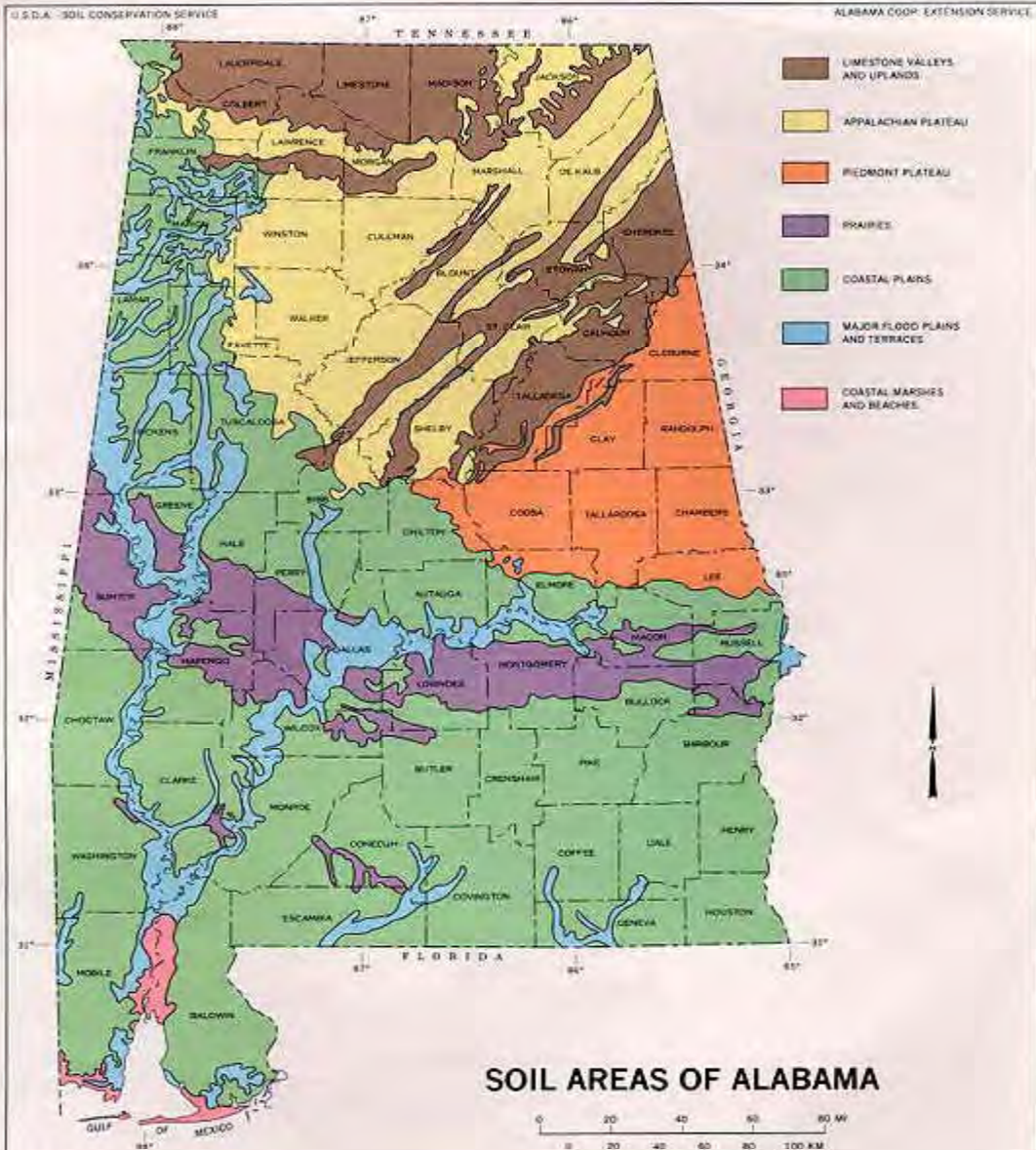
- Compact with sheepsfoot

Sodium bentonite is expensive

- Calcium bentonite will not work

- Minimum \$3500 per acre





SOURCE: General soil map of Alabama No. 4-B-33616 published January 1964

CIR. 45H-340
SEPTEMBER 1966 4-B-33619-2



Liming Fish Ponds

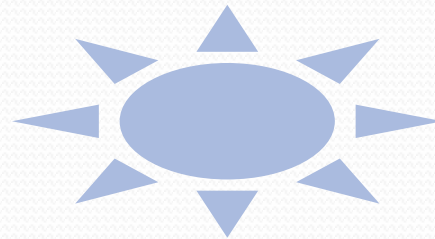
- Most ponds outside Alabama's Black Belt will need lime
 - Lime is required so nutrients can be used in the food web of the pond.
 - 20 mg per liter total alkalinity
 - 2-3 tons per acre
 - Best applied before pond is filled with water
 - Ponds smaller than 3 acres, spread around pond
 - Larger than three 3 acres, use barge method(consultant)

Why Fertilize?

Fertilizers are the primary source of nutrients needed to establish and maintain the pond's food chain



- Algae
- Planktonic animals
- Insects and other invertebrates
- Forage fish
- Predator fish
- Alligators
- Angler





Fertilizing Fish Ponds

- Before fertilizing, assess your needs!!
 - Aesthetics – maybe you just want clear water for swimming
 - Light fishing pressure
 - 10 pounds of bass and 100 pounds of bream per acre
 - Medium fishing pressure
 - 15-20 pounds of bass and 150 pounds of bream per acre
 - Heavy fishing pressure
 - 25 pounds of bass and 200 pounds of bream per acre
- Feeding fish with floating feed is an option too!



Fertilizing Fish Ponds

- Fertilization Schedule and Costs
 - March through September every three to four weeks
 - Seven to nine applications
 - Each application requires 1 gallon of liquid fertilizer
 - \$5.30 per gallon
 - One acre will cost \$37 to \$47 in a year
 - Are your friends and family going to eat more than 10 pounds of bass and 100 pounds of bream per acre per year?

Weeds

Filamentous algae

Submersed Plants

Floating Plants

Emergent Plants

Marginal Plants

Grass Carp

Herbicides

Proper pond construction

Proper fertilization techniques

Weed sample to local ACES staff

Digital photo to Fish Center



Stocking the Right Fish

Eliminate trash fish
green sunfish, bullheads, carp

Crappies

Hybrid Bream

Channel Catfish

Proper bass bream ratio in Alabama
100 bass
1000 bream





Fish for Stocking

- The Department of Conservation and Natural Resources does not stock farm ponds
- Fish for stocking can be purchased from private fish hatcheries
- DCNR still does pond balance checks in May and September. (Make application)
- Beware of the fish mongers from Arkansas!



Muddy Water

- Causes
 - Non vegetated or eroding watershed
 - Stupid cows (GOATS ARE OK!)
 - Water chemistry
- Solutions
 - Improve watershed
 - Fence off cows
 - Send bucket of pond water to Fish Center for diagnosis and recommendations



Fish Kills

- Algae die- offs
 - Maintain a 18-24” visibility in water
- Turn- overs
 - Invest in a destratifier
- Fish diseases
 - Contact Alabama Fish Farming Center
- Fire ants
- Mad neighbors and those deadly DOT herbicides

Questions?



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