MANAGING WETLANDS FOR WATERFOWL

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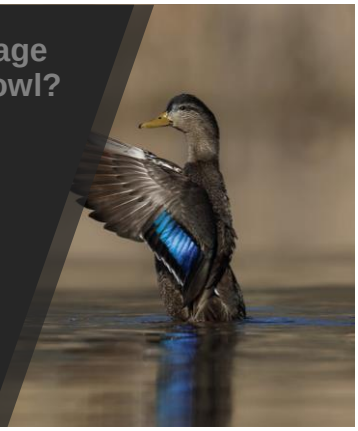
Objectives

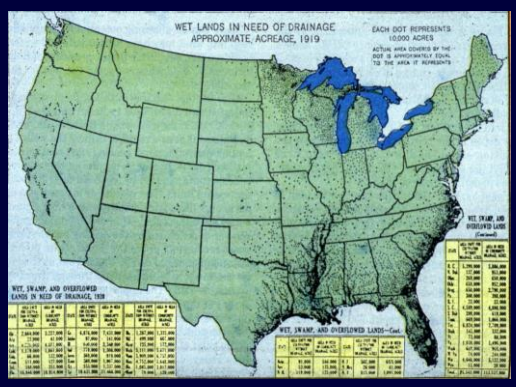
- Southeastern waterfowl habitats and current wetland trends
- Habitat Management Recommendations
- Ducks Unlimited Conservation Programs

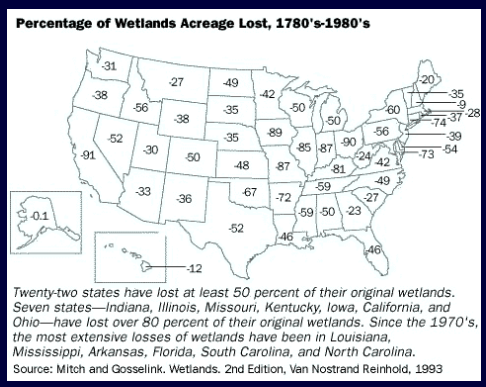
Why Manage for Waterfowl?

- Hunting
- Heritage / tradition
- Income source
- Aesthetics / wildlife viewing
- 75% of land in private ownership
- Loss of historic wetland habitat



STATUS OF WETLANDS

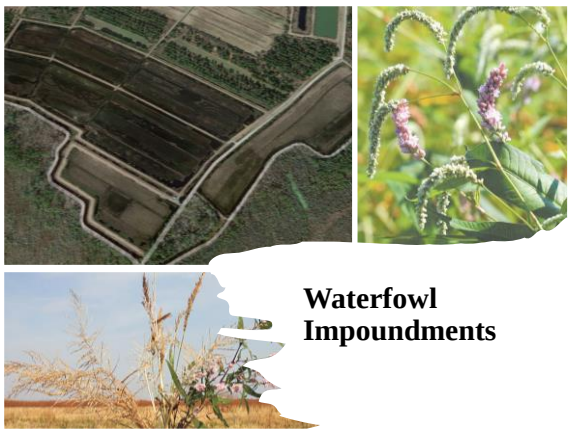




Twenty-two states have lost at least 50 percent of their original wetlands. Seven states—Indiana, Illinois, Missouri, Kentucky, Iowa, California, and Ohio—have lost over 80 percent of their original wetlands. Since the 1970's, the most extensive losses of wetlands have been in Louisiana, Mississippi, Arkansas, Florida, South Carolina, and North Carolina.
Source: Mitch and Gosselink. Wetlands. 2nd Edition, Van Nostrand Reinhold, 1993

Current Trends

- 50% of wetlands in U.S. are gone
- Rate has slowed over the past 30 years BUT…
- Still losing 60,000 acres per year



IMPORTANT MANAGEMENT CONSIDERATIONS

What Does Seasonal Mean?

- Flooded for part of the year
- Flooded during winter or dormant season in the south
- Flooding of short duration

Why are Seasonal Wetlands Important?

- Good conditions for germination during growing season
- Plants produce seeds
- Plants are flooded during dormant season

Wetland Plants

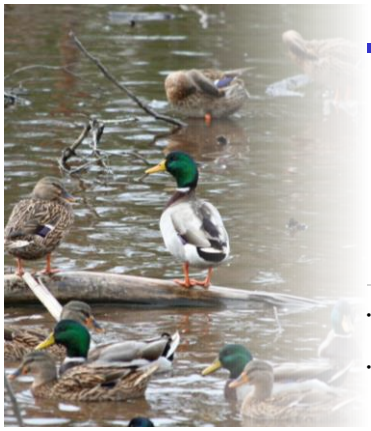
- Tolerant of flooding
- Annuals produce abundant seeds
- Perennials produce underground resources
- Provide structure for invertebrates

Foraging Depths

Water Depth

Grebes
Diving ducks
Wading birds
Dabbling ducks
Shorebirds

Species



What is a Greentree Reservoir?

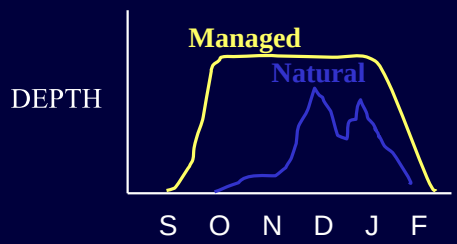
- Impounded forest with live trees
- Water is removed during growing season and added during winter

Resources in GTR

Plant foods
- Hard mast
- Soft mast

Invertebrates
- Aquatic
- Semi-aquatic

GTR Flooding Regime



Vary Flooding Regimes

Within a year

Among years

Never the same pattern

Greentree Reservoir

Problems

- Expensive to establish
- Permitting difficulties
- Poor management can lead to damage, shift in species

Summary

- Can be great habitat
- Management is key and needs to vary

Beaver Ponds

Beaver Ponds

Species

- Wood duck, mallard, hooded merganser, black duck

Management

- Summer drawdown to stimulate native vegetation or plant foods
- Fall flood to provide habitat
- Control water level

Beaver Ponds

Problems

- Beavers plug up water control structure and impact habitat

Summary

- Fairly passive management
- Provide good brood habitat for wood ducks

Moist Soil Management

What is Moist Soil Management?

Manipulation of soil and water to produce resources for wetland dependent wildlife in seasonally flooded environments

Wildlife Response to Moist Soil Management

Migratory waterbirds
Aerial foraging songbirds
Breeding fish
Breeding amphibians
Breeding waders
Breeding waterfowl

Key Management Points

Water manipulation:

- Begin drawdown in Spring (April – May)
- This is when soil temps are cooler and desirable species germinate

Key Management Points

Water manipulation:

- Slow Drawdown (pull 1 board every 7-10 days)
- This creates a moist environment across the seed bed as the unit slowly drains/dries

Soil Disturbance

- Disking, mowing, flooding, herbicide, burning, etc.
- No control limits seed production, increases woody vegetation and perennials
- Set back succession

Coastal Impoundments

Species

- Teal, gadwall, wigeon, pintail, and some divers

Management

- Native vegetation
- Mainly brackish conditions
- Drawdown in spring, circulate water and gradually increase depth (30” max.)

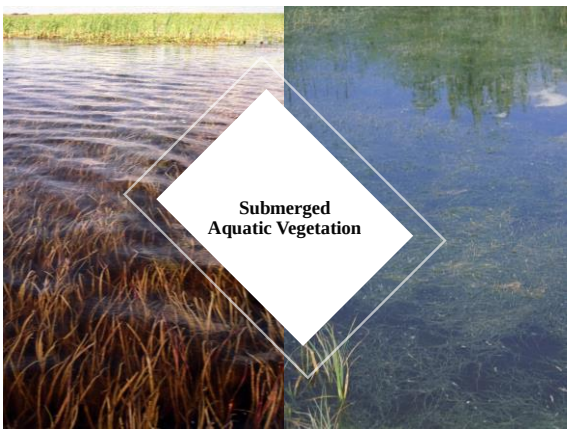
Coastal Impoundments

Problems

- Salinity (7-20 ppt)
- Water quality
- Algae blooms

Summary

- Excellent habitat
- Intensive management



Flooded Cropland

Species
- Variety but mainly dabblers

Management
- Plant agricultural crop (sorghum, corn, rice, soybeans, etc.)
- Flood in fall after harvest (6-18”)
- Drawdown in spring for planting

Flooded Cropland

Problems
- Expensive
- Baiting issue

Summary
- Need infrastructure
- Provides good source of energy but lacking essential nutrients

Agricultural foods
- High energy, readily available
- Nutritionally incomplete
- Cost, baiting issue

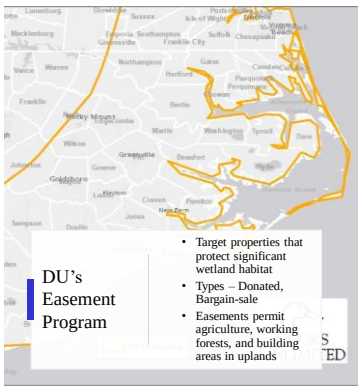
Native vegetation
- Essential nutrients + insects
- Drought/Flood resistant
- Can manipulate
- High yield
- Requires soil disturbance

Take Home Lessons

- Know your site
- Have an objective
- Monitor your results
- Wetlands are dynamic
- Shallow water is best
- Think beyond one season

DU Cost-share Habitat Projects

- DU can work with private landowners to implement projects on their land
- 50% cost-share required from landowner
- Land typically needs to be protected
- Only certain projects are good fits
  - Dependent on funding from competitive grant programs



DU's Easement Program

- Target properties that protect significant wetland habitat
- Types – Donated, Bargain-sale
- Easements permit agriculture, working forests, and building areas in uplands

Ducks and more…