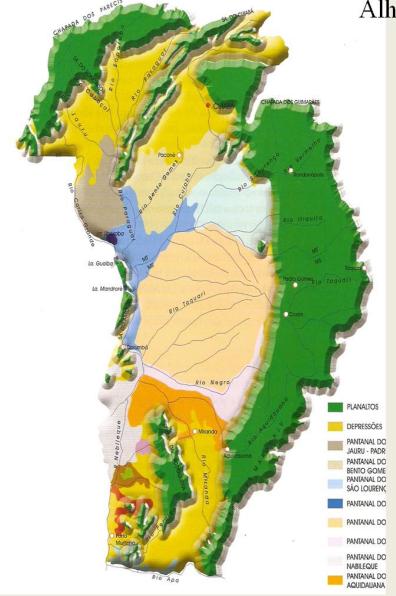
Habitat Use by Wildlife in Agricultural and Ranching Areas in the Pantanal and Everglades

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Alho & Gonçalves (2005)

Pantanal

- 140,000 km² of wetlands with a monomodal flood pulse
- Elevation between 80 to 150 meters
- In Brazil adjacent to Bolivia and Paraguay
- Encompasses the Upper Paraguay River basin
- Most is privately owned
- Ranching is the primary landuse





Wildlife

- 260 species of fish
- 35 species of amphibians
- 167 species of reptiles
- 650 species of birds
- 95 species of mammals







Wildlife and Habitat



- Waterfowl and migratory birds are found in wetlands and associated habitat
- Woodlands provide food and nesting habitat for many birds
- Aquatic species include many fish as well as the giant otter and other mammals, reptiles and amphibians
- Large predators range throughout, including jaguar, puma, ocelot and oncilla
- Cattle are found on upland habitat along with marsh and brocket deer







Cattle Ranching

- On the Pantanal there are over 4.4 million heads of cattle with 2.8 million in the lower marsh
- In the Aquidauana region management is mostly low intensity
- In many farms, the cattle remain in the area year round with no food supplements except minerals and vaccinations







Habitat Features

- Wooded Areas
- Aquatic Habitat
- Corridors and

Trails

- Edges
- Pastureland







Woodlands and Forests

- Protection of rivers and springs through reduced siltation and erosion
- Supports natural communities including birds
- Moderates climate and provides shelter







Marshes and Wetlands

- Waterfowl
- Wading birds
- Aquatic species
- Fish
- Plant communities
- Critical to the region and the wildlife







Threats to the Natural System

- Agriculture, mining, and development in surrounding areas
- Agricultural intensification within the Pantanal
- Loss of woodlands and forests
- Altered hydrology
- Unmanaged ecotourism
- Pollutants
- New and improved roads







Everglades Agricultural Area

- Between Lake Okeechobee and natural/ managed wetlands of the greater Everglades
- In existence since 1950s
- 280,000 ha or 2800 sq km
- Mainly sugarcane, also rice, vegetables and sod
- Highly managed, very little native vegetation
- Relatively low road density, private property





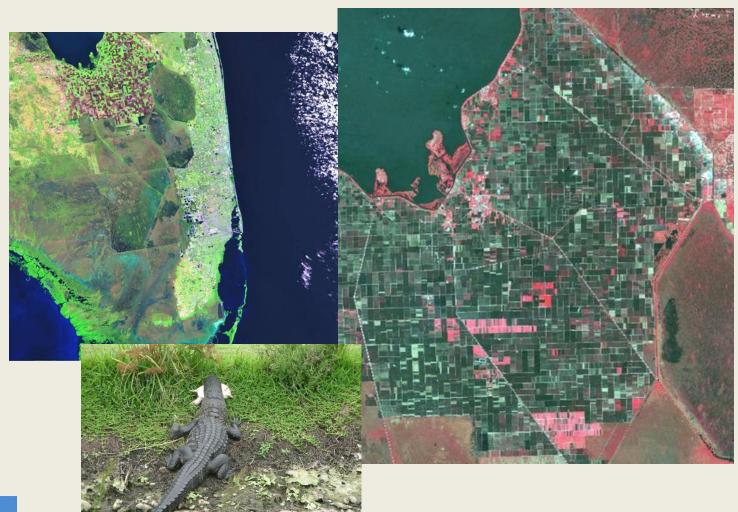
Wildlife

- 22 species of fish
- 13 species of amphibian
- 24 species of reptile
- 164 species of bird
- 19 species of mammal











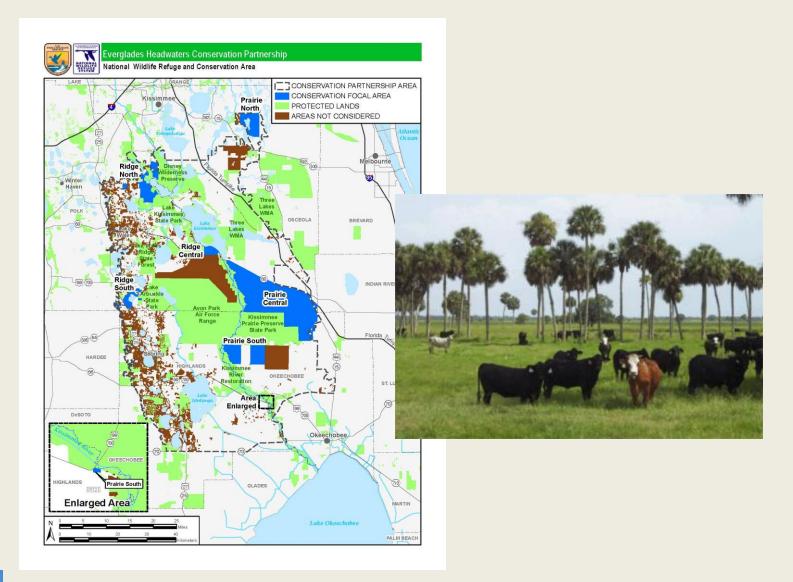


Lake Okeechobee Headwaters

- Ranching
- Matrix of cattle ranches, seasonally wet grasslands and longleaf pine savannahs
- Endangered and threatened species
- Water quality and storage issues upstream from Lake Okeechobee
- Large restoration project using partnerships and conservation











Habitat Features

- Flooded fields or isolated wetlands
- Upland vegetation including wooded habitat or sugarcane
- Habitat structure such as perches and nesting sites
- Uncultivated areas and edges
- Roads and corridors
- Fields or pastures





Uncultivated Areas and Edges

- Important refugia for birds such as common yellowthroat during harvest and disturbance in the EAA
- Brushy growth on edges provides nesting for small egrets and herons
- Management important for other needs such as water quality, doesn't always match wildlife needs





Trees and Wooded Habitat in Agriculture

- Perches for wintering raptors, nesting for crested caracara in cattle ranches
- Dispersal and daytime roost for barn owls from the nest box program in the area
- Affects raptor community composition
- Nesting structure for larger waterbirds such as cormorants, anhingas





Wetlands, Flooded Fields, Retention Ponds, Filter Marshes

- Preserved natural marshes integral to larger landscape of the Everglades
- Managed wetlands or flooded fields support migratory or dispersing waterbirds such as ducks, wading birds, shorebirds, terns and gulls including wood stork and roseate spoonbill
- Wetlands of all kinds can provide migratory and breeding waterfowl habitat for species such as mottled ducks in prairie wetlands around Lake Okeechobee, STAs and flooded agricultural fields





Relevance to Other Managed Lands

- Importance of wooded/vegetated edges and nonfarmed habitat
- Wetlands, whether created or maintained, support many wildlife species
- Management may not always be compatible with wildlife needs
- Importance of these areas within the agricultural landscape
- Importance of these areas, and others, within the framework of restoration



Relevance to the Natural System

- Flooded areas store and clean water
- Flooded and fallow fields may supplement habitat for shorebirds, wood stork, and other wading birds
- Flooded fields may provide breeding habitat for mottled duck, whistling-ducks, night-herons and other species
- Wooded and brushy areas support migratory upland bird species and wintering raptors from within and outside Florida





Questions?





