

#### **U.S. Fish and Wildlife Service**



➤ "Many Hunters came home with empty bags. Others were more fortunate...The season was disastrous enough, however, to convince the true sportsmen among the duck hunters that something was seriously amiss."

Nature Magazine, April 1935)







- ►U.S. Fish and Wildlife Service and the National Wildlife Refuge System primary authorities and responsibilities
- ➤ Waterfowl Management on Refuges in Louisiana



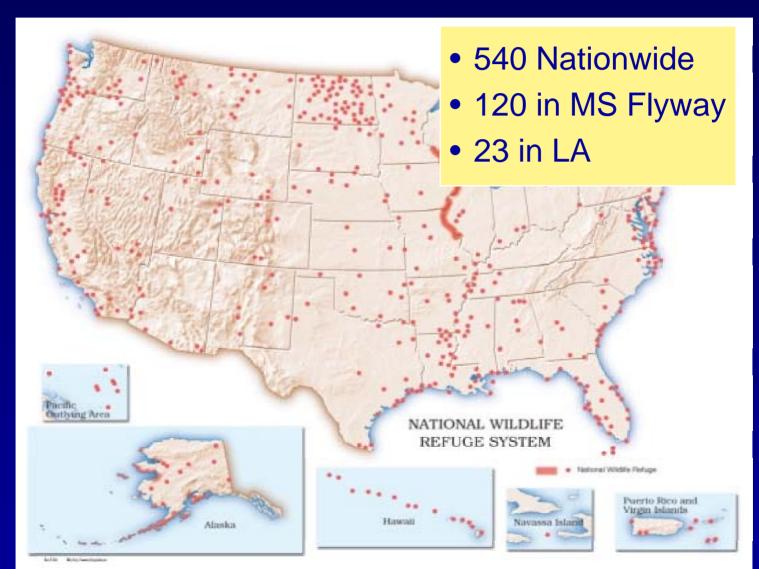


# Service Programs Contributing to Waterfowl Conservation

- Migratory Birds and State Programs
- Ecological Services
- Law Enforcement



## National Wildlife Refuge System





## Refuges Established





## Refuge Establishment Authorities

- Executive Order
- Migratory Bird Conservation Act 1929
- Refuge Administration Act 1966
- Emergency Wetlands Act of 1986
- Others...





## Refuge Purposes

Cameron Prairie National Wildlife Refuge (LA) est. 1988

"...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds." (Migratory Bird Conservation Act)







## Refuge Management Authorities

- Establishment Authority
- Migratory Bird Conservation Act 1929
- Refuge Recreation Act
- Refuge Improvement Act of 1997





## Refuge Improvement Act



- "Wildlife First"
   Mission Statement
- Priority public uses of refuges
- Management as a system
- Compatibility of uses



## **Priority Public Uses**

- Hunting
- Fishing
- Hiking
- Photography
- WildlifeObservation
- Education





## Louisiana Refuges

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Upper Ouachita K
                      THandy Brake
      D'Arbonne T
                   TBlack Bayou Lake
                      Tensas River
           LE Monroe
     Red
     River
            Catahoula
                        ₹Bayou Cocodrie
Natchitoches
                      KLake Ophelia
       Grand Cote
                                 Bogue Chitto
                    Cat Island
           Atchafalaya (
                             Big Branch Marsh
                  Baton Rouge
                                          SE LA Refuges
      Lake Charles ES Lafayette
                                        Bayou Sauvage
              acassine
                                            Breton
         Cameron ___
 Sabine
                         T Bayou Teche
         Prairie
                  Shell Keys
                                              ▼Delta
                               Mandalay
```



## Louisiana Refuges

- 23 Refuges
- 540,000 acres
- Critical area in the country for wetlands and wintering waterfowl
- Refuge Habitats include Bottomland Hardwoods to Barrier Islands and coastal marshes
- Approx. 1.4 million visitors & \$60 million in annual economic benefits



## Refuge Management

- Waterfowl Populations
- Hunting
- Sanctuaries
- Croplands
- Habitat Restoration Reforestation
   Wetland Restoration



## Refuge Waterfowl Populations



- Mid Winter Annual Surveys (Jan. 2003 Refuges supported 512,000 ducks and geese)
- Banding
- Enhancing nesting and brood habitat
- Monitor for Disease



## Refuge Waterfowl Hunting

270,000 acres open to waterfowl hunting





## Refuge Waterfowl Hunting

## Annual Review with State for hunt seasons

- Sabine NWR added 10,000 acres in 2000
- Lacassine NWR added 5,000 acres in 2001
- Bayou Cocodrie NWR 8,000 acres added in last two years

Currently 18 of 23 refuges open to

hunting

Grand Cote opens this Fall



## Refuge Sanctuaries

- Need for Sanctuaries
  - Legislation
  - Biological Basis
    - Pair Bonding
    - Preening
    - Fat Storage

Special Considerations



## Refuge-wide Sanctuaries

#### Bayou Sauvage NWR

23,000 acres located within city limits of New Orleans



## Breton NWR 5,000-acre barrier island





## Refuge Sanctuaries

As of 2003, approx. 257,000 acres in Sanctuaries

- In the past 5 years, 23,000 acres of Sanctuaries opened to hunting
- Surveys show at Delta NWR, wintering duck populations evenly occupy hunt & sanctuary areas



## Refuge Cropland Management

 Unharvested Crops in Sanctuaries



- Louisiana Refuges
  - 1,300 acres
- Mississippi Refuges
  - 2,300 acres
- Tennessee Refuges
  - 2,849
- Kentucky Refuges
  - 0 acres
- Alabama Refuges
  - 850 acres
- Arkansas Refuges
  - 2,485





## Refuge Cropland Management

Region 3 Refuges
 (Wisconsin, Iowa,
 Illinois, Indiana
 Minnesota, Ohio,
 Michigan, & Missouri)
 unharvested crops in
 sanctuaries
 --2,000 acres



## Cropland in the MS Flyway

Upper Flyway Region (MN, WI, MI, IA, IL, IN, OH, MO) Lower Flyway Region (KY, AR, TN, LA, MS, AL)

- 48 million acre corn
- 47 million acres soybeans
- 3.9 million acres winter wheat
- 200 thousand acres rice

(2000-2002 USDA National Agricultural Statistic Survey)

- 3 million acres corn
- 2.7 million acres winter wheat
- 2.3 million acres rice



## Refuge Habitat Restoration

- Bottomland Hardwood Reforestation
- Hydrology
   Restoration
- Wetland Restoration



- Last 10 years, over 60,000 acres reforested
- Greater acreage of moist-soil
- Over 3,500 acres of coastal wetlands restored



## Refuge Planning

# Comprehensive Conservation Planning (CCP)

- Comprehensive biological and management analysis
- -2000 and 2 year process
- -15-year plan for future

# Importance of Hunters for Waterfowl Conservation

- Purchase Federal & State Duck Stamps
- Support Habitat Restoration Efforts
- Public involvement on refuge planning
- Spread the conservation message



## Trails on Refuges

# Hiking, Biking, Canoeing Trails

Interpretive panels and brochures provided





## Outreach/Visitor Services

 Interpretive tours are conducted by refuge staff and volunteers

#### Tours can include:

- Canoeing
- Biking
- Hiking
- Photography
- Nature interpretation/bird watching





## Louisiana Refuges

Management of Wildlife and Habitat





