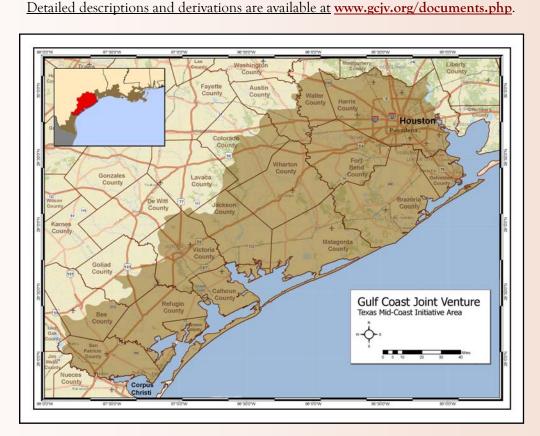
# Gulf Coast Joint Venture Texas Mid-Coast Initiative Area

#### Introduction

The Gulf Coast Joint Venture (GCJV) is a bird habitat conservation partnership that spans the coastal portions of Alabama, Mississippi, Louisiana, and Texas. The GCJV mission is to advance conservation of important bird habitats through biological planning, implementation of habitat conservation activities, and evaluating the planning and implementation process through monitoring and research. GCJV conservation activities focus on waterfowl, landbirds, shorebirds, and waterbirds. The GCJV promotes habitat delivery, research, and monitoring activities that address the priorities identified by the partnership.

For conservationists seeking to address GCJV priorities for the Texas Mid-Coast, this document summarizes priority bird conservation actions for the area.



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# **Waterfowl**

# Migrating and Wintering Waterfowl

Species addressed in GCJV planning: Mallard, Northern Pintail, Gadwall, American Wigeon, Green-winged Teal, Blue-winged Teal, Northern Shoveler, Mottled Duck, Canvasback, Redhead, Ring-necked Duck, Greater & Lesser Scaup, Lesser Snow Goose, Greater white-fronted Goose, and Canada Goose

<u>Population Objectives</u>: 1,959,109 ducks and 770,558 geese; refer to Table 1 in the <u>Texas Mid-Coast Initiative Area</u>
<u>Plan</u> for objectives by species

<u>Habitat Objectives</u>: Table 1. Migrating/wintering waterfowl habitat objectives for the Texas Mid-Coast IA.

Habitat Type	Aug-Oct Flooded Acres	Nov-Mar Flooded Acres
Harvested Rice 1st Crop	8,259	
Harvested Rice 2nd Crop		41,685
Unharvested Rice 2nd Crop		2,194
Moist-soil	19,823	92,508
Total (Rice and Moist-soil)	28,082	136,387
Coastal Marsh	NA <sup>1</sup>	NA <sup>1</sup>
Shoalgrass		13,549 <sup>2</sup>

<sup>&</sup>lt;sup>1</sup>Not yet available.

<u>Biological Foundation</u>: Bio-energetic models yield acreage of foraging habitats necessary to meet dietary demands of population objectives. For Redheads, proximity to reliable freshwater wetlands influences availability of seagrass beds

### **Conservation Activities:**

- Reduce erosion of coastal marsh through shoreline and bank stabilization
- Minimize saltwater intrusion and enhance productivity of coastal marsh through hydrologic restoration
- Maintain or improve levees and water-control structures on managed marshes

- Provide water and vegetation management on harvested and idle croplands (i.e., rice) and coastal prairie wetlands
- Protect, enhance, and create fresh water wetlands within 10 km of seagrass beds

### **Research Priorities:**

- Estimate waterfowl foraging values of coastal marsh types
- Estimate waste rice and natural seed biomass in active and idle rice fields
- Describe likely effects of water resource allocation and changing cultivation practices on rice agriculture and associated waterfowl habitats

# **Breeding Waterfowl**

Priority Species: Mottled Duck

Population Objective: Western Gulf Coast (i.e., GCJV-wide) population index of 105,816 individuals, including at least 35,322 in Texas and 70,132 in Louisiana, as measured from Mid-winter Surveys in coastal areas of these states

Habitat Objective: Not yet available

<u>Biological Foundation</u>: Factors limiting recruitment are primary constraints to population growth

# Conservation Activities:

- Create and restore large blocks of nesting habitat in agricultural lands and coastal marsh
- Restore wetlands and ensure reliable water to provide brood-rearing habitat from mid-April through July in agricultural landscapes
- Remove predators in targeted locations

### Research Priorities:

 Measure the effectiveness of habitat conservation actions to benefit Mottled Duck breeding productivity, including breeding propensity, nest success, and brood survival

<sup>&</sup>lt;sup>3</sup>Habitat objective is not temporally explicit. Majority of Redhead use is Nov. to Mar.



# **Landbirds**



Priority Landbird Species: BCR 37; BCR 25, 26, 27

Northern Bobwhite

<u>Population Objective</u>: BCR 37, TX portion - 525,050 birds; 43,754 coveys; BCR 25, Texas Mid-Coast Initiative Area - 938 birds, 78 coveys

Habitat Objective: BCR 37, TX portion - Improve 12,827,000 acres (5,009,900 cropland acres; 2,125,900 pasture/hay acres; 5,670,300 rangeland acres; and 20,900 CRP grassland acres); BCR 25, Texas Mid-Coast Initiative Area - Improve 26,171 acres (7,803 pasture/hay acres; 5,961 rangeland acres; 11,431 pine forest acres; and 976 hardwood forest acres)

<u>Biological Foundation</u>: Acreage of improved cropland, pasture/ hay, rangeland, forest, or CRP grassland required to produce a covey

<u>Conservation Activities</u>: Control but don't remove brush; convert exotic grass to native grass

Loggerhead Shrike

<u>Population Objective</u>: 233,056 birds during winter (164,056 Resident, 69,000 Migratory)

Habitat Objective: 1,985,530 acres

<u>Biological Foundation</u>: Territory size(s) dictates acreage needed to support population objectives

<u>Conservation Activities</u>: Preserve native prairie areas; maintain low, thick shrubs in fields (3–10 shrubs or small trees per acre)

Le Conte's Sparrow

Population Objective: 210,198 birds during winter

Habitat Objective: 210,198 acres

<u>Biological Foundation</u>: Winter density estimates dictate acreage needed to support population objectives

Conservation Activities: Manage ≥500 acre blocks of native grassland with burned and unburned areas; prescribed burns should occur on a 3-year rotation

Seaside Sparrow

Population Objective: 65,000 birds in U.S. BCR 37 and GCJV portion of BCR 26

<u>Habitat Objective</u>: 650,000 acres in U.S. BCR 37 and GCJV portion of BCR 26

<u>Biological Foundation</u>: Breeding territory size dictates acreage needed to support population objectives

## Conservation Activities:

- Create and/or restore marsh habitat, in blocks ≥10,000 acres, containing areas of medium height smooth cordgrass, interspersed with ponds, tidal creeks, and bare ground areas
- Plug selected ditches in marshes that have been ditched
- Create marsh-elevation islands, with shallow water bodies and scattered woody shrubs, using dredged material

Cerulean Warbler, Golden-winged Warbler, and Swainson's Warbler (migratory suite)

Population Objectives: Not yet available

<u>Habitat Priorities</u>: Large forest patches (≥10,000 acres) close to the Gulf of Mexico

<u>Biological Foundation</u>: Theoretical bio-energetic foraging needs of migrating warblers

<u>Conservation Activities</u>: Maintain, restore, or create large forest patches (≥10,000 acres) along the Texas coast

# <u>Landbird Research Priorities</u>:

- Test assumptions and refine parameter estimates used in population-habitat models
- Determine suitable grassland patch size, species composition, structure, and landscape habitat matrix needed to support wintering Le Conte's Sparrows
- Identify habitat components of ideal migration stopover habitat
- Assess effectiveness of GCJV priority landbird species planning and management in addressing the needs of other bird species of conservation concern



# Shorebirds and Waterbirds



# Shorebirds

<u>Population Objectives</u>: Table 2. Fall (July 15—Nov 5) migrating shorebird objectives for inland-managed habitat in the Texas Mid-Coast IA.

<b>Priority Species</b>	Population Objective	Shallowly Flooded and/or Mudflat Acres
Long-billed Curlew	11,954	9,863
Western Sandpiper	534,196	26,164
Stilt Sandpiper	278,285	7,036
Buff-breasted Sandpiper	20,546 7,226	
Short-billed Dowitcher	7,916 7,081	
Total	852,897	57,370

<u>Biological Foundation</u>: Bio-energetic models yield acreage of foraging habitats necessary to meet the demand of population objective

Other Shorebirds of Concern: Snowy Plover, Wilson's Plover, Hudsonian Godwit

Population Objective: Not yet available

Habitat Objective: Not yet available

Biological Foundation: Not yet available

<u>Conservation Activities</u>: Provide habitat ranging from shallow, flooded fields to mudflats

# Research Priorities:

Evaluate assumptions used to derive inland/managed habitat objectives in GCJV shorebird plan Improve accuracy and precision of population estimates

#### Waterbirds

<u>Priority Species</u>: Reddish Egret, Little Blue Heron, Wood Stork, King Rail, Black Rail, Gull-billed

Tern, and Black Skimmer

### Population Objectives:

- Reddish Egret: 2,000 breeding pairs in the TX portion of the GCJV
- Little Blue Heron: 5,345 breeding pairs in Texas Mid-Coast IA
- Wood Stork, King Rail, Black Rail, Gull-billed Tern, and Black Skimmer: Not yet available

### **Biological Foundation**:

- Reddish Egret: Estimation of breeding population impacts of specific management treatments applied to specific colonies
- Little Blue Heron: Population is limited by availability of suitable foraging habitat proximal to suitable nesting habitat

### **Habitat Objectives**

- Little Blue Heron: See Little Blue Heron Conservation Plan (http://www.gejv.org/docs/GCJV\_LBHE\_ Conservation\_Plan.pdf)
- Not yet available for Reddish Egret, Wood Stork, King Rail, Black Rail, Gull-billed Tern, or Black Skimmer

#### Conservation Activities:

### Reddish Egret

- Apply colony-specific management actions
- Create/improve alternate colony sites
- Improve foraging habitat within 10 km of existing colonies

## Little Blue Heron

 Apply specific management actions to colonies, or clusters of colonies, and associated foraging habitat

# **Research Priorities**:

- Reddish Egret: Test breeding population response assumptions for each management action
- Little Blue Heron: (1) Test breeding population response to management actions, (2) Develop standard, repeatable methodology, incorporating detection probabilities, to assess population status and distribution

		Recommended	Action
Reddish Egret Colony Site	Predator Control	Disturbance Management	Habitat Action
<b>Dressing Point</b>	Х		Χ
Little Bay	Х	X	
North Deer Island	Х		
Second Chain of Islands	Х	Х	X
Sundown Island			X