



Bird Conservation Priorities for the Mid-Atlantic & New England Coast

Mitschka Hartley & Melanie Steinkamp

U.S. Fish & Wildlife Service
Atlantic Coast Joint Venture

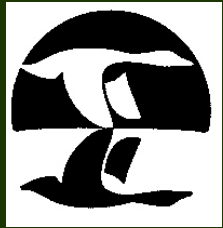


Bird Conservation Priorities

Overview

- The bird conservation initiatives
- Bird habitat Joint Ventures
- Bird Conservation Regions & priority species
- Challenges & opportunities for coastal habitat conservation

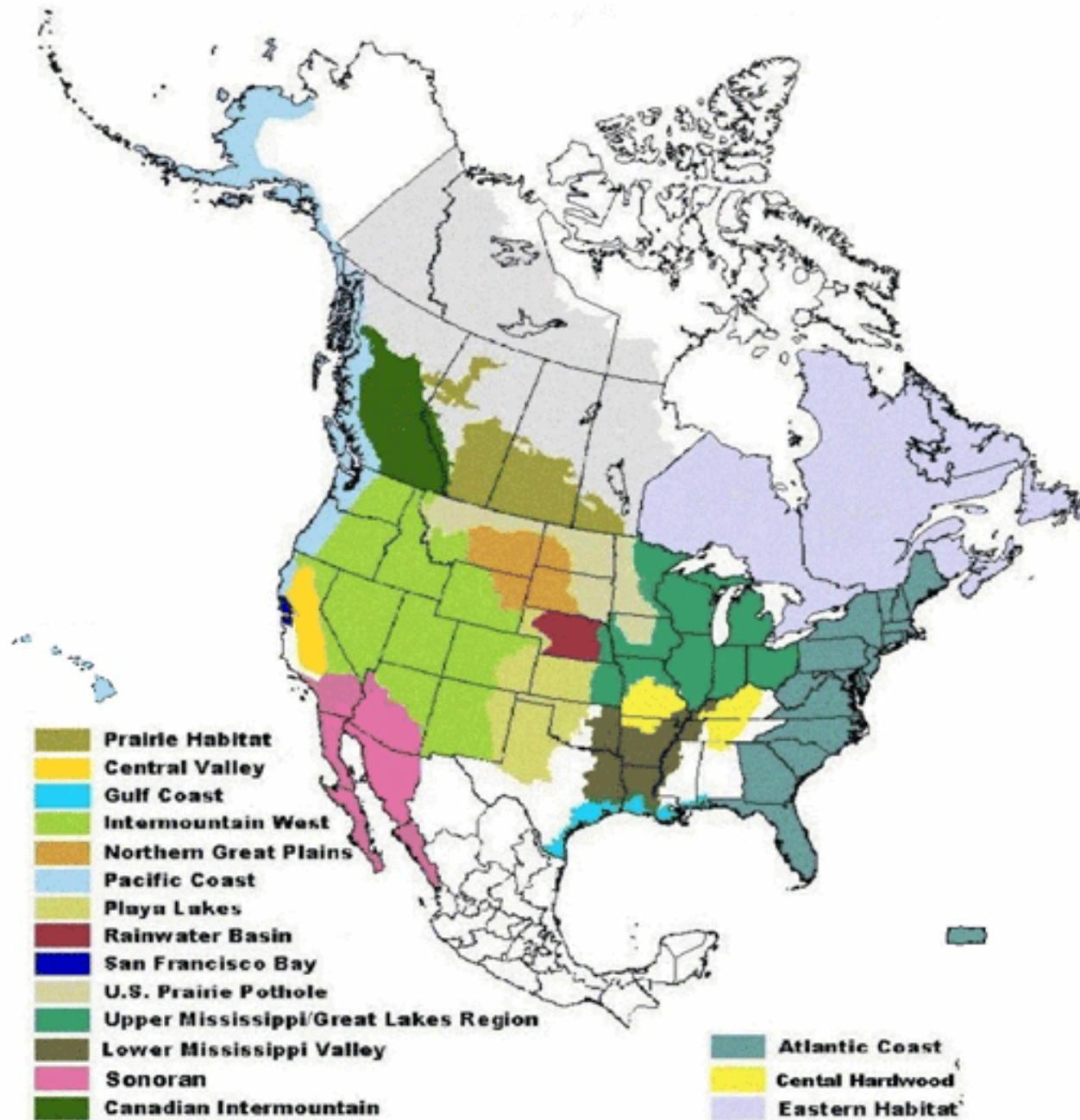




North American Waterfowl Management Plan (1986)

- Assessed continental populations & set goals
- Identified important geographic areas
- Established regional partnerships to deliver habitat conservation (**Joint Ventures**)
- Had dedicated funding: North American Wetlands Conservation Act (**NAWCA**)

North American Joint Ventures





Vision

Partners working together for the conservation of native bird species in the Atlantic Flyway Region of the United States

Bird Conservation Initiatives



North American Waterfowl Management Plan



Partners in Flight (landbirds)

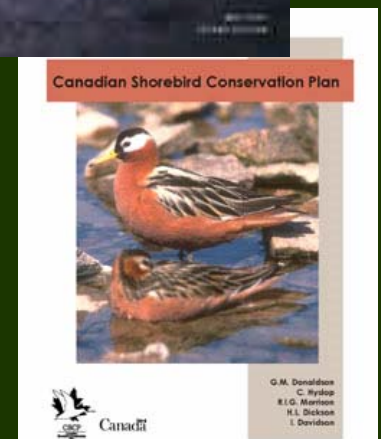
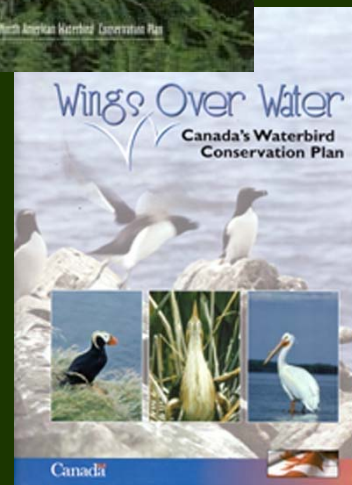
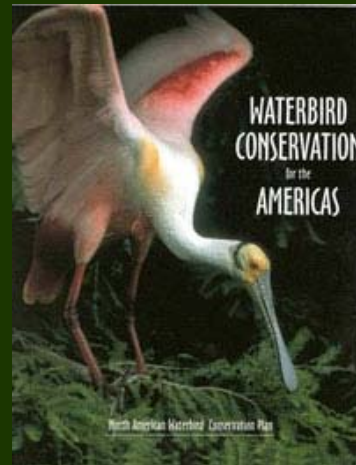
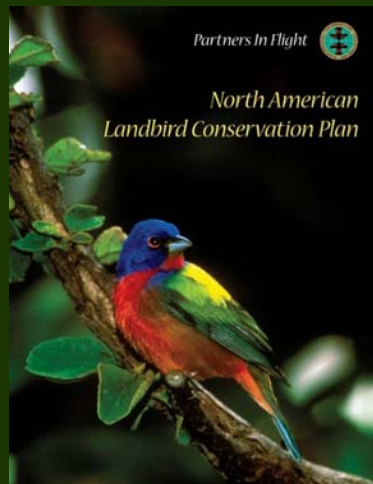
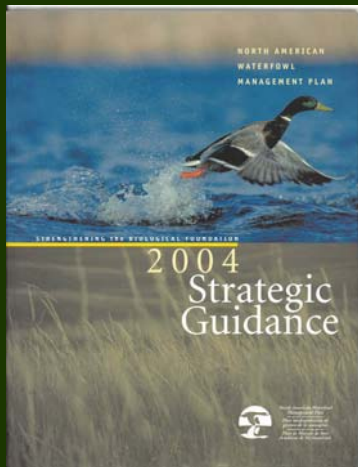


Waterbird Conservation for the Americas



**Shorebird Conservation Plans
U.S. & Canadian**

The Bird Plans



Bird Conservation Initiatives

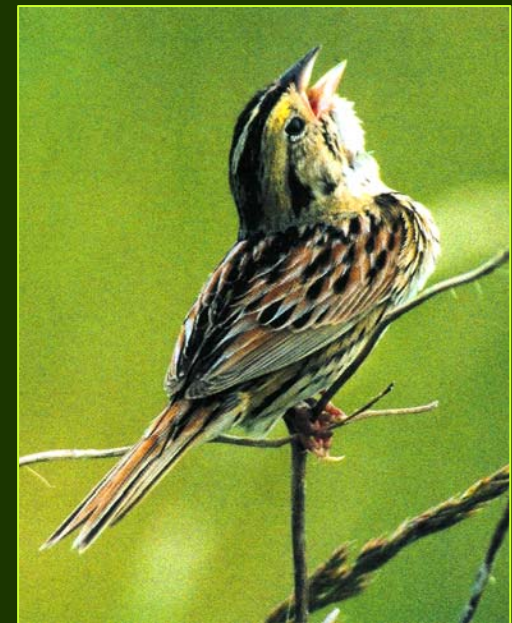


All these plans:

- Assess & prioritize species
- Set population objectives
- Discuss broad threats & conservation strategies

Species Conservation Assessment: Vulnerability Measures

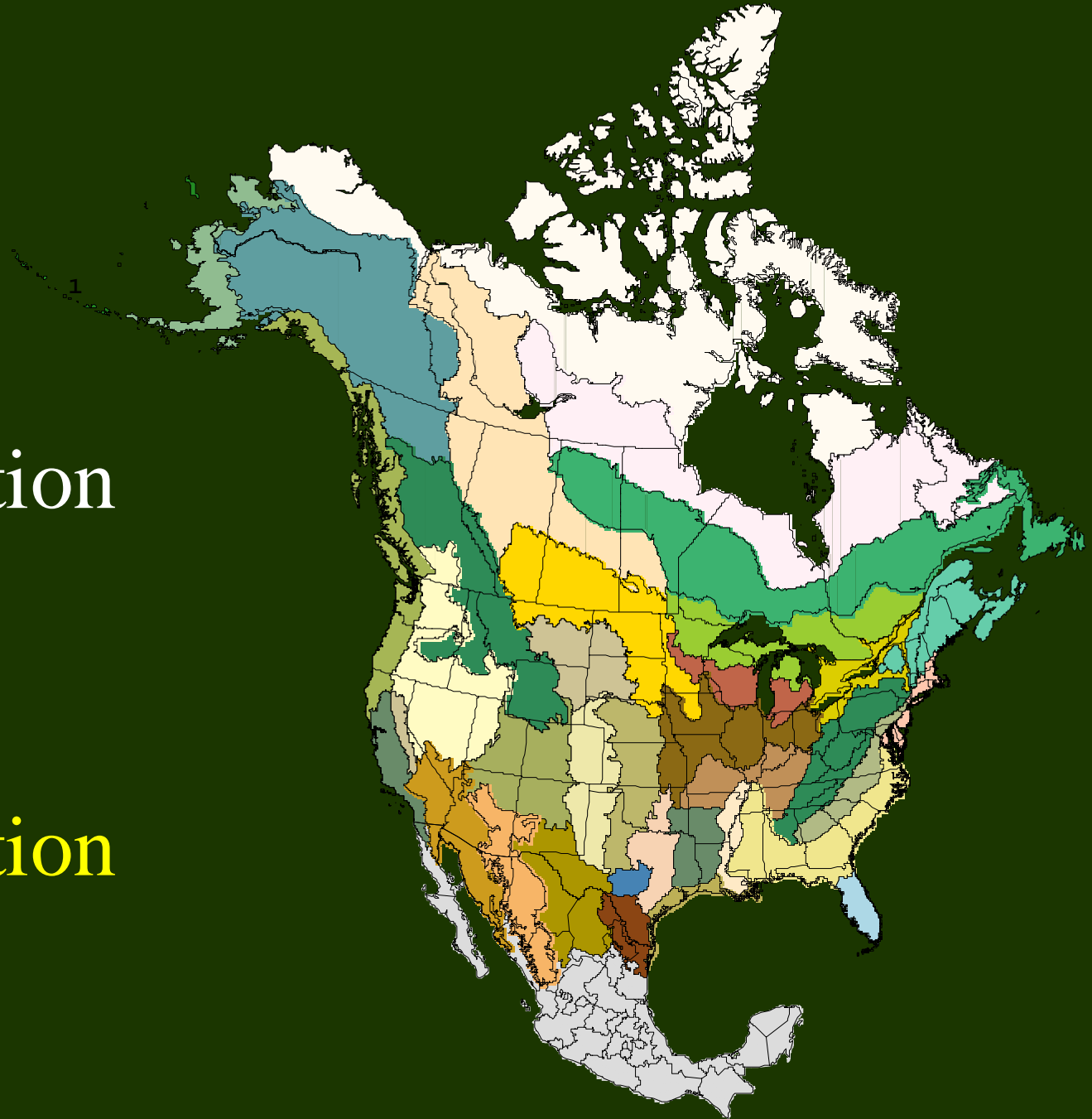
- Population Size (PS)
- Breeding Distribution (BD)
- Non-breeding Distribution (ND)
- Threats Breeding (TB)
- Threats Non-breeding (TN)
- Population Trend (PT)



Combined Score = $PS + \max(BD, ND) + \max(TB, TN) + PT$

North
American
Bird
Conservation
Initiative

Bird
Conservation
Regions



Bird Conservation Initiatives

- Initiatives have regional plans that provide information on species specific to the region
- Regional plans include list of priority conservation actions to implement

Role of Joint Ventures

- Most JVs now focus on all birds
- JVs participate & often coordinate conservation planning for species, habitats, and regions
- Work with partners on evaluation, planning, and implementation

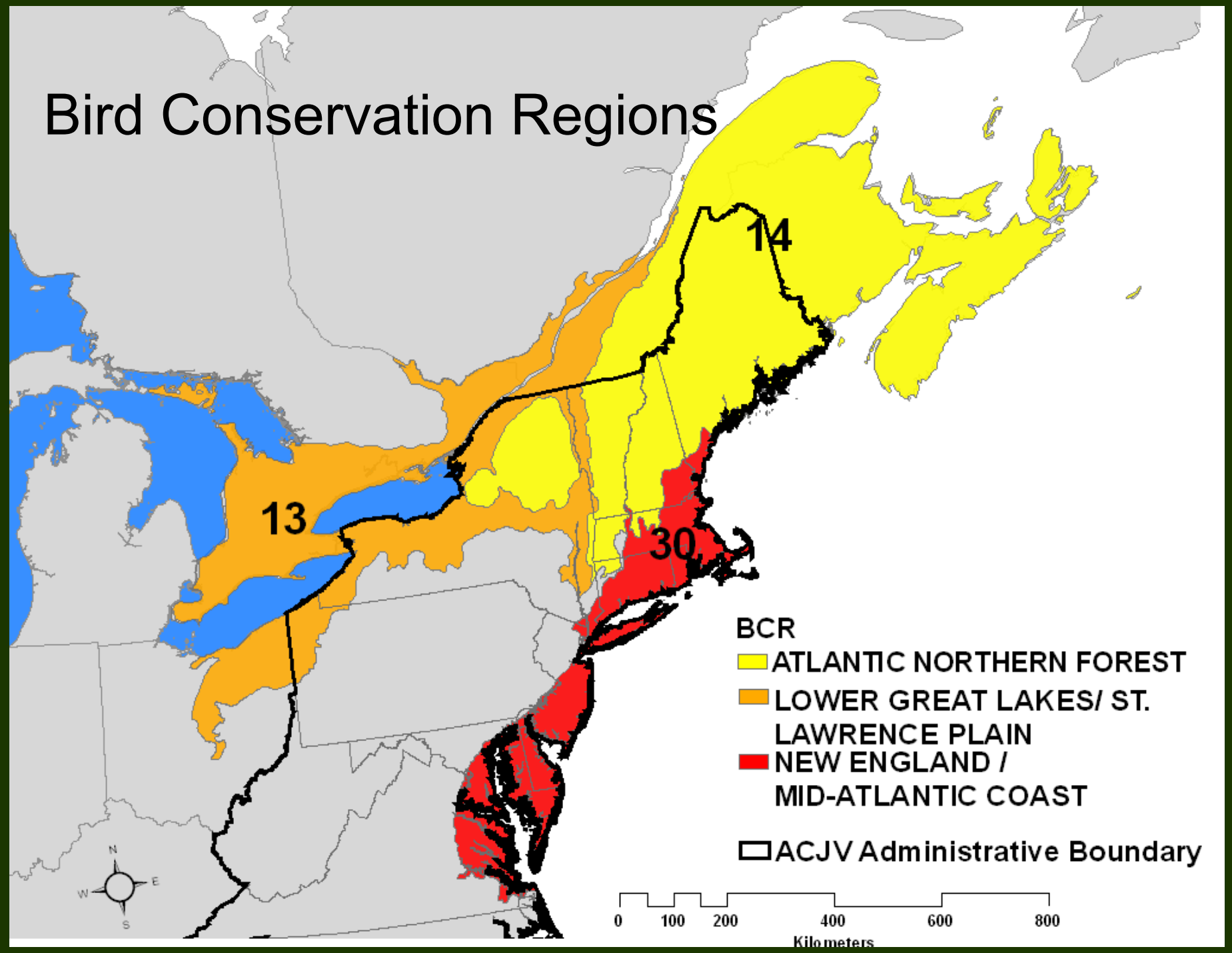
Examples

- Population assessment & monitoring
- Habitat maps & models that direct conservation action to priority areas
- Research into limiting factors
- Funds for habitat protection

Bird Conservation Regions



Bird Conservation Regions



Habitats

Bird conservation plans have species grouped by habitat. BCR 13, 14, & 30 habitats included:

- Marine Open Water (Offshore)
- Estuary & Bay
- Beach, Sand and Mud Flat
- Estuarine Emergent Wetland
(includes brackish and high marshes)
- Rocky Shoreline (includes islands)

Priority Species by Habitat

BCR 30 -- **Beach, Sand, Mud Flat**

Highest Priority

American Oystercatcher

Gull-billed Tern

Piping Plover

Red Knot

Roseate Tern

Ruddy Turnstone

Sanderling

Whimbrel

High Priority

American Golden Plover

Black-bellied Plover

Buff-breasted Sandpiper

Dunlin

Greater Yellowlegs

Hudsonian Godwit

Least Tern

Marbled Godwit

Semipalmated Sandpiper

Short-billed Dowitcher

White-rumped Sandpiper

Wilson's Plover

Willet

Moderate Priority

American Avocet

Black Skimmer

Common Tern

Least Sandpiper

Lesser Yellowlegs

Royal Tern

Semipalmated
Plover

Western Sandpiper

Use of Inlets by Priority Shorebird Species

International Shorebird Survey data from southeast indicates that some species prefer inlets to other coastal habitats during migration & wintering, including:

Highest Priority

- American Oystercatcher (B)
- Piping Plover (m,B)
- Red Knot (M)

High Priority

- Wilson's Plover (B)
- Short-billed Dowitcher (M)

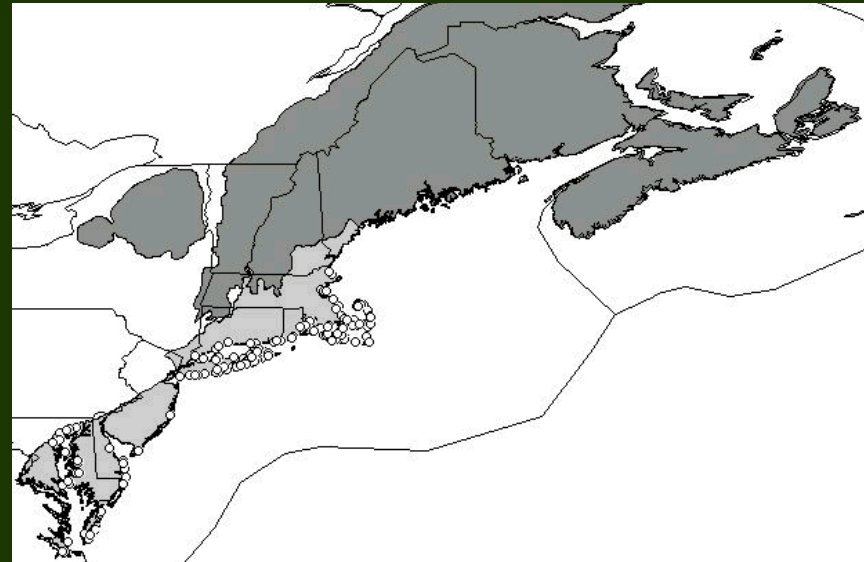
High Priority Species

Beach, Sand, Mud Flat

Least Tern

Foraging habitat: 3-12 km from colony; variety of shallow water habitats; marine coastal bays, lagoons, estuaries, river and creek mouths, tidal marshes & lakes, occasionally offshore

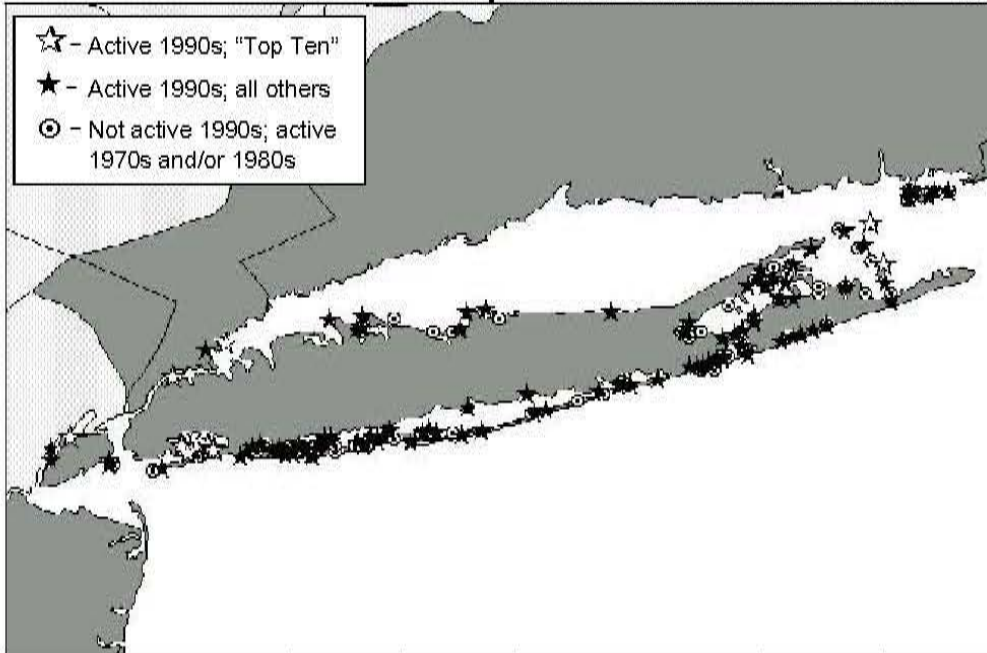
Management needed: protect against predation, human disturbance at nesting sites, encroaching vegetation



Regional threats:

Degradation/loss of habitat due to development, vehicles, and human use of nesting areas; encroaching vegetation; removal of shell substrate

New York Important Waterbird Areas – Coastal Seabird Breeding Habitats



<u>NY Seabird Summary</u>	All	Top Half	Top Ten
Number of colonies	32	16	10
Number of seabirds	47,637	45,356	41,648
% sites protected	Unknown	Unknown	Unknown
% sites publicly owned	Unknown	Unknown	Unknown
% sites privately owned	Unknown	Unknown	Unknown

"Top Ten" COLONIES	LAT	LONG	STATUS - OWNER	# BIRDS	SPECIES PRESENT	CONSERVATION ISSUES
Great Gull Island	41.2019	72.1200	Unknown-Unknown	18920	COTE, ROST	
Jo Co Marsh	40.6156	73.7933	Unknown-Unknown	9500	COTE, FOTE, LAGU	
North & South Brother Islands	40.8006	73.8967	Unknown-Unknown	2576	DCCO, GBBG, HERG	
Canarsie Pol	40.6203	73.8769	Unknown-Unknown	2394	GBBG, HERG	
Gardiners Island	41.0944	72.0847	Unknown-Unknown	2000	BLSK, COTE, DCCO, GBBG, HERG	
Huckleberry Island	40.8872	73.7647	Unknown-Unknown	1660	DCCO, GBBG, HERG	
Ruffle Bar	40.5986	73.8597	Unknown-Unknown	1360	GBBG, HERG	
Silver Hole Marsh	40.6069	73.7933	Unknown-Unknown	1238	COTE, LAGU	
Shooters Island	40.6428	74.1606	Unknown-Unknown	1078	DCCO, GBBG, HERG	
East High Meadow	40.6214	73.8103	Unknown-Unknown	922	COTE, LAGU	

Priority Species by Habitat

BCR 30 -- Marine Open Water

Highest Priority

Red-throated Loon

High Priority

Audubon's Shearwater

Black Scoter

Bridled Tern

Common Eider

Greater Shearwater

Long-tailed Duck

Northern Gannet

Red-necked Phalarope

Surf Scoter

White-winged Scoter

Moderate Priority

Cory's Shearwater

Harlequin Duck

Razorbill

Red Phalarope

Highest Priority Species

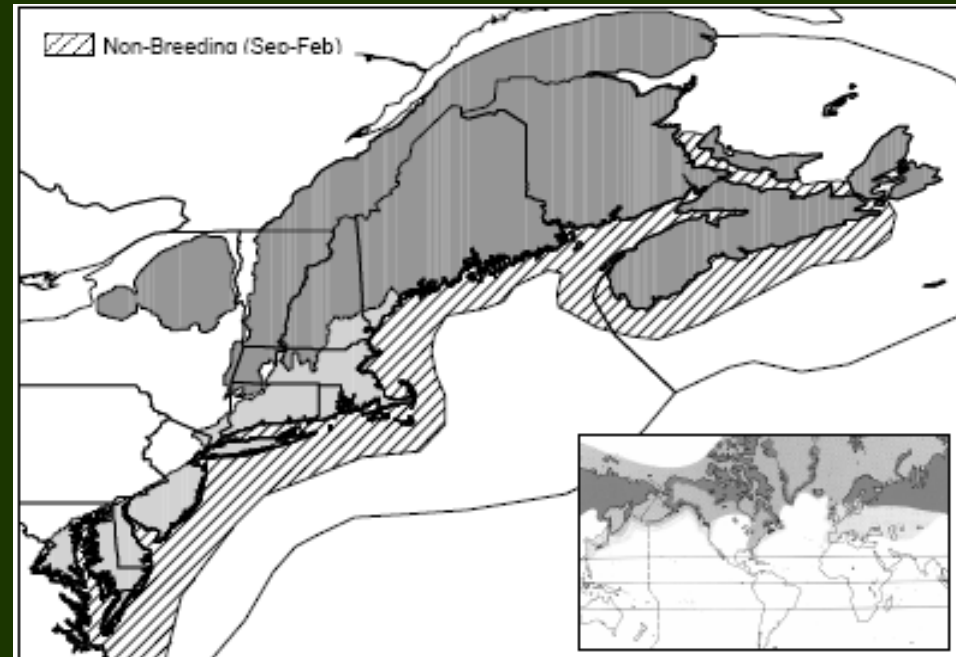
Marine Open Water

Red-throated Loon

Foraging habitat: far from breeding sites, along coast at tidal estuaries, mudflats in streams and rivers, or larger lakes; mostly in water <1 m deep; marine feeding close to shore during windy, rough conditions, farther offshore in calm

Regional threats:

- Oil spills (wintering)
- Tangled in fishing nets
- Degradation of habitat
- Impact/collision with wires and other stationary structures
- Possible impact of wind farm developments



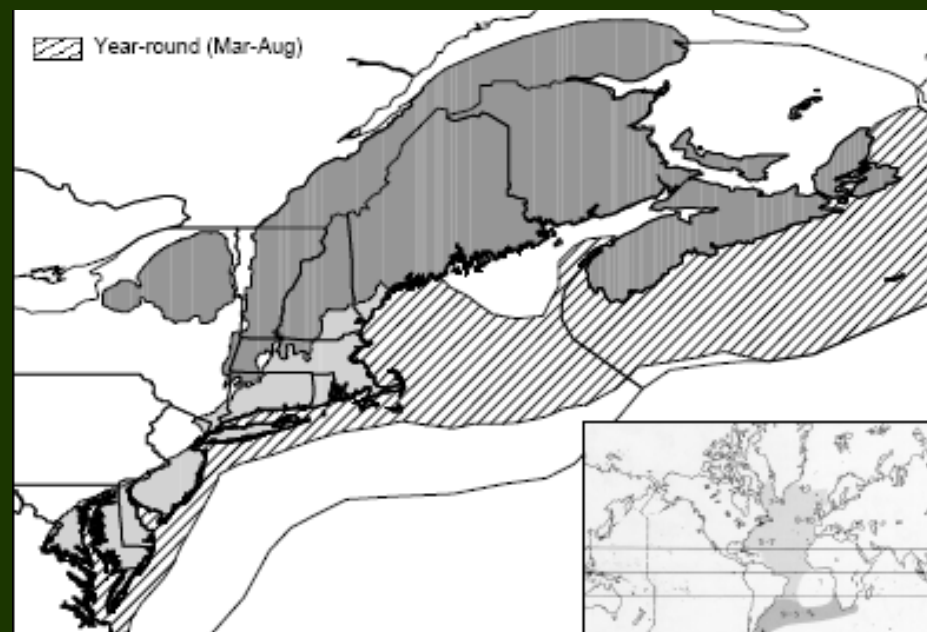
High Priority Species

Marine Open Water

Greater Shearwater

Distribution: pelagic in region, May, June/July (peak)

Habitat: pelagic, tertiary carnivore on cephalopods, fish; scavenge on offal from fishing vessels; plunge-diving & surface feeding in cool offshore and pelagic waters



Regional threats: Habitat loss from erosion, earthquakes, volcanoes; fisheries; oil spills

High Priority Species Marine Open Water

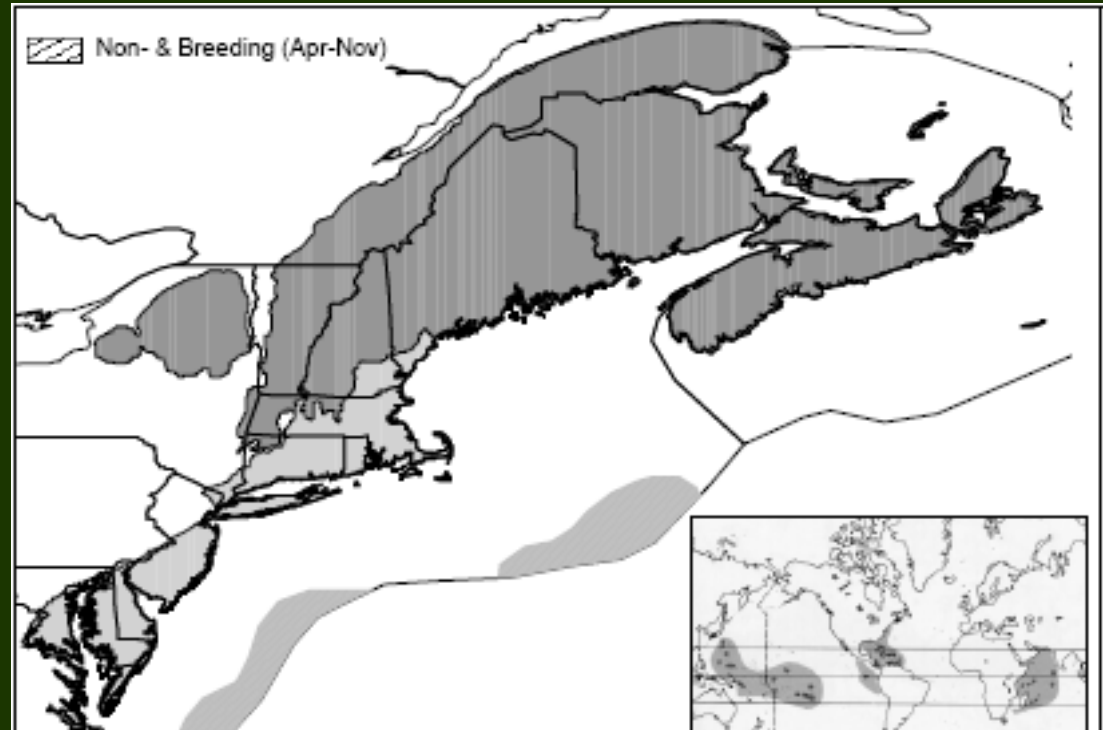
Shearwaters, Scoters

Foraging Habitat: deep open water; mostly in warm water >100 m deep

Distribution: pelagic

Habitat: pelagic

Threats: unknown



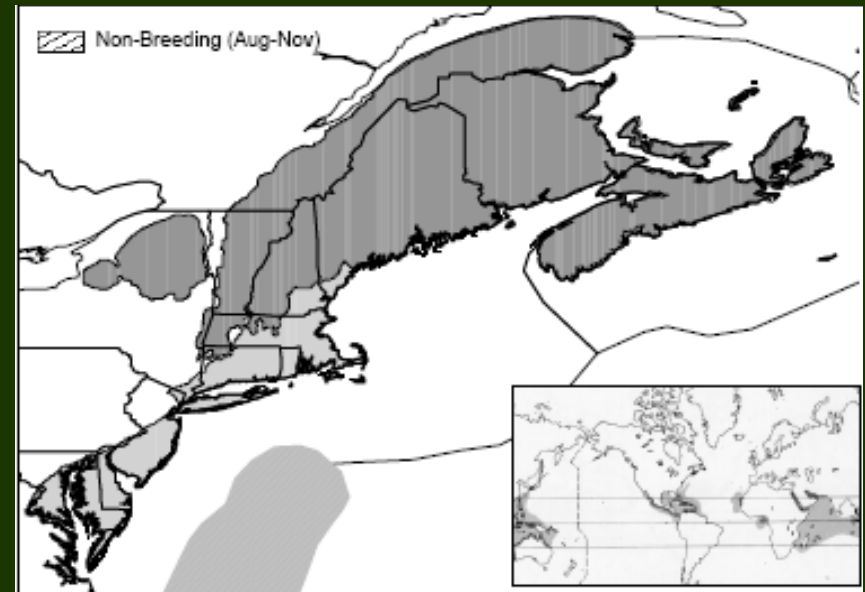
High Priority Species

Marine Open Water

Bridled Tern

Distribution: pelagic in BCR 30
Habitat: mostly pelagic

Foraging Habitat: 50-130 km offshore during non-breeding season; strong association with marine flotsam for foraging



Priority Species by Habitat

BCR 30 -- **Rocky Shoreline** (Islands)

Highest

Roseate Tern

Ruddy Turnstone

High

Purple Sandpiper

Semipalmated Sandpiper

Northern Gannet

Common Eider

Moderate

Common Tern

Razorbill

Harlequin Duck

Highest Priority Species

Rocky Shoreline

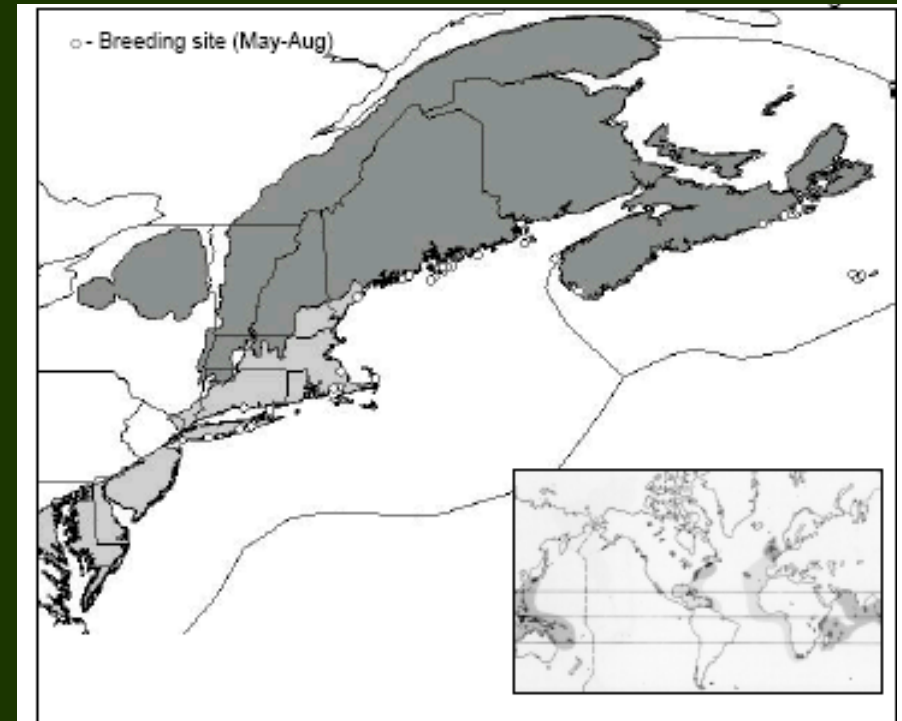
Roseate Tern

Breeds in region (Monomoy, Cape Cod, MA), important post-breeding staging area for population

Breeding habitat: islands, usually under cover, in/near dense vegetation, rock crevices, nest boxes, half-buried tires

Non-breeding: coastal bays, estuaries

Foraging Habitat: ≤ 30 km from colony; shallow sandbars, shoals, inlets or schools of predatory fish; also pelagic over schools of fish; shallow water; a specialized forager that may be limited by suitable feeding sites



Management: protect breeding colonies, foraging and wintering areas; reduce mortality in non-breeding season

Priority Species by Habitat

BCR 30 -- Estuarine Emergent Wetland

Highest

American Black Duck
Saltmarsh Sharp-tl Sparrow
Seaside Sparrow
Gull-billed Tern
Whimbrel

High

Bufflehead
Clapper Rail
Greater Yellowlegs
Hudsonian Godwit
Marsh Wren
Short-billed Dowitcher
Willet

Moderate

American Avocet
Swamp Sparrow (*C.P.*)
Least Sandpiper
Nelson's Sharp-tl Sparrow
Northern Pintail
Red-breasted Merganser
Wood Duck

Priority Species by Habitat

BCR 30 -- Estuary & Bay

Highest

American Black Duck
Atlantic Brant
Red-throated Loon
Roseate Tern

High

Black Scoter
Bufflehead
Canada Goose (**NAP**)
Canvasback
Greater Scaup
Lesser Scaup
Long-tailed Duck
Red-necked Phalarope
Surf Scoter
Tundra Swan – Eastern
White-winged Scoter

Moderate

Common Goldeneye
Common Tern
Harlequin Duck
Hooded Merganser
Northern Pintail
Red-breasted Merganser
Red Phalarope
Royal Tern
Ruddy Duck

Conservation Threats

- Habitat loss/degradation
- Pollution
- Predators on breeding grounds
- Human disturbance
- Fisheries impacts
- Offshore wind power development (?)
- Offshore oil/gas development
- Invasive species
- Global climate change

Opportunities

- Artificial habitats are important to many colonial birds (e.g., dredge spoil islands)
- Much lost coastal habitat could be restored (e.g., saltmarsh)
- Remaining natural habitats should be protected, restored
- Sustaining waterbird populations should be a goal of any coastal management project

Opportunities

Pelagic seabird abundance data needed to:

- Assess immediate & long-term impacts of proposed offshore projects
- Assess long-term changes in marine ecosystems
- Identify fine- and coarse-scale features of marine ecosystems
- Identify & manage marine reserves, assess changes in seabird distribution patterns, etc.

Conclusions

- Bird conservation partnerships exist for all coastal regions
- New partnerships slated for offshore projects
- Coastal projects should engage partners both on long-term (strategic) and short-term (project specific) basis
- Priority species & habitats should be considered in project planning
- Short & long-term (cumulative) project assessment should be addressed through monitoring programs

**Dredging, Beach Nourishment, and Bird Conservation: Northeast Workshop
Long Island, NY; October, 2005**

Priority Bird Species List for Northeastern Bird Conservation Regions

The table below lists priority species in the New England/Mid-Atlantic Coast Bird Conservation Region (**BCR 30**), Atlantic Northern Forest (**BCR 14**), and Lower Great Lakes/St. Lawrence Plain (**BCR 13**), for selected coastal habitats. Please note that other priority species—not found in coastal habitats—are not listed below, so this is not a complete list for these BCRs. Note also that only the BCR 14 conservation plan has been finalized, so the species lists for BCR 30 and BCR 13 are preliminary draft lists. These plans should be finalized in 2006. See www.acjv.org for bird conservation plan drafts, updates and final versions when available.

Beach, Sand, Mud Flats

Species	BCR 30 Tier	Species	BCR 14 Tier	Species	BCR 13 Tier
American Oystercatcher	Highest	Piping Plover	Highest	Piping Plover	Highest
Gull-billed Tern	Highest	Semipalmated Sandpiper	Highest	American Golden Plover	High
Piping Plover	Highest	<i>Ipswich</i> Savannah Sparrow	Highest	Buff-breasted Sandpiper	High
Red Knot	Highest	American Golden Plover	High	Common Tern	High
Roseate Tern	Highest	Black-bellied Plover	High	Little Gull	High
Ruddy Turnstone	Highest	Common Tern	High	Short-billed Dowitcher	High
Sanderling	Highest	Red Knot	High	Solitary Sandpiper	High
Whimbrel	Highest	Roseate Tern	High	Black-bellied Plover	Moderate
American Golden Plover	High	Ruddy Turnstone	High	Bonaparte's Gull	Moderate
Black-bellied Plover	High	Short-billed Dowitcher	High	Dunlin	Moderate
Buff-breasted Sandpiper	High	Whimbrel	High	Greater Yellowlegs	Moderate
Dunlin	High	American Oystercatcher	Moderate	Hudsonian Godwit	Moderate
Greater Yellowlegs	High	Hudsonian Godwit	Moderate	Least Sandpiper	Moderate
Hudsonian Godwit	High	Least Sandpiper	Moderate	Marbled Godwit	Moderate
Least Tern	High	Sanderling	Moderate	Pectoral Sandpiper	Moderate
Marbled Godwit	High	Semipalmated Plover	Moderate	Red Knot	Moderate
Semipalmated Sandpiper	High	Willet	Moderate	Sanderling	Moderate
Short-billed Dowitcher	High			Semipalmated Sandpiper	Moderate
White-rumped Sandpiper	High			Whimbrel	Moderate
Willet	High				
Wilson's Plover	High				
American Avocet	Moderate				
Black Skimmer	Moderate				
Common Tern	Moderate				
Least Sandpiper	Moderate				
Lesser Yellowlegs	Moderate				
Royal Tern	Moderate				
Semipalmated Plover	Moderate				
Western Sandpiper	Moderate				
<i>Ipswich</i> Savannah Sparrow	Moderate				

Marine Open Water

Species	BCR 30 Tier	Species	BCR 14 Tier	Species	BCR 13 Tier
Red-throated Loon	Highest	Common Eider	Highest	Long-tailed Duck	Highest
Audubon's Shearwater	High	Greater Shearwater	Highest	Little Gull	High
Black Scoter	High	Red-necked Phalarope	Highest	Common Loon	Moderate
Bridled Tern	High	Arctic Tern	High	White-winged Scoter	Moderate

Marine Open Water (Continued...)

BCR 30		BCR 14		BCR 13	
Species	Tier	Species	Tier	Species	Tier
Common Eider	High	Black Guillemot	High	Common Tern	High
Greater Shearwater	High	Black Scoter	High		
Long-tailed Duck	High	Northern Gannet	High		
Northern Gannet	High	Razorbill	High		
Red-necked Phalarope	High	Red Phalarope	High		
Surf Scoter	High	Red-necked Grebe	High		
White-winged Scoter	High	Atlantic Puffin	Moderate		
Cory's Shearwater	Moderate	Blacked-legged Kittiwake	Moderate		
Razorbill	Moderate	Common Loon	Moderate		
Red Phalarope	Moderate	Leach's Storm Petrel	Moderate		
Harlequin Duck	Moderate	Long-tailed Duck	Moderate		
Manx Shearwater	Moderate	Red-throated Loon	Moderate		
		Surf Scoter	Moderate		

Rocky Coast (and Islands)

BCR 30		BCR 14		BCR 13	
Species	Tier	Species	Tier	Species	Tier
Roseate Tern	Highest	Common Eider	Highest	Semipalmated Sandpiper	Moderate
Ruddy Turnstone	Highest	Great Cormorant	Highest		
Clapper Rail	High	Harlequin Duck	Highest		
Common Eider	High	Purple Sandpiper	Highest		
Northern Gannet	High	Semipalmated Sandpiper	Highest		
Purple Sandpiper	High	Arctic Tern	High		
Semipalmated Sandpiper	High	Black Guillemot	High		
Common Tern	Moderate	Common Tern	High		
Harlequin Duck	Moderate	Herring Gull	High		
Razorbill	Moderate	Northern Gannet	High		
		Razorbill	High		
		Roseate Tern	High		
		Ruddy Turnstone	High		
		Atlantic Puffin	Moderate		
		Leach's Storm Petrel	Moderate		

Estuarine Emergent

BCR 30		BCR 14		BCR 13	
Species	Tier	Species	Tier	Species	Tier
American Black Duck	Highest	American Black Duck	Highest	American Black Duck	Highest
Black Rail	Highest	Nelson's S.-t. Sparrow	Highest	King Rail	High
Gull-billed Tern	Highest	Black-crowned Night Heron	High	Short-billed Dowitcher	High
Saltmarsh S.-t. Sparrow	Highest	Short-billed Dowitcher	High	Solitary Sandpiper	High
Seaside Sparrow	Highest	Whimbrel	High	Black-crowned Night Heron	Moderate
Whimbrel	Highest	Hudsonian Godwit	Moderate	Greater Snow Goose	Moderate
Bufflehead	High	Least Sandpiper	Moderate	Greater Yellowlegs	Moderate
Clapper Rail	High	Short-eared Owl	Moderate	Hudsonian Godwit	Moderate
Forster's Tern	High	Willet	Moderate	Least Sandpiper	Moderate
Greater Yellowlegs	High			Whimbrel	Moderate
Hudsonian Godwit	High				
Mallard	High				
Marsh Wren	High				

Estuarine Emergent (Continued...)

Species	BCR 30 Tier	Species	BCR 14 Tier	Species	BCR 13 Tier
Short-billed Dowitcher	High				
Willet	High				
American Avocet	Moderate				
American Wigeon	Moderate				
Black-crowned Night Heron	Moderate				
C. P. Swamp Sparrow*	Moderate				
Gadwall	Moderate				
Green-winged Teal	Moderate				
Least Bittern	Moderate				
Least Sandpiper	Moderate				
Little Blue Heron	Moderate				
Nelson's S.-t. Sparrow	Moderate				
Northern Pintail	Moderate				
Red-breasted Merganser	Moderate				
Ruddy Duck	Moderate				
Short-eared Owl	Moderate				
Snowy Egret	Moderate				
Sora	Moderate				
Spotted Sandpiper	Moderate				
Yellow-crown. Night Heron	Moderate				

Estuary & Bay

Species	BCR 30 Tier	Species	BCR 14 Tier	Species	BCR 13 Tier
American Black Duck	Highest	American Black Duck	Highest	American Black Duck	Highest
Atlantic Brant	Highest	Barrow's Goldeneye	Highest	Canada Goose –NAP	Highest
Red-throated Loon	Highest	Common Eider	Highest	Common Goldeneye	Highest
Roseate Tern	Highest	Harlequin Duck	Highest	Lesser Scaup	Highest
Black Scoter	High	Red-necked Phalarope	Highest	Long-tailed Duck	Highest
Bufflehead	High	Black Scoter	High	Barrow's Goldeneye	High
Canada Goose –NAP	High	Canada Goose –NAP	High	Canvasback	High
Canvasback	High	Common Tern	High	Common Tern	High
Common Eider	High	Herring Gull	High	Greater Scaup	High
Glossy Ibis	High	Red Phalarope	High	Northern Pintail	High
Greater Scaup	High	Red-necked Grebe	High	Bonaparte's Gull	Moderate
Horned Grebe	High	Roseate Tern	High	Common Loon	Moderate
Lesser Scaup	High	Atlantic Brant	Moderate	White-winged Scoter	Moderate
Long-tailed Duck	High	Bald Eagle	Moderate		
Red-necked Phalarope	High	Common Goldeneye	Moderate		
Surf Scoter	High	Common Loon	Moderate		
Tundra Swan – Eastern	High	Greater Scaup	Moderate		
White-winged Scoter	High	Horned Grebe	Moderate		
Common Goldeneye	Moderate	Long-tailed Duck	Moderate		
Common Tern	Moderate	Surf Scoter	Moderate		
Green-winged Teal	Moderate	Red-throated Loon	Moderate		
Harlequin Duck	Moderate				
Hooded Merganser	Moderate				
Northern Pintail	Moderate				
Red Phalarope	Moderate				
Red-breasted Merganser	Moderate				
Royal Tern	Moderate				