COASTAL BIRD INVENTORY

A report on the birds and avian habitat of the Coastal Zone of New Hampshire

by

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Introduction

In the summer of 1982 a project was established, in co-operation with the N.H. Breeding Bird Atlas Study, which aimed at contributing to the development of baseline data on coastal resources. Funded by the Department of Commerce NOAA, Office of Ocean and Coastal Resource Management through the New Hampshire Office of State Planning, it was particularly concerned with birds regarded as rare, threatened, or endangered in New Hampshire and their nesting, feeding, and migration sites in the coastal zone. This report provides a description and inventory of the avifauna and habitats with special recognition given to those bird species of rare or undetermined status for the state.

While only 17.8 miles in length, New Hampshire's coast is blessed with an attractive variety of tidal marshes, sand dunes, beaches, rocky shores, and estuaries. This diversity of ecosystems provides habitat for an abundance of bird species found here and fulfills many recreational, industrial, and residental demands of a growing population. Office of Comprehensive Planning studies show a 14% growth of coastal towns between 1970 and 1977, and project another 53% increase by the year 2000.

This growth is creating new pressures on the resident and transient birds and may eliminate those which inhabit the areas most desired for use by man and those intolerant of the noise, pets, and pollution which accompany him. Those birds which can adapt to the changing conditions will survive and probably increase with the demise of others.

Richards (1980) has reported on the dynamic nature of coastal bird numbers and diversity in the past. Noting that the European settlers almost certainly saw a greater variety and abundance of birds than exists today, he blames the development of local food and market hunting, the millinery trade, egg collections, and most importantly hunting elsewhere, for the reduction and extripation of some migratory and breeding species. Declining numbers of birds and new conservation efforts slowly eased these hunting pressures. Since the turn of the century many birds have recovered only to be confronted with new threats in the form of diminishing land and water resources.

The removal of habitat by development may at best (although unrealistically) be halted, but it will never be reversed. We will never recreate the carrying capacity our coast once held for birds. We should, however, endeavor to preserve the finest remaining areas for the remnant bird population.

Birds are beneficial to us ecologically and economically in several ways: they are important indicators of the health of our natural systems, their presence is esthetically pleasing and may serve as a tourist attraction if carefully nurtured, and they are essential links in foodwebs, often acting as predators in the control of many pests. Conversely, some species inflict heavy economic losses upon commercial crops or pose health hazards by their contamination of public drinking waters. The enormous complexity of their roles in nature warrants our intensive research.

This study evaluates bird habitat in the coastal zone and reports requisite observations or historical reference to the

182 species that occur along N.H.'s coast in summer. Of these, 99 are considered as rare. The mobility of birds allows occasional visits from birds normally found outside of the coastal zone, thus "rare" status must be viewed with caution. (See specific comments under these birds.)

Methods

Field work was carried out from May through August 1982, and from April through July 1983. All coastal areas below the twenty foot contour line south of New Castle and exclusive of Great Bay and its tributaries were visited. Most areas were repeatedly visited at various times and tides but a few were not extensively covered. Field work of this type is never exhaustive and observations at different times, tides, or under different weather conditions may reveal birds unseen during this project. Some secretive birds were likely overlooked. N. H. Audubon Society seasonal bird records from 1960 were examined and provide recent observations for some species not found during the course of this field work.

The following report has been subdivided into four sections: 1) A list of summer species with their breeding status, area of occurrence, and abundance, 2) Habitat evaluations geographically sequenced from north to south, 3) Notes on some species of rare or undetermined status occurring in the coastal zone, and 4) Recommendations. Each site evaluated in Section 2 is identified with map letters corresponding to three USGS topographical quadrangles: A = Kittery, B = Portsmouth, and C and D = Hampton.

Summer Birds of the Coastal Zone Area

KEY

NAME

*-More information in Section 3

E-Endangered (on official N.H. list)

T-Threatened (on official N.H. list)

I-Introduced

F-Feral

BREEDING STATUS (BS)

SV-summer visitor; non-breeder

M-migrant; seen only in transit

PO-summer resident, possible breeder

PR-summer resident, probable breeder

CO-summer resident, confirmed breeder

H-historical record, breeding status undetermined

X-extirpated (formerly nesting)

AREA OBSERVED (AO)

3+-observed in 3 or more of the sites evaluated in Section 2.

SB-shallow ocean or beaches

UNSP.- unspecified coastal location; possibly above 20' contour

ABUNDANCE

VC-very common; 50 or more birds per day/observer/area

C-common; 10-49 birds per day/observer/area

U-uncommon; 0-9 birds per day/observer/area

R-rare; 5 or less birds per summer/observer/area

Species Name	BS	AO	A
Double-crested Cormorant	SV	3+	C
Great Blue Heron	SV	3+	U
*Green-backed Heron	CO	3+	U
Little Blue Heron	SV	A4,C1	U
Great Egret	SV	C4,D3	R
Cattle Egret	SV	Fuller Barns	R
Snowy Egret	SV	3+	C
Tricolored Heron	SV	D1,C5	R
*Black-crowned Night Heron (X)	PR	3+	U
Yellow-crowned Night Heron	H	UNSP	R
American Bittern	PO	A3	R
Least Bittern	H	UNSP	R
Glossy Ibis	SV	3+	U
Mute Swan (F)	CO	UNSP	R
Canada Goose (F)	H	UNSP	R
Mallard	CO	3+	U
Black Duck	CO	3+	C
Gadwall	H	UNSP	R
Green-winged Teal	H	UNSP	R
Blue-winged Teal	CO	C4	R
Wood Duck	CO	C4	R
Common Eider	SV	SB	R
White-winged Scoter	SV	SB	R
Black Scoter	SV	SB	R

Species Name	BS	AO	A
Red-breasted Merganser	H	UNSP	R
*Red-tailed Hawk	CO	3+	R
American Kestrel	PR	3+	R
Ruffed Grouse	CO	D1	R
Ring-necked Pheasant (I)	PO	UNSP	R
*King Rail	H	UNSP	R
*Clapper Rail	PO	C4	R
*Virginia Rail	H	UNSP	R
*Sora Rail	H	UNSP	R
Common Moorhen	H	UNSP	R
Semipalmated Plover	M	3+	U
*Piping Plover (X)	H	Hampton Harbor	R
Killdeer	CO	3+	C
Black-bellied Plover	M	3+	C
Ruddy Turnstone	M	SB	U
American Woodcock	PR	3+	U
Common Snipe	PO	A4	R
Whimbrel	H	UNSP	R
Upland Sandpiper (T)	H	UNSP	R
Spotted Sandpiper	CO	3+	U
Solitary Sandpiper	H	UNSP	R
*Willet	CO	D1,D3	R
Greater Yellowlegs	SV	3+	C
Lesser Yellowlegs	SV	3+	U

Species Name	BS	AO	A
Pectoral Sandpiper	M	D2	R
White-rumped Sandpiper	H	UNSP	R
Baird's Sandpiper	H	UNSP	R
Least Sandpiper	M	3+	C
Dunlin	M	SB	U
Short-billed Dowitcher	M	3+	C
Long-billed Dowitcher	H	UNSP	R
Stilt Sandpiper	H	UNSP	R
Semipalmated Sandpiper	M	3+	C
Western Sandpiper	M	C1	R
Marbled Godwit	H	UNSP	R
Hudsonian Godwit	H	UNSP	R
Sanderling	H	UNSP	U
Wilson's Phalarope	H	UNSP	R
Northern Phalarope	M	D1	R
Pomarine Jaegar	H	UNSP	R
Parasitic Jaegar	H	UNSP	R
Great Black-backed Gull	SV	3+	C
Herring Gull	CO	3+	VC
Ring-billed Gull	SV	3+	U
Black-headed Gull	SV	D3	R
Laughing Gull	SV	A2	R
Bonaparte's Gull	H	UNSP	R
Forster's Tern	H	UNSP	R

Species Name	BS	AO	A
* Common Tern (T)	CO	3+	U
*Arctic Tern (T) (X)	H	Hampton Harbor	R
*Roseate Tern (T) (X)	H	UNSP	R
*Little Tern (X)	H	Hampton Harbor	R
Caspian Tern	H	UNSP	R
Black Tern	H	UNSP	R
Black Skimmer	H	UNSP	R
Black Guillemot	H	UNSP	R
Rock Dove	CO	3+	C
Mourning Dove	CO	3+	C
Yellow-billed Cuckoo	PO	A4	R
Black-billed Cuckoo	PO	B2	R
Common Barn-Owl	H	UNSP	R
Eastern Screech-Owl	H	UNSP	R
Great Horned Owl	CO	3+	R
Barred Owl	H	UNSP	R
Long-eared Owl	H	UNSP	R
Short-eared Owl	H	UNSP	R
Northern Saw-whet Owl	H	UNSP	R
Whip-poor-will (T)	PO	D3	R
Common Nighthawk	H	UNSP	R
Chimney Swift	PR	3+	U
Ruby-throated Hummingbird	PR	3+	U
Belted Kingfisher	PR	3+	U

Species Name	BS	AO	A
Common Flicker	CO	3+	U
Hairy Woodpecker	CO	3+	U
Downy Woodpecker	CO	3+	U
Eastern Kingbird	CO	3+	U
Great Crested Flycatcher	PR	3+	U
Eastern Phoebe	CO	3+	U
Alder Flycatcher	SV	B2	R
Willow Flycatcher	SV	C7	R
Least Flycatcher	H	UNSP	R
Eastern Wood-Pewee	PR	3+	U
Horned Lark	PO	UNSP	R
Tree Swallow	CO	3+	C
Bank Swallow	H	UNSP	R
Northern Rough-winged Swallow	H	UNSP	R
Barn Swallow	CO	3+	C
Cliff Swallow	CO	3+	U
Purple Martin	H	UNSP	R
Blue Jay	CO	3+	U
Common Crow	CO	3+	C
Fish Crow	H	UNSP	R
Black-capped Chickadee	CO	3+	C
Tufted Titmouse	PO	3+	U
White-breasted Nuthatch	CO	3+	U
Red-breasted Nuthatch	PR	B3	U

Species Name	BS	AO	A
Brown Creeper	H	UNSP	R
House Wren	CO	3+	U
*Marsh Wren	CO	C4,B2	U
Sedge Wren (X)	H	UNSP	R
Northern Mockingbird	CO	3+	U
Gray Catbird	CO	3+	C
Brown Thrasher	CO	3+	U
Robin	CO	3+	U
Wood Thrush	CO	3+	U
Hermit Thrush	H	UNSP	R
Veery	PR	A4	U
Eastern Bluebird (T)	CO	UNSP	R
Blue-gray Gnatcatcher	PR	UNSP	R
Cedar Waxwing	CO	3+	U
Starling	CO	3+	VC
Yellow-throated Vireo	H	UNSP	R
Solitary Vireo	H	UNSP	R
Red-eyed Vireo	PR	3+	U
Warbling Vireo	CO	A2	R
Black & White Warbler	PR	3+	U
Golden-winged Warbler	H	UNSP	R
Blue-winged Warbler	H	UNSP	R
Nashville Warbler	PQ	A3	R
Parula Warbler	PR	D4	R

Species Name	BS	AO	A
Yellow Warbler	CO	3+	C
Magnolia Warbler	H	UNSP	R
Black-throated Blue Warbler	H	UNSP	R
Black-throated Green Warbler	PR	B3	U
Chestnut-sided Warbler	CO	3+	U
Pine Warbler	PO	A3	R
Prairie Warbler	H	UNSP	R
Ovenbird	PR	3+	U
Common Yellowthroat	CO	3+	C
Canada Warbler	PO	A3	R
American Redstart	CO	3+	U
House Sparrow	CO	3+	C
Bobolink	CO	3+	U
Eastern Meadowlark	PO	Fuller Barns	R
Red-winged Blackbird	CO	3+	C
Orchard Oricle	CO	A2, D1	R
Northern Oriole	CO	3+	C
Common Crackle	CC	3+	C
Brown-headed Cowbird	CO	3+	U
Scarlet Tanager	PO	UNSP	R
Northern Cardinal	PR	3+	U
Rose-breasted Grosbeak	CC	3+	U
Indigo Bunting	PR	3+	U
Purple Finch	CO	3+	U

Species Name	BS	AO	A
House Finch	CO	3+	U
American Goldfinch	PR	3+	U
Rufous-sided Towhee	CO	3+	C
Savannah Sparrow	PR	D4	R
Grasshopper Sparrow	H	UNSP	R
Henslow's Sparrow	H	UNSP	R
Sharp-tailed Sparrow	PR	3+	U
Seaside Sparrow	H	UNSP	R
Vesper Sparrow	H	UNSP	R
Chipping Sparrow	CO	3+	U
Field Sparrow	PR	A3	R
White-throated Sparrow	PR	3+	U
Swamp Sparrow	CO	3+	U
Song Sparrow	CO	3+	C

Avian habitat evaluations for the Coastal Zone of New Hampshire

Map Location	
A1	Quarry Area
A2	Witch Creek and Odiorne Point
A3	Fairhill Swamp
A4	Berry's Brook
A5	Wallis Sands Marsh
B1	Sagamore Creek
B2	Awcomin Marsh
B3	Rye Recreation Area
C1	Rye Harbor Marsh
C2	Straw Point
C3	Burke Pond
C4	Eel Pond
C5	Philbrick Pond
C6	Little River Swamp
C7	Meadow Pond
D1	Hampton Marsh North
D2	Taylor River
D3	Hampton Marsh South
D4	Seabrook Dunes
A, B, C, D	Shallow Ocean and Beaches

*Note: the term "common summer species" in this section refers to species listed as "common", "uncommon", and "very common", in the previous section.

Quarry Area, Rye A1

DESCRIPTION

A small pond just south of New Castle Road and east of Sagamore Road. Surrounded by Phragmites and littered with trash, this area has no outstanding bird life.

DIVERSITY

Poor. Approximately 20 common summer species.

ABUNDANCE

Low for all species.

COMMENTS

The former importance of this area is questionable. Two Midland Painted Turtles noted here on May 18, 1983.

Witch Creek and Odiorne Point, Rye A2

DESCRIPTION

Tidal creek and wooded uplands on northern Rye town border, rocky shore and pebble beach surrounds much of Witch Creek.

DIVERSITY

Good. Approximately 35-plus common summer species. Common Tern feed here.

ABUNDANCE

Fair for most birds.

COMMENTS

This report cannot address the possible impacts proposed marina construction would have on resident and migrant birds. An extreme understatement would be that the construction may adversely effect tern activities. Heavy land bird migration passes through this area. One Smooth Green Grass Snake was seen at Odiorne Point State Park on June 6, 1983.

Fairhill Swamp, Rye A3

DESCRIPTION

This is the large tidal marsh and woods enclosed by Brackett, Pioneer, and Marsh roads. The western half of this area is a mixed coniferous-deciduous forest with some White Cedar.

DIVERSITY

Fair. Approximately 30 common summer species. Four rarer species frequently present: Glossy Ibis, Sharp-tailed Sparrow, Common Tern, and Little Blue Heron.

ABUNDANCE

Low for most species. A fair number of Sharp-tailed Sparrows (seven seen on July 31, 1983.)

COMMENTS

A few Common Terns and wading birds use this area for feeding. Sharp-tailed Sparrows probably breed here. The undeveloped roadless woods west of the tidal area could be used by nesting herons in the future. The lack of permanent pools may be why this area does not support more waders and migrating shore birds.

Berry's Brook, Rye A4

DESCRIPTION

The area enclosed by Sagamore, Pioneer, Clark and Brackett roads containing a small marsh and a trout stream.

DIVERSITY

Fair. Approximately 30 common summer species. Used by 5-plus species of waders and shore birds. Little Blue Heron frequently feed here.

ABUNDANCE

Low, but size of area, not quality may be limiting. A long hot spell in the first 2 weeks of July 1982 had left many pannes dry and cracked in the coastal zone. One of the few remaining pools was one at Berry's Brook Marsh west of Brackett Road. Here on July 18, 1982 a Little Blue Heron and a Snowy Egret engaged in some bill fencing. The Little Blue Heron emerged victorious and stretched dominantly. Dwindling resources may have precipitated this squabble.

A sizable colony of Cliff Swallows and some Barn Swallows is maintained in the large old barn south of Berry's Brook, east of Brackett Road. The highest count was approximately 125 Swallows, almost all Cliff Swallows with some Barn Swallows on the wires over the brook on August 1, 1982.

Wallis Sands Marsh, Rye A5

DESCRIPTION

This marsh is just west of Wallis Sands and is bisected by Wallis Road.

DIVERSITY

Fair. Approximately 25 common summer species. Used by 5-plus species of waders and shore birds. Black Ducks bred here in 1982.

ABUNDANCE

Low for most species. Fair (50+) shore birds per day during migration.

Sagamore Creek, Portsmouth B1

DESCRIPTION

A tidal river section between Rt. 1 and Rt. 1A. The woods on the north side are mostly pines.

DIVERSITY

Fair. Approximately 20 common summer species. Used by 10-plus species of waders. Green-backed Heron and Common Tern feed here.

ABUNDANCE

Good. Exposed flats often have more than 150 shore birds of various species during migration.

COMMENTS

This area has some of the largest feeding flats for shore-birds in New Hampshire.

Awcomin Marsh, Rye B2

DESCRIPTION

The large tidal marsh just west of Rye Harbor, west of Rt. 1A. There still remains some Typha around a small pool in the southwest corner of this marsh.

DIVERSITY

Fair. Approximately 25 common summer species. Used by 5-plus species of waders and shore birds. Marsh wrens probably nested here in 1982. A few Sharp-tailed Sparrows here.

ABUNDANCE

Low for all species.

COMMENTS

Four Marsh Wrens were seen or heard singing in Typha around the small southwest pool on July 6, 1982, Phragmites appears to be replacing the Typha here, which may be why no Marsh Wrens were found in 1983.

Rye Recreation Area, Rye B3

DESCRIPTION

A swamp and wooded upland bordering the western edge of Awcomin Marsh.

DIVERSITY

Fair. Twenty-five plus common summer species.

ABUNDANCE

Fair for most species.

COMMENTS

A Spotted Salamander was found here on July 9, 1983 under a rock near the stonewall west of the head of Back Woods Trail.

Rye Harbor Marsh, Rye C1

DESCRIPTION

A small marsh with some permanent pannes east of Rt. 1A and south of Rye Harbor.

DIVERSITY

Fair. Approximately 25 common summer species around the edges. Used by 10-plus species of waders and shore birds. Sharp-tailed Sparrow, Glossy Ibis, and Little Blue Heron regularly occur here.

ABUNDANCE

Fair for most resident and migrating waders and shorebirds.

COMMENTS

The panne west of 1A (across from the Pilot House) supports lower numbers of shore birds at dawn but they usually depart by mid-morning when traffic increases along the highway.

Straw Point, Rye C2

DESCRIPTION

Immediately south of Rye Harbor Marsh, this is a small wooded area composed of mostly pines. A small pond occurs on the eastern edge.

DIVERSITY

Fair. Twenty-five plus species of common summer birds. Black-crowned Night Herons here. Migrating Common Nighthawks occur here in late August each year.

ABUNDANCE

Fair for most species. Migrating Nighthawks pass in "large numbers". Black-crowned Night Herons may once have nested here. (See notes under this species.)

COMMENTS

Much of the land here is owned by Mrs. E. Bunke. She has recounted the history of the Black-crowned Nighthawk observations. In addition, she has described and identified by picture, the Eastern Box Turtle as a species she had captured in her yard in 1978.

Burke Pond, Rye C3

DESCRIPTION

A small fresh-water pond, north of South Road, just west of Central Road. The southern border of the pond abuts the Abenaki Golf Course.

DIVERSITY

Low. Approximately 20 common summer species. A Black Duck was seen here on July 17, 1982.

ABUNDANCE

Low for all species.

COMMENTS

The Abenaki Golf Course appears to have filled some of the bordering southern end in 1983. Some of the fringing White Cedar here had been cut on the northeast shore in 1982.

Eel Pond, Rye C4

DESCRIPTION

A fresh-water pond immediately west of Jenness Beach and Rt.1. Large stands of Typha species surround much of the pond. During summer months Nyphaea odorata covers much of the pond.

DIVERSITY

Good. Approximately twenty-five plus species of common summer birds, also such rarities as Marsh Wren, Clapper Rail, Great Egret, and Black-crowned Night Heron.

ABUNDANCE

Low for most species. Fair for Marsh Wrens, eight recorded on July 8, 1982.

COMMENTS

This is one of the few places for Marsh Wrens and Clapper Rails in the state.

Philbrick Pond, Hampton C5

DESCRIPTION

A small pond between Rt. 1A, Central and Chapel Roads.

DIVERSITY

Low. Approximately 20 common summer species.

ABUNDANCE

Low for all species.

COMMENTS

One Tricolored Heron was seen here on July 3, 1982. This pond is almost always devoid of waders for undetermined reasons.

Little River Swamp, Hampton C6

DESCRIPTION

A small marsh west of Rt. 1A, just south of Little Boars Head.

DIVERSITY

Fair. Approximately 25 common summer species. Green Heron occur here.

ABUNDANCE

Low for most species. Bobolink occur in fair numbers on the western edge of this marsh.

COMMENTS

This marsh was most likely more diverse when it was more vitally linked with the ocean. A cottontail rabbit of undetermined species was seen here on July 3, 1982.

Meadow Pond, Hampton C7

DESCRIPTION

A fresh-water pond north of Winnacunnet Road, and west of Rt. 1A. The tidal affect on this pond is minimal and during July and August of 1982 and 1983 the water level was low and choked with Potomogeton pusillus.

DIVERSITY

Low. Approximately 20 common summer species. One or two Common Terns sometimes fish here. A Willow Flycatcher was seen here on June 9, 1982.

ABUNDANCE

Low for all species.

COMMENTS

The eastern border of this pond is crowded with trailers and houses, perhaps effluents from these have stimulated the dense growth of Potomogeton pusillus. Meadow Pond has been mentioned as a good spot for birds (Elkins 1982). Most likely it was more productive in the past.

Hampton Marsh North, Hampton D1

DESCRIPTION

The large salt marsh north of Rt. 51 and west of Rt. 1A. Included in this area are the woods surrounding the Sewage Disposal Plant.

DIVERSITY

Good. Approximately 30 common summer birds. Used by ten-plus species of waders and shore birds. Sharp-tailed Sparrows, Glossy Ibis, Common Tern, Tricolored Heron, Willet, Green-backed Heron, and Black-crowned Night Heron occur here.

ABUNDANCE

Fair for most species. Good numbers of Sharp-tailed Sparrows; more than 35 counted on July 23, 1983. Common Terns have a colony here. At least three pairs of Black Ducks bred here in 1983.

COMMENTS

This is undoubtedly the richest wildlife area within the coastal zone. In the woods directly west of the sewage plant, 4 Heron nests (most likely Green-backed Herons) were found among the tall beeches. These were unoccupied and without fresh droppings. The expansion of fill operations towards these nests may have scared off the birds. Large pipes from the sewage plant empty into the marsh. Whether this effluent is treated water or merely drainage has not been determined.

Taylor River, Hampton and Hampton Falls D2

DESCRIPTION

This marsh, really a part of the Hampton Salt Marsh, surrounds the Taylor River west of Rt. 1 and east of Rt. 95.

DIVERSITY

Fair. Approximately 25 species of common summer birds. Used by five-plus species of waders and shore birds. A pair of Red-tailed Hawks nested here or nearby in 1982.

ABUNDANCE

Low for most species. Fair for Sharp-tailed Sparrows, seven reported July 30, 1982.

Hampton Marsh South, Hampton, Hampton Falls, and Seabrook D3

DESCRIPTION

The salt marsh south of Rt. 51 to the Massachusetts state line. This area is the largest roadless salt marsh in the coastal zone.

DIVERSITY

Good. Approximately 30-plus species of common summer birds on the edges. Used by 10-plus species of waders and shore birds. Common Tern, Sharp-tailed Sparrow, Glossy Ibis, Black-headed Gull, Willets, Little Tern, Whip-poor-will, Great Egret and Green-backed Heron occur here.

ABUNDANCE

Fair for most species. Good numbers (hundreds) of migrating shorebirds use the pools north of Depot Road during the late summer and fall.

COMMENTS

During very high tides this marsh is almost entirely inundated. This may be why the numbers of nesting birds, particularly Sharp-tailed Sparrows is low compared to the Hampton Marsh North. A pair of Common Terns nested here in 1982. Continuity with Massachusetts marshes provide a corridor for far ranging or expanding wildlife species, for example, Willets.

Seabrook Dunes, Seabrook D4

DESCRIPTION

This area, identified as "the sands" on the Hampton topographic map contains the last remaining backdunes in New Hampshire. Dunlop et al. (1983) have documented the flora of this site.

DIVERSITY

Fair. Approximately 25-plus species of common summer birds. Seasonal pool used by 5-plus species of waders and shore birds. Green-backed Herons nest here.

ABUNDANCE

Low for most species. Large numbers of Tree Swallows descend upon the bayberries in the fall, over 100 birds seen here on September 16, 1982.

COMMENTS

This is the only location of confirmed Green-backed Heron nesting in the coastal zone area. Killdeer nested here in 1982. Savannah Sparrows probably nested here in 1983. ORVS could disturb the nesting herons and should be prevented from entering the area. Cottontail rabbits of undetermined species inhabit this area.

Shallow Ocean and Beaches A, B, C, D

DESCRIPTION

Sandy beaches and rocky or pebble beaches extending along entire coast and the shallow waters just offshore.

DIVERSITY

Fair. Approximately 25-plus species of water and shore birds.

ABUNDANCE

Low during summer for most species. High during migration and winter.

COMMENTS

Vacationing crowds prevent usage of these areas during summer months. High numbers (hundreds) of shore birds use these beaches on rainy days or when the crowds diminish. Five hundred to eight hundred Scoters and good numbers of other sea ducks winter near shore along New Hampshire's coast (Stott 1972).

Notes on some species of special concern

Green-backed Heron

Green-backed Herons were confirmed as nesting in the Seabrook Dunes Area (D4) on July 19, 1982. An adult was seen carrying nesting material into the wooded area southwest of the first building south of where Cross Beach Road meets Rt. 1A. Dunlop et al. (1983) have described this area as a "sunken forest" and identify it as Area#2. Green-backed Herons may also nest in the southernmost sunken forest designated as Area#4 from which a pair was flushed later the same day.

The Green-backed Heron may have nested just west of the Hampton Sewage Disposal Plant. 4 nests were found here in the tall beeches. No recent droppings were seen, nor any birds. If indeed these were built by Green-backed Herons, noise and fill operations may have disturbed them.

The Green-backed Heron is a confirmed breeder in many other locations throughout the state but it cannot be regarded as without need of conservation efforts. These birds are very sensitive to disturbance and need to be sheltered against encroaching civilization if they are to maintain their coastal population.

Black-crowned Night Heron

The Black-crowned Night Heron has been considered extirpated as a nesting bird in New Hampshire. It is still considered as such but may well have nested at Straw Point, Rye (C2) in recent years. Mrs. E. Bunke, owner of much of the land here, has watched these birds return in small numbers to her back yard each spring for the last ten years. Here they fish in a small pond and presumably nest in the adjacent pine forest. Several nests are located here,

but no recent droppings nor birds were observed in several visits to the area during 1983. Mrs. Bunke suspects that a local family of red foxes have killed any birds that may have returned this year.

The Black-crowned Night Heron has good populations south of New Hampshire and its absence here presents no danger to the species. Curiously, this may in fact be a blessing. Black-crowned Night Herons have caused havoc in tern colonies by swallowing chicks whole. With no terns to spare, the state must face the loss of one species with the view of saving another. Alas, this situation serves as a perfect illustration of a small ecosystem unbalanced by the loss of habitat. Were there enough resources, both species could play their natural part in the grand scheme.

Red-tailed Hawk

The Red-tailed Hawk is the only diurnal raptor other than the American Kestrel to frequent the coastal zone during summer. On July 30, 1982 an immature bird was heard and seen calling just west of the largest bend in the Taylor River Area (D2). The adults most likely nested near here. Adults had been seen in many coastal areas throughout the summer and most likely the same immature was seen on August 18, 1982 over the Seabrook Dunes (D4). During the field season of 1983, adults were seen only three times. The first bird was seen in the Fairhill Swamp (A3) on May 5, 1983. This may have been a migrant. A pair was seen on July 7, 1983 in Hampton Marsh South (D3) and a single bird in the same location the following day. It may be that the coastal zone is only marginally suited to raptors, for reasons undetermined.

Rails

Rails are small birds of secretive habits. They are most often heard rather than seen, during the night and very early morning hours. During the course of field work only 1 rail was detected, a Clapper Rail flushed from Typha sp. stalked near the outlet of Eel Pond, Rye (C4) on July 8, 1982. The presence of other rails in the coastal zone is likely and 4 species, the King Rail, Clapper Rail, Virginia Rail, and Sora Rail, have been recorded in the past. The loss of habitat has certainly resulted in a decrease in rail numbers but because of their nature it is impossible to guess to what extent.

Piping Plover

The Piping Plover formerly nested on a sand spit on the southwest side of the Hampton Harbor Inlet. As late as the summer of 1970 they were successful in raising young, but the increasing use of this area by bathers and fishermen prevented nesting in the following years. Because Piping Plovers need untrampled sandy beaches they are unlikely to return to N. H.

Willet

Small numbers of Willets have been recorded almost yearly since 1960. This year several Willets have been seen and a pair has been confirmed as nesting near the Common Tern colony in the Hampton Marsh North (D1). A fledging was seen here and may well be the first in over 50 years. This bird will probably increase in the years ahead if the habitat is not affectively altered.

Terns

The Common Tern is the only tern species which remains nesting in N. H. The Arctic Tern and Little Tern nested along with small numbers of Common Terns near the mouth of Hampton Harbor in the recent past but this tern area has been overrun by man and his pets and no longer supports a colony. The Roseate Tern may never have nested in the coastal zone (Richards 1980). The Common Tern need not nest in a colony, a single pair being discovered nesting in Hampton Marsh South (D3), just north or Rt. 296 and west of the Blackwater River in 1982. The remaining Common Tern colonies, in Hampton Marsh North (D1), small islands in Little Harbor, and in the vicinity of Little Bay upstream from the mouth of the Piscataqua River, are studied and monitored by biologists each summer. These conservation efforts will prove fruitless if the quality of tern foraging areas, i. e. Witch Creek (A2) and Hampton Harbor is destroyed.

Marsh Wren

The Marsh Wren is undoubtedly declining in the coastal zone. It was found until recently at Meadow Pond (C7) and the Awcomin Marsh (B2). No Marsh Wrens could be detected at either site when they were visited in 1983. The Awcomin Marsh site, first discovered in 1982, appears to have more Phragmites and less Typha this year than last and this may be the reason Marsh Wrens have disappeared. Eel Pond (C4) remains the only site for these birds in the coastal zone. Perhaps as many as 10 pair nest here although only 8 birds were recorded July 8, 1982.

Recommendations

The protection of individual species has proven to be hopeless without preservation of the ecosystem to which it belongs. The expansive salt marshes of N. H. are fragmented and ditched and these actions of the past are reflected in the avian communities extant. A study in Rhode Island by Reinhert et al. (1981) had concluded that species richness (diversity) in unditched marshes daily or seasonally was consistently greater than that for ditched marshes. Perhaps New Hampshire's marshes could benefit from the construction of permanent pools in areas severely ditched. The return of most of new Hampshire's marshes to their primitive condition is impractical but there remain areas of such quality as to allow the survival of unique and valuable birds. Three sites particularly worthy of increased or continued conservation efforts are:

Eel Pond, Rye - C4

This is the only location of a recent Clapper Rail sighting within the state. This pond has allowed the only recent confirmed nesting of Blue-winged Teal, Wood Ducks and Marsh Wrens in the coastal zone. In addition, water birds such as the Great Egret and Black-crowned Night Heron often feed here.

The greatest threat to this site could well be the influx of Phragmites australis. This weed could replace the Typha (cattails) here and eliminate the habitat required by rails, Marsh Wrens and other water birds. The removal of this weed would be difficult if it becomes established, elimination of any pioneers may delay or prevent its invasion.

Hampton Marsh North, Hampton - D1

This is one of the finest areas for wildlife within the coastal zone. A Common Tern colony here is the largest in the state. This is the only site of nesting Willets, and good numbers of water birds feed here. This site supports the largest concentration of Sharp-tailed Sparrows in the state. Luckily, human disturbance is minimized by the network of ditches surrounding this marsh, but water quality from the nearby sewage treatment plant may deserve inspection.

Seabrook Dunes, Seabrook - D4

This is the only site of confirmed Green-backed Heron nesting in the coastal zone area. The Killdeer also nests here and migrating Tree Swallows feed in great numbers. Savannah Sparrows probably nest here. With protection, additional ground nesting birds such as the Horned Lark may be attracted. A report on the vegetation and flora here has been prepared separately (Dunlop et al., 1983) and offers recommendations which will afford sufficient protection to the bird life.

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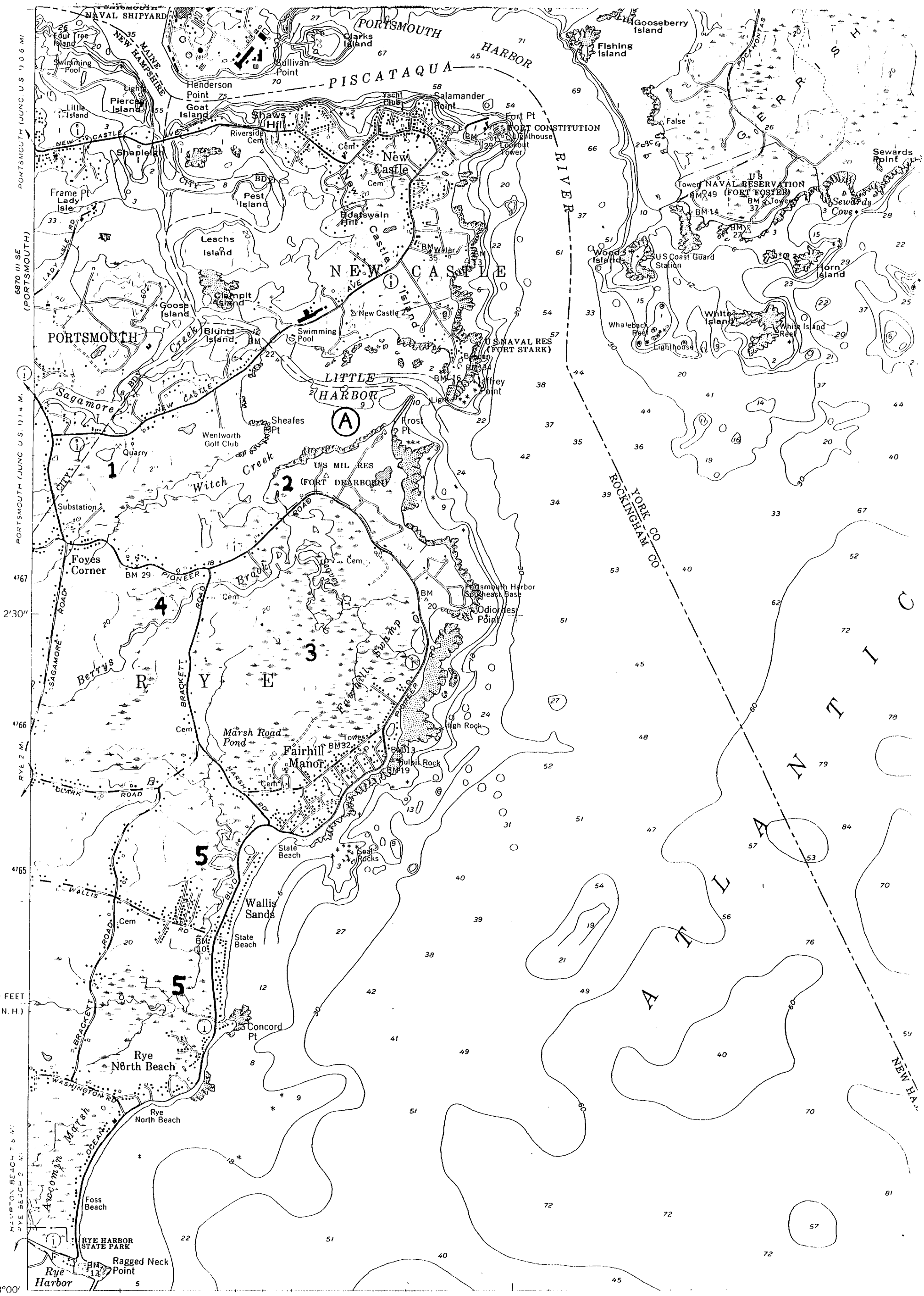

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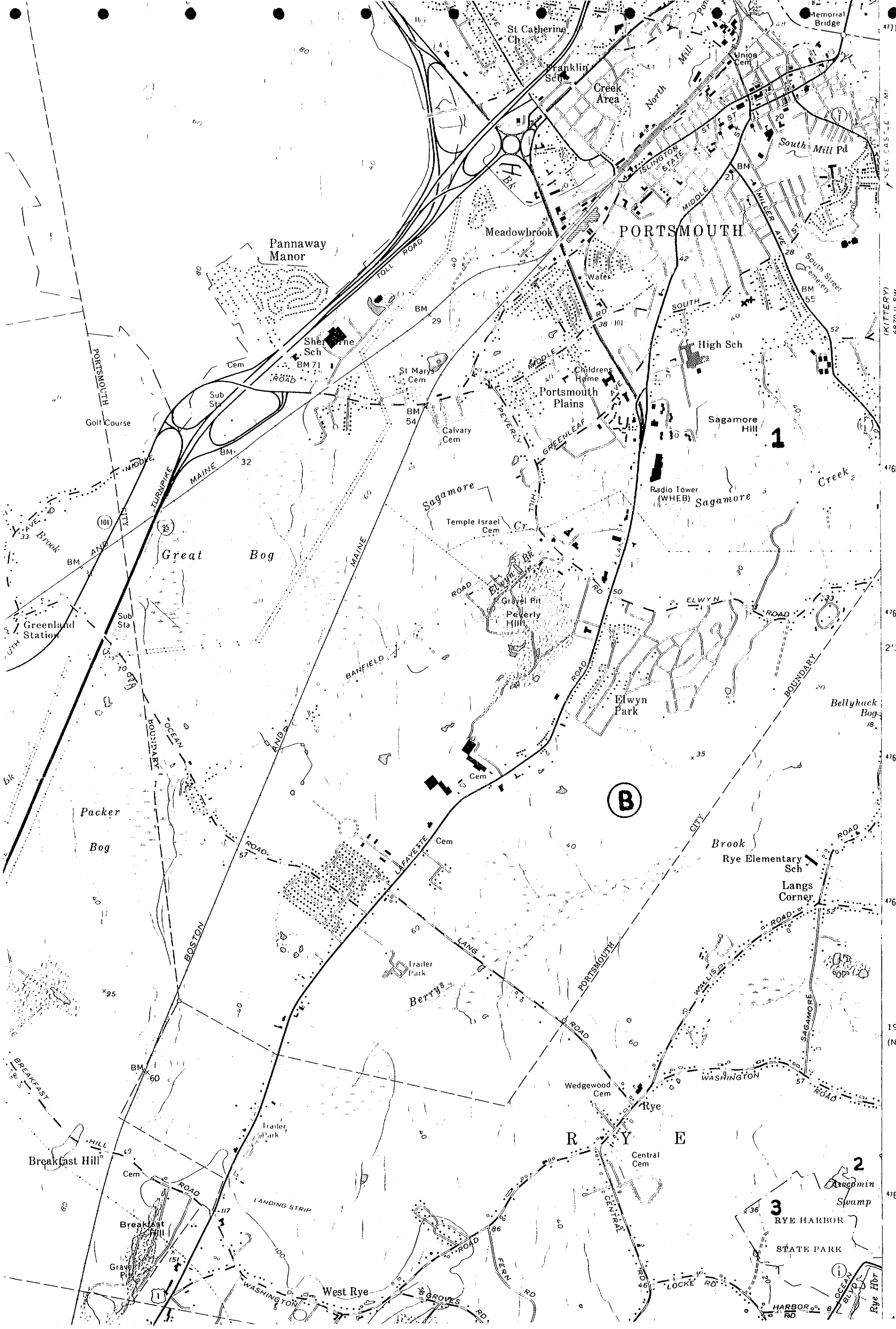

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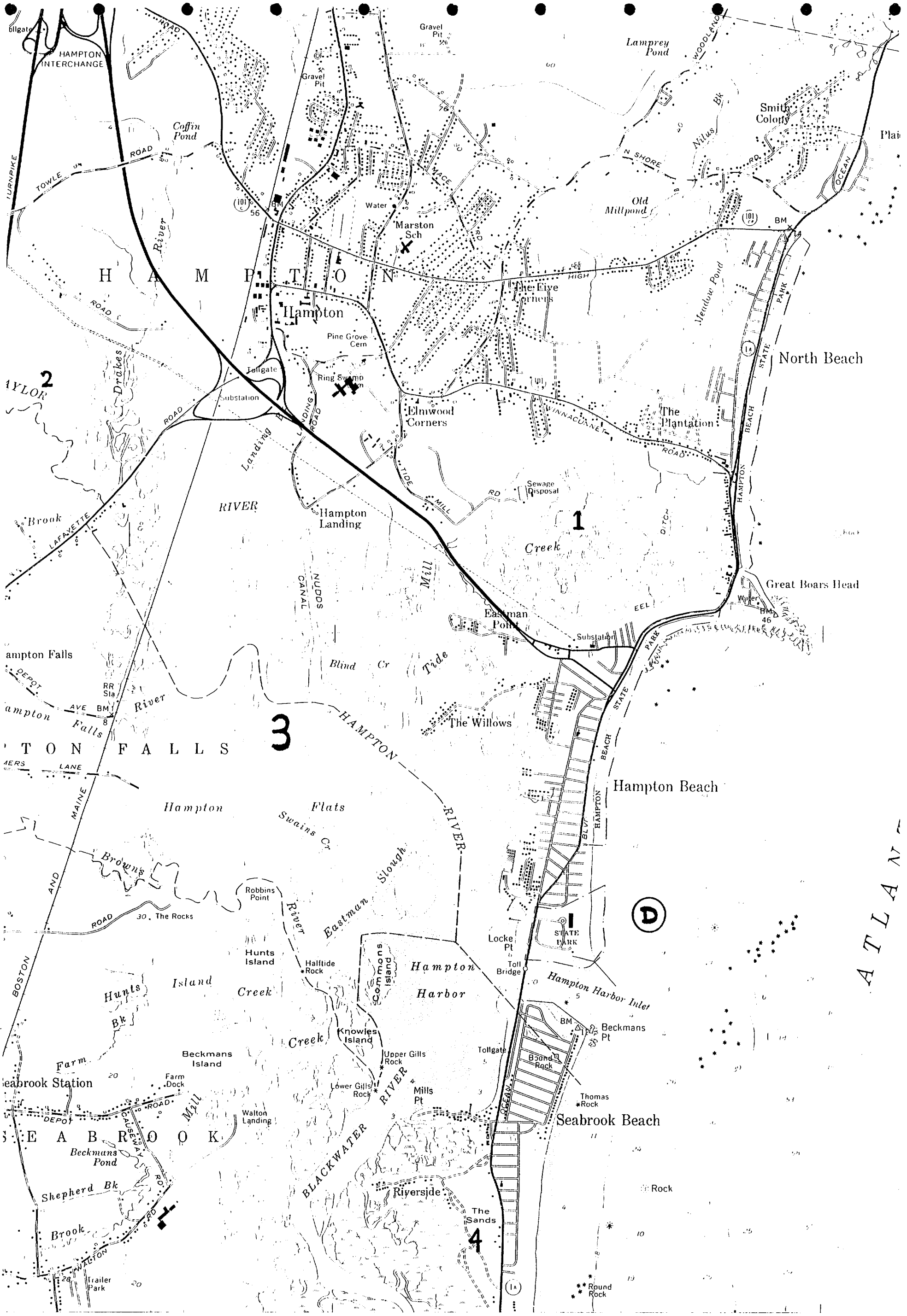

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