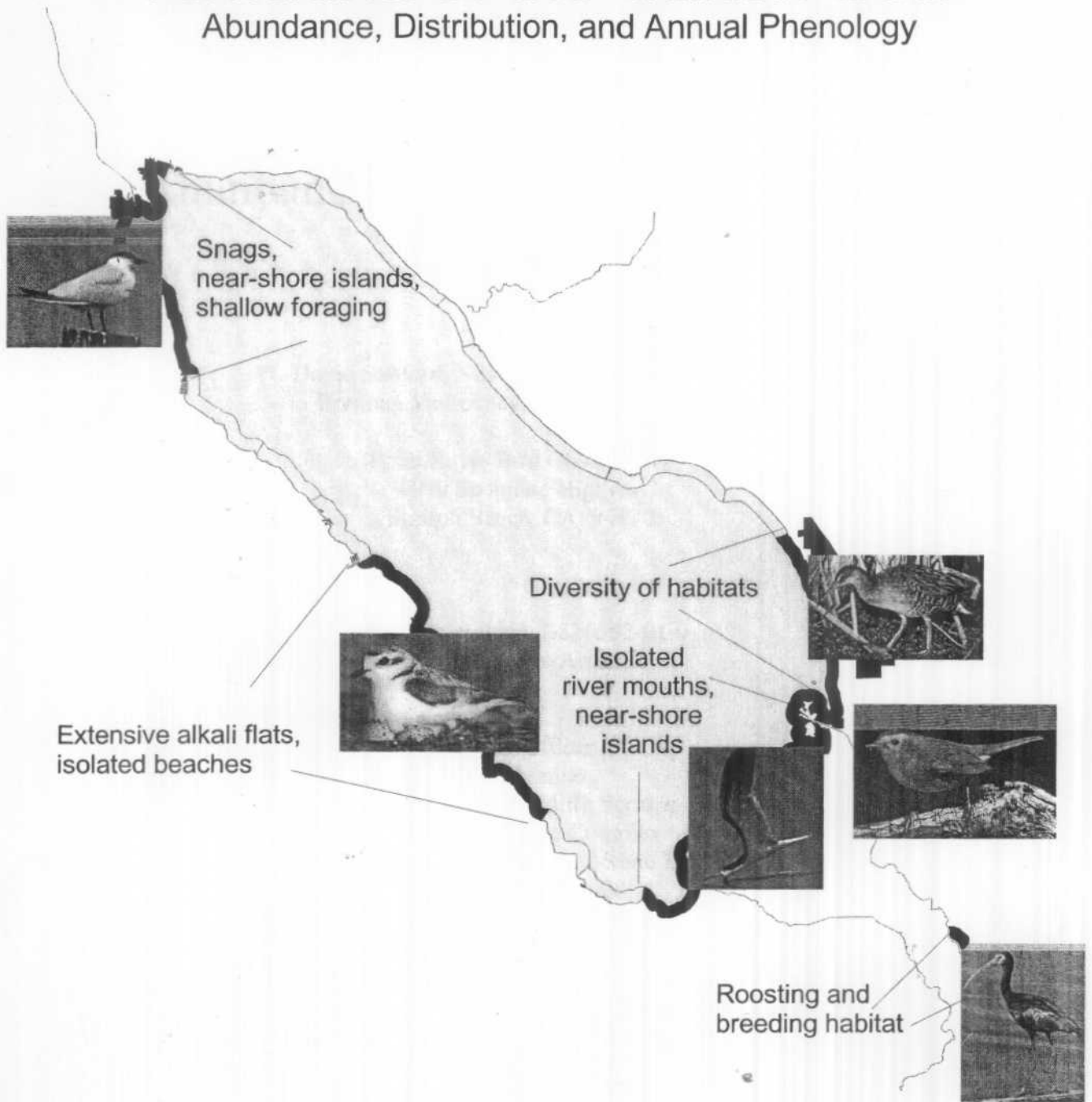


Avifauna of the Salton Sea

Abundance, Distribution, and Annual Phenology



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Point Reyes Bird Observatory

for

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by

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Abbreviations

PRBO	Point Reyes Bird Observatory
SSNWR	Sonny Bono Salton Sea National Wildlife Refuge
WA	Wildlife Area
Wister Unit	Wister Unit of Imperial Wildlife Area (WA)

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Abstract

As part of a multi-disciplinary reconnaissance survey in 1999, we used a variety of survey methods to describe patterns of abundance, distribution, annual phenology, and broadscale habitat associations of birds at the Salton Sea. These surveys further documented the great importance of the Salton Sea within the Pacific Flyway to wintering, migratory, and breeding waterbirds. Surveys of waterbirds (other than Eared Grebes) at the Salton Sea and adjacent habitats, estimated about 187,000 individuals in January, 88,000 in April, 170,000 in August, and 261,000 in November. Additional surveys of Eared Grebes in November and December suggested the total population of all waterbirds was about 434,000 to 583,000 in those months, respectively. Surveys also documented breeding by about 14,000 pairs of colonial waterbirds. Waterbirds were not equally distributed around the Sea, and areas of particular importance to them were the northern, southwestern, southern, and southeastern shorelines. By contrast, certain wading birds and shorebirds were much more numerous in agricultural fields of the Imperial Valley than in wetland habitats at the Salton Sea. Various studies indicate the Salton Sea is of regional or national importance to various species groups – pelicans and cormorants, wading birds, waterfowl, shorebirds, gulls and terns – and to particular species -- the Eared Grebe, American White Pelican, Double-crested Cormorant, Cattle Egret, White-faced Ibis, Yuma Clapper Rail, Snowy Plover, Mountain Plover, Gull-billed Tern, Caspian Tern, Black Tern, and Black Skimmer.

Projects to restore the ecosystem's health by reducing salinity and limiting bird die-offs should be carefully assessed to ensure they do not have unintended impacts and are not placed where large numbers of breeding, roosting, or foraging birds currently concentrate. Similarly, plans to enhance opportunities for recreation or commerce at the Sea should aim to avoid or minimize disturbance to birds. Future research should focus on filling gaps in knowledge needed to effectively solve problems facing birds at the Salton Sea.

Chapter 1 Introduction

The Salton Sea, as an integral part of the Río Colorado Delta region, supports large numbers and a great variety of avian species and arguably is one of the most important wetlands to birds in North America. A number of bird species have populations in the Salton Sea area that are of regional or continental importance in size or are highly vulnerable. Additionally, the Salton Sea serves as a vital migratory stopover and wintering area for species that breed elsewhere in western North America. Because of this connectivity, the health of populations of many species of waterbirds is linked to that of the Salton Sea. Great concern recently has been expressed about the fate of the Salton Sea ecosystem because of increasing salinity, contamination from agricultural and urban sources, disease outbreaks, and large die-offs of waterbirds (e.g., USFWS 1997).

Although key information on the avifauna of the Salton Sea has been summarized (Shuford et al. 1999), various proposals to deal with problems of ecosystem health are hampered by the limited quantitative data available on the status and ecology of birds