YUMA CLAPPER RAIL

Habitat Areas in the Salton Sea Region
Annual Population Counts, 1990 – 1999

By S.J. Montgomery

Introduction:

The Yuma Clapper Rail is one of three subspecies of clapper rails in California, all of whom have been listed as endangered by State and Federal Government. The Yuma Clapper Rail occurs primarily along the lower Colorado River and in the area of the Salton Sea in southeastern California. Populations also occur along the Colorado River in Arizona, and in over- wintering sites in Mexico.

Habitat:

Dense emergent freshwater marsh vegetation is the general habitat type utilized by breeding populations of the Yuma Clapper Rail. Other important features of suitable habitat include relatively shallow water depth, close proximity to the land-water interface, a surface mat of dead, fallen vegetation, and a supply of prey, such as crayfish, beetles, and snails.

The Wister Unit:

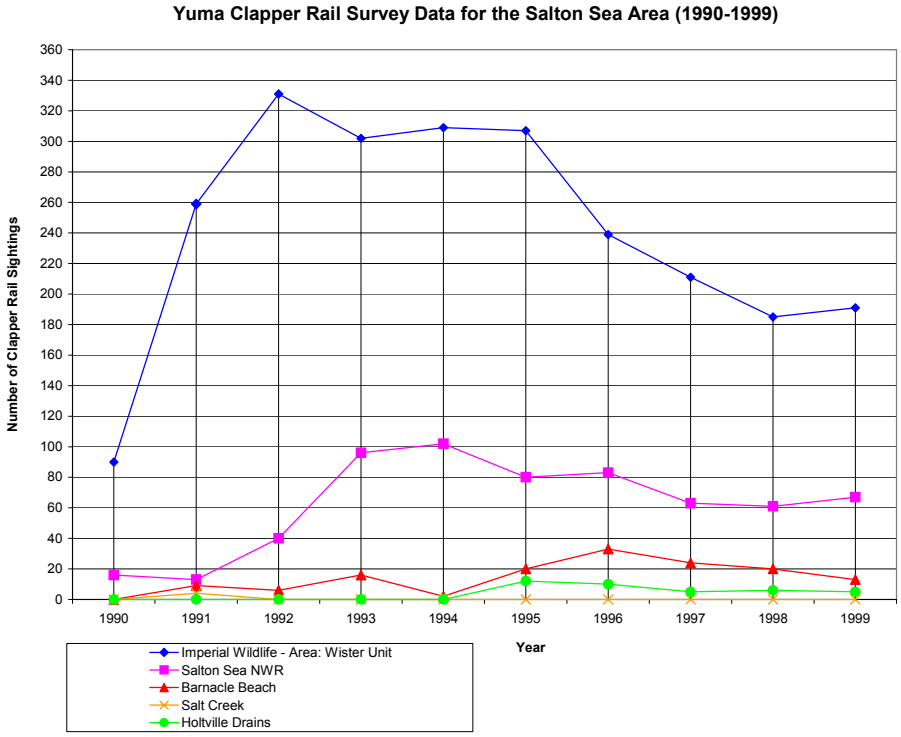
The Wister Unit of the Imperial Wildlife Management Area is an extensive system of diked ponds that provide abundant habitat suitable for supporting an extensive population of Yuma Clapper Rails as well as many other bird species. The usable habitat within this area fluctuates year to year depending on a variety of factors, but regardless, supports an extensive assemblage of species as well as the Rails. Although Yuma Clapper Rails are found at several locations in and around the Salton Sea, both the largest population and the most extensive habitat for this bird occurs at the Wister Unit.

Yuma Clapper Rails In Managed Habitats At the Salton Sea:

Review of the 1991-1999 census data for all Yuma Clapper Rail habitat locations indicates the relative importance of the intensively managed ponds at the Wister Unit to the health and welfare Yuma Clapper Rail population. During this 9-year period, the Yuma Clapper Rail population counted at the Wister Unit represented 28-44% (mean approx. 32%) of the total population counted for all survey areas combined.

During Yuma Clapper Rail field studies conducted at the Wister Unit spanning more than 15 years, S.J. Montgomery observed that Yuma clapper rail population densities generally correlated well with the number of managed ponds that contained dense stands of mature cattails, and to a lesser degree, bulrush. Montgomery also observed that unvegetated ponds are rapidly occupied once cattail/bulrush habitat develops to moderate or high density.

In addition, older stands of cattails exhibit a higher density of crayfish, which is apparently a primary food source for this bird, as well as significant amounts of dead recumbent cattail stems that facilitate rapid travel through the marsh vegetation by the Yuma Clapper Rail.



Conclusions:

The total number of Yuma Clapper Rail individuals reported for all census areas has declined by 30-40% since 1994. The numbers of reported Clapper Rails have increased at some population centers and decreased at others. Reasons for these changes are not confirmed, but nonetheless, this rapid decline in five years warrants serious concern.

While it remains important to maintain widespread populations of the clapper rail in its natural habitat along the Colorado River and elsewhere, it is quite evident that the overall Yuma Clapper Rail population size can be readily expanded by increasing the area of managed mature cattail habitat available. This objective can be achieved not only at the Wister Unit at the Salton Sea, but elsewhere along the shoreline of the Salton Sea where suitable marshlands could be developed.

For further information, contact:

Stephen J. Montgomery
SJM Biological Consultants
4907 Morena Blvd. Suite 1414
San Diego, CA 92117
Ph: 858-274-6511
Fax: 858-274-6512