

# The Status of the Light-footed Clapper Rail

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The Light-footed Clapper Rail (*Rallus longirostris levipes*) is one of three races of the Clapper Rail considered by both the State of California and the U.S. Department of Interior to be endangered (California Department of Fish and Game, 1974; Bureau of Sport Fisheries and Wildlife, 1973). In 1972 and 1973 I visited most of the remaining saltmarshes within the range of this subspecies in an attempt to delineate current distribution and estimate remaining numbers. The results of my study are presented here.

## METHODS

I used five approaches for this study: a thorough review of the meager literature on this subspecies; solicitation of reports from other observers; playing tape-recorded rail calls in suitable-appearing habitat; looking for rails when high tides completely covered the marshes, forcing them into view; and generally searching for rails, nests, and other evidence that birds were present.

High tide counts were most effective in locating and enumerating rails because the majority of rails were exposed to view when all marsh vegetation was inundated. Unfortunately, only a few marshes have unimpaired tidal flow, so use of this technique is limited. Tape recorded rail calls were sometimes effective, but rail response was minimal and sporadic even though I used similar techniques and equipment, and copies of the same tapes used by Tomlinson and Todd (1973) in their Yuma Clapper Rail studies. I completely failed to elicit rail response in two marshes when I knew rails were present. Background noise from

automobile traffic, airplanes, and ocean breakers is extreme at some marshes I visited, and this may have appreciably reduced the effective range of my tape recordings.



*A piece of styrofoam provides a dry perch for a Light-footed Clapper Rail during an extremely high tide. Photo / S.R. Wilbur.*

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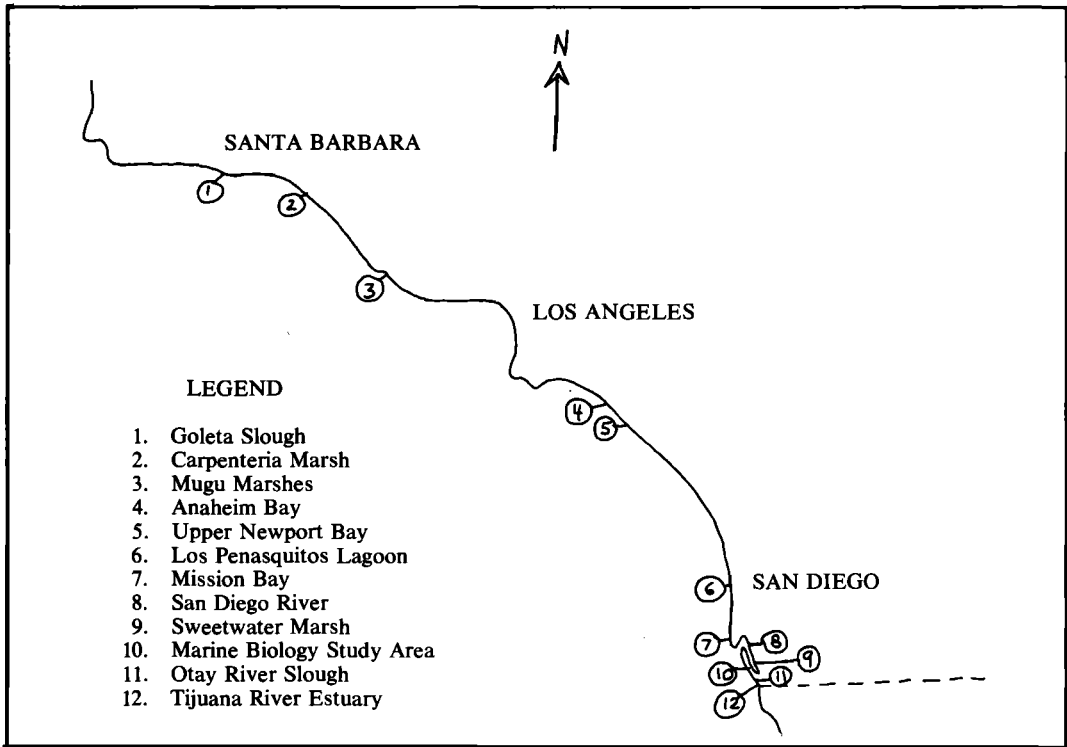


Figure 1. Areas inhabited by Light-footed Clapper Rails.

Walking the marshes in search of rails is laborious, time consuming, and rarely yields representative results. However, when other techniques failed, using this method I verified the presence of Clapper Rails in two marshes, once by flushing a bird from dense vegetation and once by finding an active nest.

Few people, even experienced birders, see Light-footed Rails regularly, so there are few published observations of this subspecies. These few records, however, provided clues for my search. Also, I am grateful to the individuals cited in the report for allowing use of their personal observations.

## RESULTS

*Santa Barbara County.* In five days at *Carpenteria Marsh* (Also called El Estero, or Sandyland Slough), I observed only one Clapper Rail. The highest count known to me is of five birds on November 28, 1959 (N. Metcalf, pers. comm.); the total population of the area is apparently very small. Elsewhere in the county, Richard Webster reported single birds at *Goleta Slough* on September 6, 1969 and on February 17, 1972 (N. Metcalf, pers. comm.). *Goleta Slough* is a favorite with local birders, and there should be more records if even moderate numbers of clapper rails are present.

*Ventura County.* I spent three days in the *Mugu marshes* (Pacific Missile Range) without seeing or hearing any Clapper Rails. During one of these days, an extremely high tide completely inundated large sections of the marsh and should have forced some birds into view if many were there. On March 12, 1971, a party of rail counters dragged ropes through a section of this marsh hoping to flush rails into view, but only two were found (McCaskie, 1971). The current population there is apparently small.

*Orange County.* I did not personally investigate the *Anaheim Bay* marshes, but they have long been known as one of the important Light-footed Rail habitats. Romero (1972) roughly estimated the population to be 100 to 200 birds. Much of this area is included in the Seal Beach Naval Weapons Station, which has recently been classified as a National Wildlife Refuge. *Upper Newport Bay* has a small population of rails. Sexton (1972) made nine counts during high tides in 1971 and 1972, and observed from 16 to 27 birds per count. He estimated the total Newport Bay population to be approximately 32 birds. A few Clapper Rails may still exist in the remnant salt-marsh at *Bolsa Chica*, but Mike Evans (pers. comm.) made 36 waterbird counts there in 1971 and 1972 and failed to see or hear any Clapper Rails.

*San Diego County.* The *Tijuana River Estuary* south of Imperial Beach has one of the largest Light-footed Rail populations. During the peak of an extremely high tide on December 20, 1972, I observed 24 rails simultaneously and saw another six nearby. In the same area on November 11, 1973, Paul Jorgensen and I estimated approximately 30 birds again. An especially high storm tide on January 7, 1974 produced a count of 40 rails (P. Jorgensen, pers. comm.). We are not yet able to project these counts to an accurate population estimate of the entire estuary, but my preliminary opinion is that the sample area is by far the most densely populated and that the total population of the estuary is probably not more than 150 birds.

Most of the once-vast marshland of San Diego Bay and Mission Bay has been destroyed, but all of the remnant areas appear to support a few Clapper Rails. Harold McKinney (California Department of Fish and Game) and I found one active Clapper Rail nest in the *Sweetwater* (National City) marsh on April 18, 1973 but we saw no birds, and I have no recent reports from there. Alan Craig reports (pers. comm.) sightings of small numbers in South San Diego Bay at *Otay River Slough* and the *Marine Biology Study Area* (north of Imperial Beach on the Coronado Strand) and to the north in the *San Diego River* flood control channel. In *Mission Bay* on April 19, 1973, McKinney and I saw or heard an estimated six birds, which is probably nearly the entire population of that small area.

Of the northern San Diego County lagoons, only *Los Penasquitos* is currently known to support Clapper Rails. I saw or heard birds there on several occasions, and in 1972 Mrs. Jesse LaGrange (pers. comm.) knew of five nests. Ken Stott Jr. (pers. comm.) saw a Clapper Rail at *San Elijo Lagoon* on May 13, 1947, but I could find no other records for that area. I failed to see or hear any Clapper Rails there during three days when I played tape recorded calls. *Buena Vista Lagoon* formerly supported a few Clapper Rails (K. Stott, pers. comm.), but the marsh area has since been filled and is now the site of a shopping center.

## CONCLUSIONS

Only 12 California marsh areas are presently believed to be inhabited by the Light-footed Clapper Rail, and eight of these appear to support only 5-15 birds apiece. Tentative estimates for the other four are: Anaheim Bay 200, Upper Newport 30-35, Los Penasquitos 30, and Tijuana

Estuary 150. These estimates, admittedly very rough, indicate a total Light-footed Rail population on only about 500 birds. Recognizing that rails are secretive and hard to inventory, the actual count could be somewhat higher, but I feel it is most unlikely that the number could be more than 750 birds altogether.

Reductions in Light-footed Clapper Rail populations can be attributed almost entirely to loss of habitat. An estimated 26,000 acres of saltmarsh once existed between Santa Barbara and the Mexican border. At present there are approximately 8500 acres (Speth, 1971), much of which has been degraded by pollution, water diversion, and restriction of tidal flow. Of those areas currently occupied by Clapper Rails, few can be considered to have a very secure future. Of the four major areas only Anaheim Bay appears to be relatively safe from future habitat destruction. Tijuana Estuary, Los Penasquitos Lagoon, and Upper Newport Bay are all threatened by commercial developments that could reduce or destroy local rail populations.

I have not visited Baja California, but I believe there is still a substantial population of Clapper Rails in the marshes around San Quintin Bay. Taxonomists do not agree on the subspecific identity of these birds, but some feel they are representatives of the Light-footed race. If so, it is fortunate to have a relatively secure (for now) reservoir of these birds, but whether the Light-footed Clapper Rail survives within the United States may well be decided within the next few years.

## LITERATURE CITED

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