

# BIRD-BANDING

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## MIGRATORY MOVEMENTS OF THE NORTHERN CLAPPER RAIL

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Available data on the status of the Northern Clapper Rail (*Rallus longirostris crepitans*) at times other than the breeding season have been quite limited. There are only scattered records, and few specimens, of individuals definitely known to be migrating or wintering. During the breeding season the status of this race is much better known. Breeding birds occur regularly in coastal marshes from southern New England to northeastern North Carolina, an area that coincides almost exactly with the coastal strip of the Embayed Section (Fenneman, 1938) of the Atlantic Coastal Plain.

Because of the dearth of information concerning the distribution of the Northern Clapper Rail in migration and winter, a special effort was made to learn more about this through an intensive banding program. To this end, a total of 1028 Clapper Rails of various ages were banded on the "Eastern Shore" of Virginia (Accomac and Northampton Counties) during the late summer (July 3 to August 31) from 1933 to 1952. One hundred and forty-six were banded by John H. Buckalew and the remainder by the writer. Most of these were captured in "lead-wire" traps near Chincoteague, Virginia, in 1950 and 1951 (Stewart, 1951).

Forty-six of these banded rails were later recovered (recovery rate, 4.5%) including 45 that were shot by hunters and one that was run over by a car. Forty-two (recovery rate, 4.1%) were taken during the first hunting season, within 4 months of date of banding; and 3 were taken between 12 and 16 months after banding during the second hunting season. One immature bird banded on July 3, 1933, was shot during the fourth hunting season following banding, on October 29, 1936.

During the periods August 1-August 29, 1950 and July 16-August 31, 1951, 915 Clapper Rails were banded near Chincoteague, Virginia, including 833 immatures from 1/3 to full-grown, and 82 adults. Forty (4.8%) immature birds were later recovered, whereas only 1 (1.2%) of the adults was taken. Of the immature birds that were recovered, 15 (37.5%) were taken in the southern Atlantic States, 13 (32.5%) in Accomac and Northampton Counties, Virginia, between 10 and 60 miles from point of banding, while 12 (30%) were from near Chincoteague within 4 miles of point of banding. The single adult was found in Georgia.

Altogether, twenty of the Clapper Rails banded in Virginia were later recovered in the southern Atlantic States (see map, fig. 1).

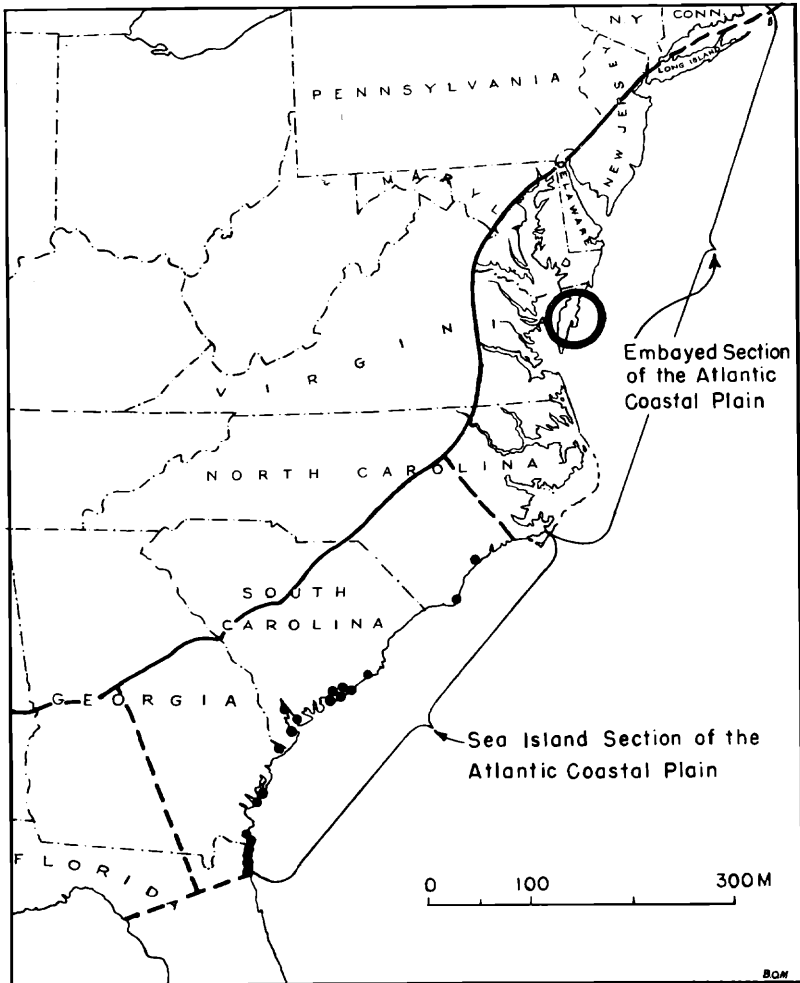


FIGURE 1

Fig. 1. Recoveries in South Atlantic States of Clapper Rails banded in Accomac and Northampton Counties, Virginia. Banding locations are included within large open circle, while recoveries are represented by dots.

They were all from a narrow coastal strip, about 450 miles long, extending from southeastern North Carolina to northeastern Florida. Physiographically, this corresponds to the coastal area of the "Sea Island Section of the Atlantic Coastal Plain" (Fenneman, 1938). It is the principal area in which the more southern subspecies, Wayne's Clapper Rail (*Rallus longirostris waynei*) breeds, and is characterized

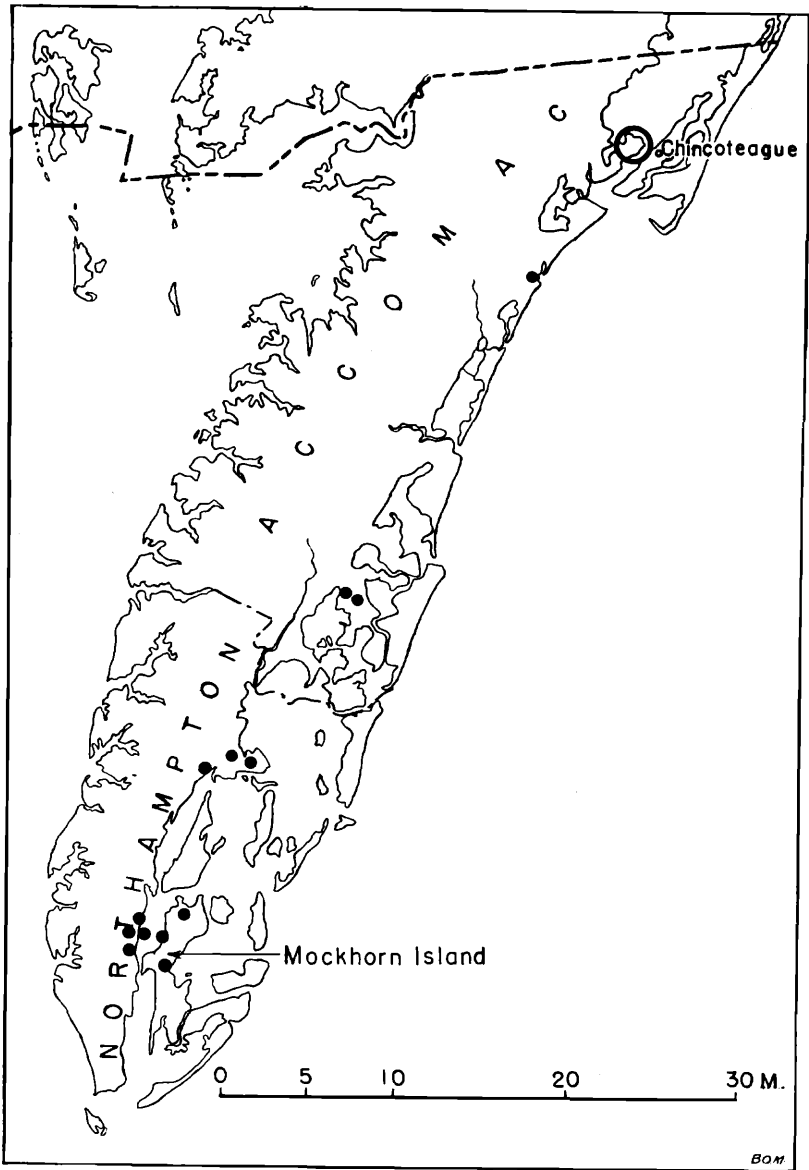


FIGURE 2

Fig. 2. Recoveries of Clapper Rails banded at Chincoteague, Virginia, and shot in Accomac and Northampton Counties, Virginia between 10 and 60 miles from banding station. Banding station is included within open circle while recoveries are indicated by dots.

by very extensive salt marshes composed chiefly of Salt-water Cordgrass (*Spartina alterniflora*). Within this strip, 9 recoveries of Virginia-banded rails were made in South Carolina, 5 in Georgia, 4 in northeastern Florida and 2 in southeastern North Carolina. In addition, two recoveries from Georgia, not shown on the map, were banded as adults at Ocean City, New Jersey, by F. V. Schmidt.

The relatively large number of recoveries made in the Southern Atlantic States would indicate that the Sea Island Section is probably the major wintering ground for the Northern Clapper Rail. This idea is further supported by the fact that during the winter, this race is either comparatively scarce or absent throughout its breeding range to the north, while to the south there are no records of occurrence south of Duval County, Florida. Most of the recoveries in the southern Atlantic States were made in October or November whereas most of the Virginia recoveries were made in September. This suggests that many of the latter group might have been migrating or perhaps were not yet prepared to leave the breeding grounds. The latest recoveries of rails shot near the point of banding were 3 banded between August 4 and 17 that were taken between October 4 and 5.

The 13 recoveries made in Virginia at distances of 10 to 60 miles from Chincoteague help to show the route taken by migrating Clapper Rails (see map, fig. 2). These recoveries were made in Accomac and Northampton Counties, both of which contain extensive areas of excellent Clapper Rail habitat—salt marshes, composed chiefly of Salt-water Cordgrass. Seven of these were taken in the vicinity of Mockhorn Island about 60 miles south of the banding station. It would appear that this is a major concentration area for migrating Clapper Rails. It is interesting to note that there have been no recoveries reported from southeastern Virginia or northeastern North Carolina. Undoubtedly this is due to the fact that the salt marshes in this area, consist chiefly of Needlerush (*Juncus roemerianus*), a type that is not nearly as attractive to Clapper Rails as is the Salt-water Cordgrass. It is not improbable that most migrating rails would pass by this area without stopping, traveling directly from the Virginia "Eastern Shore" to the Sea Island coastal strip of the southern Atlantic States.

Apparently, some Clapper Rails waste little time in travelling from their breeding grounds to the wintering area. This is indicated by one immature bird that was banded at Chincoteague on August 26, 1950 and recovered in northeastern Florida on September 24, 1950. Other evidence that some of the rails migrate quite early is furnished by the record of one banded at Chincoteague on August 15, 1950 and recovered about 60 miles to the south on September 6, 1950. Another banded at Chincoteague on July 28, 1951 was recovered in South Carolina on September 16, 1951. Sprunt and Chamberlain (1949) report that the earliest record of the Northern Clapper Rail in South Carolina was a specimen collected on Bull's Island, September 9, 1943, while in New Jersey (Stone, 1937), migrants have been recorded as early as August 28. An abrupt increase in numbers of trapped full-grown Clapper Rails was noted at Chincoteague on August 25, 1951, which would probably indicate the start of migration that year (Stewart, 1952).

A high rate of yearly turn-over in rail populations at Chincoteague is indicated by the banding records. In 1950, 198 were banded there including 15 adults and 183 immature birds. In 1951, out of 68 adults captured in the same trapping area, only one was previously banded. This bird had been banded as an immature on August 14, 1950 and was recaptured on July 25, 1951, about 150 yards from the banding location. Analysis of 268 repeat records of immature birds trapped at Chincoteague in 1951 (Stewart, 1952), shows that there is considerable local movement of this age group on the breeding grounds, ranging from 200 to 1400 yards from point of original capture.

#### SUMMARY

A total of 1028 Clapper Rails of various ages were banded in Accomac and Northampton Counties, Virginia in late summer from 1933 to 1952. Forty-six (4.5%) were later recovered, including 42 (4.1%) taken during first hunting season following banding. Out of 833 immature birds banded at Chincoteague, 40 (4.8%) were recovered, while out of 82 adults banded during the same period only 1 (1.2%) was taken; of these, 16 were recovered in the southern Atlantic States, 13 in Virginia between 10 and 60 miles from point of banding, and 12 within 4 miles of point of banding. Altogether, 20 rails banded in Virginia, were recovered in southern Atlantic States, including 9 in South Carolina, 5 in Georgia, 4 in northeastern Florida and 2 in southeastern North Carolina; in addition 2 banded in New Jersey were recovered in Georgia. These records indicate that the coastal strip of the southern Atlantic States is a very important wintering ground of the Northern Clapper Rail. Several records, including one banded at Chincoteague on August 26, 1950 and recovered in northeastern Florida on September 24, 1950, show that some rails travel rapidly from breeding to wintering areas. Fall migration begins during late August and early September. There is considerable yearly turn-over in breeding populations, since out of 198 rails banded in 1950, only one was recaptured in the same trapping area in 1951.

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