

Pre-nesting activity of the Purple Gallinule near Savannah, Georgia.—Observations on the pre-nesting activity of the Purple Gallinule (*Porphyrula martinica*) were made by me at the Savannah National Wildlife Refuge, Jasper County, South Carolina from 9 to 16 April 1960, 12 to 23 April 1961, and 28 to 30 April 1963. Jasper County is in extreme southeastern South Carolina. The Refuge headquarters is approximately 10 miles (16 km) up the Savannah River from the port of Savannah, and about 20 miles from the ocean.

Apparently Purple Gallinules were more abundant in the South Carolina and Georgia low country during the days of domestic rice (*Oryza sativa*) growing than at present. Rice was grown along the tidal rivers near the coast from colonial times until about 1911. A. T. Wayne (*Birds of South Carolina*, Charleston, Charleston Museum, 1910. See p. 40.) referred to Purple Gallinules as "locally abundant during the breeding season on abandoned rice plantations and also on freshwater rivers where the Wampee (*Pontederia cordata*) grows in profusion."

The Savannah National Wildlife Refuge is one of the most important concentration areas of the Purple Gallinule on the south Atlantic coast north of Florida. E. O. Mellinger, Assistant Manager of the Refuge, estimates the usual breeding population at 500 pairs, and in years when rice is grown there the population is doubled (pers. comm., 19 April 1961).

Purple Gallinules begin to arrive in the Savannah area in the first half of April. In 1960, two were noted on 9 April. The arrival and buildup of Purple Gallinule populations in 1961 was recorded daily along a four-mile route as follows: 4 (1 pair), 12 April; 7 (2 pairs), 13 April; 13 (5 pairs), 16 April; and 24 (7 pairs), 19 April.

Observations were made from a dike overlooking patches of alligatorweed (*Alternanthera philoxeroides*) and white waterlilies (*Nymphaea odorata*) in a canal where the gallinules spent much time. Alligatorweed forms a thick, spongy mat upon which Purple Gallinules can conveniently move about, find an abundance and variety of food, and readily disappear when necessary in the foot-high vegetation. Occasional patches of giant cutgrass (*Zizaniopsis miliacea*) distributed through the alligatorweed mats provide additional cover.

The availability of food was probably the principal factor in the utilization of the alligatorweed mats and lily pads. Tadpoles (*Rana* sp.), aquatic insects, and flowers of the giant cutgrass were foods observed to be most frequently taken by Purple Gallinules during this period. Such unusual food items as sporophylls of the royal fern (*Osmunda regalis*) and flowers of a white waterlily were consumed. Also, on one occasion a Purple Gallinule was seen to fly up into a mulberry (*Morus* sp.) tree where it fed on the ripe fruit for several minutes.

Pairing begins shortly after arrival on the breeding grounds, often within a day or two, and some pairing even may occur en route. Courtship and feeding territories (the same) on the alligatorweed mats and lily pads are vigorously defended against other species. One territory along an alligatorweed-choked canal measured 200 feet (61 meters) in length by 30 feet (9 meters) in width.

Paired birds feed separately, moving back and forth along alligatorweed mats or lily pads within the territory, maintaining contact by calling. The call of one sex could be described as a fairly rapid *kuk-kuk-kuk-kuk-kuk-*, or *cut-cut-cut-cut-cut-*; that of the other as a somewhat similar, but higher pitched *keek-keek-keek-keek-keek-* and *kek-kek-kek-kek-kek-*. It was not determined which sex gave the higher or lower pitched call, as copulation was not observed; nor was it possible under the circumstances to obtain a calling bird.

Courtship posturing occurs while the gallinules are standing, rather than while

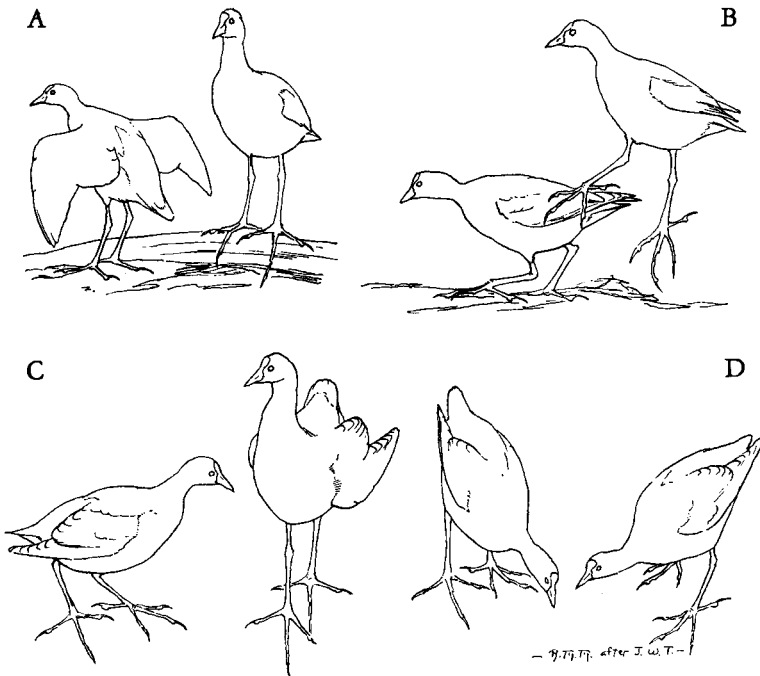


Figure 1. Courtship posturing of the Purple Gallinule. See text for explanation.

swimming as in the coot (*Fulica americana*). The white under tail coverts are usually prominently displayed by one or both sexes. Posturing nearly always occurs when the birds of a pair, that have separated in the course of feeding, wander close to one another. The principal display, performed by either sex, occasionally by both at the same time, consists of a bird standing in a slightly bent forward position, with neck outstretched, and with wings held at near right angles to the body and bent at the wrist, so that the primaries are pointed downward. In this position one or both birds slowly sway from side to side, lifting first one foot and then the other (see Figure 1A). Occasionally both sexes perform this display simultaneously and back to back, a foot or two apart. However, usually only one of the pair performs the display while the other stands to the rear for a few seconds, and then walks onto the back of the displaying bird in a manner simulating copulation (see Figure 1B). Following this performance one or both birds, with half-lowered wings, strut and cut across the path of the other much in the manner of a barnyard rooster (see Figure 1C). The swaying display is usually performed with the birds 10 or fewer feet apart, but in two examples seen the birds were separated by 30 and 40 feet. Sometimes one or both birds of a pair will make a deep bow as they approach one another instead of going through the above-mentioned ritual (see Figure 1D).

Nest building by the earliest-nesting birds begins in two to three weeks after arrival at the Savannah National Wildlife Refuge. A completed nest was found on 28 April 1963; and a nest with eggs was found by Walter Erichsen near Savannah on

4 May 1929 (T. D. Burleigh, *Birds of Georgia*, Norman, Univ. of Oklahoma Press, 1958. See p. 224.).

I am grateful to Mr. John W. Taylor for preliminary sketches of Purple Gallinule displays.—BROOKE MEANLEY, *Patuxent Wildlife Research Center, Laurel, Maryland*.

An early record of the Cattle Egret in Colombia.—The capture of a Cattle Egret (*Bubulcus ibis ibis*) near Buxton, British Guiana, on 27 May 1937, by Emmet R. Blake (*Auk*, 56: 470-471, 1939) initiated a flow of reports that have recorded the steady spread of this heron of the Old World throughout the Americas. Bond (*Second supplement to the Check-list of birds of the West Indies*, Acad. Nat. Sci. Philadelphia, 1957; p. 3) has published notes received from Mr. Vincent Roth, Curator of the British Guiana Museum, which indicate that the bird had become established there long before, since Sir Everard im Thurn had observed it between 1877 and 1882 on the Courentijne River, and A. W. B. Long of Georgetown had found it in 1911-1912 on the Essequibo coast. To these early reports there may be added one from northern Colombia that has not been brought to the attention of ornithologists.

During the latter half of World War I, R. B. Cunninghame Graham made a survey of the cattle industry in the Department of Bolívar, Colombia (partly in the western section now separated as the Department of Córdoba), on behalf of British interests that had under consideration the establishment of a meat-packing plant. In an interesting narrative of the travel concerned with this mission, Graham (*Cartagena and the banks of the Simú*, London, 1920; p. 239) includes the following observation made during a journey on horseback along the lower Río San Jorge, en route from the small settlement of San Benito to the town of Jégua above Magangué:

"Sometimes the road ran on a narrow causeway between deep swamps where alligators basked in the sun. As we rode by they swam off sluggishly. At other times the trail passed shallower swamps on which fed cattle, standing up to their hocks in water and in mud.

"White ibises sat on the cattle's backs, swaying to keep their balance, as a sailor sways upon a deck. Others stood at the water's edge so motionless and sacramental-looking that one saw at a glance why the Egyptians worshipped them."

Anyone who has seen cattle feeding in the tropical swamps and ciénagas of northern South America will be certain that the "white ibises" were in truth Cattle Egrets, and that Graham, in graphic prose, has recorded an occurrence in the lower Río Magdalena drainage of Colombia much earlier than the recent reports of the writer (Wetmore, *Smiths. Misc. Colls.*, 117: 1, 1951) and de Schauensee (*Caldasia*, 5: 1144, 1952) that were thought to be the first for this country.

Graham in his account does not give a definite chronology, but from some of his statements it is possible to establish an approximate date. He indicates in several places that the war was in progress, though the country people did not seem unduly curious regarding it. And in a casual outline of the types of conversation held with his hosts at various haciendas he includes as one item (p. 209) "how Don Marcos Fidel Suarez' chances were looking for the approaching presidential election," and adds in a footnote "This gentleman eventually became president." Colombian friends inform me that Don Marcos Fidel Suarez was president from 1918 to 1922, and that his campaign for election would have begun about two years previous to its successful conclusion. This would place the date of observation of the Cattle Egrets in 1916 or 1917.—ALEXANDER WETMORE, *Research Associate, Smithsonian Institution, Washington 25, D. C.*