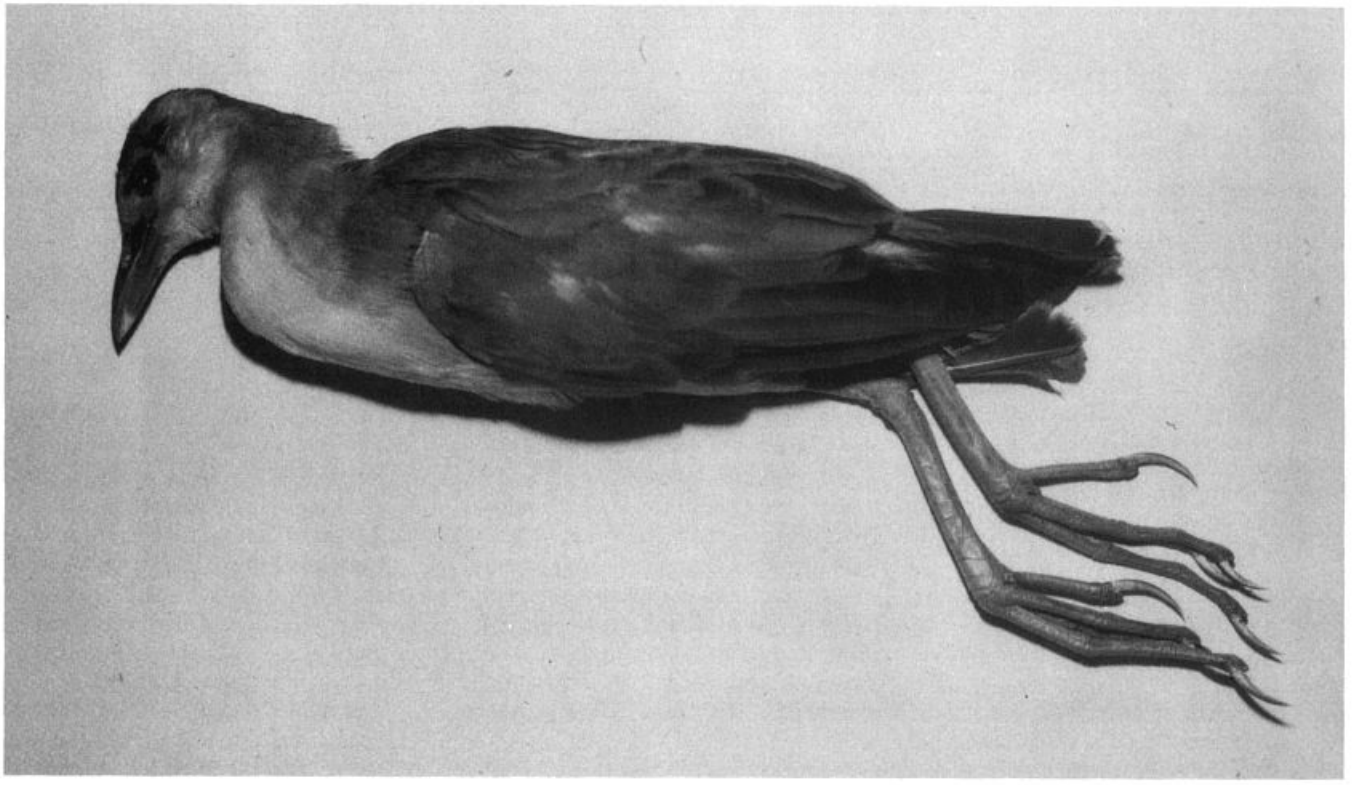
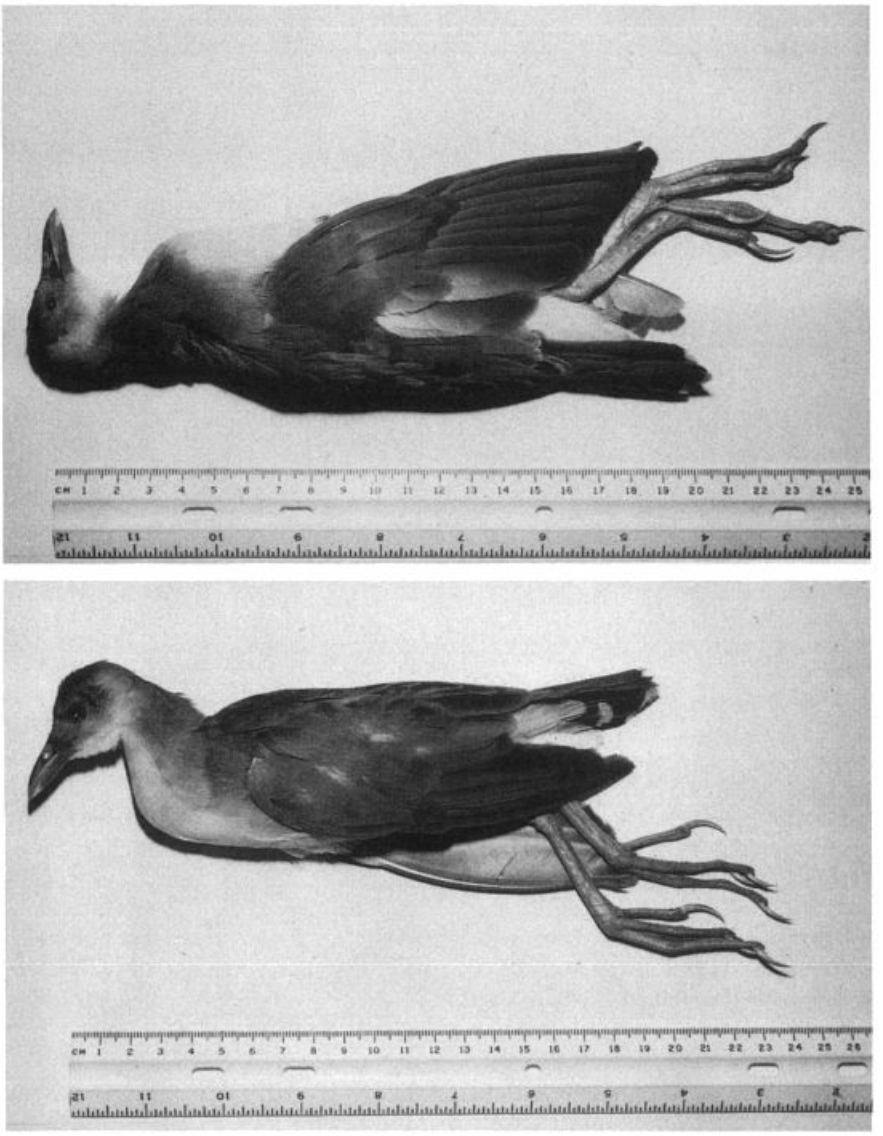
First Azure Gallinule for North America

Barbara Spencer and William Kolodnicki

ON DECEMBER 14, 1986, ANGELA Wright discovered a dead gallinule in the backyard of her home in Fort Salonga, Suffolk County, New York. She took it to the Theodore Roosevelt Sanctuary, Oyster Bay, New York, where it was initially identified as an immature Purple Gallinule (*Poryphyrula martinica*) and placed in a freezer for later preparation as a study specimen. On January 12, 1987, Barbara Spencer, who had previously had experience with Azure Gallinule (*Poryphyrula flavirostris*) in Ecuador, and William Kolodnicki, Director of the Sanctuary, identified the specimen as an adult Azure Gallinule. The specimen was photographed and color was noted using Smithe's color guide as a reference. The following measurements were recorded:



Photo/Barbara Spencer



Photos/Barbara Spencer

Wing Chord: 132 mm
Tail: 68.9 mm
Bill: 31.9 mm (includes shield)
Tarsus: 42.1 mm
Weight: 68.5 gms (weight when received)
Overall Length: 25.5 cm (9.75–10 inches) (bird on its back)

Study of measurements of Azure and Purple gallinules provided in Ripley (1977) shows that the present specimen falls within the range for *P. flavirostris* except for weight, which was only 75% of the lower limit. The measurements provided in Ripley are as follows:

Color: it should be noted that the blue-greens of the plumage vary with the angle of the light and are difficult to match to a standard; at a distance, the bird appeared quite gray, with white underparts.

Bill and shield: overall, these parts had a yellow-olive appearance; tip of the lower mandible, above the nostrils, and the middle of the edges of both mandibles were sulphur yellow; rest of lower mandible and base of upper was closest to parrot green, with some dusky areas in front of the nostrils. The shield was a mix of straw yellow, sulphur yellow, and parrot green. It is uncertain if freezing affected bill color. At the American Museum of Natural History, several freezings and thawings later, the bill was plain yellow. Presumably the fluids had drained from the bill.

Legs and feet: basically yellow ochre in appearance, slightly more orange at the joints and toes.

Skin around eye: yellow ochre, similar to the legs.

Iris brown

Lesser wing coverts: varied with light, generally turquoise green cast. The color extended onto outer web of primaries and secondaries; inner web dusky; secondaries paler gray and the blue obscure.

Sides of breast: bluish, similar to coverts.

Flanks: tinged light grayish blue.

Cheeks: pale grayish blue.

Sides of neck: bluish.

Throat, front of neck, center of breast: white.

Wing linings: white; veins in underside of primaries white (dark on upper side); primaries grayish.

Tertials and mantle: feathers dusky, edged greenish; upper mangle more olive green than dusky.

Tail: dusky (blackish); narrow white tips on each feather; upper tail coverts blackish, edged white; under tail coverts white.

Back: dusky (blackish).

Belly and lower breast: white.

The plumage was in excellent condition with little or no signs of wear. The specimen was not visibly damaged or disarrayed and was quite fresh when it was picked up. On February 18, 1987, Spencer and Kolodnicki delivered the specimen to the American Museum of Natural History, where it was received by Robert Dickerman. Comparison with skins in the museum collection confirmed the identification as *P. flavirostris,* the first specimen for North America. When the skin was prepared, several small punctures were noted in the breast, lending some support to the notion that the acquisition of the specimen was cat-assisted. Although the bird was light in weight, it was not totally emaciated. It should be noted that the yard where the bird was found is adjacent to marshland on the north shore of Long Island.

The major difference between the adult *P. flavirostris* and an immature *P. martinica* is the complete lack of buffy coloration on the neck and breast of *P. flavirostris.* Immature *P. martinica* would show a bluish frontal shield contrasting with a darker bill. *P. martinica* is clearly removed from consideration because of its larger size and buffy coloration in immature plumage.

The Lesser Gallinule (*P. alleni*), an African species intermediate in size between *P. flavirostris* and *P. martinica,* and a known wanderer, has a red-tinged

	Azure Gallinule *P flavirostris*		Purple Gallinule *P martinica*	
	males	females	males	females
Wing	126–139 mm	125–139 mm	168–192 mm	161–184 mm
Tail	67 mm		60–82 mm	60–78 mm
Bill	34 mm		45–52 mm	41–50 mm
Tarsus	45 mm		45–52 mm	52–65 mm
Weight	92–111 gms	92–107 gms	203–269 gms	213–291 gms

With the exception of the tail measurement there is no overlap between the two species.

bill as an immature, and ochre-brown to pale red-brown legs. There are no other species of gallinule that might be confused with *P. flavirostris.*

DISCUSSION

While identification of this species is certain, the means of its arrival on the north shore of Long Island, New York, cannot be determined beyond doubt. A check with the International Species Inventory System (ISIS) list of birds in captivity showed that *P. flavirostris* has never been kept in captivity (Amos *pers. comm.*). A detailed computerized list of rails, which is maintained at the San Diego Zoo, supported this statement (Muller *pers. comm.*). A check with several local collections showed no Azure Gallinules, past, present or missing. Taken together with the good condition of the plumage, this information seems to rule out the possibility that the bird escaped from captivity.

Rallidae as a group, including gallinules, are known as long distance wanderers. While perceived as "poor fliers" they are capable of flights of great distance over water. Lesser Gallinule has been found as far north as Britain, and to Ascension Island and St. Helena in the South Atlantic up to 1900 kilometers from the nearest point of Africa (Ripley). Cramp *et al.* note that movements to Europe fit with seasonal moves following retraction of wetlands in Africa and shortly after spells of anticyclonic conditions with southerly winds from West Africa. Concerning *P. martinica,* Cramp *et al.* mention that the species is accidental in the Azores, Britain, Norway, and Switzerland and that migrants make direct passage over the full width of the Gulf of Mexico. The southernmost birds move into the tropics for the austral winter. Such migrants meeting a cyclonic storm are especially prone to being blown beyond range. They go on to mention that low pressure systems moving up the east coast regularly carry *P. martinica* to Bermuda and the northeastern part of North America. Indeed, records show such vagrants, both adult and immature, on Long Island, New York, during the fall of 1986. There seems to be no reason to assume that the bird under discussion actually arrived in December. It could have been present in the marsh since summer, or September, and only forced into the open by increasingly adverse weather conditions or lack of food in December.

Little seems to be known of the movements of Azure Gallinules. They are described as inhabiting "disjunct areas east of the Andes, where they frequent rice fields and fresh water swamps with deep water and a thick vegetation of grass . . . food consists mostly of grass seeds, insects and spiders" (Ripley). It is "spottily distributed" north of the Amazon and widespread south of it to Paraguay and extreme northern Argentina (Meyer de Schauensee). Reports of migrants March to May on the Sabana de Bogata noted by Hilty and Brown suggest that seasonal movements take place. Other species of austral migrants have been found in New England in recent years, so it seems at least plausible that an individual *P. flavirostris* could be caught in a tropical disturbance and carried out to sea with the northward movement of the weather system. Ship-assisted passage cannot be ruled out, and tankers are known to enter Long Island Sound following voyages from the Caribbean. Perhaps this is the most parsimonious explanation for the appearance of *P. flavirostris* on Long Island. If true, the species joins several other additions to the North American avifauna that are under suspicion of arriving in the same or similar manner.

REFERENCES

AMOS, Stephen. 1987. National Aquarium in Baltimore, Maryland.

CRAMP, Stanley *et al.* 1985. *Handbook of the Birds of Europe and the Middle East and North Africa Vol. II.* Oxford University Press, New York.

HILTY, Steven L., and William L. BROWN 1986. *A Guide to the Birds of Colombia* Princeton University Press, Princeton, N.J.

MEYER de SCHAUENSEE, Rudolf. 1970 *A Guide to the Birds of South America* Academy of Natural Sciences, Philadelphia, Wynnewood, Pa.

RIPLEY, Dillon S. 1977. *Rails of the World* D.E. Godine, Boston.

SMITHE, Frank B. 1975. *Naturalist's Color Guide.* American Museum of Natural History, New York.

——154 Dayton St., Sea Cliff, N.Y 11579 (Spencer); *Theodore Roosevelt Sanctuary, Oyster Bay, N.Y. 11771* (Kolodnicki)