Common Grackle in Utah.—On the morning of March 21, 1957, I collected a large icterid, later identified by Dr. C. Lynn Hayward as a Common Grackle (*Quiscalus quiscula versicolor*). It was collected from the higher branches of an apple tree on a farm located at 2470 West Street in West Provo, Utah County, Utah. This was the only grackle seen in the area. Other species observed in the immediate vicinity included the Brewer Blackbird.

According to William H. Behle, this appears to be the first record of this grackle in Utah confirmed by a specimen. The skin was deposited in the museum collection at Brigham Young University, Provo, Utah.—GEORGE M. TALLEY, *Zoology and Entomology Department, Brigham Young University, Provo, Utah, May 15, 1957.*

Cattle Egret in Costa Rica.—On December 3, 1954, and for three days thereafter, I observed a group of twelve Cattle Egrets (*Bubulcus ibis*) at Palo Verde, a cattle ranch located in the lower Tempisque Valley in the province of Guanacaste, Costa Rica. This is the first record for Costa Rica and apparently the first report of the species in Central America north of Panamá.

The birds had established temporary residence close to the hacienda's ranch house situated some 75 yards from the muddy edge of some deeply flooded fields. The cowboys, struck by the association between these little herons and cattle, claimed to have become aware of the birds only a short time before. It would seem, therefore, that the egrets had arrived at about the close of the rainy season. They were in their pure white winter plumage. The bill looked entirely yellow in some individuals but was orange-yellow in others; the legs were dusky (neither obviously blackish nor greenish).

Even aside from color characters the birds were distinctive. The bill, and also the neck, were relatively shorter than in similar species such as the Snowy Egret (*Leucophoyx thula*) and the Little Blue Heron (*Florida caerulea*). The feathering of the chin seemed to extend well toward the tip of the underside of the bill, giving the birds a puffy throated, almost goitrous, look which the Snowy and Little Blue lack. Perched, they always kept the neck drawn down into the hunched back; never was the neck held curved or even partially arched. Afoot, from a forwardly inclined stance, they would occasionally stretch out the neck horizontal to the ground, and they then exhibited peculiar, goose-like weaving motions. In flight, the wings were beaten more rapidly than in the other small herons, and the general appearance in the air was more gull-like than heron-like. Except when spreading out to feed, the birds kept together as a unit when at rest or in flight. They settled on trees or, more often, rested individually upon a row of half-drowned fence posts. As regards voice, during the several days on which they were observed the birds uttered rarely only a low *kruk* which was quite different from the lengthened, guttural croaks of other small herons.

When feeding, the Cattle Egrets alighted beside livestock. Indiscriminately they transferred their attentions from cattle to horses and pigs, and also from certain individuals to others. They attended the animals favored at the moment in the ratio of either one bird to one beast or of several to one. With the neck extended, they looked up in an inquiring manner at the grazing horses and cattle, or down at a mired pig. The egrets might move up close in order to pluck a parasite from an animal's hide, or seize an insect stirred up in the grass. The livestock appeared oblivious to the birds' existence. When the host beasts moved onward, the birds hurried after them with an odd neck-flopping. Whereas other small herons regularly retract the neck or bob the head at each step, the Cattle Egrets extended the neck like a goose, a few steps being required for the body to catch up with the head. Among the species known to me this gait most resembled that of a Sun-Bittern (*Eurypyga helias*). From time to time a Little Blue Heron would join the Cattle Egrets, not to follow the cows but, possibly, out of curiosity or perhaps for company's sake. The egrets disregarded the visitor, which would fly away after a short time.—PAUL SLUD, *University of Michigan Museum of Zoology, Ann Arbor, Michigan, May 2, 1957.*

Black Swan in Kelp off Southern California.—About midday on May 24, Earle G. Cunnison and I flushed an adult Black Swan (*Chenopis atrata*) as we approached the kelp bed off Torrey Pines, San Diego, California. At the time we were in a small boat about 300 yards off shore. The swan rose about 75 yards ahead of us, flew westward, then circled southward, remaining over the sea at a height of less than 50 yards. Grinnell and Miller (Pac. Coast Avif. No. 27, 1944:559) reported that the Black

Swan is "sometimes seen out of captivity on lowland bodies of water in company of wild waterfowl." The bird we saw was alone.

In its native Australia the Black Swan is most abundant in fresh water, but at times it is common on salt water, particularly in lagoons and on tidal flats. It generally avoids open, rough water, moving as the wind changes to feed in the lee of a bank or point (Mathews, The Birds of Australia, 4, pt. 1, 1914–1915:12–22, pl. 200). The habitat where the bird reported here was observed therefore seems unusual. Inquiry at the San Diego Zoological Garden and from a local bird fancier who keeps Black Swans has failed to indicate that any birds of this species have been lost recently.—JAMES R. STEWART, *Scripps Institution of Oceanography, University of California, La Jolla, California, June 13, 1957.*

Pigeon Wing-beats Synchronized with Breathing.—Moving pictures of a pigeon (*Columba livia*) in flight reveals that it inhales on the upstroke of the wings and exhales on the downstroke. The analysis of breathing was aided by fastening a rubber balloon over the bill and external nares of the bird, leaving a small area at the rear of the mouth uncovered for an air passage. As the bird breathed, the balloon collapsed and expanded. The balloon was left in place for over an hour, and the bird showed no signs of distress. The bird was an adult homing pigeon flying free except for a long light line secured to a light harness which did not apparently interfere with normal flight. The tether kept the pigeon within range of a 16mm. camera. Thirteen complete wing-beat cycles at 48 frames per second were carefully analyzed with the results stated above, and six more cycles at 32 frames per second agreed with these results, although they were not as complete. The pigeon was photographed in short flights of about 30 feet. The method works very well and should be adaptable to other types of birds under different conditions.

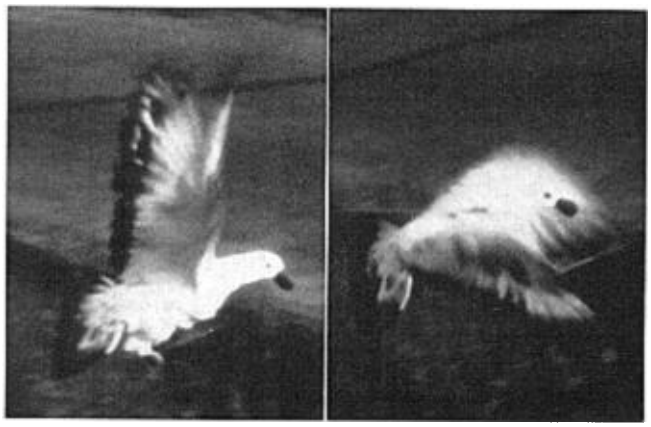

Fig. 1. Flying pigeon with balloon on bill. Left, upstroke, showing collapsed balloon. Right, start of upstroke with balloon inflated.

The figure shows on the left a pigeon near the end of an upstroke with the balloon collapsed and, on the right, the start of an upstroke with the balloon still expanded from the preceding downstroke. The inhalation begins at this position. These illustrations are copied from 16mm. Kodachrome film. A red balloon was used. The collapsed state of the balloon could be readily detected on the film by shadows along the sides of the open mouth. Unfortunately these shadows do not show in these reproductions. It is suggested that white or yellow balloons be used for better photographic recording in future tests.—JACK T. TOMLINSON, *San Francisco State College, California,* and ROBERT S. MCKINNON, *Oakland Junior College, Oakland, California, July 1, 1957.*

A Western Representative of the Rufous-sided Towhee Collected in New Jersey.—On December 23, 1952, while on the Raritan Estuary Christmas Census, Mr. George L. Daniels and I were canvassing a swamp located near Metuchen, Middlesex County, New Jersey. In the process of counting the various birds present, my attention was drawn to an unusual towhee which hopped out