



FIG. 1

**Observation of Brant in southern Illinois.**—There have been numerous reports from hunters of shooting Brant (*Branta bernicla*) along both the Mississippi and Ohio Rivers in extreme southern Illinois, but no specimens or confirmed identifications have been obtained. Smith and Parmalee (1955. "Distributional Check-list of the Birds of Illinois," p. 14) note only one observation of the Brant, an immature captured at Lacon, Marshall County, 9 November 1921. Three Brant were observed at McGinnis Slough, Cook County by K. Bartel (1932. *Oologist*, 50:6). Two Brant were observed at Chicago in October 1947 (1948. *Audubon Field Notes*, 2:15) and a male, now in the Principia College collection, was shot by a hunter in Jersey County in 1964 (1965. *Audubon Field Notes*, 19:45). All of these reports are from the northern or central part of the state.

On 19 December 1963, I observed a single Brant feeding with several thousand Canada Geese (*Branta canadensis*) in a pasture on the Crab Orchard National Wildlife Refuge, Williamson County. The Brant was observed for about 15 minutes at a distance of about 30 yards. On 31 December the bird was seen by Mr. James R. Rice, wildlife aid at the refuge, in the morning and during the afternoon I photographed the bird using a 300 mm lens (Fig. 1). The bird was not seen thereafter. —ROBERT A. MONTGOMERY, Box 95, Vienna, Illinois, 27 May 1966.

**Sedatives interfere with walking more than flying.**—Birds apparently find that flying takes less finesse than walking. Under the influence of chloral hydrate, a principal component of the barman's "Mickey Finn" or knockout drops, Western Gulls (*Larus occidentalis*) and White-crowned Sparrows (*Zonotrichia leucophrys nuttalli*) immediately lose much or all of their ability to walk and stand, yet can be urged into flying very effectively for short distances. Ethyl alcohol has a similar effect on the sparrow.

Several years ago I was working on a study on the breathing of birds in flight and needed a large bird. I felt that a gull could be easily captured by putting a sedative in a sardine, rather than erecting complex and heavy nets. About a half teaspoon of chloral hydrate was put in a sardine and thrown to a gull. The bird swallowed it very quickly, regurgitated it, and took a drink of sea water. The drug took effect very quickly: the gull rocked back on its tail feathers and flopped over on its side. When approached, the gull, which immediately took off in company with a number of other gulls, flew several hundred yards as well as any of the other birds! Upon landing, it immediately collapsed and flopped around on the ground.

Two problems were then considered: 1) is this sensitivity restricted to the Western Gull, and 2) is the sensitivity limited to the effect of chloral hydrate; or is it the general effect of sedatives on birds?

White-crowned Sparrows were trapped on the campus of San Francisco State College and hand-fed with very small crystals of chloral hydrate. The sparrow would tend to squat on its legs, rather than flop over, and refused to hop. After some urging it could fly handily, however.

To test the specificity of the sedatives, ethyl alcohol was also tried. The sparrows were strongly sedated with 0.2 ml of ethyl alcohol, and again they could fly but would not hop. During the recovery from light anesthetization with ether or chloroform similar results were observed.

In both species, recovery was complete.

In addition to the sedatives mentioned, additional drugs with sedative action were tried: potassium bromide and meprobamate ("Miltown"). Crystals were hand-fed to the sparrows. In both of these cases the birds appeared uniformly affected. They refused to hop or to fly.

Lorenz (1956. In "l'Instinct dans le comportement des animaux et de l'Homme," page 260, Masson & Co., Paris), mentions the work of von Holst who found that decerebrated pigeons or those with labyrinth disturbances could fly and not walk.

This work was initiated under grant RG-8623 of the National Institutes of Health, U.S. Public Health Service.—JACK T. TOMLINSON, *Biology Department, San Francisco State College, San Francisco, California, 11 March 1966.*

**Breeding behavior of a uniquely marked Starling.**—The escape of an adult male Starling (*Sturnus vulgaris*), instrumented for telemetering physiological parameters, provided an opportunity to observe the breeding behavior of a uniquely marked bird. This bird had been equipped in October 1964 at the Wildlife Research Center, Denver, Colorado with two electroencephalogram sensors, two electrocardiogram sensors, a respiration transducer, and a temperature transducer (Thompson, 1964. *Proc. 2nd Natl. Biomed. Sci. Instrum. Symp.* 2:123-130). The bird was marked by white masking tape on its back, which served to protect a cannon plug and the exterior wires from the internal sensors and transducers, and also by an elevated white "cap" of dental cement on its head, protecting the two electroencephalogram sensors (Fig. 1).

The Starling escaped 15 March 1965 and was first sighted 2 April feeding on a lawn one-quarter mile away. Identification was made by the "cap" on its head and tape on its back. The bird was observed courting a female in the same area 16 April, and was observed regularly until 6 May to determine any effects of surgery, color marking, and laboratory confinement. Motion pictures were taken of the feeding and nesting activities of the two birds. During this period the male copulated with his mate and, on one