approximately 35 dollars. The integrator can conceivably be made smaller by using commercially available micro-modular circuitry and may be suitable for studies for many species.

This instrument has been tested experimentally in the laboratory and on several captive Laysan Albatrosses. We have not, however, had the opportunity to make any actual measurements on free-flying birds. Any investigator having the opportunity to use this integrator is invited to apply to us for a chance to test this instrument. For more complete information on the details of circuitry and assembly, please write to the authors or refer to the technical note by Dorman, Rowley, and Birkebak (*A flight-time integrator for birds,* Heat Combustion Laboratory, Dept. of Mech. Eng., Univ. of Minnesota, Minneapolis).

We should like to thank William Rowley for his technical assistance in constructing and modifying the flight-time integrator. P. L. Blackshear and D. W. Warner are acknowledged for their cooperation on this project. This research was conducted at the Minnesota Museum of Natural History, University of Minnesota, and was supported by NIH Training Grant 5 T1 A1 188, NIH Research Grant GM-07345, and a grant from the Louis W. and Maud Hill Family Foundation, St. Paul.—EUGENE A. LEFEBVRE, *Department of Zoology, Southern Illinois University, Carbondale, Illinois;* RICHARD C. BIRKEBAK, *Department of Mechanical Engineering, University of Kentucky, Lexington, Kentucky;* and FRANK D. DORMAN, *Department of Mechanical Engineering, University of Minnesota, Minneapolis, Minnesota.*

Another record of active molt in passerine birds.—G. E. Watson (*Auk*, 80: 486–495, 1963) summarized the existing records of the occurrence of active molt in birds. However, his records for the Passeriformes included only two families, Corvidae and Fringillidae. While examining a specimen of the Slaty Vireo (*Neochloe brevipennis*), of the Vireonidae, I found several juvenal feathers from the interscapular region that had the broken-off caps of the keratinized feather sheath of the new first winter plumage attached to the base of the calamus of the old feathers. (See Figure 1C, p. 488, in Watson's article for a photograph of a similar situation in the Ruddy Sheld-Duck.)—LARRY L. WOLF, *Museum of Vertebrate Zoology, University of California, Berkeley, California.*

Organisms consumed by various migrating shorebirds.—In view of the scanty literature concerning genera and species of food organisms of migrating birds, the data in Table 1 may be of some value. These data were gathered in conjunction with a study done in 1960 and 1961 for a Master's thesis at the University of Illinois.

Members of the following 10 species of shorebirds were collected, and the stomach contents analyzed: American Golden Plover (GP in Table 1), *Pluvialis dominica*, 1 specimen; Common Snipe (CS), *Capella gallinago*, 6; Greater Yellowlegs (GY), *Totanus melanoleucus*, 3; Lesser Yellowlegs (LY), *Totanus flavipes*, 9; Pectoral Sandpiper (PS), *Erolia melanotos*, 7; Least Sandpiper (LS), *Erolia minutilla*, 4; Dunlin (D), *Erolia alpina*, 2; Stilt Sandpiper (STS), *Micropalama himantopus*, 2; Semipalmated Sandpiper (SS), *Ereunetes pusillus*, 2; Wilson's Phalarope (WP), *Steganopus tricolor*, 1. All were collected at a shallow, mud-bottom pond near Champaign, Illinois, except the plover, which was taken in a field near Fisher, Illinois. This plover and one snipe were taken in spring, all others during the autumn migration.

TABLE 1

ORGANISMS CONSUMED BY VARIOUS SHOREBIRDS

Family	*Organism*	*Shorebird*[1]									
		GP	*CS*	*GY*	*LY*	*PS*	*LS*	*D*	*STS*	*SS*	*WP*
Lumbricidae (earthworms)	*Lumbricus* sp.			X							
Physidae (snails)	*Physa* sp.		X	X	X	X		X		X	
Baetidae (mayflies)	*Callibaetus fluctuans*, naiads				X						
Coenagrionidae (damselflies)	*Enallagma civile*, naiads				X						
Aeschnidae (dragonflies)	*Anax junius*, naiads			X							
Libellulidae (dragonflies)	*Epicordulia princeps*, naiads			X	X						
	Erythemis simplicicollis, naiads			X	X						
	Plathemis lydia, naiads			X	X						
Cicadellidae (leafhoppers)	*Draeculacephala* sp., adults							X			
Chironomidae (midge flies)	*Chironomus* sp., larvae, pupae, and adults				X	X	X		X		
Stratiomyidae (soldier flies)	*Odontomyia* sp., larvae		X	X	X	X	X	X			
Haliplidae (crawling water beetles)	*Peltodytes edentulus*, larvae		X			X	X				
Dytiscidae (predaceous diving beetles)	*Agabus disintegratus*, larvae and adults		X	X	X	X		X			
	Hygrotus (*nubilus*?), larvae and adults		X	X	X	X	X	X		X	
Hydrophilidae (water scavenger beetles)	*Berosus* sp., larvae and adults		X		X	X	X	X		X	
Nitidulidae (picnic beetles)	*Glischrochilus* sp., adults							X			
Curculionidae (weevils)	*Ceutorhynchus cyanipennis*, adults							X			
	Epicaerus imbricata, adults	X									
	Hypera nigrirostris, adults	X						X			
	Limnobaris sp., adults						X				
	Sitona hispidula, adults				X						
	Sitona cylindricollis, adults				X	X	X	X			
	Sitona spp., adults	X									X
Formicidae (ants)	*Tetramorium* sp., adults	X					X				X
Cyprinidae (minnows)	*Pimephales promelas*			X							

[1] See text for explanation of abbreviations. The presence of the food item in the stomach contents is indicated by an X.

The presence of certain of the curculionids (*Limnobaris* sp., *Sitona cylindricollis*, *S. hispidula*) is explained by the fact that their host plants grew near the water's edge, and the presence of the other terrestrial insects by the fact that many were trapped on the pond's surface and washed to shore. Dytiscids were represented mainly by adults (only one larva), chironomids mostly by larvae and some pupae (only one adult), and hydrophilids by about equal numbers of larvae and adults.

Not included here are those insects that could not be identified beyond order or family because they had been crushed or had essential parts missing.

I am indebted to S. Charles Kendeigh, my advisor during the study, to Leonora K. Gloyd, and to John M. Kingsolver, Milton W. Sanderson, and Philip W. Smith of the Illinois Natural History Survey for identification of food organisms, and to Richard R. Graber (also of the Illinois Natural History Survey) and John E. Williams for aid in collecting specimens.—WILLIAM S. BROOKS, *Department of Zoology, University of Illinois, Urbana, Illinois.* Present address: *Department of Biology, Ripon College, Ripon, Wisconsin.*

The incubation period of the Hawaiian stilt.—The incubation period of the Hawaiian stilt (*Himantopus h. knudseni*) appears not to have been recorded in scientific literature. On 3 May 1964, W. Michael Ord, Paul Breese, and I found a nest containing three eggs at the Kaneohe Marine Base on windward Oahu, Hawaii. A fourth egg was laid the following day. I checked this nest on several later dates, finding the first egg pipped (with a hole about one-fourth inch in diameter) at 0845 hours, 27 May. By 0800, 28 May, three of the young had hatched and their down had dried. Two of the downy young remained in the nest at my approach, but the third bird ran off about 18 inches and crouched at the base of a clump of salt grass. The head, neck, and most of the body of the fourth bird had already broken out of its shell, although the rear end of the bird was not completely free from a portion of the larger end of the egg shell.

If we reckon, after M. M. Nice (*Condor*, 56: 173, 1954), the incubation period to be the elapsed interval between the laying of the last egg in the clutch and the hatching of the last young, when all of the eggs hatch, the incubation period for this clutch of eggs was 24 days.

G. C. Munro (*Birds of Hawaii*, Rutland, Vermont, Bridgeway Press, 1960; see p. 60), citing an 1891 source, gives a clutch size of 8 to 12 eggs for the Hawaiian stilt. This appears certainly to be in error. Neither Ord, who has done much field work in Hawaii, nor I have ever seen an Hawaiian stilt nest with more than four eggs.—ANDREW J. BERGER, *Department of Zoology, University of Hawaii, Honolulu, Hawaii.*

The eggs and nesting ground of the Puna Plover.—During an excursion in the first week of January, 1965, to the Andean "Tolares" and salt lagoons of the Altiplano in northwestern Jujuy, Argentina, I found the Puna Plover (*Charadrius alticola*) on its breeding grounds. The species is found in cold, arid, plateau regions from Peru to Antofagasta, Chile, and in the high Andes of northwestern Argentina. The only breeding record seems to be the observation of a pair with one young at Salar del Huasco in the Cordillera of Tarapaca, Chile, although the species is also supposed to breed at Lago Cotacotani, at an altitude of about 15,750 feet in the Cordillera of Arica (J. B. Goodall, *Las aves de Chile*, vol. 2, 1951; p. 211).