County, on 12 June 1968 by Helen Strong. An immature female was collected (deposited in San Diego Natural History Museum) on Point Loma, San Diego County, on 3 October 1968 by Virginia Coughran.

Hooded Warbler. (Wilsonia citrina). During the spring period a singing male was seen in San Francisco, San Francisco County, between 4 and 6 May 1958 by Florence Plymell and others; a singing male was seen in Berkeley, Alameda County, on 27 May 1960 by Dr. Edwin Willis; and an adult male was banded and photographed (slide deposited in San Diego Natural History Museum) in Topanga Canyon, Los Angeles County, on 17 June 1962 by Don Bleitz.

During the fall I collected an immature male (deposited in San Diego Natural History Museum) on Southeast Farallon Island on 29 September 1968, and Cliff Lyons and I saw a female-plumaged bird at Deep Springs, Inyo County, on 25 August 1967. A male-plumaged bird was seen and photographed (photograph deposited in San Diego Natural History Museum) near Borrego Springs, San Diego County, between 24 and 28 November 1967 by myself and others, and a male-plumaged bird was banded and photographed (slide deposited in San Diego Natural History Museum) on Point Loma, San Diego County, on 26 October 1968 by Alan Craig.

Canada Warbler. (Wilsonia canadensis). The only spring record to date is one collected in the Panamint Mountains, Inyo County, on 13 June 1967 (Northern, Condor 70:391, 1968).

## NOTES ON THE LIFE HISTORY OF THE MOUSE-COLORED FLYCATCHER IN SURINAM

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The Mouse-colored Flycatcher (Phaeomyias murina) is one of the many small and dull-colored flycatchers in tropical South America. For a description of the bird, its habitat, food, nest, and eggs, I refer the reader to my recently published "Birds of Surinam' (Oliver and Boyd, Edinburgh, 1968).

It was common in my garden just outside Paramaribo, Surinam, where I found six nests with eggs; one on 31 January, five in April, and one with nestlings on 24 September.

Nest and nest building. The nest is a small open cup placed in a fork of two branches, usually below 4 m. It is made of fine grasses and green moss and is thickly lined with feathers (fig. 1). Apart from white chicken feathers, I found a few green ones, probably from the Green-rumped Parrotlet (Forpus passerinus) which was a regular guest in my garden. The nest is built by one bird only (probably the female), as I observed in two nestings in 1961 and 1965. When the building bird arrived at the nest, it was sometimes accompanied by its mate, which uttered its melodious call but never assisted in building.

On 3 April 1965 I observed a bird building in a small tree near one of my windows. The nest consisted then only of a few dead grasses. On 8 April the nest appeared to be finished, and the sitting bird was turning around in it, streaking with the underside of its lower mandible along the outer wall. On 10 April the bird sat steadily. In this case nest building lasted about eight days.

Egg laying. The two immaculate white eggs are laid on alternate days. My observations in two cases

During the fall period one was seen in Pacific Grove, Monterey County, on 17 and 18 October 1968 by Dr. Ronald Branson and Elgin Hurlbert: one was seen in Morro Bay State Park, San Luis Obispo County, on 21 November 1965 by Mr. and Mrs. Tom Hyland and others; one was seen near Santa Barbara, Santa Barbara County, on 11 October 1943 (Hutchinson, Audubon Mag. 46:80, 1944); one was seen at Point Dume, Los Angeles County, on 27 October 1961 by Virginia Coughran; two were seen at Barton Flats in the San Bernardino Mountains, San Bernardino County, on 5 October 1968 by Eugene Cardiff and others, and one of these, an immature female, was collected (deposited in San Bernardino County Museum) the following day by Cardiff; one was seen near La Jolla, San Diego County, between 24 and 30 September 1967, during which time it was banded and photographed (slide deposited in San Diego Natural History Museum) by myself and Alan Craig; and one was seen near Imperial Beach, San Diego County, on 29 October 1967 by myself and Alan Craig.

There have been only two previously published reports of the Connecticut Warbler and two published reports of the Canada Warbler for California; the other species are reported for the first time for California. I am indebted to all these people mentioned above for permitting the use of their records.

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FIGURE 1. Nest of Mouse-colored Flycatcher, Paramaribo, Surinam, 9 February 1960.

were as follows: one egg at noon of 31 January 1960 and at 06:45 on 2 February, but two eggs at 16:15 of 2 February; one egg at 15:50 on 28 April 1960 and at 17:00 on 29 April, but two eggs at 16:00 on 30 April.

Incubation. According to my observations (two in 1960 and one in 1965) incubation is by one bird only. My April 1965 observations of an incubating female were as follows: 17 April, 12:30-12:50, 15 min on the nest, 5 min off the nest; 17 April, 16:00-17:00, 31 min on, 29 min off; 19 April, 11:45-13:00, 58 min

TABLE 1. Summary of care of nestling Mouse-colored Flycatchers.

Date	Age of nestlings	Time observed	Times fed	Nestlings covered
19 May	5 days	13:25-14:25	11	13:35–14:04
20 May	6 days	14:25-15:25	16	14:25-14:32
				14:46-15:00
21 May	$7 \mathrm{\ days}$	15:00-16:00	20	15:03-15:20
				15:55-16:00
22 May	8 days	12:00-13:00	32	
24 May	10 days	14:20-15:20	13	
29 May	15 days	12:01-13:01	20	

on, 17 min off; 20 April, 11:30-12:45, 75 min on. The nest was fully exposed to the sun, and on 19 and 20 April the bird stood in the nest with drooping wings, panting with open bill, so that its orange-yellow gape was clearly visible. Sometimes the bird answered its calling mate.

In the case in which the second egg had been laid on 30 April, both eggs hatched on 14 May, an incubation period of 14 days.

Nestling period. The nestlings are fed by both parents and almost exclusively on insects, only one at a time. My observations of a nest in which the eggs hatched on 14 May 1961 are shown in table 1. The

## PEREGRINE FALCON OBSERVED FEEDING FAR AT SEA

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A falcon approached and landed on the forward mast of the Bureau of Commercial Fisheries RV George B. Kelez while the vessel was stopped for gillnet fishing south of Umnak Island in the Aleutians (24 April 1968, 48°30'N, 168°40'W) about 418 km from the nearest land. On the preceding two days the ship had encountered strong southwest and westerly winds as high as 70 knots, which had lessened to about 15–20 knots on the day of the bird's appearance. Although its feathers were ruffled and the margin of the tail was frayed, the bird seemed to be in good condition. It left the Kelez during the late afternoon of 26 April as the ship passed near a large Japanese freighter.

The bird was identified as a mature Peregrine Falcon, Falco peregrinus (Peterson 1961). This identification was confirmed by Drs. Gordon Orians, Dennis Paulson, and Edwin Willis of the Department of Zoology, University of Washington. From a color film taken of the bird (by Richard Bakkala, Bur. Comm. Fish., Biol. Lab., Seattle, Washington) they thought it was probably the migratory subspecies, F. p. anatum, and not the coastal subspecies, F. p. pealei.

About 19:00 on 24 April the falcon, which had moved from the forward mast to the main mast (a height of 18 m above the water), took off, climbed to about 36 m, and dove on a storm petrel (Oceanodroma) in a flock flying just above the waves. It was impossible to identify the prey, but both Fork-tailed

quick feeding rate on 21, 22, and 29 May I attribute to the fact that both parents snapped insects from branches immediately below the nest in flight in the same way as the tody flycatchers (*Todirostrum*) feed (Haverschmidt, Auk 72:325, 1955).

The excrements of the nestlings were taken away by both parents and on 21 May I saw one bird "nest probing" after having fed. Then it covered the nestlings. The nestlings were no longer covered after they were eight days old. On 31 May (when they were 17 days old) both nestlings left the nest and I lost sight of them.

The main food of *Phaeomyias* in my garden were the orange berries of *Phthirusa pirifolia* (Loranthaceae). Sometimes a bird with a berry in its bill alighted on the nest rim but swallowed it, and only twice, when they were eight and ten days old, did I see that a berry was fed to the nestlings.

Nest defense. Both birds were very aggressive towards other birds that ventured near the nest. I saw them chasing away (by divebombing) Bananaquits (Coereba flaveola), House Wrens (Troglodytes aedon), Barred Antshrikes (Thamnophilus doliatus), Blue-gray Tanagers (Thraupis episcopus), Silverbeaked Tanagers (Ramphocelus carbo), and even the much larger Smooth-billed Ani (Crotophaga ani), which I suspect as a potential nest robber.

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Petrels (O. furcata) and Leach's Petrels (O. leucorhoa) were seen near the ship. The falcon returned with the petrel clutched in its talons, resumed its perch on the yardarm, and devoured the catch. The next day the peregrine was observed capturing four more petrels. Its technique was to spot the flock or individual prey before leaving the ship, climb to gain altitude and position, and then dive at its prey. If it missed, which occasionally happened, it regained altitude and struck again. The actual kill was difficult to observe because of the distance and waves, but on two occasions the falcon was wet when it returned to the ship. Pearson's (1936:88) description of the attack of F. p. anatum on sea birds was similar to our observations. Petrels are included among the numerous sea birds that Bent (1938) and Bond (1946) reported as peregrine prey.

The Peregrine Falcon is known to be a powerful flyer and capable of long migrations (probably even long over-water flights). Hickey (1969) remarked that there were many records of peregrines boarding ships at sea. The most extraordinary of these was that reported by Voous (1961), in which a falcon, presumed to be a peregrine, boarded a Dutch factory ship 1300 km from Africa and departed two days later, still more than 1100 km from South America. This falcon devoured at least four storm petrels while aboard. Petrels were eaten by Peregrine Falcons in two other shipboard observations reported by Voous. The actual pursuit and capture of the prey was not reported or seen in the above instances.

Dementiev (1951) noted that F. p. pealei fly far from shore to hunt sea birds and have been reported to capture sandpipers (Calidris minutilla) 97 km at sea and devour them on the wing. Grayson (1872) reported an incident in 1858 in which a peregrine landed on a sailing ship 161 km off the coast of lower California and killed at least a dozen dusky petrels in the two days it was aboard. Our observation of the actual pursuit and consumption of storm petrels in the North Pacific Ocean helps to substantiate Voous' con-