Tyrannus tyrannus. Eastern Kingbird. One seen at Shiprock, New Mexico, on July 27, 1938. This is the first New Mexico record west of the Rio Grande, although the species has been observed several times in northeastern Arizona.

Iridoprocne bicolor. Tree Swallow. Four seen near Aztec, New Mexico, April 27, 1937. Allan R. Phillips (in letter) reports seeing three tree swallows about ten miles north of Gallup, New Mexico, on May 5, 1937.

*Riparia riparia*. Bank Swallow. Four seen flying over Pueblo Colorado wash at Ganado, Arizona, August 11, 1938, and one flying over reservoir at Snake Butte, about fifteen miles southwest of Keams Canyon, Arizona, September 30, 1938.

*Pica pica.* Black-billed Magpie. One observed September 19, 1936, at Tees-nos-pas, Arizona. Teesnos-pas is only a few miles air line from the San Juan River in southeastern Utah and northwestern New Mexico, where the magpie is locally common; so this record is not unexpected. Arizona, except for this one locality, is completely out of the normal range of this species.

Cinclus mexicanus. Dipper. One seen along Lukachukai Creek in Lukachukai Mountains, Arizona, June 24, 1938, and two along headwaters of Whiskey Creek in Lukachukai Mountains, New Mexico, October 11, 1937.

Bombycilla cedrorum. Cedar Waxwing. Two seen May 8, 9, 11, and 12, 1937, at Keams Canyon, Arizona, feeding on apple blossoms. Individual birds were seen May 23 and June 7, 1937, at the same locality. One observed at Gallup, New Mexico, October 18, 1938.

Phainopepla nitens. Phainopepla. One adult male seen June 24, 1937, at Keams Canyon, Arizona. Dendroica caerulescens. Black-throated Blue Warbler. A male observed October 9, 1938, in Milk Ranch Canyon near Fort Wingate, New Mexico. This is the second record for New Mexico, and the first west of the Rio Grande Valley. It is interesting to note that the other record was made at almost exactly the same time of year, October 8, 1904, at Gallinas Mountain, by J. H. Gaut (see Bailey, Birds of New Mexico, 1928, p. 615).

Seiurus noveboracensis. Water-thrush. One seen May 15, 18, 19, 20, and 22, 1937, at Keams Canyon, Arizona, all probably the same individual. One also seen in Milk Ranch Canyon near Fort Wingate, New Mexico, September 8, 1938.

Icteria virens. Yellow-breasted Chat. Adult seen at Keams Canyon, Arizona, October 12, 1938.

Icterus parisorum. Scott Oriole. Two males seen May 20, 1937, at Wildcat Mesa, ten miles northwest of Keams Canyon, Arizona. One adult male seen with almost fully-grown juvenile, July 14, 1937, in Hopi Buttes, near Na-ah-ti Trading Post, Arizona. Both records are from open piñon-juniper woodland.

Molothrus ater. Cowbird. Flock of five at Keams Canyon, Arizona, June 24, 1937, and a pair at Jeddito, Arizona, June 30, 1937.

Guiraca caerulea. Blue Grosbeak. One seen July 20, 1938, at Waterflow, New Mexico, in cottonwood grove.

Passerina amoena. Lazuli Bunting. One observed May 15, 1937, another June 30, 1937, both at Keams Canyon, Arizona. I was present at Keams Canyon between these two dates, but saw no other birds of this species. Later in the season, two were seen August 24, 1938, at Oraibi, Arizona, and two August 28, 1937, at Keams Canyon.

Hesperiphona vespertina. Evening Grosbeak. Several small flocks (thirty-five individuals in all) seen December 6 to 8, 1938, at Fence Lake, New Mexico, about seventy miles south of Gallup, New Mexico. The birds were feeding on juniper berries.

Spinus tristis. American Goldfinch. One male and two females seen May 28, 1937, and a pair on June 4, 1937, at Keams Canyon, Arizona.

*Pipilo fuscus.* Brown Towhee. Several observed June 2 and June 16, 1938, at Schillingburg's Trading Post, about ten miles west of Crownpoint, New Mexico. Also one September 2, 1938, at Barth's Jaralosa Ranch, about twenty miles south of Zuni, New Mexico, and three on December 13, 1938, about ten miles southwest of Gallup, New Mexico. Apparently a rare bird in northwestern New Mexico; I have never met with it in northeastern Arizona.

Calamospiza melanocorys. Lark Bunting. Adult male seen May 13, 1937, at Wildcat Mesa, ten miles northwest of Keams Canyon, Arizona. None seen in northeastern New Mexico.

Spizella arborea. Tree Sparrow. Three seen January 19, 1937, and two on February 19, 1937, at Moenave, near Tuba City, Arizona. Also one seen near Newcomb's Trading Post, thirty miles south of Shiprock, New Mexico, November 9, 1937.—GALE MONSON, 311 East Green, Gallup, New Mexico, February 1, 1939.

Food Consumption of a Sparrow Hawk.—At Norris, Tennessee, we received a wounded Sparrow Hawk (*Falco sparverius*) which a CCC crew had found lying in the woods. The bird, a male, had evidently been shot. The right wing was injured, as well as the right side of the head, and the FROM FIELD AND STUDY

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right eye was blind. It was in a weak condition when given to us on December 17, 1937. It weighed 86.7 grams with the stomach empty. Its weight on January 31, 1938, totaled 113.8 grams, the stomach again empty. When first received, it breathed at the rate of 38 inhalations per minute.

We kept the bird on a screened porch, 10 feet by 14 feet in dimensions, and allowed it to move about at will at all times. At first it was too weak to feed itself and was fed small pieces of meat by means of forceps. Two days later it had recovered sufficiently to pick at meat placed in front of it but was not strong enough to tear off any pieces. Gradually, however, it grew stronger and able to feed itself. On the 19th of December it was able to fly a little and on the 23rd seemed fully recovered.

On December 14, a pan of water and a small pile of gravel were set out for the bird. Although it was never observed to touch either of these, on the 15th a quantity of gravel was found in the pan of water. The hawk ate mice, House Sparrows and beef; it refused pork and would not touch beef kidney. Unadulterated ground beef it consumed readily; but when the beef contained a slight garlic flavor, the bird ate it with some show of reluctance.

We kept several records of the consumption of lean beef in order to learn how much food it needed. The supply of beef was weighed before being put out each morning, the amount provided always ample and greater than the amount consumed. Each night, after the hawk had gone to roost, the amount remaining was weighed and the consumption computed. Only those days preceded by wholly beef-eating days are presented in the following table. The computations of the calories consumed are based upon the assumption that a gram of lean beef contains 1.76 calories.

| Date    | Consumption<br>(grams) | Calories | Departure from<br>the mean |
|---------|------------------------|----------|----------------------------|
|         |                        |          |                            |
| Dec. 24 | 22.1                   | 38.9     | 4.7                        |
| 25      | 22.5                   | 39.6     | — 4.0                      |
| 26      | 23.1                   | 40.7     | 2.9                        |
| 27      | 22.6                   | 39.8     | — 3.8                      |
| 28      | 15.9                   | 28.0     | 15.6                       |
| 29      | 19.1                   | 33.6     | —10.0                      |
| 30      | 39.9                   | 70.2     | +26.6                      |
| 31      | 32.7                   | 57.6     | +14.0                      |
| Jan. 1  | 21.4                   | 37.7     | — 5.9                      |
| 2       | 28.9                   | 50.9     | + 7.3                      |
| 3       | 23.4                   | 41.2     | — 2.4                      |
| 4       | 25.8                   | 45.4     | + 1.8                      |
| 5       | 17.7                   | 31.2     | -12.4                      |
| 12      | 29.1                   | 51.2     |                            |
| 13      | 30.1                   | 53.0     |                            |
| 14      | 22.9                   | 40.3     |                            |
| 15      | 21.6                   | 38.0     |                            |
| 18      | 34.9                   | 61.4     |                            |
| 21      | 23.5                   | 41.4     |                            |
| 22      | 16.4                   | 28.9     |                            |
| 23      | 18.0                   | 31.7     |                            |
| 28      | 35.8                   | 63.0     |                            |
| Feb. 2  | 17.3                   | 30.4     |                            |
| 11      | 27.6                   | 48.6     |                            |
| 12      | 27.2                   | 47.9     |                            |
| Mar. 25 | 25.0                   | 44.0     |                            |
| Mean    | 24.8                   | 43.6     |                            |
|         |                        | .510     |                            |

Four computations of single meals were also obtained:

| Feb. | 12 | 9.1 grams |
|------|----|-----------|
| Mar. | 16 | 7.2 grams |
| Mar. | 25 | 7.8 grams |
| Apr. | 7  | 7.4 grams |
| Mean |    | 7.9 grams |

The thirteen consecutive record-days between December 24 and January 5 are interesting in that the accumulated negative departures from the mean reached 41.0 calories on the 29th but were balanced on the 30th and 31st by positive departures from the mean amounting to 40.6 calories. In other words, the hawk ate less than his average during the six days and then made up for this partial abetimence on the two succeeding days. Indications of similar behavior appear in the few other consecutive record days. This suggests that there may be normal physiological accumulations and deficiencies which are balanced by subsequent decreases and increases in the food intake. It may also suggest an explanation for the apparent tendency among animals to eat sparingly sometimes and to gorge themselves at other times when food is abundant.

The average daily consumption of food during the period of observation, when the thermometer ranged from 15 to 70 degrees above zero Fahrenheit, was 24.8 grams or 20.9% of the presumed normal body weight of 113.8 grams. The single-meal average consumption of 7.9 grams was 6.9% of the same body weight. The average number of calories per day was 43.6. The average number of calories per gram of body weight per day was .383 calories.

It may be of interest to note that the caloric consumption of this hawk, whose activity was slight (compared with that of a normal bird of the same species), amounted to nearly twelve times the .032 calories per gram of body weight per day consumed by a human being whose relative activity may be considered analogous.—LEONARD WING and ANNE HINSHAW WING, 205 Prospect Street, New Haven, Connecticut, April 18, 1939.

**Starlings Arrive in Utah.**—Thirteen Starlings (*Sturnus vulgaris*) were discovered feeding with a flock of Brewer Blackbirds about the corrals on the Jeremy ranch, in Salt Lake County, by Mr. Thayer Evans, February 26, 1939. Mr. Evans killed one of the birds for identification, mounted it, and presented it to the University of Utah. I observed these birds on several occasions thereafter. Their attitude was decidedly like that of a meadowlark rather than that of a blackbird. The short tail, quick wing beat, and long glides to alight, are characters that differentiate them when in a flock of Brewer blackbirds.—C. W. LOCKERBER, Salt Lake City, Utah, April 15, 1939.

A Pacific Kittiwake Comes Inland.—On February 16, 1939, during my absence from the city, Alva Oakes, of the Oregon Audubon Society, called at my office and left a very good written description of a gull-like bird he had found apparently sick on a sandbar on the south bank of the Columbia River in Multnomah County, Oregon. Two days later, Mr. Oakes again called and repeated his description of the bird that he had picked up and carefully examined. When I told him that I believed he had seen a Pacific Kittiwake, a species not before recorded in Oregon from any other than seashore localities, he returned to the Columbia River and found the bird dead at the exact spot where he had seen it before. The area is overrun with house cats, dogs, and small boys, but the bird had not been molested in any way; thus *Rissa tridactyla pollicaris* has been added to the birds of the Portland, Oregon, area. On being dissected, it was found to be an adult male in much emaciated condition.—STANLEY G. JEWETT, *Portland*, Oregon, March 22, 1939.

Geographic Variation in the Fork-tailed Petrel.—Recent acquisition by the Museum of Vertebrate Zoology of two series of specimens representing the species Oceanodroma furcata, one series from the southern limit, the other from near the northern limit of its range, demonstrates the existence of a readily appreciable geographical variation. The differences seen between northern and southern populations seem sufficient to warrant the use of separate names to indicate them.

The Fork-tailed Petrel was first formally named by Gmelin in 1789 as *Procellaria furcata*, based on an English description published four years before by Pennant in his Arctic Zoology. Both these authors indicate the icy waters between Asia and America as the bird's range, and Pennant, in the descriptive part of his Zoology, records the sighting of these petrels northeast of "Kamtschatka" on Cook's voyage to that region. It is therefore clear that the type locality for the name *furcata* is Bering Sea; this name is thus to be used for the northwestern population.

In reviewing the literature, the only old name we have found, that is seemingly useable for the now newly discerned southern form of the Fork-tail, is *plumbea*. This was allegedly a manuscript name, proposed by Peale and listed by him (U. S. Explor. Exped., vol. 8, Mamm. and Ornith., 1848, p. 292) as if a synonym of *Thalassidroma furcata* (Gmelin). The description given in the text applies quite as well to one race as the other. But this fact does not, in our judgement, preclude its resuscitation, when we take into account the circumstance that the only specimens Peale had before him "were obtained on the coast of Oregon." We therefore use Peale's name for the southeastern race, defining it as follows.

Oceanodroma furcata plumbea, new subspecies, though old name (Peale's).

Southern Fork-tailed Petrel.

Type.—Not known to be extant, if, indeed, ever designated; but before us is one of two "cotypes" contained in the United States National Museum, namely, no. 15461. The specimen is old, soiled, rag-