

careful observations, Mrs. Zimmermann has added seven additional species of birds, including four orioles, to the list of exploiters of man-made nectar.

This list can be further expanded by adding several orioles and other birds which feed on nectar from flowers. Leck (1974) reported this feeding habit by the Baltimore Oriole, Orchard Oriole (*I. spurius*), Yellow-backed Oriole (*I. chrysater*), and Chestnut-headed Oropendola (*Zarhyncus wagleri*). Nectar feeding at flowers has also been reported for the Montezuma Oropendola (*Gymnostinops montezuma*) and 14 other Central American birds by Skutch (1954, 1960, 1967, 1969). The Florida Cardinal (*Cardinalis cardinalis floridanus*) occasionally exploits this food source (Russell 1951, Wible 1974). Dr. and Mrs. Raymond Ryckman (pers. comm. 1974) have also observed Hooded Orioles and Mockingbirds (*Mimus polyglottos*) feeding on the spongy, nectar-filled petals of cultivated guavas (*Feijoa sellowiana*) in Loma Linda, California.

These additions are of interest because they include principally granivorous and insectivorous birds that have not previously been considered as nectar feeders. The known nectarivorous birds of North America, exclusive of hummingbirds, are summarized in table 1. Thirty-two species representing 10 families are included in this temporary listing. The expanded list of nectar feeding orioles, now including nine species or subspecies, further substantiates the claim that "nectar feeding is more common in all orioles than has previously been recognized" (Fisk 1973). Nectar feeding appears to be even more widespread than was formerly suspected. From the list presented here, the statement by Peterson and others (1963) that more

than 1600 species of birds feed on nectar should no longer be so difficult to believe, even for North American ornithologists.

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## INLAND MIGRATION OF JAEGERS IN NORTHEASTERN ALASKA

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The migration route by which jaegers reach the arctic slope of northern Alaska has been stated or implied as north along the western coast and thence east or south onto the rolling tundra of the slope and into the foothills and mountains (Bee 1958, Irving 1960, Kessel and Cade 1958, Maher 1974, and Williamson et al. 1966). A major spring movement of jaegers north through the eastern Brooks Range was observed in May 1972; this observation raises questions regarding the regularity and geographic distribution of such inland migration routes.

Spring was late that year, and most of the ground on both the north and south slopes of the eastern Brooks Range was still snow-covered by 15-18 May; there were few signs of breakup on the rivers, ponds, and lakes. In 13 hr of low-level flying including both slopes of the Brooks Range, and extensive ground observations at Arctic Village, only one jaeger, probably a Long-tailed Jaeger (*Stercorarius longicaudus*), was seen between 15 and 19 May. On 20 May, Dean and Magoun established a camp just east of the Canning River near the junction of Ikiakpuk and

Ikiakpaurak valleys (approximately 69°25' N, 146°00' W). The entire area was essentially snow-covered, and we were ahead of the arrival of passerine migrants. By 24 May much of the snow on south-facing slopes had melted and the Canning River ice was beginning to break up. No jaegers were seen 20-26 May; on 27 May a flock of several Long-tailed and five unidentified jaegers were seen (three singles, one double). From Valkenburg's arrival on 26 May until 7 June the area was never truly dark and was under almost 24-hr observation.

During the day of 28 May and during the night of 28-29 May there was a steady stream of jaegers coming north out of the mountains through the Canning River valley. The birds were flying well below the mountain tops, sometimes quite close to the ground. At the junction of the Ikiakpuk and Ikiakpaurak valleys some swung NE and followed or angled across one of these valleys without an obvious change of direction. We were unable to devote full attention to the birds and could only estimate their number. Additionally, since we were observing from a slope on one side of a broad valley, we were faced with obvious problems arising from distance, sun direction, and light intensity. Dean estimated at the time that the flight must have averaged one jaeger every 5 min for about 30 hr; the birds were flying as singles, in two's and three's, and in small groups. He identified many Long-tailed Jaegers and some Pomarine Jaegers (*S. pomarinus*). Valkenburg estimated that he saw between 20 and 30 from 08:00 and 14:00 on 28 May. From 14:00 28 May to 05:00 29 May he estimated 90 birds. He saw from 50 to 60 more between 05:00 and

14:00 and another 30 after 14:00 on 29 May. Depending on which of the two estimates one uses, it is clear that at least 200 and perhaps 300 or more jaegers flew past within our view during the period 27 through 29 May. We saw none on 30 or 31 May, although the weather was generally clear except for a low ground fog that covered the valley during the intervening night. Unfortunately, weather records for the Gulf of Alaska and the Bering Sea are not precise enough to allow reasonable speculation about the influence of storm patterns on the movement we observed.

Biologists who were flying on the arctic slope reported large numbers of jaegers in extensive areas north of our position on 30 and 31 May whereas they had seen few earlier.

We unquestionably witnessed a large movement of jaegers, including a good number of Pomarine Jaegers. However, we can shed little light on the annual frequency or constancy of such movements. The reports produced in connection with recent studies in northeastern Alaska, northwestern Yukon, and the Mackenzie Valley reveal no evidence of substantial movements of jaegers except coastwise fall flights (Davis 1974, Gollop and Davis 1974a,b, Gunn and Livingston 1974a,b,c, Salter 1974a,b, Salter and Davis 1974, Schweinsberg 1974). Several of these parties were in the field in time to observe the passage or arrival of spring migrants in 1972.

Magoun was in the valley of the Marsh Fork of the Canning River from 4 June through late August 1973; she recorded jaegers as rare and saw no large movements. Richard Chapman (pers. comm.) reported seeing 11 Long-tailed Jaegers on the ice of Porcupine Lake 3 June 1975; these birds appeared to be heading toward the Marsh Fork. He saw three more the next day. Chapman was at Porcupine Lake from 2 May–11 June 1975 when he moved down the Marsh Fork; by late June most of his work was in the Echooka and Ivishak valleys. He reported jaegers as uncommon through late August and saw no large movements.

A review of the pertinent literature (Bee 1958, Irving 1960, Kessel and Cade 1958, Kessel and Schaller 1960, and Preble 1908) reveals a pattern of jaeger spring migratory movement from west to east along the arctic slope, some evidence of a southward movement from the coast into the foothills, and strong negative evidence regarding large movements north through the major passes in the Brooks Range. Additionally, there is strong evidence against the presence of large numbers of Parasitic (*S. parasiticus*) and Pomarine jaegers in interior Alaska and northwestern Canada or on the south slope of the Brooks Range. Irving's information from Anaktuvuk Pass and the fact that jaeger populations are mobile suggest inconsistency rather than constancy in movement patterns. There is no question that large numbers of Long-tailed Jaegers and some Pomarine Jaegers did move northward along an interior migration route in 1972 rather than reach the arctic slope from the coast to the north. The birds could have reached the upper Canning River valley either by going up the Yukon River from the Bering Sea, down the Yukon from interior Canada, or by following any of a large number of combinations of rivers and passes from the Gulf of Alaska. It may be significant that in the area that Irving knows best, the Colville River runs from west to east just outside the northern foothills of the Brooks Range before turning north to the ocean. The Colville River valley may afford a useful

path for jaegers moving east into the western half of the arctic slope. On the eastern half of the arctic slope there is no such large valley paralleling the mountain front. Rather, the rivers emerge from the mountains and go nearly directly north to the ocean. This condition may cause an interior, overland migration of jaegers in the eastern half of the Brooks Range if such proves to be the usual case. Cade's (1955) documentation of interior movements of Black Brant (*Branta nigricans*) provides an interesting parallel to our observations.

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## CATTLE EGRETS IN CENTRAL COAHUILA

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On 23 February 1974 Sr. Ignacio Urutia shot a Cattle Egret (*Bubulcus ibis*) in his garden at Ocampo, an isolated village (elev. ca. 1100 m) in the Chihuahuan Desert of central Coahuila, Mexico (27°22'N, 102°26'W). The bird appeared emaciated, and dissection revealed no fat. Flies were present in the stomach and completely filled the esophagus. The bird was an immature female with a yellow bill and nearly black feet. The ovary measured 7 × 12 mm. This is the first specimen of a Cattle Egret taken in Coahuila. It has been given to the Field Museum of Natural History, Chicago (FMNH #297139).

Ocampo is in a basin surrounded by mountains ranging from ca. 780 to 2900 m. Characteristic plants of the region are creosote-bush (*Larrea tridentata*), lechuguilla (*Agave lechuguilla*) and prickly-pear cactus (*Opuntia* spp.). Mesquite (*Prosopis* sp.), huisache (*Acacia farnesiana*) and *Acacia rigidula* occur chiefly around water. Plants commonly cultivated and irrigated include maize, beans, alfalfa, and sorghum.

Cattle Egrets were observed in Coahuila during 1974 as follows: on 19 February, Philip Weisheipl saw one bird flying low over our residence adjacent to Sr. Urutia's garden at Ocampo. This may have been the same bird shot four days later, as Cattle Egrets were not seen again in Ocampo for more than two months. Craig Cady and I saw 27 of these herons about 24 km NE Torreón on 28 March. John L. Kaspar saw three near Monclova on 10 April. On 25 April, Sylvia Brey saw an immature egret with cattle just southeast of Ocampo. She and Cady observed one in the same plumage at the same site two days later. Brey found three egrets there on her last visit on 28 April.

I believe these sight records to be the first from the central part of Coahuila. Zimmerman (Condor 75:480-481, 1973) reported sight records of the species from Durango, San Luis Potosí, central Chihuahua, southern Nuevo León and the Torreón region of Coahuila. Contreras (Publ. Biol. Inst. Invest. Cient. Univ. Auton. Nuevo León 1:2-3, 1973) reported a Cattle Egret collected on 5 December 1971 near the village of China in Nuevo León.

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