are opportunistic in both feeding habits (Lagrenade and Mousseau 1981b) and habitat selection (Soots and Landin 1978). Therefore, such birds could have highly adaptable mating strategies. The origin of female-female pairs and polygynous trios is still unclear, but mate fidelity in these associations seems to indicate an adaptive response to an excess of females in the colony.

We are grateful to Robert Pichet and Alfred Lagrenade for their field assistance and to Michael R. Conover for his helpful review of the manuscript. This study was supported by the Centre de recherches écologiques de Montréal and the salaries for field assistance by Summer Canada Projects.

LITERATURE CITED

- CONOVER, M. R., D. E. MILLER, & G. L. HUNT, JR. 1979. Female-female pairs and other unusual reproductive associations in Ring-billed and California gulls. Auk 96: 6–9.
- FITCH, M. 1979. Monogamy, polygamy, and female-female pairs in Herring Gulls. Proc. Colonial Waterbird Group 3: 44–48.
- FRY, C. M., & C. K. TOONE. 1981. DDT-induced feminization of gull embryos. Science 213: 922– 924.
- GILMAN, A. P., G. A. FOX, D. B. PEAKALL, S. M. TEEPLE, T. R. CARROLL, & G. T. HAYMES. 1977. Reproductive parameters and egg contaminant levels of Great Lakes Herring Gulls. J. Wildl. Mgmt. 41: 458–468.
- HUNT, G. L., JR., & M. W. HUNT. 1977. Femalefemale pairing in Western Gulls (*Larus occidentalis*) in southern California. Science 196: 1466– 1467.
- —, J. C. WINGFIELD, A. NEWMAN, & D. S. FAR-NER. 1980. Sex ratio of Western Gulls on Santa Barbara Island, California. Auk 97: 473–479.
- KOVACS, K. M., & J. P. RYDER. 1981. Nest-site tenacity and mate fidelity in female-female pairs of Ring-billed Gulls. Auk 98: 625–627.

- LAGRENADE, M.-C., & P. MOUSSEAU. 1981a. Reproduction des Goélands à bec cerclé à l'île de la Couvée, Québec (Canada). Naturaliste can. 108: 119–130.
- —, & —, 1981b. Alimentation des poussins de Goélands à bec cerclé de l'île de la Couvée, Québec (Canada). Naturaliste can. 108: 131– 138.
- MOFFITT, J. 1942. A nesting colony of Ring-billed Gulls in California. Condor 44: 105–107.
- MOUSSEAU, P., & M.-C. LAGRENADE. 1980. Succès de reproduction et contaminants présents chez le Goéland à bec cerclé du sud-ouest du Québec (Canada). Rapp. préparé par le Centre de rech. écol. de Montréal pour le Serv. can. faune, Envir. Canada.
- RYDER, J. P. 1978a. Sexing Ring-billed Gulls externally. Bird-banding 49: 218–222.
- . 1978b. Possible origins and adaptive value of female-female pairing in gulls. Proc. Colonial Waterbird Group 2: 138–145.
- —, & P. L. Soмppi. 1979. Female-female pairing in Ring-billed Gulls. Auk 96: 1–5.
- SHUGART, G. W. 1980. Frequency and distribution of polygyny in Great Lakes Herring Gulls in 1978. Condor 82: 426–429.
- SOKAL, R. R., & F. J. ROHLF. 1969. Biometry. San Francisco, Freeman.
- SOOTS, R. F., JR., & M. C. LANDIN. 1978. Development and management of avian habitat on dredged material islands. U.S. Army Engineer water ways experiment station. Dredged material research program.
- SOUTHERN, W. E. 1978. Ring-billed Gull pair with two nests. Wilson Bull. 90: 299–301.
- WEAVER, D. K., & J. A. KADLEC. 1970. A method for trapping breeding adult gulls. Bird-banding 41: 28–31.

Received 1 February 1982, accepted 27 May 1982.

A Record of the Siberian Flycatcher (Muscicapa sibirica) from Bermuda: an Extreme Extra-limital Vagrant

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On 28 September 1980 at 1300 I was checking the Somerset Long Bay Nature Reserve in Sandy's Parish, Bermuda for migratory birds when I discovered a medium-sized flycatcher feeding along the edge of a grassy clearing. First impressions suggested an *Empidonax* flycatcher, but on closer approach I was puzzled to observe a generally dark plumage with extensive white spotting on the upper parts and dark spotting or streaking on the underparts forming a partial breast band. Another striking feature was the large size of the eyes, enhanced by white eye rings. This combination of characters gave it the general appearance of a juvenal-plumaged Eastern Bluebird (*Sialia sialis*) except for the lack of blue on wings and tail. The behavior, however, was unquestionably that of a flycatcher. It perched conspicuously on low dead snags overhanging the clearing, looked around in flycatcher fashion, and made frequent flycatching sorties, usually returning to the same perch. The perching stance was generally erect, but at times the tail was raised to a horizontal position.

Convinced that this was an extreme extralimital vagrant, I alerted the other Bermuda birders, and Messrs. Eric Amos and Richard Headford were able to join me in my observations for the rest of the afternoon. By evening we were satisfied that the bird was an Old World flycatcher, but certainly not the Spotted Flycatcher (*Muscicapa striata*) or Brown Flycatcher (*M. latirostris*), the only species illustrated in guides available to us. Although our combined ornithological literature on Asian birds was scant, we eventually reached a consensus, on the basis of a description in Wildash's (1968) "Birds of South Vietnam," that it was probably *M. sibirica*.

It seemed imperative that such a remarkable record should be confirmed and documented as fully as possible, so the bird was collected the next day at 0900 and prepared as a specimen. This was subsequently forwarded both to the American Museum of Natural History and to the Smithsonian Institution for comparison with reference series of Asian flycatchers before deposit as N. 812985 in the American Museum of Natural History collections. Identification to subspecies was independently confirmed by Drs. S. Dillon Ripley and Wesley Lanyon as *Muscicapa sibirica sibirica*, male, in first basic plumage. Data on the fresh specimen were as follows: weight, 14.0 g; total length, 135 mm; wing-chord, 79 mm; fat class, 2 (moderate); sex, indeterminate from internal examination.

The Siberian Flycatcher is a widely distributed, abundant, and highly migratory flycatcher of Siberia, and the nominate race breeds from the central Altai to Kamchatka, where the range extends north to 60° latitude (Dement'ev et al. 1954). It winters in the tropics from Indochina and the Malay peninsula to Sumatra and Borneo (Vaurie 1959). Assuming that the Bermuda specimen originated from the closest part of the breeding range, the straight line distance to Bermuda over the Canadian Arctic is approximately 9,000 km, only 500 km greater than the distance to the southern extremity of the species' normal wintering range, but in exactly the opposite direction!

Despite the extreme extralimital nature of this record, there are no reasonable grounds for believing that the bird reached Bermuda by other than natural means. Flycatchers are not kept as cage birds and would be extremely difficult to keep alive in captivity over such a distance. The specimen was healthy with good fat reserves, and the plumage showed no signs of abnormal wear or fouling that might be expected of an escaped cage bird. While it is not possible to say exactly how long it had been present on Bermuda (Long Bay reserve was previously checked on 17 September), it is probable that it arrived in a wave of other passerines, including the first Blackpoll Warblers (*Dendroica striata*) of the fall, on 24 September. Allowing for the longer time it would take to reach Bermuda, this date closely matches a record of an immature male *M. s. sibirica* collected on Shemya Islands, outermost Aleutian Islands on 13 September 1977 (Gibson 1981). There are no previous records of *M. sibirica* from the Atlantic region or the continental Americas.

Any attempt to explain such long-distance vagrancy must be purely speculative. Although a physiological capability for migration a long distance over water is now generally accepted for some passerines such as the Blackpoll Warbler, (Nisbet et al. 1963, Nisbet 1970, Williams et al. 1977, Larkin et al. 1979), it is doubtful that the specimen under consideration here could have flown all the way to Bermuda without stopping at least once on the intervening North American continent. Assuming that it landed first in the Alaskan or Canadian boreal zone, it might then have been caught up in the general southeasterly migration of such long-distance, Nearctic migrants as the Blackpoll Warbler, which fly directly over the western Atlantic towards eastern South America.

Records such as this provide further evidence that landbirds that breed in the temperate zone and have to cross substantial ocean areas to reach their tropical wintering grounds are physiologically adapted to accomplishing this by means of a few, very long-distance, nonstop flights rather than a series of short hops.

I am grateful to Mr. James Baird for delivering the specimen to the American Museum of Natural History from Bermuda and to Drs. S. Dillon Ripley, Wesley Lanyon, and Ian Nisbet for identifying the specimen and providing constructive comments and criticism during the preparation of this paper.

LITERATURE CITED

- DEMENT'EV, G. ET AL. 1954. Birds of the Soviet Union, vol. 6. Jerusalem, Israel Program for Sci. Transl.
- GIBSON, D. D. 1981. Migrant birds at Shemya Island, Aleutian Islands, Alaska. Condor 83: 65– 77.
- LARKIN, R. T., D. R. GRIFFIN, J. R. TORRE-BUENO, & J. TEAL. 1979. Radar observations of bird migration over the western North Atlantic. Behav. Ecol. Sociobiol. 4: 225–264.
- NISBET, I. C. T. 1970. Autumn migration of the Blackpoll Warbler: evidence for long flight provided by regional survey. Bird-Banding 41: 207– 240.
- —, W. H. DRURY, & J. BAIRD. 1963. Weight loss during migration. Bird-Banding 34: 107–159.
- VAURIE, C. 1959. The birds of the palearctic fauna: passerines. London, H.F.&G. Witherby, Ltd.
- WILDASH, P. 1968. Birds of South Vietnam. Rutland, Vermont, Charles G. Tuttle Co.
- WILLIAMS, T. C., L. C. IRELAND, & J. M. TEAL. 1977. Autumnal bird migration over the western North Atlantic Ocean. Amer. Birds 31: 251–267.