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Two new southern migrants for Brazil.—The list of birds occurring in Brazil was increased by two species in May 1973 by finding of the Snowy Sheathbill (*Chionis alba*) and the Chocolate-vented Tyrant (*Neoxolmis rufiventris*) in Rio Grande do Sul during the course of an avifaunal survey of the state on which I am engaged under the aegis of the Museu Nacional, Rio de Janeiro and the Smithsonian Institution, Washington, with assistance from the Frank M. Chapman Memorial Fund. These species now join the very few that nest in high southern latitudes and are known to reach Brazil during their autumn migration. Neither has previously been recorded beyond Uruguay.

I collected the Snowy Sheathbill, a female, No. 888 in my collection, on the ocean beach 6 km southwest of Cassino at 32° 14' S, 52° 13' W on 10 May 1973. I first saw it in the company of a small flock of Kelp Gulls (*Larus dominicanus*). I found a flock of four Chocolate-vented Tyrants on the ground in pastureland about 50 km southwest of the city of Rio Grande at 32° 14' S, 52° 35' W at an altitude of about 10 m on 12 May 1973. A male was collected and is No. 915 in my collection.—WILLIAM BELTON, *Caixa Postal 119, Gramado, Rio Grande do Sul, 95670, Brazil*. Accepted 31 Jul. 73.

A Pleistocene Gyrfalcon.—A Late Pleistocene to Recent fauna occurs in the Laramie Range of Albany County, Wyoming, in Bell Cave, 18 miles north of Laramie in Wall Rock Canyon at an elevation of 7,800 feet. Preliminary analysis of the fauna shows cold climate similarities with Little Box Elder Cave (Anderson 1968, Univ. Colorado Studies, Ser. in Earth Sci. 6) and Chimney Rock Animal Trap (Hager 1972, Univ. Wyoming Contrib. to Geol., vol. 11, No. 2). So far 47 species of mammals and 10 species of birds have been identified. Seven mammalian species are either extinct or their extant representatives are not in the area today, but are found at higher altitudes or latitudes.

No carbon-14 date has been determined for the deposit but the site is stratified and the bone can be given a relative date. Bone from deeper levels (over 0.5 m) has been mineralogically replaced and is distinct from the more recent appearing nonreplaced bone of the upper level. Some replaced bone also occurs in the upper level, but is apparently present there through rodent activity. Extinct species as well as those forms not found in the area today are represented only by replaced

bone. The replaced bone, even if found in the upper levels, is considered older than the apparently recent bones and is probably of Pleistocene age.

Among the upper level bones that show the mineral replacement characteristic of the deeper levels, is a left tarsometatarsus of the Gyrfalcon, *Falco rusticolus*. This bone was identified by R. W. Storer of the University of Michigan Museum of Zoology (Bird Division) and measures as follows, with the corresponding measurements in parentheses from a recent specimen (University of Michigan Museum of Zoology 74815): greatest length—63.6 mm (63.5 mm); greatest transverse width, proximal end—15.7 mm (17.9 mm); greatest transverse width, distal end—15.5 mm (17.4 mm); greatest anterior-posterior width, proximal end—8.4 mm (10.2 mm); and greatest anterior-posterior width, distal end—10.7 mm (11.6 mm). The present range of *Falco rusticolus* is considered by Salt and Wilk (1966, The birds of Alberta, Edmonton, Government of Alberta) as being circumpolar. Rare winter sightings have been reported as far south as Michigan, northern Ohio, Kansas, Nebraska, and Wyoming (A.O.U. 1957, Check-list of North American Birds, fifth ed., Baltimore, Amer. Ornithol. Union).

Previous fossil records of *Falco rusticolus* are limited to Sweden, Czechoslovakia, and Hungary (Brodkorb 1964, Bull. Florida State Mus., Biol. Sci. 8: 294). In view of the mineralization of the Bell Cave bone, which associates it with the Pleistocene fauna of the site, it appears that this specimen should be considered the earliest reported occurrence and first fossil record of *Falco rusticolus* from North America.

I thank George Frison, Michael Hager, and George Zeimens for their help and review of this note, also R. W. Storer for identifying the *Falco rusticolus* specimen, and especially C. W. Hibbard for all the help he has given. The specimen is deposited in the University of Wyoming Anthropology Department Collections (UWA:ALB-236).—DANNY WALKER, *Department of Anthropology, University of Wyoming, Laramie, Wyoming 82070*. Accepted 4 Sep. 73.

Emigrations of Northern Shrikes 1959–1970.—In 1935 G. M. Allen suggested to me that possibly the appearance of Northern Shrikes (*Lanius excubitor*) in New England in large numbers coincided with the appearances of Snowy Owls (*Nyctea scandiaca*) (Gross 1927, 1931). Analysis of data available from the Bird-Lore Christmas Census and other counts indicated that the shrikes, indeed, did appear at approximately 4-year intervals, nearly always coincident with the appearance of the owls (Davis 1937). The agreement was strikingly exact except that shrikes appeared in both winters in 1934–35 and 1935–36, rather than declining in the second winter. A suggestion that a change had occurred in the length of the cycle during the past century was available from data on the abundance of the arctic fox (*Alopex lagopus*). It seemed (Davis 1937) that before 1893 the period between peaks was usually 3 years and the average was 3.3 years. However, after 1900 the average for the shrikes was 4.1 years. The suggestion for the common cause of the emigrations of shrikes and owls was that lemmings died off at intervals. Later analysis (Davis 1949) indicated that in 1937–38 the owls appeared in numbers while shrikes were scarce. In 1941–42, the owls appeared after a decline in shrikes, but in 1945–46 the emigrations again coincided (Gross 1947). Thus the synchrony earlier observed was less exact. Still later (Davis 1960) the emigrations failed to coincide. In 1953–54 the owls reached a maximum, but the shrikes maintained a maximum for 4 years, 1953–54 through 1956–57.