NORTH AMERICAN MIGRANTS IN BOLIVIA

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Various species of North American migrant birds either pass through Bolivia or occur there throughout much of the austral summer, and some have recently been recorded there during the northern breeding period, late April–July. This paper describes all known localities, seasons, and altitudes, in which Nearctic-breeding species have been recorded in Bolivia. Many are first records for Departments in Bolivia. The status of many birds in that country is still poorly known (see Dott 1984 for review of literature).

I resided in Bolivia from August, 1969 to September, 1971, and from April, 1974 to September, 1975. Most localities mentioned in this paper were visited on a few occasions, except for Laguna Alalay, which I visited in most months during September, 1969-January, 1970; March-May, 1971; and October, 1974-August, 1975; including every calendar month except February. Laguna Alalay is a shallow, oval lake, nearly one km long, at the edge of Cochabamba city, Cochabamba Department, 17.5°S 66°W, at ca. 2,550 m altitude. It lies in a xerophytic region where rain occurs briefly, usually between December and March. Despite some human disturbance, the lake is attractive to many resident and migrant species of birds.

In the following notes, Department (Dept.) of Bolivia and altitude are mentioned for all localities except Laguna Alalay.

Falco peregrinus. Peregrine Falcon. Seen twice at Laguna Alalay; singles on 20 Dec. 1969 and 27 April 1975. Remsen and Ridgely (1980) gave records of this species from low and high altitudes in Santa Cruz, Cochabamba, and Oruro depts.

It is still unclear whether or not peregrines that are seen in Bolivia may be North American migrants. A breeding population occurs in southern South America, and birds seen in central and northern South America have been presumed to be migrants from either North America or southern South America, or both (Meyer de Schauensee 1966, 1982; Brown and Amadon 1968, Blake 1977). Recently, however, Peregrine Falcons have been found nesting in Peru and Ecuador (Ellis and Glinski 1980, Jenny et al. 1983, Schoonmaker et al. 1985).

Pluvialis dominica. Lesser Golden-Plover. Seen at Laguna Alalay as follows: one—14 Sept. 1969; two—12 Oct. 1969; twenty—23 Nov. 1969; ten—18 Jan. 1970; four—26 Oct. 1974; one—29 Dec. 1974; two—16 Jan. 1975; one—29 July 1975. In addition, I saw two at the airport at Trinidad, Beni Dept., 230 m, 6 Dec. 1974. Other records are few. Bond and Meyer de Schauensee (1943) recorded three specimens from Santa Cruz and Tarija depts. in Oct.—Nov., and J. V. Remsen (pers. comm.) saw the species at Laguna Alalay: forty—1 Nov. 1976; twenty—3 Nov. 1976; one—26 Jan. 1977.

These records indicate that Lesser Golden-Plovers may

pass through and perhaps over-winter in Bolivia in small numbers, at least in low and middle altitudes in eastern and central areas, with no records yet from the western highlands. This partly agrees with Meyer de Schauensee's (1982) statement that *P. dominica* "migrates chiefly e. of Andes. Winters (Sept.-March) mostly in s. South America," except that small numbers also appear to over-winter in central Bolivia in west-central South America.

Tringa solitaria. Solitary Sandpiper. Seen at low altitudes in localities ranging from north to south Bolivia: four in wet ditches on plains near Trinidad, Beni Dept., 230 m, 5 Dec. 1974; noted as common on wet plains northwest of Magdalena, Beni Dept., 200 m, 9–16 Dec. 1974; several at pools between Santa Cruz and Montero, Santa Cruz Dept., 350 m, 16–25 March 1975; and one at the Rio Pilcomayo at Villa Montes, Tarija Dept., 380 m, 6 Nov. 1974. I know of only two other records of this species in Bolivia, from Cochabamba and Beni depts. (Bond and Meyer de Schauensee 1943, Gyldenstolpe 1945); thus, all Bolivian records are from low altitudes.

Tringa flavipes. Lesser Yellowlegs. Seen at Laguna Alalay: few—14 Sept. 1969; few—12 Oct. 1969; ten—23 Nov. 1969; twenty—20 Dec. 1969; thirty—18 Jan. 1970; few—21 March 1971; one—23 May 1971; forty—26 Oct. 1974; seventy—29 Dec. 1974; forty-five—16 Jan. 1975; two—5 April 1975; one—27 April 1975; seven—20 Aug. 1975. The higher counts were not single, large flocks, but the sum of small groups and individuals dispersed along the shores. Other authors have recorded specimens or small flocks from high and low localities in Beni, La Paz, Oruro, Potosi, and Tarija depts. (Bond and Meyer de Schauensee 1943, Gyldenstolpe 1945, Niethammer 1953, Pearson 1975). J. V. Remsen (pers. comm.) saw 200 at Laguna Alalay 3 Nov. 1976, forty there 26 Jan. 1977, and twenty-five at Lake Titicaca, La Paz Dept., 27 Jan. 1977.

Blake (1977) and Meyer de Schauensee (1982) reported that this species winters throughout most of South America. My observations show that small numbers can occur at Laguna Alalay, perhaps not uncommonly, through late April and May.

Tringa melanoleuca. Greater Yellowlegs. Recorded at Laguna Alalay: few-14 Sept. 1969; few-12 Oct. 1969; three-23 Nov. 1969; twelve-20 Dec. 1969; six-18 Jan. 1970; three – 26 Oct. 1974; twelve – 29 Dec. 1974; twentyfive-16 Jan. 1975; four-27 April 1975; five-20 Aug. 1975. These totals consisted of dispersed birds, not single flocks. In addition, I saw four birds NW of Oruro, Oruro Dept., 3,740 m, 7 July 1975, at large unfrozen stretches of saline floodwater, (among large numbers of other species of water birds), in an area where the running streams of fresh water remained frozen across their surfaces even in direct sunlight. I saw one Greater Yellowlegs at a tiny, mountain pool in the Andes of Cochabamba Dept., 20 km NW of Cochabamba city, at 4,600 m, on 8 March 1970, perhaps the highest elevation record of this species anywhere. Leeches, but no other organisms, were evident in the clear water where this bird had been feeding, so it is likely that it was feeding on them.

Meyer de Schauensee (1966, 1982) and Blake (1977) stated that this species winters in most of South America, but Bolivian records are few: one in northern Beni Dept. (Bond and Meyer de Schauensee 1943); a few at Lake Uru Uru, Oruro Dept. (Pearson 1975); twenty-five at Laguna Alalay, 3 Nov. 1976; one at Lake Titicaca, La Paz Dept., 27 Jan. 1977 (J. V. Remsen, pers. comm.); and one at La Cumbre, La Paz Dept., 4,500 m, 28 Oct. 1967 (F. Vuilleumier, pers. comm.). These records indicate that small

numbers occur in Bolivia throughout the austral summer months, particularly at medium to very high altitudes, with some birds recorded in late April and July.

Actitis macularia. Spotted Sandpiper, Laguna Alalay was the highest locality at which I saw this species: one-12 Oct. 1969; five - 23 Nov. 1969; one - 20 Dec. 1969; one -18 Jan. 1970; two-26 Oct. 1974; twenty-29 Dec. 1974; twenty-two-16 Jan. 1975; twenty-5 April 1975; twelve-27 April 1975, I also noted these sandpipers at widely scattered lowland localities; one at Magdalena, Beni Dept., 200 m, 7 Dec. 1974; two near Villa Tunari, Cochabamba Dept., 290 m, 18 Oct. 1974 and 20 Feb. 1975; two at the Rio Yapacani, NW of Montero, Santa Cruz Dept., 293 m, 20 March 1975; and three at Villa Montes, Tarija Dept., 380 m, 6 Nov. 1974. Bond and Meyer de Schauensee (1943) recorded the species from two low areas, in Beni and Tarija depts., and J. V. Remsen (pers. comm.) saw ten at Laguna Alalay on 1 Nov. 1976, and four there on 26 Jan. 1977. These records show that the species occurs in Bolivia from October to late April, scattered through lowland areas and up to about 2,550 m.

Calidris bairdii. Baird's Sandpiper. Seen at Laguna Alalay: five-16 Jan. 1975, two-27 April 1975, forty-six-20 Aug. 1975. The forty-six birds seen in August were in a single, tightly-packed, restless group, and were constantly lifting their wings in readiness to fly-presumably a migrating flock. Also at Laguna Alalay, J. V. Remsen (pers. comm.) saw 150-3 Nov. 1976, and twenty-26 Jan. 1977, and at Lake Titicaca, La Paz Dept., two on 27 Jan. 1977. Other Bolivian records are from ca. 4,000 m and higher. Bond and Meyer de Schauensee (1943) recorded three specimens from Oruro and Potosi depts., Niethammer (1953) saw one at Lake Titicaca, La Paz Dept., (Nov.) and observed the species winter in large numbers at Lake Poopo, Oruro Dept., with "flocks numbering thousands" there in December, and Pearson (1975) found it "common" at Lake Uru Uru, Oruro Dept., in September. F. Vuilleumier (pers. comm.) saw the following numbers at four lakes in the Sud Lipez area, southern Potosi Dept., in November, 1982: 950 at Laguna Colorado, 130 at Laguna Verde, 673 at Laguna Salada, and 160 at Laguna Kalina, and he saw Calidris sp., probably bairdii, at three localities in La Paz Dept. in October 1967, including three at La Cumbre, 4,500 m.

Thus, I know of no lowland Bolivian records of Baird's Sandpiper; they are all from the Andes from ca. 2,550 to 4,500 m elevation, sometimes in large numbers, mainly in September-January, with my own records including August and April. Blake (1977) and Meyer de Schauensee (1982) stated that the species winters in southern South America and locally in the Andes of Ecuador, Peru, and Bolivia. Jehl (1979) suggested that the importance of the Andes as a wintering area may have been exaggerated, but the records here throw doubt on this opinion. On the coast of Argentina, Myers and Myers (1979) found that wintering flocks of Baird's Sandpiper were usually less than 20-30 birds, but were sometimes over 100 birds during migration times. The Bolivian records do not appear to confirm that wintering flocks tend to be smaller, but it is not clear until what month migration may continue; Jehl (1979) noted that juveniles migrate in autumn later and more slowly than adults.

Calidris melanotos. Pectoral Sandpiper. I saw this species at Laguna Alalay: forty—12 Oct. 1969; eighty—23 Nov. 1969; 180—20 Dec. 1969; sixty—18 Jan. 1970; present (not counted)—21 March 1971; ten—23 May 1971; twenty—26 Oct. 1974; 160—29 Dec. 1974; seventy—16 Jan. 1975; thirty-five—5 April 1975; three—29 July 1975. These birds occurred mainly in well-defined flocks on the muddy margins of the lake. Also at Laguna Alalay, J. V. Remsen (pers. comm.) saw eight—3 Nov. 1976, and 300—26 Jan. 1977. Other Bolivian records are: two specimens from Potosi and La Paz depts. (Bond and Meyer de Schauensee 1943); four specimens from northern Beni Dept. in Sept.—

Nov. (Gyldenstolpe 1945); a few seen in Oruro Dept. in Sept. (Pearson 1975); seven or eight seen there 15 Oct. 1967 (F. Vuilleumier, pers. comm.); and twenty-five at Lake Titicaca, La Paz Dept., 27 Jan. 1977 (J. V. Remsen, pers. comm.). Blake (1977) and Meyer de Schauensee (1982) stated that Pectoral Sandpipers winter locally from Ecuador, Peru, Bolivia, and Brazil southwards. The records here show that small numbers have been recorded in high and low parts of Bolivia, and that, at Laguna Alalay, birds were present throughout austral summer months, reaching their highest numbers in November-January, and some were present there in April, late May, and July.

Bartramia longicauda. Upland Sandpiper. I saw this species a few km from Trinidad, Beni Dept., 230 m, on 5 Dec. 1974. Their numbers were difficult to establish, as the birds were seen from horseback in damp, cattle-ranching plains, with grass \(\frac{1}{2}-1\) m tall; the birds individually rose and re-entered the grass in front of the horse, but there appeared to be 15-20. Other Bolivian records are: near Caiza, Tarija Dept. in April (number not stated; Lonnberg 1903); one—northern Beni Dept. in Sept. (Bond and Meyer de Schauensee 1943); two-northern Beni Dept. in Sept.-Nov. (Gyldenstolpe 1945); one-Irupana, La Paz Dept., 1,500 m, in Oct. (Niethammer 1956); one-Villa Tunari, Cochabamba Dept., 290 m, 19 Oct. 1974 (W. E. Lanyon, pers. comm.); one-near Lake Uru Uru, Oruro Dept., 3,700 m, in Oct.; and several groups of up to eight birds around Santa Cruz city, Santa Cruz Dept., in Oct. (Parker and Rowlett 1984).

Thus, all Bolivian records are from low areas, except one (L. Uru Uru), and all are within Sept.–Dec., except one in April. It is not clear whether they represent migrants passing through, or whether some birds winter in Bolivia. Blake (1977) and Meyer de Schauensee (1982) reported that the species winters on pampas of southern Brazil, Paraguay, Uruguay, and Argentina, with "a few" in northern South America.

Phalaropus tricolor. Wilson's Phalarope. Large swimming rafts were present at Laguna Alalay, and my counts, which may often have been under-estimates, were: 100-14 Sept. 1969; 400-12 Oct. 1969; 600-23 Nov. 1969; 400-20 Dec. 1969; 300-18 Jan. 1970; 700-26 Oct. 1974; 900-29 Dec. 1974; 3.000-16 Jan. 1975; 1.200-5 April 1975; 600-27 April 1975; one-22 June 1975; two-29 July 1975. Thus, Laguna Alalay appears to be an important wintering area for these phalaropes, with their highest numbers during Oct.-April, and occasional birds in June and July. The bird on 22 June 1975 was in molt, appeared uneasy and watchful, and could not or would not fly. The two on 29 July 1975 were in ragged plumage with traces of summer coloring only on the coverts; they could fly, but spent much time resting with their beaks tucked under one wing. Although Meyer de Schauensee (1966, 1982) and Blake (1977) mentioned Bolivia as within the winter range, the only Bolivian records appear to be some cited by Niethammer (1953) from La Paz, Cochabamba and Beni depts.; those described as "common" at Lake Uru Uru, Oruro Dept. by Pearson (1975); and 5,000 and 3,000 seen at Laguna Alalay, 3 Nov. 1976 and 26 Jan. 1977, respectively, by J. V. Remsen (pers. comm.).

Chordeiles sp., probably C. minor. Common Nighthawk. I watched two nighthawks (probably Common Nighthawks, rather than Lesser Nighthawks [C. acutipennis], as the white patch on the outer primaries was positioned well back from the tips) before dark in the town of Sucre, Chuquisaca Dept., 2,900 m, 11 Nov. 1974. Meyer de Schauensee (1966, 1982) considered C. minor as a migrant over most of South America south to Argentina, but I know of no Bolivian record. C. acutipennis has been recorded once in western Beni Dept. in January, 1938, (Gyldenstolpe 1945), and there are several Bolivian records of the more easily distinguished Sand-colored Nighthawk (C. rupestris; Bond and Meyer de Schauensee 1943, Niethammer 1953, Parker and Rowlett 1984).

Riparia riparia. Bank Swallow. Seen by me twice: two at Montero, Santa Cruz Dept., 300 m, 19 March 1975, and two at Laguna Alalay, 27 April 1975, flying among other swallows, including Blue-and-White Swallows (Notiochelidon cyanoleuca). There is one record from Santa Cruz Dept. (Bond and Meyer de Schauensee 1942, Zimmer 1955), and J. V. Remsen (pers. comm.) saw two birds at Laguna Alalay on 1 Nov. 1976. These few records suggest that Bank Swallows may be scarce or irregular visitors in Bolivia.

Hirundo rustica. Barn Swallow. Barn Swallows were common at Magdalena, Beni Dept., 200 m, 17–21 Dec. 1974; they were numerous (more so than resident species of Hirundinidae) in the area of Santa Cruz, Montero, and Buena Vista, all Santa Cruz Dept., 240–250 m, 16–25 March 1975; and were seen at Laguna Alalay: four—26 Oct. 1974; ten—29 Dec. 1974; ten—16 Jan. 1975; fifteen—5 April 1975; one—27 April 1975; and two—22 June 1975. Perhaps Barn Swallows may concentrate in different areas from day to day, and disperse variably in different years, in their winter quarters; I saw none at Magdalena 6–9 Dec. 1974 despite their numbers there 8 days later, and I saw none anywhere in Bolivia during 1969–1971, even during my numerous visits to Laguna Alalay.

Other Bolivian records are of one specimen from Potosi Dept. in March (Bond and Meyer de Schauensee 1942), mentioned as "a winter visitor" in northern Bolivia (Gyldenstolpe 1945), 25 seen at Laguna Alalay 1 Nov. 1976 (J. V. Remsen, pers. comm.), three at Laguna Colorada, Potosi Dept., Nov. 1982 (F. Vuilleumier, pers. comm.), and several sightings in Santa Cruz and Oruro depts. in October 1983 (Parker and Rowlett 1984). Meyer de Schauensee (1966, 1982) considered this species as occurring throughout South America from August to May; therefore, the above June record is of interest.

Hirundo pyrrhonota. Cliff Swallow. I saw ca. eight at Laguna Alalay, 17 April 1975, flying among other swallows mainly Blue-and-White Swallows. A single specimen from Bolivia was taken in Chuquisaca Dept. in October, 1957 (Remsen and Traylor 1983), and there are now several recent sight records: five at Cochabamba city 1 Nov. 1976; from 5–200 per day in northern Beni Dept. in Nov. Dec., 1976; 30+ and two in Santa Cruz Dept., Oct., 1982 and Oct., 1983; and two twice in Oruro Dept., Oct., 1979 and Oct., 1983 (all in Parker and Rowlett 1984). No Bolivian records were known before these, and Meyer de Schauensee (1982) considered the species as wintering in Brazil and Argentina, transient in Colombia and Venezuela, and casual in Chile.

Other Nearctic-breeding migrants that I did not see, but that have been recorded in Bolivia at least once, some in the last century and others only recently, are: Charadrius semipalmatus, Catoptrophorus semipalmatus, Calidris minutilla, C. fuscicollis, C. himantopus, Tryngites subruficollis, Limosa haemastica, Larus pipixcan, Sterna hirundo, Coccyzus erythropthalmus, C. americanus, Myiodynastes luteiventris, Progne subis, Catharus fuscescens, C. ustulatus, Vireo olivaceus, Dolichonyx oryzivorus, Dendroica cerulea, D. fusca, Piranga rubra, and P. olivacea (see Bond and Meyer de Schauensee 1942-1943, Meyer de Schauensee 1966, 1982, Pearson 1975, Parker et al. 1980, Remsen and Ridgely 1980, Remsen and Traylor 1983, Parker and Rowlett 1984).

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