

BIRDS COLLECTED IN NICARAGUA BY BERNARDO PONSOL

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Resident naturalists in Central America are few, but the opportunities for such a person to make valuable contributions to ornithology are great. The late Fr. Bernardo Ponsol, S.J., of the Colegio Centro-América at Granada, Nicaragua, made a noteworthy collection of birds in that country and his enthusiastic pursuit of biological studies continued until his untimely death in 1946. Fr. Ponsol's collection has been almost unknown except for his record of an American Golden Plover (*Pluvialis dominica*) in Nicaragua (Wetmore, 1945) and for some mention in a popular account of the country (Marden, 1944). Since Fr. Ponsol's death there has been no one at the Colegio to continue his studies, and frequent changes in the staff made it unlikely that an active museum could be maintained. Therefore, the authorities of the institution generously donated those specimens for which there were adequate data to the University of California, Los Angeles, so that Fr. Ponsol's contribution to ornithological study in Nicaragua could be made known.

Bernardo Ponsol was born at San Sebastian, Spain, on February 23, 1900, and entered the Society of Jesus at Loyola, Spain, on July 15, 1917. He studied Biology and other sciences at Ona, Spain, and studied Theology and was ordained priest at Innsbruck, Austria. He returned to Spain and studied Biology for at least two years in the Central University in Madrid. Fr. Ponsol came to Nicaragua (evidently in the late 1930's) as Provincial of Central America, but despite the time-consuming duties of this office he managed to collect and prepare bird specimens—some as display mounts and others as study skins—and trained others in these activities. All accounts indicate that he was a most enthusiastic ornithologist, using as much time as he could spare to collect specimens and attempting to visit as many different habitats as possible. In 1943 he began correspondence with Alexander Wetmore, and through Dr. Wetmore was able to obtain some of the standard reference works on New World birds for the library of the Colegio Centro-América.

In 1945, Fr. Ponsol prepared a manuscript, entitled "Zonas Biogeográficas de la Flora y Fauna Nicaragüenses," that was a preliminary treatment of the subject; he intended to revise and extend it as more data were amassed and did not consider it ready for publication. This work was issued posthumously in 1958 as publication no. 6 of the Academia Nicaragüense de la Lengua, with due notice of Fr. Ponsol's view that the paper was not in final form.

There is no doubt that Fr. Ponsol hoped to continue and expand his ornithological activities, but he met a tragic death in an airplane crash at La Libertad, Nicaragua, on April 22, 1946. Unfortunately some of his notes were either lost in the crash or were not preserved at the Colegio, but for many specimens there are adequate data on the labels or in some of his specimen catalogs that were saved.

Fr. Ponsol made a tangible and lasting contribution to ornithology through his collecting activities, and he also made a contribution of another and perhaps less tangible nature. He is remembered with the greatest respect by former students at the Colegio and by all those with whom he came in contact throughout the country, and his widely-known enthusiasm for biology still encourages cooperation and assistance from people in all walks of life for zoological investigation in Nicaragua. For these reasons one can say with confidence that future students in this region will be indebted to Fr. Ponsol's pioneering efforts on behalf of biological science in his adopted country.

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LOCALITIES

Many of the localities at which Fr. Ponsol collected specimens can be found only on large scale maps of Nicaragua, and some I have not been able to place precisely. The following list includes all localities not easily found on standard maps or at which more than one specimen referred to in the subsequent account was collected. On many labels only the notation "CCA" (= Colegio Centro-América) or "casa" is present. For convenience I have given these localities as "Granada" as they refer to the institution in that city.

Tepetate.—This locality is not on any map, and it is the name given to the point where a small creek empties into Lake Nicaragua near the grounds of the Colegio Centro-América. For practical purposes it may be included in the city of Granada, Department of Granada.

Subidero.—This is another unmapped locality, just north of Tepetate, along the shore of Lake Nicaragua in the immediate vicinity of Granada.

El Progreso.—An hacienda at an elevation of 2700 feet on the slopes of the Volcán Mombacho near the city of Granada in the Department of Granada.

Santa Teresa.—An hacienda near the base of the Volcán Mombacho, about 7 km. southwest of Granada.

El Carmen, Las Sierras.—An hacienda in the Department of Managua, about 10 km. southwest of the city of Managua, at an elevation of about 2700 feet on the ridge ("Las Sierras") that lies southwest of the city. A town of El Carmen, about 30 km. southwest of Managua and shown on many maps, is at a lower elevation and is evidently not the Ponsol locality.

Santa Rita, Matagalpa.—An hacienda in the Department of Matagalpa, about 5 km. southeast of the city of Matagalpa, located in highlands called the mountains of El Apante with altitudes ranging from 3000 to 4000 feet.

La Providencia, Matagalpa.—An hacienda adjoining Santa Rita (above). Specimens were sometimes collected on the same day at both localities.

Santa María de Ostuma.—A large hacienda, including a popular hotel, that lies approximately 9 to 12 km. north of Matagalpa in the Department of Matagalpa.

Río Melchora.—A tributary of the Río San Juan about 15 km. east of San Carlos, Department of Río San Juan.

San Francisco.—On the Río San Juan, about 12 km. east of San Carlos.

San Emilio, Rivas.—This is not a Ponsol locality, but it figures importantly in discussions of the distribution of Nicaraguan birds and mammals and is thus included here. The professional collector W. B. Richardson obtained a large number of bird and mammal specimens there, and most of the birds are in the Chicago Natural History Museum and are cited in the "Catalogue of Birds of the Americas" (where the misspelling "San Emilis" frequently occurs). Richardson's original labels that I have seen are marked "San Emilio, (Rivas)," and Emmet R. Blake informs me that the geographic files of the Chicago Museum give the location as "on the south central shore of Lake Nicaragua, at Lat. 11° 3' N; Long. 85° 26' W." This location lies in the Department of Rivas, which extends from the west shore of Lake Nicaragua to about halfway along its southern edge. The fact that Richardson specified "Rivas" rules out various other places outside that Department that are also named "San Emilio." The town of Rivas could not have been meant, for it lies in the arid Pacific slope habitat and the birds from San Emilio are of Caribbean slope affinities. Unfortunately, there is no "San Emilio" at the above-specified location on most available maps. I have found it only on an undated wall map of Central America compiled by Alfredo Vischer and published by Wilh. C. Rübsamen, Stuttgart, Germany. Most detailed maps of Nicaragua show the localities of Cárdenas and Orosi on the south shore of the lake, and San Emilio would be about 6 km. east of Cárdenas and 4 km. west of Orosi. Probably many species characteristic of the humid lowlands of eastern Nicaragua reach the western limit of their distribution near San Emilio, where their usual habitat extends westward along the south shore of Lake Nicaragua. Although Richardson's "San Emilio" is a type locality, its absence on maps and the understandable confusion with other localities of the same name have resulted in its misplacement even in recent distributional works (Hall and Kelson, 1959; Casebeer, Linsky, and Nelson, 1963); hence, detailed discussion of the exact location seems merited.

ANNOTATED LIST OF SPECIES

In the following account, I have attempted to include all of Fr. Ponsol's records that provide new information on the status and distribution of Nicaraguan birds, and in some instances I have added notes from my own observations and collections in Nicaragua or listed previously unpublished records of specimens in the American Museum of Natural History (AMNH) in New York.

Gampsonyx swainsonii leonae. Pearl Kite. One pair taken on December 13, 1941, is without locality data but was probably obtained at or near Granada. An unsexed bird that measurements indicate is a female was taken at Tepetate on January 13, 1942, and a male was taken at the same place on April 24, 1943. These specimens support the statements of Miller and Griscom (1921) and Hellmayr and Conover (1949) that the Nicaraguan birds, despite their isolation, do not differ significantly in color or size from those of northern South America. Although Miller and Griscom (*op. cit.*) said that this little kite was common in western Nicaragua, specimens from this area are extremely scarce and my experience has been that these birds are very seldom encountered.

Pandion haliaetus. Osprey. A mounted bird at the Colegio Centro-América was taken at Tepetate on July 19, 1940. There are very few specimen records for Nicaragua at any season, and this appears to be the first for a summer month.

Amaurolimnas concolor. Uniform Crake. One male taken on March 28, 1946, on the Río Melchora has measurements (in mm.) as follows: wing, 111.6; tail, 39.2; exposed culmen, 25.1; tarsus, 41.8; middle toe without claw, 30.1. These dimensions lend support to the view that a small race *guatemalensis* is recognizable.

Porzana carolina. Sora. One female was collected at "La Punta" on February 21, 1943; the locality is uncertain but it is probably on the lakeshore near Granada. This species would be expected to winter in Nicaragua, but I am unable to find any published specimen records for the country. However, there is an unsexed specimen (AMNH) taken 12 mi. south of Metapa (= Darío), Department of Matagalpa, on April 25, 1917.

Heliornis fulica. Sungrebe. A female was taken on March 28, 1946, on the Río Melchora. The stomach contents are noted as small coleopterous insects; the ovary was somewhat developed.

Charadrius hiaticula semipalmatus. Semipalmated Plover. A male was taken at Subidero on April 19, 1943. This occurrence is not surprising, but I am unable to find a published specimen record for Nicaragua. Three females of this species (AMNH) were taken at Tipitapa, Department of Managua—two on April 27, and one on April 28, 1917.

Bartramia longicauda. Upland Plover. An unsexed bird was collected at Granada on April 20, 1940. The only previous record appears to be a sight identification by Richmond (1893).

Numenius phaeopus hudsonicus. Whimbrel. A female was taken on September 15, 1942, at Granada. I know of no other published specimen record for Nicaragua.

Tringa solitaria cinnamomea. Solitary Sandpiper. An unsexed bird, taken at Tepetate on October 17, 1942, has the characteristics of the western subspecies.

Erolia melanotos. Pectoral Sandpiper. Two birds, both unsexed, were taken at Granada on April 26, 1943. Dickey and van Rossem (1938) record this species in El Salvador as an abundant fall migrant but state that it is rare or accidental in the spring. Two birds (AMNH) were taken at Tipitapa, Department of Managua, on April 27 and 28, 1917.

Tryngites subruficollis. Buff-breasted Sandpiper. An unsexed bird taken at Granada on October 30, 1942, appears to be the first record for Nicaragua although the occurrence is not unexpected.

Larus pipixcan. Franklin Gull. A female in definitive black-headed plumage was taken on May 26, 1942, at Subidero. This is the first specimen record for Nicaragua, and the late spring date is surprising. Black Terns were also recorded on the same date (see beyond), and unusual weather conditions may have been responsible for these occurrences. On January 19, 1957, I saw numerous Franklin Gulls over Lake Nicaragua at Puerto Diaz, 18 km. southwest of Juigalpa, Department of Chontales; probably this species winters regularly on one or both of the Nicaraguan lakes.

Sterna fuscata. Sooty Tern. A mounted specimen at the Colegio Centro-América was taken at "Lago Granada" (= Lake Nicaragua) on July 7, 1940. This bird, probably a storm-blown vagrant, represents the first record for Nicaragua.

Hydroprogne caspia. Caspian Tern. A male taken on February 18, 1942, at Subidero is the first Middle American record for an area south of México. As in the case of the Franklin Gull, it may be that Lake Nicaragua provides a wintering place for some members of water bird populations that winter primarily in other regions.

On February 1, 1955, I saw several large terns perched on pilings at the edge of Lake Managua in the city of Managua that I identified as this species.

Chlidonias niger surinamensis. Black Tern. Two males and one female were taken at Subidero on May 26, 1942. One of the males is in full black plumage, but the other two birds show no approach to this condition. This seems to be the first specimen record for Nicaragua. The occurrence of the species was to be expected, but the late spring date is surprising.

Pionus senilis decoloratus. White-crowned Parrot. A male was collected on March 14 and a female on March 17, 1943, at El Carmen. These parrots, now found only on the Caribbean slope, were taken on the Pacific slope and may possibly have been escaped captives; parrots of several species are popular as pets in Nicaragua. However, the White-crowned Parrot may have been an inhabitant of the gallery forest of the Pacific slope before the area was so extensively altered for coffee-planting and other agricultural purposes.

Campylopterus hemileucurus. Violet Sabrewing. A male taken on May 8, 1943, at Santa Rita, appears to be intermediate between *C. h. hemileucurus* and *C. h. mellitus*. It is more bluish, less violet

on the rectrices (like *hemileucurus*) but resembles *mellitus* in the extent of the white tips to these feathers.

Picumnus olivaceus dimotus. Olivaceous Piculet. A male was taken on April 6, 1946, at San Francisco; Richmond's (1893) specimen from San Carlos in the same region is the only other published record for Nicaragua.

Automolus rubiginosus umbrinus. Ruddy Foliage-gleaner. An unsexed bird was collected on April 23, 1945, at Aranjuez, 4000 feet, 17 km. north of Matagalpa, Department of Matagalpa. The only other record of this species for Nicaragua is a male (testes not enlarged) taken at San Rafael del Norte, Department of Jinotega, on March 24, 1917. This specimen is in the American Museum of Natural History, and the label gives the elevation as 3500 to 4500 feet, and specifies deciduous forest; there would be cloud forest at that altitude in northern Nicaragua.

Thamnophilus doliatus intermedius. Barred Antshrike. A male taken on March 11, 1942, at Mombachito in the central part of the Department of Boaco shows no approach to the pale race *pacificus* although the locality is probably near the western edge of the range of *intermedius*.

Pachyrhamphus major. Gray-collared Becard. A male taken at Santa Rita on May 1, 1943, illustrates the variability in color of this species. The specimen was obtained near the type locality of the race *australis*, but it shows much more black in the interscapular region than examples of that subspecies and thus resembles *P. m. major* of eastern México.

Tyrannus tyrannus. Eastern Kingbird. Two birds were taken at Tepetate on October 1 and October 13, 1942, and another was collected on September 23, 1942, at a locality that I cannot identify although it is probably near Granada. These fall records from the Pacific slope are of interest as Dickey and van Rossem (1938) recorded this species in El Salvador only in the spring and suggested that the southward migration was confined to the Caribbean side of Central America.

Myiodynastes luteiventris luteiventris. Sulphur-bellied Flycatcher. A male taken on March 14, 1943, at El Carmen probably represents an early spring migrant.

Nuttallornis borealis. Olive-sided Flycatcher. A female was collected at El Progreso on April 14, 1943. Although this bird was probably a spring migrant, members of this species occasionally winter through Nicaragua as far north as Guatemala (Land, 1962). I have specimens and observations of this species in Nicaragua from late November through January. Two specimens (AMNH) probably represent migrants—one female was collected at Matagalpa on September 24, 1907, and another female was taken at 2400 feet on the Volcán Mombacho, Department of Granada, on May 6, 1917.

Catharus aurantiurostris costaricensis. Orange-billed Nightingale Thrush. A male taken on March 15, 1943, at El Carmen is an unexpected locality record as all others are from the north-central highlands. Hellmayr (1934) is emphatic that the race *albidior* described from Nicaragua is inseparable from *costaricensis*, and his authority is followed here.

Icterus chrysater chrysater. Yellow-backed Oriole. A male was taken on April 30, 1943, at La Providencia, and two females were taken on May 1 and May 6, 1943, at Santa Rita. A male and female were taken on April 21 and 24, 1945, respectively, at Santa María de Ostuma, 3400 feet. The dates suggest that the species breeds in the vicinity of Matagalpa. Dickey and van Rossem (1938) reported that this oriole did not nest in El Salvador and that their latest spring record was in mid-March.

Agelaius phoeniceus grinnelli. Redwinged Blackbird. An adult male taken on December 27, 1941, at Tepetate is large (wing, 124.2 mm.; tail, 94.8 mm.) and thus referable to *grinnelli*.

The subspecific status of the Redwings of Nicaragua is in need of clarification as some confusion exists in the literature. Our specimens and those of the American Museum of Natural History from the Department of Managua, and those from the Río Menco, Department of Granada, reported by Hellmayr (1937), show that *grinnelli* is the form inhabiting the Pacific slope. Redwings are known from the Caribbean slope of Nicaragua only at the south end of Lake Nicaragua and along the Río San Juan and Río Frío (where the species does occur in association with *Ramphocoelus passerinii*, contra Howell, 1957). Birds from this area, including those collected by Richardson at San Emilio (see p. 153), have previously been assigned to the race *richmondi* (Griscom, 1932; Hellmayr, 1937), which has a much shorter wing than *grinnelli*. Monroe (1963) has recently described *brevirostris* from the Caribbean slope of Honduras and southeastern Nicaragua. The collection at the University of California in Los Angeles has five males and four females from the latter region, taken in April,

1962, that seem to fit Monroe's characterization of *brevirostris* although in this Nicaraguan series the tail length of the males is somewhat greater (79 to 87 mm., average 83) and the culmen from nostril measurements average slightly higher (males: 16.1 to 17.3 mm., average 16.7; females: 14.1 to 14.4 mm., average 14.3). As the Nicaraguan populations appear to be separated by a considerable distance from those in Honduras, some differences would be expected; present evidence, however, indicates that Monroe is correct in referring birds from southeastern Nicaragua to *brevirostris*. San Emilio probably represents the western limit of the local range of this form.

Van Rossem (1930) described *costaricensis* from the region around the head of the Gulf of Nicoya in northwest Costa Rica. He commented that the new form was only slightly smaller than *grinnelli* and so similar that it would not be worth naming except that the ranges of *grinnelli* and *costaricensis* were apparently discontinuous and separated by an intervening race (presumably *richmondii* [= *brevirostris*]). If van Rossem was aware of the specimens from San Emilio he may have assumed that this locality was in the Pacific slope habitat of Nicaragua. I have re-examined the seven males and six females (including the type) of *costaricensis* in the Dickey Collection (UCLA) that formed the bulk of the series on which van Rossem based his description, and I have also examined a pair in the University of Michigan Museum of Zoology (UMMZ) taken on January 14, 1951, at Catalina, Canton Bagaces, Guanacaste Province, Costa Rica, by Paul Slud. I am unable to detect any consistent color differences between the females of *costaricensis* and eight females of *grinnelli* from El Salvador although two of the former are more brownish, thus tending to resemble *brevirostris*. All of the Costa Rican birds in the Dickey Collection were taken in June or August, and the plumage is heavily abraded in almost every one. The rectrices are badly worn in every specimen, and in only three males taken on June 15, 1929, do the remiges appear in sufficiently good condition to permit an accurate measurement. The wing measurements to the nearest mm. of these three males are 116, 120, and 123. UMMZ no. 133350, a male in good plumage, has a wing measurement of 121 mm. As the wing length of *grinnelli* males ranges from 120 to 126 mm. (van Rossem, 1930, and my own measurements of nine males of this race from western Nicaragua), only one of the four *costaricensis* in good plumage falls outside the size limits of *grinnelli* as indicated by wing length. I have confirmed van Rossem's tail measurements for *costaricensis*, but the rectrices are so frayed in most of these specimens that I do not feel that the figures are valid for comparison. I have also remeasured the six females of *costaricensis* and eight females of *grinnelli* in the Dickey Collection, which are without exception in worn plumage. My measurements differ somewhat from those of van Rossem (1930); I find the range of wing and tail length to be as follows: *costaricensis*: wing, 89 to 93 (91); tail, 64 to 70 (66); *grinnelli*: wing, 90 to 99 (94); tail, 62 to 74 (67). An unworn female of *costaricensis* (UMMZ no. 133351) has wing and tail measurements of 96 and 72 mm., respectively. Culmen from nostril measurements of *grinnelli* and *costaricensis* are virtually identical: *grinnelli*: males, 16.1 to 19.0 (17.3); females, 12.7 to 14.6 (13.6); *costaricensis*: males, 16.3 to 18.4 (17.3); females, 12.2 to 14.4 (13.3).

It appears that *costaricensis* tends to be slightly smaller than *grinnelli*, but with considerable overlap in size; consistent color differences are not apparent. Fresh-plumaged specimens from Costa Rica are needed to resolve the question of the validity of *costaricensis*, and it may not prove to be separable from *grinnelli*. It is possible that the Costa Rican populations represent *grinnelli* approaching *brevirostris*, but there is at present no direct evidence of interbreeding between these two races.

Cassidix nicaraguensis. Nicaraguan Grackle. A male without locality data (probably from Granada) was collected on December 10, 1941, and a female was taken at Granada on December 27, 1941. The Nicaraguan Grackle is a distinct species, restricted to the vicinity of the two great lakes of Nicaragua but abundant within this limited range. It is sympatric with the much larger Great-tailed Grackle (*C. mexicanus*) from which it differs markedly in size, color, vocalization, and breeding behavior. Detailed discussion of these points, which have also been investigated recently by Dr. Robert K. Selander of the University of Texas, is outside the scope of the present paper and must be reserved for a later time.

Tanagra musica. Blue-hooded Euphonia. A male and a female were taken on April 30, 1943, at La Providencia and at Santa Rita, respectively, and a male was taken at Santa María de Ostuma at an elevation of 3700 feet on April 14, 1944. There is only one other record of this species in Nicaragua. Hellmayr (1936) listed none and mentioned that there seemed to be a gap in the range, but

Zimmer (1943) cited one specimen from Nicaragua (AMNH). It is a male taken 3 miles southeast of Jinotega, Department of Jinotega, in pine-oak forest at an elevation of 3500 feet on April 6, 1917. The testes were much enlarged according to a note on the label. Zimmer recognized Hartert's race *vincens* for the Central American populations from southern Guatemala through Panamá. In an unfortunate *lapsus*, however, Zimmer characterized this form as having a lighter blue hood than *elegantissima* of México; Hartert (1913) described *vincens* on the basis of having a darker blue hood than that of more northern birds. The three specimens mentioned here resemble the darker examples of a series of 11 birds from El Salvador and are thus referable to *vincens* if this proves to be a valid race.

Piranga ludoviciana. Western Tanager. A female was taken on April 13, 1943, at El Progreso. Although this species has not previously been recorded from Nicaragua, it is a common winter resident on the Pacific slope of that country. I collected a male at La Trinidad, 17 km. southwest of Diriamba, Department of Carazo, on December 27, 1951, and numerous individuals were seen at La Calera, 12 km. east of Managua, Department of Managua, in January, 1957. On January 27, 1957, for example, these tanagers were noted in large numbers with Clay-colored Robins (*Turdus grayi*) in a berry-bearing tree at the interface of a woodlot and a pasture.

Guiraca caerulea lazula. Blue Grosbeak. Three birds, one adult male, one immature male, and one female, were taken on January 24, 1943, at Santa Teresa. These specimens have very large bills and the adult male is light blue in color; they are therefore referable to the Central American race. Dickey and van Rossem (1938) did not record this species in winter in El Salvador, and it may be that the population moves south at least to the Pacific slope of Nicaragua in those months.

In addition to the records listed above, the Ponsol collection includes specimens of various resident and migrant species that provide information on local distribution that is of considerable interest to all students of Nicaraguan birds.

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