# BREEDING OF THE BAND-TAILED GULL (*LARUS BELCHERI*) ON THE ATLANTIC COAST OF ARGENTINA

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The Band-tailed Gull (also called Belcher's Gull and Simeón Gull) has long been known to breed on the arid Pacific coast and adjacent islands of Perú and northern Chile (Murphy, 1936:1053–1056; Goodall, Johnson, and Philippi, 1951: 283). Earlier authors (Saunders, 1896:226; Dwight, 1925:158; Alexander, 1928: 129) included in the range the coast of Argentina, the Magellanic region, and the Falkland Islands, but Hellmayr (1932:409), Peters (1934:314), and Murphy (1936) rejected such reports, regarding *Larus belcheri as* "an endemic species of the Humboldt Current littoral." The collection of specimens on the Atlantic coast of Argentina (Daguerre, 1933:214; MacDonagh, 1934:312; Steullet and Deautier, 1938:2; 1946:654), with the publication of morphological data, satisfied Hellmayr and Conover (1948:257) that this species did in fact occur on the Atlantic. The question still remained whether it bred on that coast.

Daguerre (1933:215) had reported finding on an island in Bahía San Blas, in the southern part of the province of Buenos Aires, deserted gull nests with some dead chicks, which he attributed to this species. During the probable breeding season there had been sight observations of *Larus belcheri* at Puerto Ingeniero White and Puerto Belgrano, a little to the north of the Bahía San Blas (Casares, 1939:286; Olrog, 1958a:31). Sight reports and specimen records indicated that the species ranged in Argentina at least from Puerto Deseado on the Patagonian coast to Mar del Plata in Buenos Aires, and even to Uruguay during the Southern Hemisphere winter (Olrog, 1948:492 and 1958b:8; Cuello and Gerzenstein, 1962:84). Field experience and examination of specimens convinced me that there was a distinct Atlantic population, which I described as *Larus belcheri atlanticus* (Olrog, 1958b:8), because it differed from the nominate Peruvian population in longer culmen and wing. With assistance from the Mae P. Smith Gull Fund of the American Museum of Natural History I went to Bahía San Blas from 6 to 11 November 1963, in an effort to determine whether *Larus belcheri* bred in that district.

## NESTING

San Blas is a somewhat hook-shaped island, roughly 10 miles long, separated from the nearby mainland only by tidal watercourses, which, even well inland, form salt lagoons with sandy islets, frequented by gulls, terns, oystercatchers, and plovers. On the seacoast there is a group of islands and islets (fig. 1). Local fishermen readily pointed out the sites of colonies of Kelp Gull (*Larus dominicanus*) and Brown-hooded Gull (*Larus maculipennis*), but although they seemed to be acquainted with the Band-tailed Gull, they were not familiar with its breeding places. However, on one of our first excursions (8 November), we found a small colony of nesting *Larus belcheri* very near a larger colony of *Larus dominicanus*, and secured specimens. Both colonies were on a good-sized island, separated from the main area of San Blas by two branches of a saline watercourse, and some two kilometers from its outlet in the sea. This island was just above water level, partly inundated at high tide, and covered with saw-grass. The gull colonies were 500 meters from the water. The *Larus belcheri* colony consisted of 12 nests; that of *Larus dominicanus* of 75 nests. The nests were made of pieces of peat and lichens, with some odd feathers in them,

and placed on grass tussocks. They contained only one or two eggs, rather than three, described as the clutch in Perú. The fishermen suggested that these colonies had been subjected to egging and that the eggs were a replacement set. The explanation seemed probably correct, for at another large colony of Kelp Gulls on a sandy islet in a salt lagoon there were no eggs, but numerous well-grown chicks, between two to three weeks old, of which we banded 424. A nesting pair of Band-tailed Gulls with its two eggs was collected on 9 November and sent to the American Museum of Natural History. We had planned to return later to obtain chicks, but an accident required postponement of the project.

## IDENTIFICATION

Contrary to what has been suggested by some authors, field recognition in Argentina of the Band-tailed Gull, at least of older individuals, presents no difficulty. In breeding plumage adults show resemblance to the larger Kelp Gull in possessing a blackish mantle, the outer primaries lack white tips, the white tail is crossed by a black subterminal band (rather inconspicuous until the bird flies), and the yellow bill has a black subterminal ring (sometimes restricted to the maxilla) and a red tip. The iris was light brown and the tarsi yellow or greenish yellow in specimens I collected. In the adult nonbreeding dress the characteristic bill and tail patterns are retained, but the white head is rather heavily mottled with brownish gray, more or less well set off from the white of the upper back, but showing much unmarked white on the forehead and throat. The mottling tends to be darker and more extensive in younger birds. But, according to Dwight (1925:161), speaking of the nominate Peruvian race, the distinctive soft-part pattern of the bill and a plumage aspect much like winter adults appear by the second winter.

## HABITS AND DISTRIBUTION

The breeding biotope of *atlanticus* at San Blas is very different from that described for *belcheri* in Perú, where the latter "nests in low situations, close to the breaking waves" and on rocky islands (Murphy, 1936:1054). At San Blas nests of *atlanticus* were in grass tussocks far from the water. The colony of *atlanticus*, like that of *dominicanus*, gave the impression of marsh birds, rather than sea birds. In Perú, according to Murphy (1936:1055–1057), *belcheri* preys persistently on eggs and chicks of other birds, particularly of the abundant Guanay Cormorant, *Phalacrocorax bougainvillii*. At San Blas, where colonies of cormorants or of other birds easy to prey upon are absent, *atlanticus* fed on fish and crabs. Possibly the principal Atlantic breeding ground may be found farther south on the Patagonian coast, where there are colonies of cormorants and penguins. Probably, too, *atlanticus* nests farther north on the islands of Bahía Blanca, near which (at Puerto Belgrano) I have seen adults in breeding dress during the summer. In the summer months (November to February) I have found subadults with mottled heads farther north at San Clemente del Tuyú, Cabo San Antonio and vicinity, at the extreme northeast projection of Buenos Aires province. There small flocks of 5 to 15 birds frequented the beaches, seeming reluctant to fly, but running off, rather like plovers, and often swimming out from the beach. During the winter I found *atlanticus* commonest about Mar del Plata, Buenos Aires, and there are published records as far north as the coast of Uruguay. Now that the species has proved more adaptable ecologically and more wide-ranging than formerly believed, the possibility of breeding in the

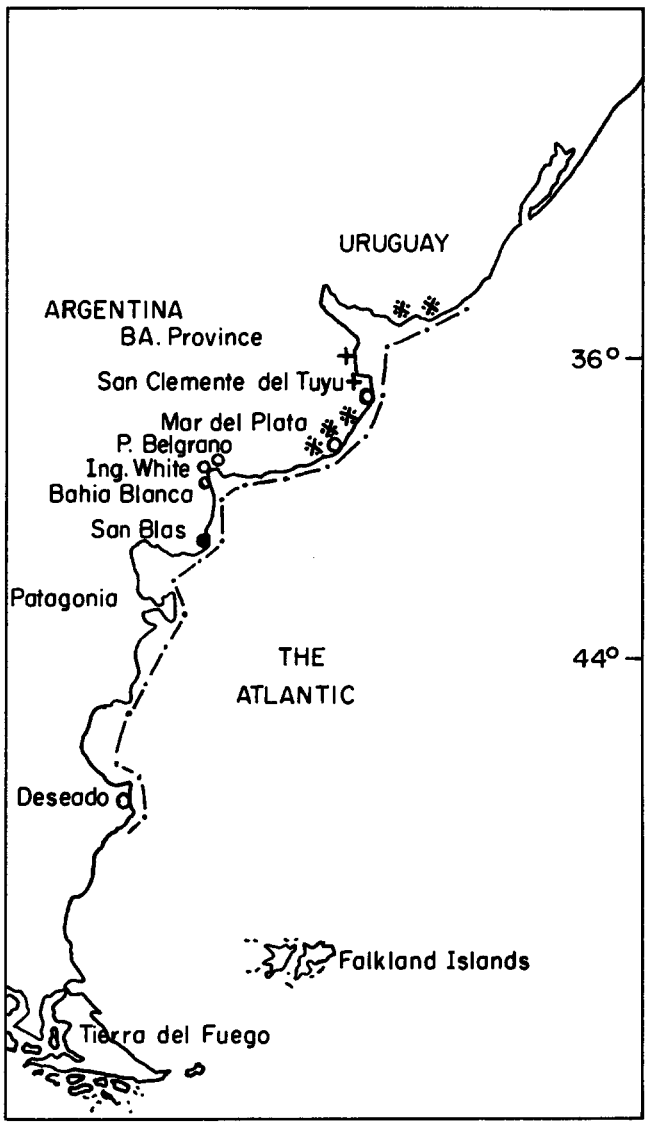


Figure 1. Distribution of *Larus belcheri atlanticus*. •, known breeding site; –.–., known general distribution; *, known wintering sites; +, known summering sites (subadults).

Magellanic region, on Tierra del Fuego, in Patagonia, and even in the Falkland Islands warrants investigation.

On the Pacific all reported breeding localities, and most specimen records, are from tropical latitudes between the Equator and the Tropic of Capricorn, on coasts washed by the cool Humboldt Current (fig. 2). On the Atlantic the only known breeding site and all occurrence records are well within the South Temperate Zone, south of lat 34° S. Even on the Pacific, where cold waters extend much farther northward, the range of *Larus belcheri* may be more extensive than recorded, in both

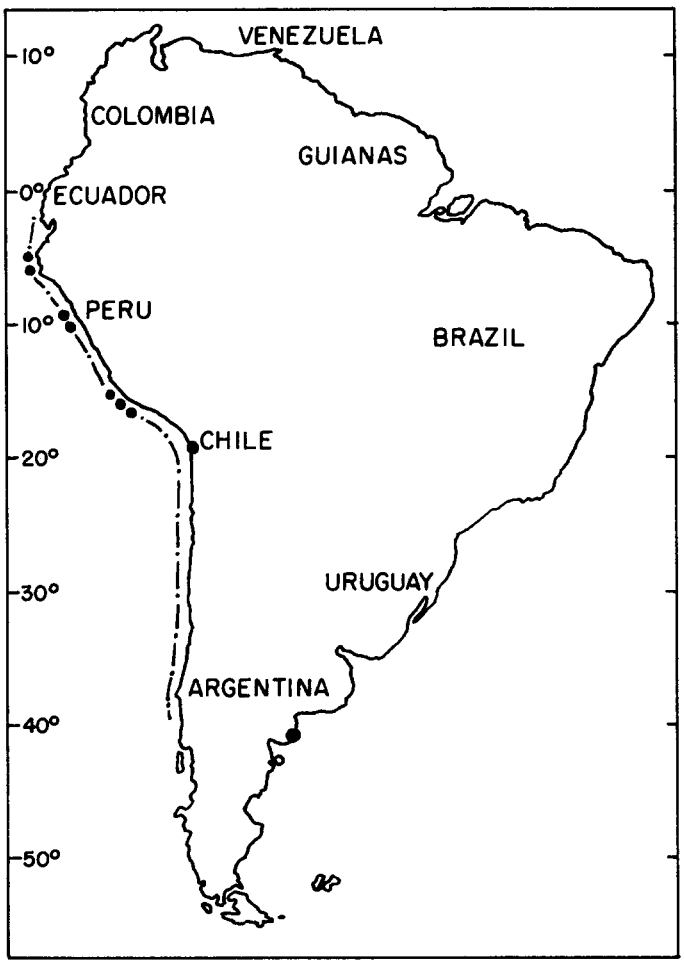


Figure 2. Distribution of *Larus belcheri* Vigors. ●, known breeding localities; –.–., known general distribution.

directions. On 17 or 18 May 1940, I saw two at Corral, the port of Valdivia, Chile (almost 40° S), farther south than the range reported by Goodall, Johnson, and Philippi (1951:282). Eugene Eisenmann writes me as to observations in the Bay of Panamá (ca. lat 9° N):

On 20 December 1962, at the city of Panamá, on rocks in the sea close to the suburb of San Francisco de la Caleta, I watched a blackish-backed, hooded gull, at rest, walking, and in flight, which showed all the plumage features, the bill pattern, the leg color, and relative size of *Larus belcheri*. The primaries were dark to their tips (the secondaries formed a white border) and the white tail was banded, although the neck and underparts appeared white. I had excellent comparison with the smaller Laughing and Franklin's Gulls (*Larus atricilla* and *Larus pipixcan*) and with one larger immature Herring Gull (*Larus argentatus*). Occurrence in Panamá may be more than casual, for Mr. William Belton has written me describing in detail two band-tailed dark-backed gulls, with the soft-part colors of *Larus belcheri*, observed by him at the beach of Fort Amador,

near the Pacific entrance of the Canal, in 1964. The gull seen on 10 May had (surprisingly for this date) a pure white head; that seen on 24 August had the dark hood of the non-breeding stage. In each case the larger size and darker mantle were compared with *Larus atricilla*. The features described by Mr. Belton seem diagnostic of *Larus belcheri*, except that the failure to mention expressly absence of white on the primary tips perhaps may leave open the remote possibility that the white-headed bird might have been a Japanese Black-tailed Gull (*Larus crassirostris*), which has, however, a lighter mantle.

## COMPARISON OF *ATLANTICUS* AND NOMINATE *BELCHERI*

E. Eisenmann and I compared my breeding pair from Argentina, and an immature male about a year old that I collected at Cabo San Antonio, San Clemente del Tuyú, Buenos Aires province, Argentina, 10 November 1962, with a large series of nominate *belcheri*, in all plumages, taken on the Peruvian coast and adjacent islands. All these specimens are now at the American Museum of Natural History. The differences between the two forms are far more striking than I realized when I described *atlanticus*, for at that time I had no series of *belcheri* for comparison.

*Measurements.* Of the two forms *atlanticus* is a much larger; in fact there seems to be no overlap in wing and tail measurements of adults. Breeding ads. ♂ wing (flat) 408 mm, tail 154, culmen 55, tarsus 69; ♀ wing 399, tail 149, culmen 47, tarsus 56. My type series measured: 2 ♂♂ wing 420, 428, culmen 55, 56; 2 ♀♀ wing 400, 408, culmen 52. Steullet and Deautier (1946) give measurements for five examples of *atlanticus* from Argentina, as wing 403–428, tail 154–170, culmen 52.5–57. Murphy's measurements (1936) for nominate *belcheri* from Peru are 6 ♂♂ wing 348–372, tail 128–143, culmen 50–52, tarsus 63–66; 8 ♀♀ wing 330–352, tail 124–143, culmen 46–51, tarsus 55–60. Even my immature *atlanticus*, wing 393 (worn), tail 163, culmen 54, tarsus 61, is larger in wing, tail, and culmen than any *belcheri* measured by Murphy.

*Plumage of adults.* The mantle color of *atlanticus* in breeding dress is distinctly blacker (slaty black rather than brownish black); this difference is not the result of foxing, for Murphy (1936) points out that the brownish tone in nominate *belcheri* is helpful in distinguishing it in the field from *L. dominicanus*; *atlanticus* is fully as black as *dominicanus*. My two breeding *atlanticus* lack the pearl-gray tinge on the hind neck, upper back, and breast, characteristic of adult nominate *belcheri*; the under-wing coverts of *atlanticus* are white, rather than gray; the black tail band is narrower, occupying only the terminal half of the middle rectrices and a somewhat smaller area on the outer rectrices, while in *belcheri* the black is more extensive, covering most of the middle rectrices except the extreme base and tip. The dusky hood so distinctive of postnuptial adult as well as subadult and immature *belcheri* is never acquired in *atlanticus*. I have seen many *atlanticus* in winter in Argentina with brownish-gray mottling about the head, but none had anything like the sharply demarked dusky hood visible in both winter adults and subadults (at all seasons) of Peruvian *belcheri*.

*Juvenal plumage.* The juvenal dress of *atlanticus* is much lighter than that of Peruvian *belcheri* and lacks the solid dark-brown head and breast of that form.

*Soft parts.* My two breeding *atlanticus* are labeled as having red eye-rings; my recollection is that this was true of all adults I examined at close range on the breeding grounds. Murphy (1936) describes Peruvian *belcheri* as having "eyelid yellow, feathered except at the canthi," and one adult Peruvian specimen in the American Museum of Natural History (♀, 24 February 1935, "o. sl. e.") is labeled "eye-lid

dull yellowish." In both forms the iris appears to be brown, and the tarsi and toes yellow or yellowish (one of my adults is labeled as having these yellow, the other greenish-yellow). It is of interest that my adults have suffered a postmortem change in leg color; they are now dark olive, with yellow suggested only on the webs and edges of the scutes; the much older Peruvian specimens of similar breeding stage still show some yellow tones on tarsi and toes.

Eisenmann has pointed out to me that in winter dress, by reason of its hood, nominate *belcheri* shows resemblances to the Dolphin Gull, *L. scoresbyi*, while *atlanticus* looks more like the Kelp Gull, *L. dominicanus*, and the distant Japanese Black-tailed Gull, *L. crassirostris* (which also has a black-banded tail, and similarly patterned bill). For gulls the differences between *atlanticus* and *belcheri* are such, according to Eisenmann, as one might expect between allied but distinct species. However, we both feel that until more is known of the breeding range of *atlanticus*, and whether there is any zone of contact, it is better to maintain that form as a race of *Larus belcheri*.

## ACKNOWLEDGMENTS

I wish to thank Dean Amadon of the American Museum of Natural History for facilitating the expedition to San Blas, and Eugene Eisenmann of the same museum for his interest in the project and help in connection with this paper.

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