

VALIDITY OF THE SHOREBIRD GENUS PSEUDOSCOLOPAX

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While preparing the ornithological material for the forthcoming Encyclopedia Arctica, I recently have had occasion to examine specimens of numerous Asiatic birds. One of the most interesting and puzzling of these is the so-called Snipe-billed Godwit, a species Peters has listed as *Limnodromus semipalmatus*. I have not seen this bird alive, of course, but I have examined several specimens borrowed from the Museum of Comparative Zoology and the American Museum of Natural History, and I have come to believe that it belongs neither in *Limnodromus* nor in *Limosa*, but in a genus by itself. Frank A. Pitelka has expressed substantially the same belief in a recent paper (Condor, 50, 1948:259-269). Although there he has actually left *semipalmatus* in the genus *Limnodromus*, he mentions the availability of the name *Pseudoscolopax* Blyth.

The significant part of Blyth's description (Jour. Asiatic Soc. Bengal, 28, 1859:280) of *Pseudoscolopax* reads thus: "It [*Pseudoscolopax semipalmatus*] is a much larger bird than *M* [*acrorhamphus*]. *griseus*, with a proportionately longer and still more thoroughly Snipe-like bill, while the semi-palmation of the toes at once distinguishes it. The plumage, too, is very different, and in our Indian bird considerably resembles that of most Ruffs in winter dress: the rump is uniformly coloured with the back; whereas the other has a pure white rump, becoming gradually more mottled to the upper tail-coverts; and the Indian bird is almost wholly white under the wings, where the other has every feather mottled with dusky."

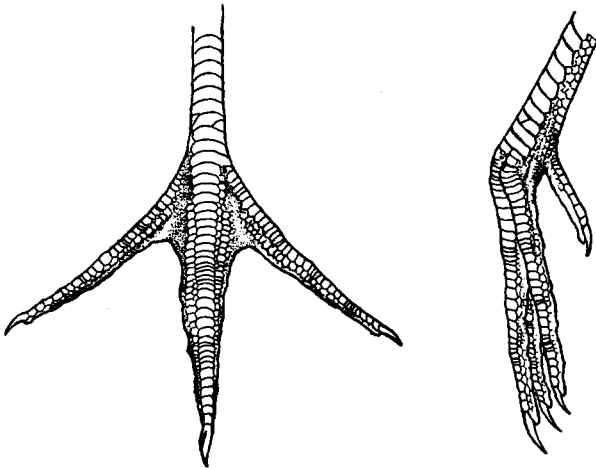


Fig. 51. Feet of *Pseudoscolopax semipalmatus*, life size.

The aforementioned semipalmation, which has been described by Pitelka, I have studied with care. In making the drawing reproduced herewith I relaxed and spread the toes of a male specimen collected by A. S. Loukashkin in the Heilungkiang Province of northern Manchuria (Am. Mus. Nat. Hist. no. 387945). As I examined the feet of this specimen, I became aware of the fact that the hallux was proportionately longer and heavier than in the New World dowitchers. In all eight specimens of the Snipe-billed Godwit I have thus far examined it reaches very nearly to, quite to, or slightly beyond the distal end of the proximal phalanx of the outer front (fourth) toe in the closed foot

and almost or quite to the distal end of the proximal phalanx of the inner front (second) toe. In only a very few of the numerous dowitcher specimens before me does the hallux reach to the distal end of the proximal phalanx of the fourth toe, and in none of them does it come at all close to reaching the distal end of the proximal phalanx of the second toe. In *Limnodromus griseus* the hallux is very slender. Exact measurement of toe-thickness in dried specimens seems to be impracticable, but careful comparison reveals that in the Snipe-billed Godwit the hallux is about half as thick as the other toes, while in the dowitchers it is about a third as thick as the other toes. This heaviness of the hallux is, I believe, correlated with the semipalmate condition. Whatever habitat factors have favored, through selection, development of the semipalmate condition have also favored bigness of hind toe. A guess may be hazarded that the bird habitually feeds in mud so deep that the semipalmation and thickness of toes are advantageous.

So far as I know, no one has called attention to certain ways in which the bill of the Snipe-billed Godwit is peculiar. The nostril is proportionately narrower than in *Limnodromus griseus*, being slit-like in six of the seven specimens at hand. It is also, again proportionately, farther removed from the frontal feathering. Oddly enough, in the only specimen before me which has an elliptical rather than a slit-like nostril, the proximal end of the nostril is only 3 mm. removed from the closest feathers, while in the other specimens it is 4 to 6 mm. away. In *Limnodromus griseus* the nostril is at the very base of the bill, the proximal end of the opening being a little more than 1 mm. (never more than 2 mm.) from the frontal feathering.

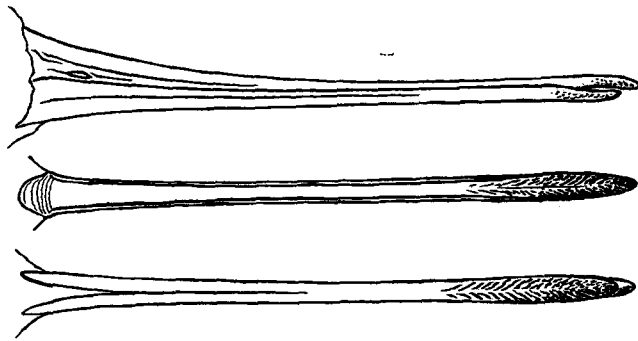


Fig. 52. Bill of *Pseudoscolopax semipalmatus*, life size, viewed from side, above, and below.

Whether the upper mandible fits down into the lower mandible in living Snipe-billed Godwits as it does in skins remains to be ascertained. In the specimen on which my drawing is based I did not become aware of this "troughing" of the lower mandible until I pried the mandibles apart. My reason for prying them apart was that I was puzzled by the closeness of the nostril to the commissure. There is, admittedly, much variation in bill-condition in the small series at hand. In the one juvenal specimen the bill was so forced out of shape by being tied shut during the course of preparation that its characters are obscure. In all the others the outer edges of the bill, when viewed directly from above, are the edges of the lower, *not the upper*, mandible, except at the very tip, where the upper mandible broadens. In all but one of the six adult specimens at hand the upper mandible fits definitely down into the lower to such an extent that pressing the two together instantly reveals the relationship. This "troughing" may also be characteristic of *Limnodromus griseus*, but probably to a lesser degree.

Blyth, who probably did not have a specimen of *Limnodromus griseus scolopaceus* before him when he described *Pseudoscolopax*, was in error in believing that *Pseudoscolopax* had a "proportionately longer" bill than *Limnodromus*. The proportions of *Pseudoscolopax semipalmatus* and *Limnodromus griseus scolopaceus* are about the same except for the position and shape of the nostril and the thickness and length of the hallux, as already described.

My thinking concerning the validity of *Pseudoscolopax* has, admittedly, been influenced by what we know of the present-day distribution of the forms involved in our discussion. As Pitelka has pointed out, the Snipe-billed Godwit breeds farther east in Asia than has been supposed. Furthermore, northeastern Siberian records of the Long-billed Dowitcher suggest that that form may yet be found breeding there. Thus, the geographical gap between the Old and New World forms is not actually very great.

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