

*Limosa limosa melanuroides***The Eastern Black-tailed Godwit**

Limosa melanuroides, Gould, *Proc. Zool. Soc.*, 1846, p. 84 (Australia).

Limosa limosa (part), Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 381.

Limosa belgica, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 254.

Limosa limosa melanuroides, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 1921; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 207.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—General colour above, brownish grey with very narrow, slightly paler fringes to the feathers. Forehead, a short superciliary stripe and a spot under the eye, whitish. Back and rump, blackish grey; upper tail coverts and base of tail, white; remainder of tail and tips of longer tail coverts, black, the tail tipped with whitish and the white base to the feathers increasing in extent outwards. Lesser wing coverts, blackish brown, the median series paler with dirty-white tips and the greater series with broad white tips forming a bar on the wing; primaries and secondaries, blackish brown, with white bases increasing in extent inwardly, the inner secondaries being almost entirely white. Under wing coverts, axillaries and quill lining, white, the feathers all round the edge of the wing, underneath, blackish, with broad white tips. Throat, belly, flanks and under tail coverts, white; fore-neck, breast and thighs, brownish grey.

Adult in breeding plumage.—Head, neck and under surface, except the chin, throat and abdomen, which are white, dull rufous. Head streaked with black. Back and scapulars, black, the feathers edged with rufous; under parts with broad blackish cross-bars.

Immature.—Young birds in the autumn are not unlike the adult in winter plumage, but they are darker above, with pale rufous edges to the feathers; under parts washed with buff.

Soft Parts.—Irides, brown; feet, greyish black, sometimes with a greenish tinge. Basal half of bill, dull yellowish red, the tip, dark brown.

Dimensions.—*Female.*—Total length, 14.5 in.; wing, 7.5 in.; tail, 3 in.; tarsus, 2.75 in.; bill from gape, 3.25 in. *Male* rather smaller.

Range in the Malay Peninsula.—Known from but few localities; the Dindings (*A. T. Edgar*); Temerloh, Pahang; near Kuala Lumpur, Selangor; Malacca; Singapore Island.

Extralimital Range.—From the breeding-grounds in North-Eastern Asia, south in winter to India, Malaysia and Australia; the typical race breeds in Europe and West Asia and migrates down to Africa, India, etc.

Note.—Eastern specimens of the black-tailed godwit are smaller than those from Europe and are therefore regarded as a distinct race or subspecies, but intergradations between the largest and the smallest specimens are found.

Nidification.—Four pear-shaped eggs are laid in a depression in the ground.

Habits.—Not a common bird in the Peninsula, but found in small numbers

in autumn and winter. Malayan specimens have been obtained at the edge of muddy creeks at some distance from the sea, on swampy plains in the interior and on mud-flats on the west coast of the Peninsula in the winter months from October to March. Birds killed at the end of the latter month are changing into nuptial plumage. Mr E. Seimund met with large flocks of the species at Temerloh in Pahang in January, but usually it is found singly or in small parties of three or four.

Limnodromus griseus semipalmatus

The Snipe-billed Godwit

Macrorhamphus semipalmatus, Jerdon in Blyth, *Journ. Asiat. Soc. Bengal*, xvii., 1848, p. 252 (near Calcutta); Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 257.

Macrorhamphus taczanowski, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 400.

Macrorhamphus griseus taczanowskii, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 64.

Limnodromus taczanowskii, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 210.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—General colour above, greyish brown, the feathers with white edges. The median and greater wing coverts with broad white edges and darker centres. Primary coverts, dark brown; outer primaries, dark brown, the inner webs largely white, the shafts white; inner primaries, largely white, irregularly mottled with black, tips black also; the long, inner secondaries, brownish grey, the others, white, irregularly barred with black. Back, rump and upper tail coverts, white, mottled and barred with black; tail feathers, barred with black and white, the median pair more uniform. Lores, brown; sides of the face, whitish, streaked with brown; rest of the under surface, white, irregularly freckled and barred with blackish on the throat, foreneck, breast, flanks and under tail coverts. Under wing coverts, whitish, their centres blackish grey. Some of the axillaries white, others with narrow, broken dark bars.

Adult in breeding plumage.—Quite distinct. The upper parts, rufous, with blackish-brown centres to the feathers; lower parts, reddish rufous, paler on the centre of the abdomen and barred with dusky on the flanks.

Soft Parts.—Bill, black, plumbeous at the base; irides, dark brown; feet, dark plumbeous (*Oates*).

Dimensions.—Total length, 13 in.; wing, 6.5 to 7 in.; tarsus, 1.9 to 2.1 in.; bill from gape, 3.1 to 3.4 in.

Range in the Malay Peninsula.—A specimen was secured in the Dindings territory by Mr R. J. Wilkinson, C.M.G., in December 1903. Mr C. J. Aagaard collected a male on the mud-flats near the mouth of the Lakon river, in Peninsular Siam, on 1st September 1911, and afterwards succeeded in securing others

in the same locality. In December 1922 or 1923 Mr E. Seimund identified the heads of two birds killed (and eaten) by a sportsman near Kuala Lumpur, in Selangor.

Extralimital Range.—Breeds in Western Siberia and in Mongolia and ranges in winter to China, Japan, the Philippines, Borneo and Sumatra. Has also been obtained in Burma, Assam, Central and Southern India. It is not uncommon in Siam.

Nidification.—Although eggs of this bird have been sent to Europe from Western Siberia very little is known of its breeding habits.

Habits.—We have little to record from Malaya about this rare wader, but Mr C. J. Aagaard, who has been very successful in obtaining specimens in Siam, has kindly given us some interesting notes. Between 1910 and 1926 he obtained about fifty specimens in the province of Nakon Sri Tammarat on the east side of Peninsular Siam, and in 1924 got seventeen "red" birds. His collector afterwards worked near the mouth of the Menam river, in Siam, and in May 1927 Mr Aagaard wrote to us that he had obtained about thirty specimens "as red as copper"—*i.e.* in breeding plumage. A few of these birds are in the Raffles Museum. Of two dated 24th April one is changing plumage, but the other appears to be in almost complete nuptial dress. Another shot on the 22nd of the same month is in perfect winter plumage, as is one on the 27th September. It seems very likely that this wader occurs much more commonly in Malaya than has hitherto been supposed.

Tringa totanus totanus and *Tringa totanus eurhinus*

The Redshank (Western and Eastern Races)

Western Race

Scolopax totanus, Linn., *Syst. Nat.*, 10th ed., 1758, p. 145 (Sweden).

Totanus calidris (part), Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 414; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 264; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 43; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 65.

Tringa totanus totanus, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 221.

Eastern Race

Totanus totanus eurhinus, Oberholser, *Proc. U.S. Nat. Mus.*, xxii., 1900, p. 207 (Ladak).

Totanus calidris (part), Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 414; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 264; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 43; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 65.

Tringa totanus terrignotæ, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 221.

Malay Names.—Kēdidi pantai; burong kaki dian.

Description.—*Adult in winter plumage.*—Head, hind neck and mantle, almost uniform brownish grey; the scapulars and long inner secondaries similar; greater wing coverts with broad white edges, forming a bar on the wing, and subterminally coarsely mottled with blackish. Back and rump, white; upper tail coverts, barred white and blackish grey. Primary coverts and primaries, blackish brown, the outermost of the latter with a white shaft; the inner primaries with their tips largely white, mottled with black; secondaries, white, with a few dusky markings. Under wing coverts, white, mottled with greyish; axillaries, white. Lores, greyish, like the upper surface; an ill-defined white superciliary; sides of the face, white, streaked with brownish. Under surface, white; the sides of the breast, greyish; and the throat and chest with scattered grey streaks. Under tail coverts sometimes lightly streaked and barred; tail barred with blackish grey and white; the middle tail feathers barred lighter grey and dark brownish grey with but little white.

Adult in summer plumage.—Upper parts heavily streaked and barred with blackish brown and much mixed with rufous; under surface much more barred, streaked and spotted than in winter.

Soft Parts.—Irides, brown; feet, orange-red; bill, brownish black; the base of the lower mandible, dirty-orange. In young birds the feet are paler and more yellow.

Dimensions.—*Female.*—Total length, 11.2 in.; wing, usually about 6.25 in.; tail, 2.6 in.; tarsus, 1.9 in.; bill from gape, 2 in. *Males* average rather smaller.

Range in the Malay Peninsula.—Both coasts and the adjacent islands.

Extralimital Range.—The breeding range of the redshank is very extensive, from Greenland, across Europe, to Eastern Siberia; it also breeds in Morocco. In winter the bird is found in Africa, India, Burma, Malaysia, the Philippines and Celebes, etc. Within this range some authors recognized four races, the so-called Icelandic redshank (*T. totanus robusta*); the common redshank (*T. t. totanus*), breeding in Europe and Morocco, but its limits in Asia not yet understood; a Central Asiatic race (*T. t. eurhinus*), which breeds in Central Asia; and a far-eastern race, *T. t. terrignotæ*. There has, however, been much discussion as to the status and boundaries of the forms occurring in Asia, and no general agreement has yet been reached.

Nidification.—The redshank usually lays its four eggs on the ground, in a well-concealed position in the middle of a tuft of grass.

Habits.—Very common on the mud-flats along the shores of the Straits of Malacca, but much rarer on the sandy beaches of the east coast, from September to March; often in very large flocks, but more usually in small parties of ten or twelve birds. In a few instances it arrives as early as August, staying as late as May.

We have birds in almost complete winter plumage collected in the latter half of September, but most birds in that month are in mixed dress; we have seen no bird in complete breeding plumage from the Peninsula. Judging from specimens in the Raffles Museum, obtained from Mr C. J. Aagaard, the redshank must be quite common in Siam up to at least the middle of June, and it is again not uncommon as early as the second week in August.

Note.—According to Colonel R. Meinertzhagen, D.S.O., the eastern red-shank differs from the typical form in winter by having the upper parts paler and greyer, the under parts whiter, with fewer and narrower streaks, the sides of the breast whiter and largely lacking the ash-brown clouding so distinctive in European birds, and the under tail coverts with fewer and narrower bars. In summer the eastern race has the upper parts paler and more rufous, whilst the under parts are usually less heavily marked. Both western and eastern forms occur in the Malay Peninsula, but the large majority of birds belong to the eastern race. Only a few specimens from Peninsular Siam, Malacca and Singapore can be referred to the western race.

Tringa stagnatilis

The Marsh Sandpiper

Totanus stagnatilis, Bechstein, *Orn. Taschenb.*, ii., 1803, p. 293 (Germany); Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 422; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 263; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 354; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 65.

Tringa stagnatilis, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 216.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—Whole under surface, forehead, sides of the face and axillaries, white, the sides of the breast slightly streaked with brownish; crown, nape and mantle, grey, faintly washed with brown; the feathers of the head with darker centres; the scapulars with narrow pale edges. Lower back, rump and upper tail coverts, white, the longest of the latter slightly barred. Outer wing coverts, dark brown; the inner ones, grey like the mantle, with pale edges. Primary coverts, primaries and secondaries, dark brown, the outermost primary with the shaft white; the inner primaries and the secondaries, paler, with light edges. Centre tail feathers, white, washed with grey and barred with blackish; outer tail feathers, white, mottled with black on the outer web, and sometimes barred on the inner web.

Adult in breeding plumage.—Differs from the winter plumage in having the feathers of the upper surface with dark shaft stripes, broadening in the centre of the feather into an irregular bar; tertiaries barred with black. Under parts less uniform; a few spots on the foreneck and breast and some indistinct bars on the flanks.

Soft Parts.—Iris, brown; bill, black, paler at base; feet, yellowish sage.

Dimensions.—*Female.*—Total length, about 10 in.; wing, 5.6 in.; tail, 2.25 in.; tarsus, 2.1 in.; bill from gape, 1.75 in.

Range in the Malay Peninsula.—Only known from the coast of Selangor and from Singapore Island.

Extralimital Range.—Europe to North-Eastern Asia in summer; in winter, Africa, India, Burma, Malaysia to Australia.

Nidification.—Does not, of course, nest in the Peninsula, but follows the

general rule and breeds in the northern part of its range. According to Mr Stuart Baker the four handsome eggs are placed in a well-lined nest in some natural hollow among short, thick grass on the edge of swamps and marshes.

Habits.—A rare bird in the Malay Peninsula and only known to us by a female in incipient breeding plumage shot by A. L. Butler on the shore at Jeram, on the coast of Selangor, on 4th February 1900, and two specimens obtained by collectors of the Raffles Museum, on Singapore Island, on 5th October 1910 and 29th April 1911. It has been recorded, in error, from the Langkawi Islands. The species is probably more numerous in the Peninsula than we have supposed, for it seems to occur in some numbers in Siam in the autumn; a series of winter-plumaged birds in the Raffles Museum was obtained by Mr C. J. Aagaard's collectors in October and November 1930, and we also have a female in breeding plumage from Koh Lak, in South-West Siam, just beyond the northern boundary of our area, collected on 4th April 1919.

We have nothing original to record of the habits of this sandpiper. Blanford aptly remarks: "The marsh sandpiper, as its name implies, is rather a bird of inland marshes and fresh-water pools than of the mud-flats and sandbanks of estuaries and the sea-coasts, though it is found in all. It is generally met with in small flocks, sometimes singly, and is an active, vivacious, noisy little bird."

Tringa incana brevipes

The Grey-rumped Tattler

Totanus brevipes, Vieill., *Nouv. Dict. d'Hist. Nat.*, vi., 1816, p. 410 (Timor).

Heteractitis brevipes, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 449.

Malay Name.—Unrecorded.

Description.—Nasal groove half the length of the culmen; tarsus with transverse plates in front and behind.

Whole upper surface, including the wing coverts, uniform ashy grey, the feathers with no pale edges except the greater wing coverts, which are narrowly edged with white. Primary coverts and primaries, blackish, the shaft of the outer primary, white; secondaries, like the back. Under wing coverts and axillaries, grey, faintly edged and tipped with white; tail feathers, grey, very slightly paler than the back. A narrow whitish stripe from bill to eye; lores, blackish grey; sides of the face, grey. Beneath, throat white; breast irregularly barred with blackish; flanks grey, with irregular dark transverse bars; rest of under surface pure white; the under tail coverts usually with a few blackish bars. The sexes are alike.

Note.—The specimens described are in intermediate plumage. Breeding birds are much more heavily barred on the under parts, while those in full winter plumage have the sides of the head white and the under surface without any dark cross-barring at all.

Immature.—Feathers of the upper surface, including the wing coverts and upper tail coverts, profusely spotted and tipped with white; outer webs of the tail feathers toothed with white.

Soft Parts.—Iris, dark brown ; bill, slaty brown ; feet, dull yellow ; claws, black.

Dimensions.—Total length, 10.75 in. ; wing, 6.5 in. ; tail, 2.75 in. ; tarsus, 1.3 in. ; bill from gape, 1.6 in.

Range in the Malay Peninsula.—The only specimens on record are two obtained on the Sultan Shoal, a few miles from Singapore, on 11th September 1923, by Mr A. W. Hamilton. They appear to mark the westernmost extension of the species.

Extralimital Range.—Breeds in North-Eastern Asia : moves southwards in winter from the Western Pacific to the Philippines, New Guinea, East and North Australia, and west through Malaysia to Celebes, Java and Borneo ; apparently quite common in Labuan.

The typical form, *Tringa i. incana*, originally described from the Society Islands, occurs in Alaska, where it probably breeds, and is found, in winter, over the whole of the Eastern and Central Pacific, meeting *T. i. brevipes* in the Torres Straits. The two forms exhibit certain differences, commonly regarded as structural, and on that account are regarded by some ornithologists as distinct species.

Nidification.—The details seem to be unknown.

Habits.—The local specimens were obtained on a reef awash at high tide. Throughout its range the bird appears to be a marine species, frequenting sandy and rocky shores and avoiding mud-flats.

Tringa guttifer

Armstrong's Sandpiper

PLATE 15

Totanus guttifer, Nordmann, in Erman's *Reise Naturh. Atl.*, 1835, p. 17 (near Ochotsk) ; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 267.

Pseudoglottis guttifer, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 479 ; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 66.

Glottis guttifer, Stuart Baker, *Faun. Brit. Ind., Birds*, vi., 1929, p. 226.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—General colour above, grey, the feathers with thin dark shaft stripes and very narrowly fringed with white ; lower back, rump and upper tail coverts, white, the latter sometimes with remains of irregular blackish bars ; wing coverts like the upper surface, but the lesser ones and those round the angle of the wing darker brownish black. Primary coverts and primaries, blackish brown, the outer primary with the shaft white ; inner primaries, greyer and tipped with white ; secondaries like the inner primaries, the innermost grey, with the greater part of the inner webs white ; tertials, grey. Under wing coverts and axillaries, white. Top of the head, hind neck, sides of the face and lores, grey with darker streaks ; forehead and superciliary stripes, whitish ; under surface, pure white. Tail, whitish grey, slightly freckled with dusky and narrowly edged with white.

Adult in breeding plumage.—Upper parts darker than in winter and variegated with pale buff. Sides of the breast mottled with blackish brown (East Siberia, August).

Soft Parts.—Iris, brown; bill, yellowish green at base, dark brown at tip; feet, dull plumbeous green.

Dimensions.—*Male.*—Total length, 11.5 in.; wing, 6.9 in.; tail, 2.6 in.; tarsus, 1.75 in.; bill from gape, 2.4 in. *Female.*—Total length, 12 in.; wing, 7.1 in.; tail, 2.9 in.; tarsus, 1.7 in.; culmen, 2.15 in.

Range in the Malay Peninsula.—The west coast from Kuala Kedah south to Selangor.

Extralimital Range.—Breeds in Tibet and apparently in North-East Asia; known from the shores of the Bering Sea, and in winter from the eastern shores of the Bay of Bengal, Hainan, the Malay Peninsula and Borneo (southernmost record).

Nidification.—Although the eggs have been described from specimens sent from Tibet, nothing seems to be known about the breeding habits of this bird, or even the exact location of the main breeding grounds.

Habits.—Nothing special is known about the habits of this rare sandpiper. In the Malay Peninsula it is found during the winter months feeding on mud-flats along with large numbers of redshanks, greenshanks and avocet-sandpipers. In the field it is somewhat difficult to distinguish from the greenshank, which, as Sharpe remarks, probably accounts for the rarity of the species in collections, but skins can be recognized at a glance by the stouter bill and shorter tarsus, by the total absence of barring to the edges of the secondaries, and by the pure white under wing coverts, which are heavily barred in the greenshank. Specimens obtained in the Peninsula are generally somewhat immature, as they have nearly always traces of bars on the upper tail coverts and all the tail feathers more or less grey.

Two specimens were obtained at Kuala Kedah in November 1907, and three at Kuala Kurau, on the Perak coast, about thirty miles to the south of Penang, in February 1908; Robinson has seen specimens from the coast of Selangor.

The bird figured (half natural size) is a female from Kuala Kurau, Perak, 26th February 1909.

Tringa nebularia

The Greenshank

Scolopax nebularia, Gunnerus, in Leem, *Beskr. Finm. Lapp.*, 1767, p. 251 (Norway).

Glottis nebularius, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 481; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 47; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 66; Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 225.

Totanus glottis, Blanford, *Faun. Brit. Ind., Birds.*, iv., 1898, p. 267.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—Forehead, superciliaries, sides of the face except the lores, back and rump, white; long upper tail coverts with a few blackish bars; crown, back of the neck and region of the ear coverts, blackish brown with broad white streaks, most marked on the crown; mantle, scapulars, tertiaries, median and greater wing coverts, greyish brown edged with white and toothed with black on both webs and with narrow black shaft stripes. Lesser wing coverts round the angle of the wing, primary coverts and primaries, blackish brown; the inner primaries paler, with narrow white tips; secondaries brownish, mottled with white on the inner webs; under wing coverts, with V-shaped bars of blackish brown; axillaries the same, but sometimes quite white; tail mainly white, the middle feathers irregularly banded with brownish, and clouded with grey; the outer pairs with narrow blackish bars or freckling on the outer webs.

Adult in breeding plumage.—The upper parts browner and darker; the black shaft stripes to the feathers much broadened, especially on the nape and hind neck. Foreneck and sides of the breast heavily spotted and perhaps barred; middle of the breast also occasionally slightly spotted.

Soft Parts.—Bill, dark brown; irides, brown; legs, yellowish green or greenish grey.

Dimensions.—Total length, 13.5 in.; wing, 7.6 in.; tail, 3.2 in.; tarsus, 2.5 in.; bill from gape, 2.4 in.

Range in the Malay Peninsula.—The west coast from Peninsular Siam, south to Malacca; Terutau Island. Occasionally inland (Kuala Lumpur). No doubt on the other islands and the east coast also, but no formal records from these places or from Singapore.

Extralimital Range.—Found practically throughout the Old World; breeds in Northern Europe and Asia, and ranges south in winter to Africa, India, Malaysia, Australia, etc. Of casual occurrence in America.

Nidification.—“The nest, a depression lined with bents, etc., is often at some distance from water, or even on dry ground among scattered pine-trees, but in Scotland it is generally on moors or wastes near a loch or other fresh water. The eggs, normally four in number, are of a warm stone-colour, with blotches of purplish grey and spots of rich brown” (*Manual of British Birds*, 3rd ed., 1927).

Habits.—The greenshank is found in similar situations to the redshank on extensive mud-flats and along the shores of estuaries and mangrove creeks, but not usually where there is much sand. It is by no means so common as the redshank, and so far as our experience goes is not met with in nearly such large flocks, more than ten or a dozen individuals being rarely seen together. The call is very shrill and reedy. Breeding plumage is often partially assumed before the birds leave the Peninsula for the north. Most of our specimens were obtained from October to January. We have no early dates, but an interesting record of a very late adult on 23rd July. Our series from Siam shows that in that country the greenshank arrives by 12th September, is common at the end of March, and stays as late as 9th April.

*Tringa glareola***The Wood-Sandpiper**

Tringa glareola, Linn., *Syst. Nat.*, 10th ed., 1758, p. 149 (Sweden); Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 219.

Rhyacophilus glareola, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 491; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 48; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 67.

Totanus glareola, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 26.

Malay Name.—Kédidi.

Description.—*Adult in breeding plumage.*—Crown and hind neck, very dark brown streaked with whitish; mantle, scapulars and tertials, dark brown, edged and toothed with white slightly tinged with brown, the pale indentations often so deep as to produce the effect of alternate dark and pale bars. Lower back, blackish brown with narrow, irregular white fringes to the feathers. Rump and upper tail coverts, white, the latter with a few dark streaks and spots. Inner wing coverts like the upper parts; lesser coverts, dark brown; greater series and secondaries, brown, tipped and fringed with white. Primaries brown, the shaft of the first one white. Tail feathers boldly banded black and white, but the outer feathers only barred on the inner web. Under parts white, spotted on the foreneck and breast and banded on the flanks with brown. Under tail coverts also with a few shaft stripes and large spots of brown. Under wing coverts, mixed brown and white. Axillaries variable, rarely almost pure white but more frequently with narrow dusky bars, sometimes very irregularly patterned.

Adult in winter plumage.—The crown less boldly streaked and the upper parts in general less variegated. The foreneck, breast and flanks less boldly marked, these parts being washed with greyish brown and perhaps thinly streaked.

Soft Parts.—Iris, brown; bill, blackish, slaty green at the base; feet, greenish grey to dull yellow.

Dimensions.—Total length, 8.25 in.; wing, 4.8 in.; tail, 2 in.; tarsus, 1.4 in.; bill from gape, 1.2 in.

Range in the Malay Peninsula.—The west coast from the northern limit to Singapore, including the islands; recorded also from the east coast. Also occurs inland on the flat land of the west coast in the same localities as frequented by snipe.

Extralimital Range.—Breeds in Europe and Northern Asia, being found in Africa, India, the Malay Archipelago, east to Australia, etc., in winter.

Nidification.—"In Europe the nest is usually concealed in some depression on tolerably dry ground, though not far from water, and usually amongst bog-myrtle, stunted heath, sedge, or other coarse vegetation; but on the wooded banks of the Yenisei Mr Popham found that, in four cases out of five, the eggs were laid in old nests of the fieldfare" (*Manual of British Birds*, 3rd ed., 1927). In Lapland the bird has been found occupying a nest of the grey shrike.

Habits.—One of the commonest waders in the Malay Peninsula, occurring both singly and in large flocks, but usually rather shy and showing a marked preference for the damp, flat lands near the coast or the more inland districts than for the seashore. We have no records of very early or very late birds, but collections show that young birds of the year, and adults in very worn nuptial plumage but beginning to change into the winter dress, are present throughout September. The species is still common the first week in April, by which time most birds are well advanced in their new plumage.

Tringoides hypoleucus

The Common Sandpiper

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Tringa hypoleucos, Linn., *Syst. Nat.*, i., 1758, p. 149 (Sweden); Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 217.

Actitis hypoleucos, Jerdon, *Birds, Ind.*, iii., 1864, p. 699.

Totanus hypoleucos, Kelham, *Ibis*, 1882, p. 18; Oates in Hume's *Nests and Eggs Ind. Birds* (2nd ed.), iii., 1890, p. 352; Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1898, p. 456; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 45.

Malay Name.—Kědidi or kědidi kělichap.

Description.—*Adult in winter plumage.*—The whole upper parts, brownish olive, with a distinct bronzy gloss, greyer on the head and nape, the feathers with dark shaft stripes, and with a subterminal dark bar and whitish or whitish buff tip. Tertiaries regularly toothed with black and buff on the edges of each web. Primaries, blackish brown, with a large white spot on the inner webs of the inner ones, and with narrow white tips, secondaries mainly white, the inner ones entirely so. Primary coverts and bastard wing, blackish, tipped with white, the greater median series, olive-brown, broadly tipped with white, forming a bar on the wing; under wing coverts mingled blackish and white. Tail feathers, banded dark brown and white, and toothed with brown and buff, all except the central feathers with broad white tips. Sides of the face, the ear coverts and lores, darker; a broad, pale superciliary stripe. Under surface, white, the sides of the breast brownish, and the throat often with narrow pale brownish shaft stripes.

Adult in breeding plumage.—Not very different from the winter plumage, but with the upper surface darker and greyer, with less of the bronzy gloss; the tertiaries not toothed with black and buff, and the lesser wing coverts much more uniform; under surface more distinctly striped on the throat and the brown patches at the sides of the breast darker and more distinct.

Soft Parts.—Iris, dark; bill, greenish black, paler at base; feet, greenish grey, yellower at knees.

Dimensions.—Total length, about 8 in.; wing, 4.3 in.; tail, 2.4 in.; tarsus, 0.95 in.; bill from gape, 1.1 in.

Range in the Malay Peninsula.—Throughout its whole length and on all the islands.

Extralimital Range.—The whole of the Old World.

Nidification.—Does not breed in Malaya. Nests and eggs have been found in Kashmir, but, like other limicoline birds, the main breeding-grounds are in the more northern parts of Europe and Asia.

Habits.—This little sandpiper may be seen on the edges of streams and stretches of open water, along the banks of rivers and on the seashore, and on the mud-flats, through nearly every month of the year, certainly from August to April, though of course it is much commoner in the winter months. It is generally solitary and is never at any time found in flocks like most of the other waders. The flight is short and jerky, and the bird is as a rule much tamer than other species of sandpipers. It is also less noisy.

Terekia cinerea

The Avocet-Sandpiper

Scolopax cinerea, Guld., *Nov. Comm. Petrop.*, xix., 1774, p. 473 (shores of Caspian Sea).

Terekia cinerea, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 474; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 258; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 47; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 66.

Xenus cinereus cinereus and *Xenus cinereus javanicus*, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, pp. 212-213.

Malay Name.—Kedidi.

Description.—*Adult in winter plumage.*—General colour above, including the wing coverts, brownish grey, the lesser wing coverts darker and the scapulars with dark shaft lines. Rump and upper tail coverts indistinctly barred with whitish. Forehead, very ill-defined superciliaries and region round the eye, whitish; sides of the face and lores, faint fuscous brown. Under surface, white; the sides of the breast, ashy brown, the feathers with narrow dark shaft stripes. Primary coverts and primaries, blackish, the inner primaries lighter, the outer one or two with white shafts; secondaries with broad white tips and edged with white on the outer web, forming a band on the wing, inner ones like the back. Tail feathers, grey, edged with white; under wing coverts, white, the outer series mottled with ashy grey; axillaries, white.

Adult in breeding plumage.—Said to differ only slightly from the winter plumage in having the head streaked with blackish brown, and with the feathers of the upper surface with black centres, and shaft stripes most marked on the scapulars; lower throat and foreneck streaked with blackish. We have not seen birds in this plumage.

Immature.—The rump and tail feathers are indistinctly barred with dusky.

Soft Parts.—Iris, brown; bill, dark brown, orange or reddish at the base of the lower mandible; feet, orange; claws, black.

Dimensions.—Total length, 9.5 in.; wing, 5.15 in.; tail, 2.3 in.; tarsus,

1.2 in. ; bill from gape, 1.9 to 2.2 in. Birds with comparatively long bills are usually females.

Range in the Malay Peninsula.—Both coasts of the Peninsula and islands in the Straits of Malacca.

Extralimital Range.—Breeding in North-Eastern Europe and Northern Asia, wintering in Africa, South Asia and Australia.

Nidification.—"The nest is a depression in the soil or moss, generally well lined with grass, rushes or scraps of flood-wrack and, unlike most sandpipers' nests, is generally placed under the lee of a sheltering bush, tuft of grass or other protection" (*Stuart Baker*). Four boldly marked eggs are laid.

Habits.—The avocet-sandpiper is very common on all the coasts of the Peninsula and adjacent islands from August to March or April. It frequents by preference stretches of deep mud on the mangrove zone and is not nearly so common on sandy beaches or rocky shores, and is never met with inland. It sometimes congregates in enormous flocks of several hundred individuals. Specimens shot in the middle of March are beginning to assume the breeding plumage, while others shot as late as the middle of December have not yet entirely discarded it.

Philomachus pugnax

The Ruff (male) and Reeve (female)

Tringa pugnax, Linn., *Syst. Nat.*, 10th ed., 1758, p. 148 (Sweden).

Pavoncella pugnax, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 500 ; Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 268 ; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 49 ; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 66.

Philomachus pugnax, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 228.

Malay Name.—Unrecorded.

Description.—*Winter.*—Both sexes. Forehead, lores and cheeks, whitish speckled with dusky brown ; sides of head and neck, speckled with brown ; the upper parts to the tail, ashy brown, with dusky brown centres and whitish fringes to the feathers ; greater wing coverts tipped with white ; primary coverts and wing quills, dark grey-brown, the secondaries with whitish tips ; outermost upper tail coverts, white ; lower parts, white, with a varying amount of grey or brown diffused over the foreneck and upper breast.

In *summer* the males grow yellow tubercles on the face, develop enormous ruffs, and assume a fancy dress on the head, breast and ruff. The colours may be any combination of white, glossy metallic black, chestnut or orange-buff. The back, scapulars and inner wing coverts are sprinkled with hues to correspond. *Females in summer* have the feathers of the upper plumage velvet black, fringed with sandy buff ; the tertiaries are boldly marked with buff and black in irregular bars ; the foreneck and breast are mottled with black.

Young birds are mostly ash-grey, tinged with buff on the lower parts, while the tertiaries are not barred ; otherwise they resemble females in summer.

Soft Parts.—Bill, dark brown, paler at the gape; iris, brown; legs and feet, fleshy yellow to yellowish brown.

Note.—We only have one faded example of this species before us and have therefore quoted, verbatim, the admirable concise description of this very variable bird given by Mr W. E. Wait in his *Manual of the Birds of Ceylon*.

Dimensions.—*Male.*—Total length, 12 in.; tail, 2.6 in.; wing, 7.2 in.; tarsus, 1.9 in.; bill from gape, 1.5 in.

Female.—Smaller. Blanford gives the following measurements: total length, 10 in.; tail, 2.25 in.; wing, 6 in.; tarsus, 1.75 in.; bill, 1.4 in.

Range in the Malay Peninsula.—In the Raffles Museum there is an old, mounted example of a ruff in winter plumage, labelled “Malacca, 1884.”

Extralimital Range.—Breeds in Northern and Central Europe and across Asia to Eastern Siberia, wintering in Africa, India, China, etc. It appears to be not uncommon in Burma proper, but rarer in Tenasserim; is unknown in French Indo-China and only recently collected in Siam. It has been recorded from Labuan on the north-west coast of Borneo, but is not known from farther east in the tropics; an occasional straggler to Greenland and America.

Nidification.—The polygamous ruffs “meet on a bare piece of ground regularly in the mornings and evenings, where they fight and display for the possession of the females. The nest is a fairly well-lined and well-hidden depression in a tuft of grass in marshland or wet meadow, occasionally in grass on a sand or stony hillock. The hens can hardly be said to nest in colonies, but, as a rule, several nests will be found close together and not far from the ‘hill,’ as the courtship ground is termed” (*Stuart Baker*).

Habits.—“In India the ruff is chiefly met with inland in flocks on the borders of tanks and marshes, and in damp grass-land, but it is also found about creeks and estuaries in places” (*Blanford*).

Calidris ruficollis

The Red-necked Stint

Tryngra ruficollis, Pallas, *Reise d. versch. Prov. Russ. Reich*, 3, 1776, p. 700 (Siberia).

Limonites ruficollis, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 545.

Tringa ruficollis, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 274.

Limonites minuta ruficollis, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 67.

Erolia minuta ruficollis, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 236.

Malay Name.—Kĕdidi.

Description.—*Adult in winter plumage.*—General colour of upper parts, brownish grey, the centres of the feathers darkened, the edges paler, these markings being less conspicuous on the hind neck. Greater secondary wing coverts broadly tipped with white. Primary coverts, black, the inner feathers broadly tipped with white; primaries, blackish, the innermost feathers paler

and edged with white on the outer webs ; outer secondaries, dark grey, with a little white on the inner web, the white increasing inwards until the inner secondaries are almost white, and with white on the outer web at the tip ; tertiaries, like the upper parts. Lower back, rump and upper tail coverts, blackish, the feathers narrowly tipped with ashy. Tail feathers, grey, the centre pair much darker, almost black. Face, entire under parts and axillaries, white, except for a few brownish-grey streaks on the sides of the breast. Wing lining white, mottled with brownish grey on the edge of the wing and washed with grey on the primary coverts.

Adult in breeding plumage.—Quite distinct. Face, throat, foreneck and upper breast, reddish chestnut. The upper surface strongly chestnut, the feathers black fringed or washed with chestnut.

Immature.—Not unlike summer adults on the upper surface, but the rufous element less strong and the hind neck much greyer. The under parts without rufous or chestnut, but the neck and breast tinged with buff.

Soft Parts.—Iris, brown ; bill from gape, black.

Dimensions.—Total length, 6.25 in. ; tail, 1.7 in. ; wing, 4 in. ; tarsus, 0.8 in. ; bill from gape, 0.7 in.

Range in the Malay Peninsula.—The west coast, from the northern limit to Singapore Island ; also recorded from Patani on the east coast.

Extralimital Range.—Breeds in North-Eastern Siberia, and moves south in autumn, through China and Japan to the Andaman Islands, Burma, Siam, French Indo-China, all Malaysia, the Philippines, to Australia and New Zealand.

Nidification.—Details are lacking.

Habits.—A common bird in the Peninsula, occurring in flocks on both the muddy and sandy coasts. Birds in winter plumage from Malaya are dated from 22nd October to 11th March, but specimens from Siam are in this plumage from 16th August to 6th April. Birds from Selangor on 7th March show a few chestnut feathers on the upper parts. We have never seen a bird in anything approaching full summer plumage, although one from the neighbouring Natuna Islands, dated 25th April, has the foreneck largely red. Although from just outside our area, a specimen from Pulau Mapor in the Rhio Archipelago, south of Singapore, as late as 6th June is worthy of notice here ; it is, mostly, in winter plumage.

The combined characters of short toes (middle toe and claw less than 0.8 in length) and pale grey outer tail feathers will always distinguish this small stint from the next two birds to be described, and on account of their very small size none of the three species should be confused with any other wader occurring in Malaya.

Some authors consider that the red-necked stint is an eastern race of the little stint (*Calidris minuta*) well known in Europe, but we are not yet certain that this is a correct view.

*Calidris minutilla subminuta***The Eastern Long-toed Stint**

Tringa subminuta, Middendorff, *Reise N. O. and O. Sibirien*, 2, 1851, p. 222 (Siberia); Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 275.

Limonites damacensis, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 553.

Limonites minutilla subminuta, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 68.

Erolia subminuta, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 236.

Malay Name.—Kědidi.

Description.—*Adult in winter plumage.*—Broadly speaking, like that of the red-necked stint, but much darker on the upper parts and on the foreneck and breast. Crown, mantle and scapulars, dark, almost blackish brown, the feathers edged with ashy; back of the neck and wing coverts, except the lesser series, very similar, but paler in tone; lower back, rump and upper tail coverts, nearly black; centre pair of tail feathers, rather paler, more brown; other tail feathers, ashy grey. A narrow white bar across the wing formed by the tips of the greater secondary coverts. Primary coverts, blackish, the innermost feathers tipped with white. Primaries, blackish, the shaft of the first feather white. Secondaries, paler, dark smoky brown, paler on the inner web and very narrowly fringed with white. Under parts and axillaries, white, the foreneck and breast clouded with ashy grey and distinctly streaked, most boldly on the sides of the breast, with pale brown shaft streaks.

Adult in breeding plumage.—Quite distinct. The feathers of the upper parts washed and edged with bright rufous chestnut. Throat, foreneck and breast rather more heavily spotted and washed with rufous on the neck and breast.

Immature.—"Top of head, dark brown with pale edgings to the feathers; indistinct loreal brown streak; back of neck, greyish brown with paler grey edges; upper back, black with buff edgings; lower back, black, as rump, latter with white tips; tail feathers with white tips, centre pair with buffish tips; scapulars and inner secondaries with broad buff edges, coverts with white tips; throat, white; chest with dusky grey streaks; rest of under surface, pure white" (*Mathews*).

Soft Parts.—Iris, brown; bill, black, dull greenish yellow at base of lower mandible; feet, dull greyish sage-green, darker on joints.

Dimensions.—Total length, 6.2 in.; wing, 3.5 in.; tail, 1.6 in.; tarsus, 0.9 in.; bill from gape, 0.7 in.

Range in the Malay Peninsula.—From north to south, but definitely known only from a few localities—Tung Song and Junk Zeylon in Peninsular Siam, Malacca, near Kuala Lumpur, and Singapore Island.

Extralimital Range.—Breeds in Eastern Siberia, Kamchatka, etc., southwards in winter through China and Japan to Ceylon, Eastern India, Burma, Siam, French Indo-China, through Malaysia, the Philippine Islands, Celebes to North Australia (rare). Accidental in Alaska.

Nidification.—No details seem to have been recorded.

Habits.—Not so common in the Peninsula as the red-necked stint and, judging from the small series of specimens obtained, preferring inland marshy districts to the exposed coasts. Specimens from Singapore collected on 2nd October are the earliest birds of which we have any record. A number shot on a snipe-shooting ground near Kuala Lumpur on 2nd April are largely in nuptial dress, but other birds from Siam collected on 20th of the same month are much more backward. This stint can always be recognized by the combination of the brownish-grey outer tail feathers and the long toes (middle toe and claw, 0.9 to 1 in. in length). The typical form of this bird is the American stint.

Calidris temminckii

Temminck's Stint

Tringa temminckii, Leisler, *Nacht. zu Bechst. Nat. Deutsch.*, 1812, p. 63 (Germany); Blandford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 275.

Limonites temminckii, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 555; Oates, *Cat. Birds' Eggs, Brit. Mus.*, ii., 1902, p. 53; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 68.

Erolia temminckii, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 237.

Malay Name.—Kēdidi.

Description.—*Adult in winter plumage.*—Upper parts, fairly uniform ashy grey, but the shaft stripes slightly darker and the extreme edge of the feathers very narrowly fringed with paler grey. Lesser wing coverts slightly darker than the others; greater secondary coverts tipped with white, forming a narrow band across the wing. Primary coverts and primaries, blackish, the first of the latter with a white shaft and the innermost feathers edged with white at the base of the outer web; secondaries, blackish, narrowly white at the tips and white at the base of the inner webs; long inner secondaries, grey like the upper parts. Centre pairs of tail feathers the same, but the outer tail feathers white, or nearly so. Throat, whitish; foreneck and breast, ashy grey, paler than the upper parts; rest of under parts and axillaries, white.

Adult in summer plumage.—Not greatly different from the winter plumage but darker above, the centres of the feathers especially darker and the edges of the feathers tinged with rufous. Foreneck and breast distinctly spotted or streaked.

Immature.—Feathers of the upper parts with buff edges and the foreneck also washed with buff.

Soft Parts.—Iris, brown; bill, black; feet, olive-green.

Dimensions.—Total length, 6 in.; wing, 3.6 in.; tail, 1.76 in.; tarsus, 0.7 in.; bill from gape, 0.7 in.

Range in the Malay Peninsula.—A very rare visitor to the Malay Peninsula of which we only have certain knowledge of a female in winter plumage collected on the golf course at Kuala Lumpur, in Selangor, on 13th March 1923.

Extralimital Range.—Breeds in Northern Europe and Asia; south in winter to Africa, Ceylon, India, China and Japan. It occurs in Burma, Tenasserim, Siam and French Indo-China. It has been taken in the Philippines and Borneo, but apparently does not occur farther east. Not known from Sumatra or Java.

Nidification.—"The nest, seldom far from water, is a scantily lined depression in sedge, rushes or short grass; the eggs, 4 in number . . ." (*Manual of British Birds*, 3rd ed., 1927). "The nests are often built several close together, and a favourite site is at the edge of some small lake or swamp on upland tundras" (*Stuart Baker*).

Habits.—We have nothing to record concerning this bird in Malaya except the bare record given above. The species can only be confused with the red-necked and the long-toed stint, but may always be identified with certainty by its *white* outer tail feathers. In winter plumage it is more uniformly grey on the upper parts than the other two species, and it can also be known by its grey breast.

Calidris testacea

The Curlew-Stint, Pigmy-Curlew or Curlew-Sandpiper

Scolopax testacea, Pallas, in Vroeg's *Cat. Adumbr.*, 1764, p. 5 (Holland).

Ancylochilus subarquatus, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 586; Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 68.

Tringa subarquata, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 278.

Erolia testacea, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 240.

Malay Name.—Kědidi.

Description.—Upper parts, brownish grey, darkest on the outer wing coverts and rump, palest on the inner wing coverts, the shaft stripes slightly darker and usually a very narrow paler fringe to the feathers; upper tail coverts, white, often with a few concealed or visible V-shaped bars. Primary coverts, black, the inner feathers with white tips; greater secondary coverts tipped with white, forming a narrow bar across the wing; primaries, blackish, the shafts white and the inner feathers narrowly edged white on the outer web; secondaries, smoky brown, and largely white on the inner web; tertials, brownish grey like the mantle. Tail feathers, brownish grey, the outer feathers palest and almost white on the inner web. Under parts, including the axillaries and the under wing coverts, except those at the edge of the wing which are dark grey with white tips, white, with fine dark streaks on the foreneck and breast, the breast faintly washed with greyish in the middle, and distinctly brownish grey on the sides, with darker shaft stripes.

Adult in breeding plumage.—Quite different. The upper parts largely bright rufous, the feathers with irregularly-shaped black centres and whitish tips. Upper tail coverts boldly spotted with black and often washed with rufous. Under parts mostly dark brick-red with very thin white bars.

Immature.—Like the adult in winter, but darker on the upper surface,

the blackish-brown mantle and scapulars being narrowly edged with whitish buff. The white under parts, especially the breast, suffused with yellowish buff.

Soft Parts.—Iris, brown ; bill, black ; feet, dark grey to black.

Dimensions.—Total length, 8.5 in. ; wing, 5 in. ; tail, 1.8 in. ; tarsus, 1.1 to 1.2 in. ; bill from gape, 1.4 to 1.6 in. Long-billed birds are usually females.

Range in the Malay Peninsula.—The west coast from north to south ; also recorded from the east coast of Peninsular Siam.

Extralimital Range.—Breeds in Northern Siberia ; migrates through Europe and Asia to Africa, India, Malaysia, Australia and New Zealand. Casual in America from north to south.

Nidification.—“ The Curlew-Sandpiper breeds in Asiatic Siberia, the eggs having been first taken by Popham on the Yenesei in late June and early July. The nest is a depression in the reindeer moss of the tundras, a slightly raised spot, drier than the surrounding swampy land, being selected for the purpose ” (*Stuart Baker*).

Habits.—Widely, though somewhat sparingly, distributed along the coasts of the Peninsula in winter ; the birds usually adults, in winter dress, with immature birds in the minority. Most of our specimens are from Siam, and the skins show that young birds arrive as early as 29th September, but are less common than the adults, which are in winter dress from 22nd September to 20th April. Specimens showing signs of the nuptial dress occur as early as 23rd February ; others in a similar stage were collected at the end of March and throughout April, but many April birds are in full nuptial dress, the remains of which can also be seen in autumn birds dated from 8th August to 29th September. We have one female from the Selangor coast collected on 21st July ; it is a very puzzling bird and seems to be moulting from winter to winter plumage, although the upper tail coverts are boldly spotted. Mr C. J. Aagaard has collected the species on the coast of Peninsular Siam on dates ranging between 1st August and 16th May ; he also has it from near Bandon on 16th June (vide *Sir W. J. F. Williamson*).

This is essentially a bird of the coastal mud-flats, where it is almost invariably seen in small or large flocks ; the white rump is conspicuous in flight.

Calidris tenuirostris

The Great Knot

Totanus tenuirostris, Horsfield, *Trans. Linn. Soc.*, xiii., 1821, p. 192 (Java).

Tringa crassirostris, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 600 ; Blandford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 277.

Tringa tenuirostris, Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 68.

Calidris tenuirostris, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 243.

Malay Name.—Unrecorded.

Description.—*Adult in winter plumage.*—Above, ashy grey, becoming browner in worn plumage; with dark stripes to the feathers more defined on the head and with pale edges which are lost in abraded plumage; back, darker; rump, white, with dark centres to the feathers; wing coverts, like the mantle, the greater and median series more broadly fringed with white. Primaries and primary coverts, blackish brown, the former with white shafts; the secondaries browner, edged with white. Axillaries, white, with indistinct dusky markings; lesser under wing coverts, black at the base; greater series, pale grey edged with white. Tail feathers, brownish grey with a narrow fringe of white. Forehead and sides of head, grey with fine shaft stripes of black. Chin and throat, white; lower throat and fore-breast, white with fine black stripes, sometimes with black centres to the feathers and larger arrow-shaped black spots. Rest of under surface pure white, sparsely spotted and striped with black on the flanks.

The sexes are almost alike.

Adult in breeding plumage.—Feathers of the mantle with broad black centres; head more clearly striped with black; scapulars, tertials and inner upper wing coverts, largely chestnut, with subterminal black bars and pale tips. Below, with the breast so thickly barred as to appear almost black. Flanks and under tail coverts with scattered arrow-shaped black spots.

Note.—Birds in full breeding plumage are never seen in the Malay Peninsula. One shot on 24th March in Selangor has the under surface as in breeding birds, but the chestnut is only just beginning to show on the inner scapulars.

Immature.—Very much blacker above, especially on the mantle, inner secondaries and tertials; breast tinged with buff and the dark markings thicker and duller.

Soft Parts.—Iris, dark brown; bill, brownish black; feet, glaucous green (*Davison*).

Dimensions.—Total length, 10.5 in.; wing, 6.75 in.; tail, 2.75 in.; tarsus, 1.35 in.; bill from gape, 1.75 in.

Range in the Malay Peninsula.—Has only been obtained on the mud-flats of the Selangor coast. Not yet recorded from the east coast.

Extralimital Range.—Eastern Siberia and the Kurile Islands, south through China and Japan to the Philippines, New Guinea and Australia; west through the Moluccas to Java, Borneo, the coasts of Burma and the Andamans and as far as the Laccadives and Sind.

Nidification.—Details unknown.

Habits.—Has been obtained in the Malay Peninsula from 17th September to 24th March, but is at no time common. The birds occur in small parties on the large mud-flats fringing the Selangor coast in the neighbourhood of the Klang river. Sir W. J. F. Williamson found the species abundant in a shallow lagoon a few miles from the sea at Lat Yai, Meklong, in Siam, in February 1918, and Mr C. J. Aagaard obtained it in the same locality at the end of March and as late as 24th April.

*Limicola falcinellus sibirica***The Eastern Broad-billed Stint or Sandpiper**

Limicola sibirica, Dresser, *Proc. Zool. Soc.*, 1876, p. 674 (Siberia and China).

Limicola platyrhyncha, Sharpe, *Cat. Birds, Brit. Mus.*, xxiv., 1896, p. 612 (part); Robinson and Kloss, *Journ. Nat. Hist. Soc. Siam*, v., 1921, p. 69.

Tringa platyrhyncha, Blanford, *Faun. Brit. Ind., Birds*, iv., 1898, p. 279.

Limicola falcinellus sibirica, Stuart Baker, *Faun. Brit. Ind., Birds* (2nd ed.), vi., 1929, p. 246.

Malay Name.—Kědidi.

Description.—*Adult in winter plumage.*—General appearance of upper parts ashy grey, the centre and shafts of the feathers darker, producing an effect of fairly bold spotting on the top of the head and mantle. Lower back, rump and upper tail coverts, brownish black, the feathers fringed with ashy. Tail feathers, grey, the centre pair much darker and almost black, the others narrowly edged with white and paler, almost white, on the inner web, especially of the outermost feathers; the shafts, white. Lesser wing coverts, almost black; greater secondary coverts, tipped with white. Primary coverts, black, the inner feathers tipped with white. Primaries and secondaries, blackish, the latter paler, smoky grey on the inner webs and narrowly tipped with white. Under parts, white, washed with brownish grey on the sides of the breast and narrowly streaked with blackish on the foreneck.

Adult in summer plumage.—The upper parts strongly washed with bright rufous, the centres of the feathers velvety black. Throat, foreneck and breast heavily spotted with blackish, the spots largest on the breast. Sides of the body and flanks heavily streaked with black.

Immature.—Not unlike adults in summer, but the foreneck washed with buff.

Soft Parts.—Iris, brown; bill, black, yellowish at the base; feet, greenish brown.

Dimensions.—Total length, 7 in.; wing, 4.2 in.; tail, 1.5 in.; tarsus, 0.9 in.; bill from gape, 1.2 in.

Range in the Malay Peninsula.—The west coast from Selangor to Singapore; also recorded from the east coast of Peninsular Siam. The local range must, of course, be more extensive than indicated, but at present specimens and records from elsewhere are lacking.

Extralimital Range.—The typical race breeds in North Europe and West Siberia, and is found in North-West India in winter; the breeding-grounds of the eastern race (*sibirica*), in Eastern Siberia, do not appear to be known definitely; the bird moves south in autumn through China and Japan to Bengal, Burma, Assam, Siam, French Indo-China, through Malaysia (not yet recorded from Borneo) and eastwards to Australia.

Nidification.—The breeding habits of the eastern race are not recorded,

