



*Seven Deadly Stints
and their Friends*

*An Introduction to Calidris
Sandpipers – Part 1*

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Larry Sansone photos

13 October 2020

Los Angeles Birders



Genus *Calidris*

-
- Composed of 23 species the largest genus within the large family (94 species worldwide, 66 in North America) of Scolopacidae (Sandpipers).
 - All 23 species in the genus *Calidris* have been found in North America, 19 of which have occurred in California.
 - Only Great Knot, Broad-billed Sandpiper, Temminck's Stint, and Spoon-billed Sandpiper have not been recorded in the state, and as for Great Knot, well half of one turned up!



Genus *Calidris*

- The genus was described by Marrem in 1804 (type by tautonymy, Red Knot, 1758 Linnaeus).
- Until 1934, the genus was composed only of the Red Knot and Great Knot.
- This genus is composed of small to moderate sized sandpipers and use a variety of foraging styles from probing in water to picking at the shore's edge, or even away from water on mud or the vegetated border of the mud.
- As within so many families or large genre behavior offers important clues to species identification.



Genus *Calidris*

- Most, *but not all*, species migrate south in their alternate (breeding) or juvenal plumage, molting largely once they reach their more southerly wintering grounds.
- Most species nest in the arctic, some farther north than others. Some species breed primarily in Eurasia, some in North America. Some are Holarctic.
- The majority of species are monotypic (no additional recognized subspecies).

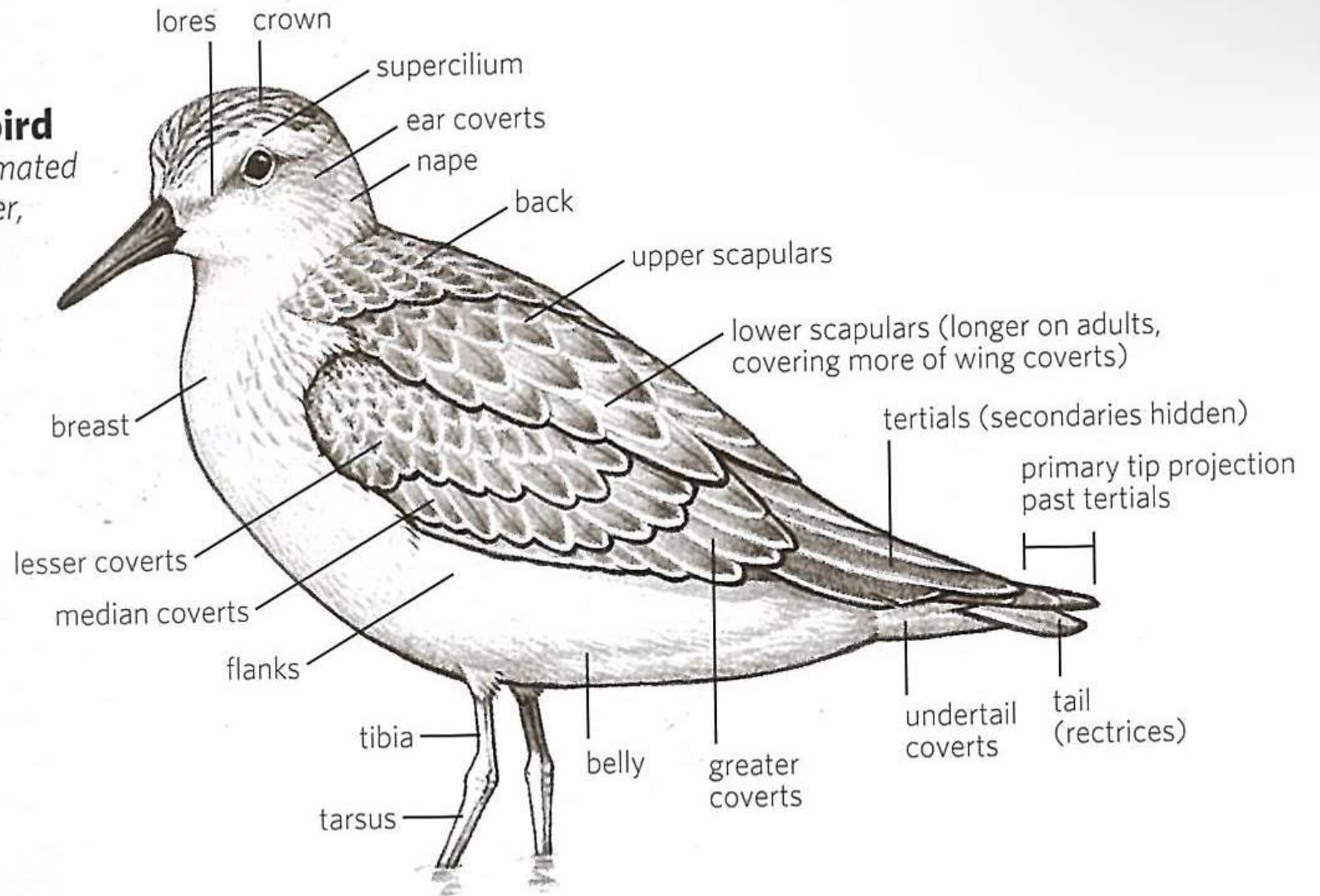


Genus *Calidris*

- In learning these species one needs to concentrate on three distinct plumages:
 - Alternate (breeding)
 - Basic (winter)
 - Juvenal plumage



shorebird
Semipalmated Sandpiper, juvenile



Shorebird Feather Topography National Geographic Field Guide to the Birds of NA drawing by Jonathan Alderfer



Semipalmated Sandpiper bright juv 6Aug11 Ventura, CA



Buff-breasted Sandpiper juv 10Sep95 Saticoy CA

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Pectoral Sandpiper juv feeding 27Sept09 Ventura, CA





Baird's Sandpiper juv 22August2020 California



Western Sandpiper first basic 29Sept09 Ventura, CA

Great Knot

Calidris tenuirostris (Horsefield)

1821 Java, Indonesia

- Monotypic.
- **Breeds** northeast Asia, winters Indian Subcontinent to Australasia. Very rare, especially in late spring on the Seward Peninsula.
- Casual elsewhere in AK.
- Accidental coastal OR (juvenile), and WV!



Great Knot

Calidris tenuirostris (Horsefield)

1821 Java, Indonesia

Brief plumage tip

In breeding plumage it looks very much like a breeding plumaged Surfbird, although bill shape and pattern in flight are very different.



Great Knot alt 03June87 Gambell, Alaska Ed Greaves



Great Knot alt and Surf-bird alt

Great Knot

Calidris tenuirostris (Horsefield)

1821 Java, Indonesia

Interesting factoid

- One individual at the south end of San Diego Bay seen periodically turned out to be a hybrid Great Knot x Surfbird. It was dubbed a “Surfknot.” A publication on this individual is long overdue.



Surfknot alt 15July12 San Diego Co., CA



Red Knot *Calidris canutus*

(Linnaeus) 1758 in Europa = Sweden

- Polytypic. Five subspecies generally recognized, *rufa* and *islandica* are found in northeast North America, *roselaari* (the breeder on Wrangel Island) from Alaska.
- Alaska breeders are somewhat intermediate between *roselaari* and *rufa*. Subspecies *canutus* breeds northern part of Taymyr Peninsula and New Siberian Islands, Russia.
- Another subspecies *rogersi* breeds chukotsk Peninsula, and at or near New Siberian Islands, Russian Far East.

Red Knot *Calidris canutus*

(Linnaeus) 1758 in Europa = Sweden

- **Breeds** mostly in the high arctic (circumpolar).
- **Winters** mostly in Australasia and southern South America, but some to coastal North America and northwest Europe.
- In CA most numerous on large coastal bays, the wintering population on San Diego Bay is by far the largest.
- **Migrates** coastally, but overall rare to uncommon.
- Rare to casual in the interior of North America, except at the Salton Sea where small numbers are regularly found, particularly in spring (April).



Red Knot *Calidris canutus*

(Linnaeus) 1758 in Europa = Sweden

Brief plumage tip

- Breeding plumage easy to diagnose with color below.
- Note white vent and undertail coverts.
- Winter plumage largely grayish.
- Note bill shape.
- Juveniles have subterminal dark fringes above.



Red Knot, fresh alt Oscoda, Michigan, on 21 May 2016. JLD



©Larry Sansone

Red Knot ad alt plumage, beginning to molt to basic
4Aug13 Ventura Co., CA



Red Knot juv 30Aug03 Ventura, CA



Red Knot *Calidris canutus*

(Linnaeus) 1758 in Europa = Sweden

Interesting factoid

- The English, and particularly the scientific name honor King Canute the Great. A Viking, he ruled the North Sea Empire of Denmark, and the United Kingdom from 990 until his death in 1035 AD.
- His heirs continued to rule until 1066 when King Harold was defeated by William the Conqueror at the Battle of Hastings, one of the seminal events of world history.
- Although likely an apocryphal story, King Canute is said to have assembled his subjects, looked out at the sea and told them he couldn't control the tide.
- He probably couldn't have controlled the feeding Red Knots on the mudflats either!

Surfbird *Calidris virgata* (Gmelin) 1789 in sinu Sandwich = Prince William Sound, Alaska

- Formerly (until 2012) in the monotypic genus *Aphriza*. Monotypic.
- **Breeds** in Alaska, including the interior, and the Yukon.
- **Winters** rocky areas, including jetties along coast, from southeast Alaska to Chile, a huge latitudinal expanse, matched only by Sanderling.
- In spring **migration** found also on sandy beaches. Said to feed on grunion eggs on CA beaches. Casual at the Salton Sea in spring (mainly April).
- Accidental elsewhere in North America including coastal Texas (multiple records) and in the fall in the interior.



Surfbird *Calidris virgata* (Gmelin) 1789 in sinu Sandwich = Prince William Sound, Alaska

- **Brief Plumage tips**
- Distinctive breeding plumage suggests Great Knot.
- Note stubby bill with pale base.
- White base to tail distinctive in flight.



©Larry Sansone

Surfbird ad alt worn breeding 5Aug13 Ventura Co., CA



Surfbird ad alt feeding 5Aug13 Ventura Co., CA



Surfbird ad alt 30Mar86 Santa Barbara, Co., CA, J.L. Dunn

©Larry Sansone



Surfbird basic 24Nov06 Los Angeles, CA

©Larry Sansone



Surfbird basic 6Nov05 Ventura, CA





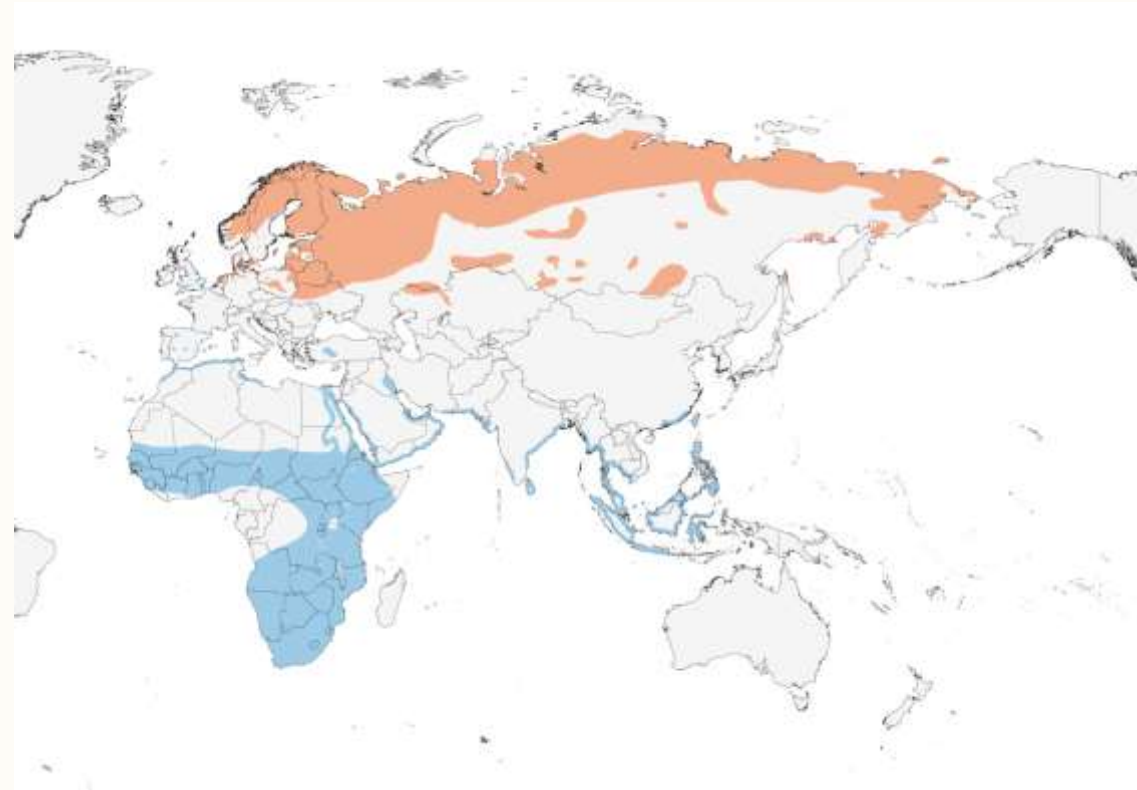
Surfbird basic 06Jan15 Humboldt Co., CA



Surfbird basic flt 24Nov06 Los Angeles, CA

Ruff *Calidris pugnax* (Linnaeus) 1758 (in Europa minus boreali = Sweden)

- Formerly in its own monotypic genus *Philomachus*.
- **Breeds** northern portions of Old World east to Russian Far East. Has bred northwest Alaska and likely has bred irregularly in the arctic elsewhere in North America.
- Most **winter** Africa south of the Sahara; some to Southeast Asia and Australia. Occurs widely, but rarely, across North America, including California where it has wintered.



Ruff *Calidris pugnax* (Linnaeus) 1758 (in Europa minus boreali = Sweden)

Brief plumage tips

- The larger males are spectacularly, but varyingly colored, in breeding plumage and have “ruffs.”
- **Interesting factoid.** Males form leks. Some males linger on the outside. They are smaller and duller and are ignored by other larger, more colorful, males. Yet they get to mate with females approaching the main center of the lek. Dressing in “drag” has its advantages. Leave it to the British to discover this!



Ruff ad alt m June, Finland, Lasse J. Laine



©Larry Sansone

Ruff basic 2547 04Apr15 Los Angeles Co., CA



Ruff female? 2Aug14 Los Angeles Co., CA



Ruff basic 8Oct78 Ventura CA



Ruff basic 16Mar15 VCGP, CA



Ruff basic 16Mar15 VCGP, CA

©Larry Sansone



Ruff juv 5Sept11 Ventura, CA

©Larry Sansone



Ruff juv 28Sept14 Ventura, CA





Ruff juv flt 9Sept11 Ventura, CA



Ruff juv 7Sept11 Ventura, CA

Sharp-tailed Sandpiper

Calidris acuminata (Horsefield)

1821 Java

- **Breeds** Arctic Ocean coast, mainly from Lena to east to Kolyma River delta; a few to Chaun Bay.
- **Winters** Australasia.
- **Migrates** East Asia, but in fall most adults take an interior route, juveniles go to the coast, then head south; many reach western Alaska and a few are noted regularly on the West Coast, including California (September-October).
- There are a scattering of records of adults from California, including from spring.



Sharp-tailed Sandpiper

Calidris acuminata (Horsefield)

1821 Java

Brief plumage tip

All comparisons should be made with the comparably sized Pectoral Sandpiper, which perhaps surprisingly isn't its closest relative. The underparts pattern is particularly important.



Sharp-tailed Sandpiper ad alt 24May91 Attu, AK, Monte Taylor



©Larry Sansone

Sharp-tailed Sandpiper ad mostly alt 30Oct92 Orange Co., CA

©Larry Sansone



Sharp-tailed Sandpiper juv 3759 4Sept06 Gambell, AK



©Larry Sansone



Sharp-tailed Sandpiper juv 24Sept12 Ventura, CA





Sharp-tailed Sandpiper juv 25Sept12 Ventura, CA

Broad-billed Sandpiper

Calidris falcinellus (Pontoppidan)

1763 (No locality given = Denmark)

- Formerly in its own monotypic genus, *Limicola*, until 2012.
- **Breeds** patchily from Fennoscandia east to northern Russian Far East.
- **Winters** mainly from the Persian Gulf and east to Australasia. Casual stray, in fall, to western Alaska (juveniles on Aleutians and Pribilofs).
- Two fall records for East Coast. Two subspecies, nominate *falcinellus* breeding in western part of range to northwest Russia, and *sibirica* breeding in Russian Far East. The latter has been collected in Alaska. The former likely accounts for the two East Coast records.



Broad-billed Sandpiper

Calidris falcinellus (Pontoppidan)
1763 (No locality given = Denmark)

Brief tips

- Long dropped bill, short legs, and a distinct split supercilium.



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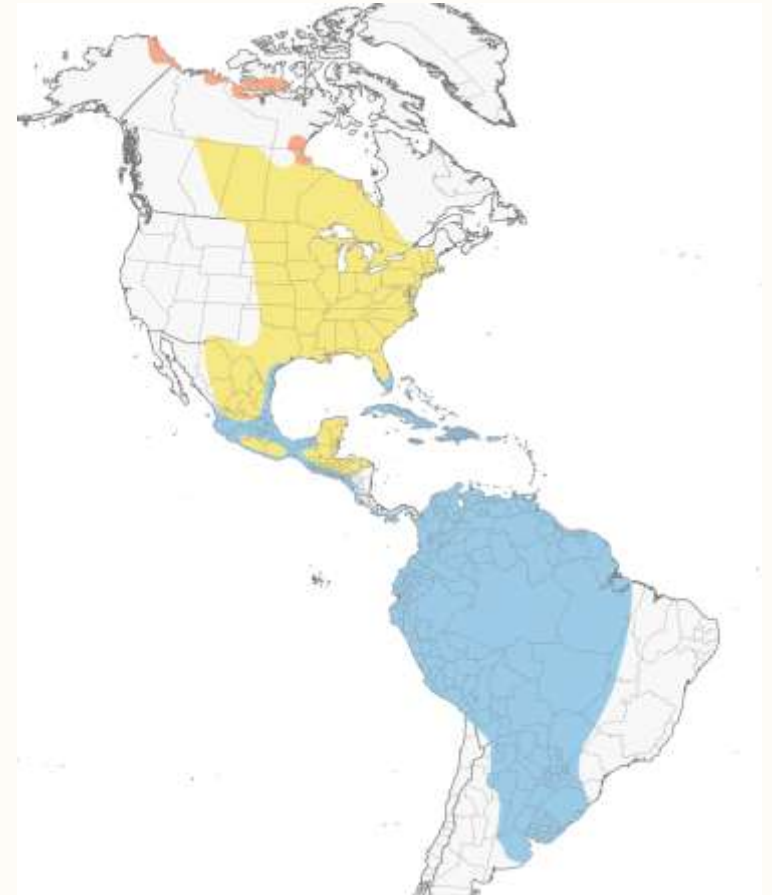
Broad-billed Sandpiper basic 16Feb09 Pak Thale, Thailand

Stilt Sandpiper

Calidris himantopus (Bonaparte)

1826 (Long Branch, New Jersey)

- Formerly in its own genus (until 1982), *Micropalama*.
- **Breeds** mainly north-central Canada, some west to north coast of Alaska.
- **Winters** southern U.S., including some around south end of Salton Sea, Imperial County, and south to central South America.
- Rare migrant in West, except from Imperial County.



Stilt Sandpiper

Calidris himantopus (Bonaparte)

1826 (Long Branch, New Jersey)

Various tips

- Long, slightly decurved bill, long legs and feeds like a dowitcher, often with dowitchers.
- Juveniles more catholic in their habitat choices, even flooded fields in the Imperial Valley.
- All plumages show distinct supercilium, white rump with darker tail.
- Arriving juveniles are often molting scapular feathers when seen in lower 48 states.



Stilt Sandpiper ad alt 28June85 MB, Canada, J.L. Dunn



Stilt Sandpiper ad alt 11May05 Tamaulipas, MX



Stilt Sandpiper juv 8Sep02 Ventura CA



Stilt Sandpipers molting juvs 7Sept11 Ventura, CA



Stilt Sandpipers molting juvs 11Sept11 Ventura, CA



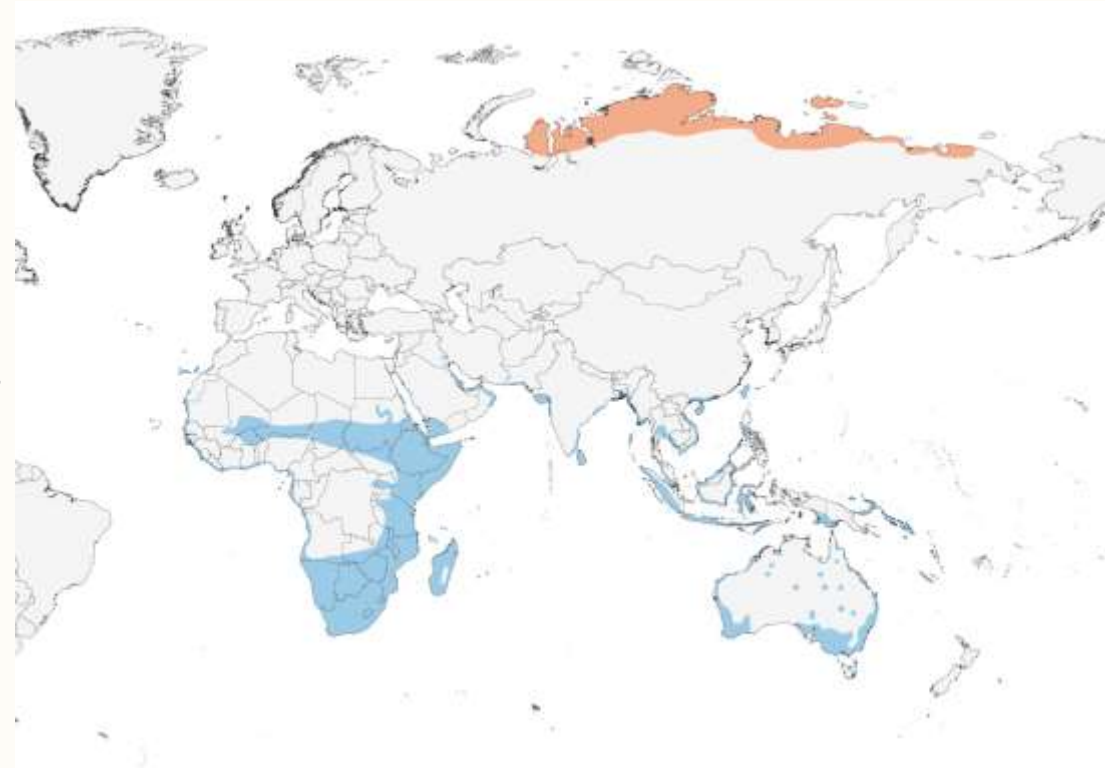
Stilt Sandpiper juv takeoff 01Sept14 Ventura, CA

Curlew Sandpiper

Calidris ferruginea (Pontoppidan)

1763 (Iceland and Chritiansøe [Denmark])

- **Breeds** northern arctic Russia, east of Urals, to northwestern Chukotka coast, Russian Far East. Has nested Barrow (Utqiagvik).
- **Winters** central Africa, south of Sahara, to Australasia, a few north to southern Europe, and east to Australasia.
- Casual stray in **migration** throughout North America, including California.



Curlew Sandpiper

Calidris ferruginea (Pontoppidan) 1763 (Iceland and Chritiansøe [Denmark])

Brief tips

- Suggestive of Stilt Sandpiper, its closest relative.
- From Dunlin, longer legs. Juvenile and winter adult cleaner below.
- In flight note white rump, dark tail.



Curlew Sandpiper juv Aug78 VA, R.J. Chandler

Stilt and Curlew Sandpipers juvs

©Larry Sansone



Curlew Sandpiper alt 24July11 San Diego Co., CA





©Larry Sansone

Curlew Sandpiper alt stretching 24July11 San Diego Co., CA

©Larry Sansone



Curlew Sandpiper juv 17 Sept 2020, UCSB, CA



©Larry Sansone



Curlew Sandpiper juv 17 Sept 2020, UCSB, CA Goleta, CA



©Larry Sansone

Curlew Sandpiper basic 16Feb09 Pak Thale, Thailand



Curlew Sandpiper 27 Sept 2020 UCSB, CA



Curlew Sandpiper 27 Sept 2020 UCSB, CA

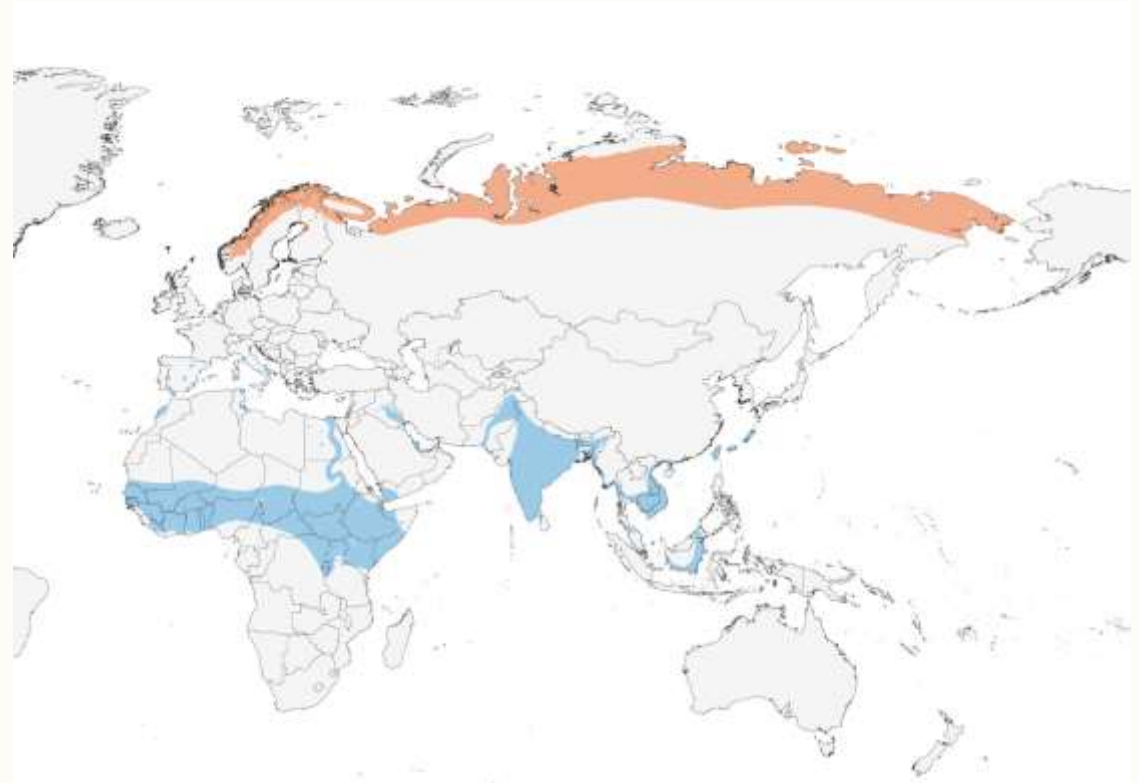


Dunlin 16 April 2016 Ventura, CA

Temminck's Stint

Calidris temminckii (Leisler) 1812
(region of Hanau am Main, Germany)

- **Brief tips**
- Shape and coloration suggestive of small Baird's, but no primary projection past tertials.
- Juvenile with Red Knot like dark subterminal feather edges above.
- Call of Temminck's a rapid dry rattle, totally unlike any other *Calidris*.



Temminck's Stint

Calidris temminckii (Leisler) 1812
(region of Hanau am Main, Germany)

Brief tips

- Shape and coloration suggestive of small Baird's, but no primary projection past tertials. Juvenile with Red Knot like dark subterminal feather edges above.
- In basic plumage, a smooth unpatterned gray above and on breast.
- Call of Temminck's a rapid dry rattle, totally unlike any other *Calidris*.



©Larry Sansone
Temminck's Stint basic 15Feb09 near Pak Thale, Thailand



Temminck's Stint: Alt Credit: Changhua Coast Conservation Action



Temminck's Stint: juv Attila Seprenyi

Long-toed Stint

Calidris subminuta (Middendorff) 1853 (Höen des Westabhanges vom Stanowoi Gebirge und des Nähe des Ausflusses des Uda = Stanovoi Mountains, Siberia, Russia)

- **Breeds** Siberia and Russian Far East.
- **Winters** Southeast Asia, a few to Australia.
- **Migrates** east Asia. Rare to uncommon in central and western Aleutians, mainly in spring. Very rare in fall.
- Accidental West Coast: Two fall records of juveniles. (OR, CA)



Long-toed Stint

Calidris subminuta (Middendorff) 1853 (Höen des Westabhanges vom Stanowoi Gebirge und des Nähe des Ausflusses des Uda = Stanovoi Mountains, Siberia, Russia)

Brief tips

- Plumage strongly suggestive of Least Sandpiper. Best field mark is head pattern – dark forehead pinches off prominent supercilium before it meets bill; yellow-pink base to lower mandible. Call lower pitched than Least.



Long-toed Stint basic 15Feb09 near Pak Thale, Thailand



Long-toed Stint juv fall 1982 Saltholme Pools, Cleveland County Durham, UK photographer ?



Long-toed Stint juv 31Aug88 Monterey Co., CA

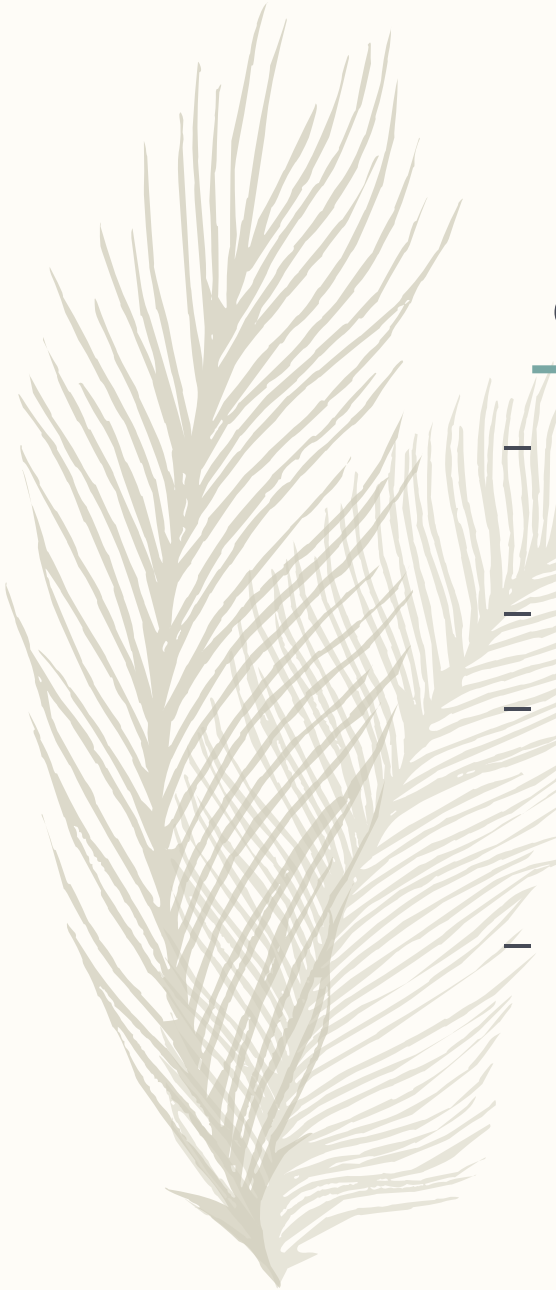


Long-toed Stint and Least Sandpipers juvs

Spoon-billed Sandpiper

Calidris pygmaea (Linnaeus) 1758 (in Surinami, error = eastern Asia)

- Highly endangered species with fewer than 400.
- **Breeds** coastal northeast Russian Far East
- **Winters** very locally (northern Vietnam, Gulf of Thailand, Myanmar, Bangladesh, and southeast India).
- Casual to Aleutians, northwest and northern Alaska. No recent records. Accidental Vancouver, British Columbia (breeding plumaged adult, 30 July – 3 August 1978).



Spoon-billed Sandpiper

Calidris pygmaea (Linnaeus) 1758 (in Surinami,
error = eastern Asia)

A few factoids

Unique bill shape diagnostic, but sometimes hard to see.

Major conservation effort underway includes:

Removing first clutch of eggs from breeding grounds in Russian Far East (inducing a second clutch) and incubating and hatching of eggs and raising the young in UK.

Also conservation programs in wintering areas, including training residents not to catch and eat them! Low population might yet be saved from extinction.



Spoon-billed Sandpiper basic 4392 22Feb12 Pak Thale, TH



Spoon-billed Sandpipers alt 31May86 Attu, AK Ed Greaves

Red-necked Stint

Calidris ruficollis (Pallas) 1776 (circa Lacus salsos
Dauriae campestris = Kulussutai, eastern Siberia = Russian
Far East)

- **Breeds** Taimyr to Chukotka, Siberia and Russian Far East, Russia. Very small numbers have bred northern and western Alaska, and probably St. Lawrence Island (12 breeding records for AK).
- **Winters** Indian Subcontinent to Australasia.
- Rare **migrant** in western Alaska. Casual in migration in North America; most records from West Coast.



Red-necked Stint

Calidris ruficollis (Pallas) 1776 (circa Lacus salsos
Dauriae campestris = Kulussutai, eastern Siberia = Russian
Far East)

Brief Tips

- Structure like a Semipalmated Sandpiper (lacks foot webbing).
- Breeding plumage very similar to the much rarer Spoon-billed Sandpiper.



Red-necked Stint alt 21July13 Los Angeles Co., CA

©Larry Sansone



Red-necked Stint alt 21July13 Los Angeles Co., CA





Red-necked Stint juv 13Sept83 Osaka, Japan, T. Shiota



Red-necked Stint basic 16Feb09 Pak Thale, Thailand



Alt Sanderling and Alt Red-necked Stint





Red-necked Stint juv 30Aug06 Gambell, AK

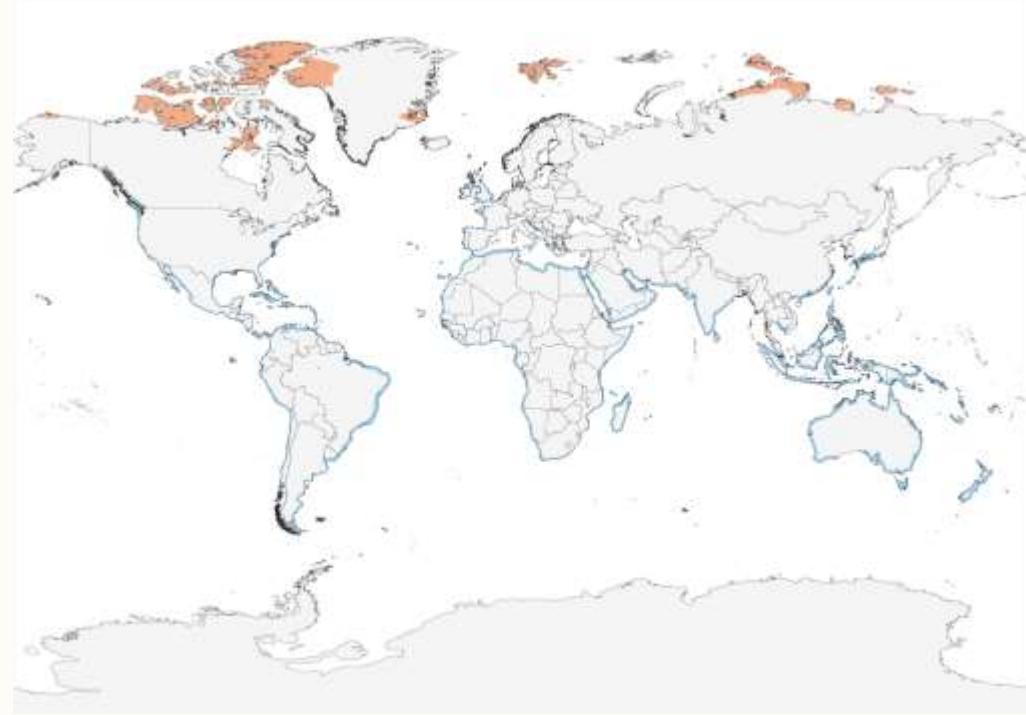


Red-necked Stint juv 31Aug06 Gambell, AK

Sanderling

Calidris alba (Pallas) 1764 (de Noordsche Zeekusten = coast of the North Sea)

- **Geographical Variation** – Two weakly differentiated subspecies, *rubida* (Alaska and high arctic, northern Canada) and nominate *alba* (Greenland, Svalbard, and northern Siberia, Russia).
- **Breeds** very high arctic. Holarctic. Winters coasts, well north in Northern Hemisphere and well south in Southern Hemisphere.
- Uncommon to rare **migrant** in the interior, late in the spring (mid to late May).



Sanderling

Calidris alba (Pallas) 1764 (de Noordsche Zeekusten = coast of the North Sea)

A few tips

- Lacks a hind toe.
- Runs on the beach, often in flocks, the “wave-runner.”
- Larger and paler (basic plumage) than peeps.
- Bold white wing stripe in flight.
- Breeding plumaged birds have been infamously confused with the smaller Red-necked Stint.



Sanderling alt running 2May08 Los Angeles, CA



©Larry Sansone

Sanderling juv 27Sept08 Los Angeles, CA



Sanderling molting juv Sept96 ME



©Larry Sansone

Sanderling basic, showing black shoulder 8Nov10 Los Angeles Co., CA



Sanderling juv flt 31Aug09 Los Angeles, CA



©Larry Sansone

Sanderlings basic flt 17Feb09 Pak Thale, Thailand

THANK YOU, JON

PLEASE TYPE YOUR
QUESTIONS INTO
THE Q AND A



Photo of Jon Dunn by Jo Heindel





References

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