

## *Calidris melanotos* (Pectoral Sandpiper)

Family: Scolopacidae (Sandpipers and Snipe)

Order: Charadriiformes (Shorebirds and Waders)

Class: Aves (Birds)



**Fig. 1.** Pectoral sandpiper, *Calidris melanotos*.

[[http://tolweb.org/Calidris\\_melanotos/90820](http://tolweb.org/Calidris_melanotos/90820), downloaded 5 March 2017]

**TRAITS.** *Calidris melanotos* is a small wandering shorebird, 19-23cm in length, with the males larger than the females. This sandpiper has dark brown upper parts and white undersides (Fig. 1). The wings have blackish flight feathers with dark brown rump and buff outer feathers. It is long-necked, with a greenish-yellow bill as long as the head, and the legs and feet are pale yellow (Reilly, 1968). The males have inflatable sacs in their breast which they use during courtship. While juveniles have bright distinct markings on their feathers (Fig. 2), the adults often have dull worn-out looking feathers in summer as they wait until they are in wintering regions to moult.

**DISTRIBUTION.** This species breeds in Alaska, northern Europe and northeast Asia between May and July. The nonbreeding season is spent in South America, New Zealand and other countries in the tropical zone between September and April (Fig. 3). Between these two regions they are referred to as passage migrants as they stop during seasonal migration along the way for a short periods, including in Trinidad and Tobago.

**HABITAT AND ACTIVITY.** The pectoral sandpiper is found in wet habitats including swamps, floodplains, rice fields, coastlines, mudflats and even saltmarshes. During migration from the northern breeding grounds to the tropical zone, these passage migrants stop off along the way to

feed and scarcely divert from the migratory route. As such, this species has adjusted its migration route to pass over habitable areas to ensure it can acquire food even during its long distance migration (Restall et al., 2007).

**FOOD AND FEEDING.** The pectoral sandpiper has a diet mainly of invertebrates. It hunts for food by moving along shorelines and mudflats with its head down, carefully picking prey off of the surface or slightly delving into the sand or mud to find them. Its diet varies based on the season and location. During the breeding season it feeds on flies, spiders, seeds and even fly larvae. Migration brings with it a change in diet to small crustaceans and other aquatic life (Ronchi Virgolini et al., 2010).

**POPULATION ECOLOGY.** It is highly sociable, often being found in flocks containing American golden plovers and other waders on shorelines and mudflats (Restall et al., 2007). Pectoral sandpipers are polygynous, with the males staying at the breeding site for a short period of time. A single male can sample as many as 23 breeding sites, that may not be a result of a failure to breed. This can allow males to have offspring at multiple sites in the same breeding season. The length of stay at each site is strongly influenced by the number of breeding females at the breeding sites. Apart from the contribution of sperm to fertilization, polygynous males provide nothing else to the care of offspring (Kempenaers and Valcu, 2017).

**REPRODUCTION.** Pectoral sandpipers prefer to breed on wet tundra. Of the total 400,000 population in the world, half breeds in Siberia and the rest along north and western Alaska and central Canada. The ritual of breeding begins with the arrival of the polygynous males on the breeding ground with each male creating its own territory. When the females arrive at the breeding ground, males try to attract the females by contracting the inflatable sacs in its breast in order to create characteristic sounds. Once the female picks a mate and breeds, she builds a nest in a secluded part of the vegetation using grass and leaves. The female lays approximately 4 eggs which she spends 21-23 days incubating. The chicks that are hatched can feed on their own not long after so the mother need only remain with them for 10-20 days, the timespan it takes for them to develop wings large enough for flight so that they can acquire food on their own (Wildlife Journal Junior, 2017). The males leave quickly after breeding, moving on to other breeding sites. The juveniles remain on the breeding grounds for many weeks from September to mid-October and can be seen moving from small flocks of just juveniles to bigger flocks that include other shorebirds (USGS, 2016).

**BEHAVIOUR.** Pectoral sandpipers are long distance migrators. They use sound as part of their anti-predator adaptations. When alarmed this sandpiper firstly becomes stationary with its eyes intently observing its predator. In more dire situations its attempts to ward off the predator by making a low throaty *churk* or *trrit* note, sometimes repeatedly (Restall et al., 2007).

**APPLIED ECOLOGY.** The pectoral sandpiper is categorized as Least Concern since the species has a large range and they can also be found in agricultural regions (IUCN, 2017). However, they do not affect the growth of the crops and are instead attracted to the flooded plains to forage for food in the mud and are therefore not considered as pests (Dias et al., 2014).

## REFERENCES

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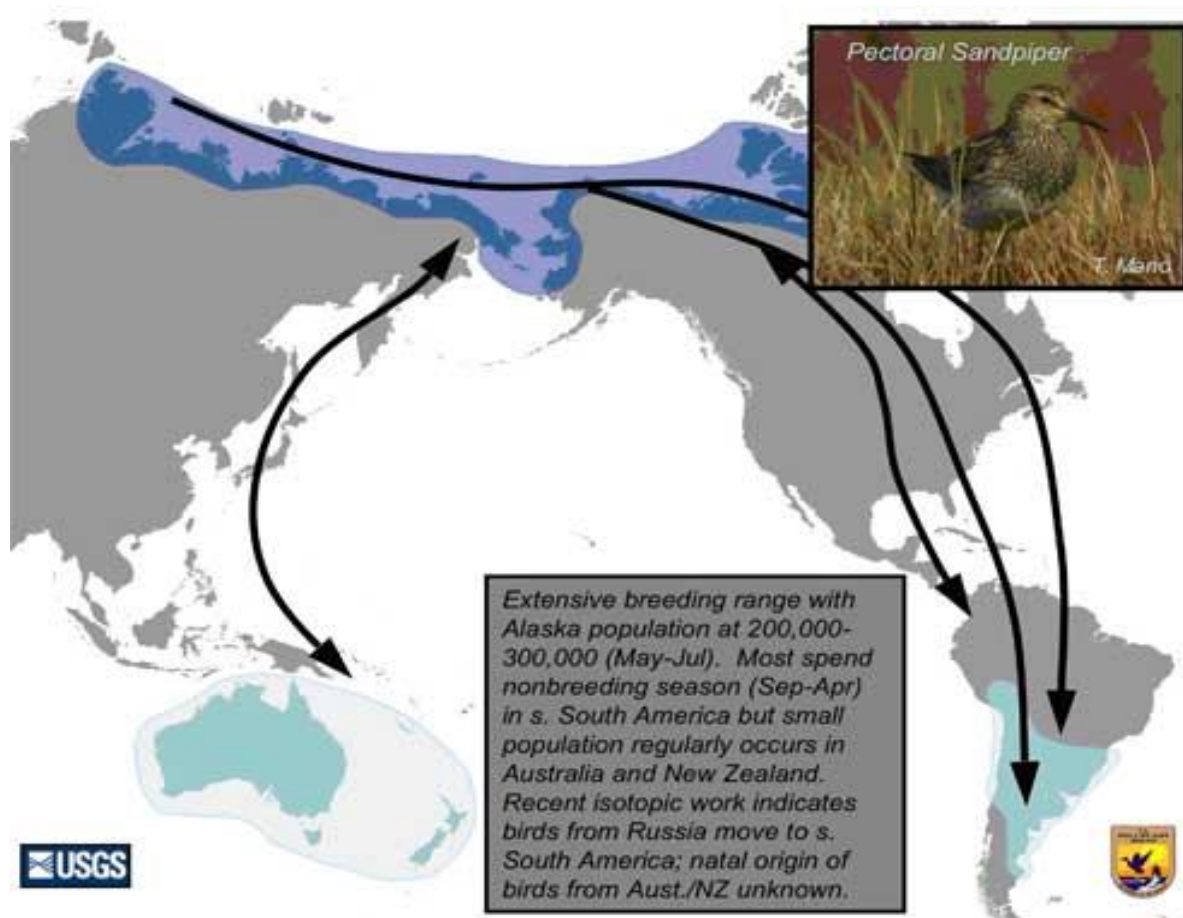
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**Fig. 2.** Juvenile pectoral sandpiper.

[[https://commons.wikimedia.org/wiki/File:Pectoral\\_Sandpiper\\_\(Calidris\\_melanotos\)\\_RWD.jpg](https://commons.wikimedia.org/wiki/File:Pectoral_Sandpiper_(Calidris_melanotos)_RWD.jpg), downloaded 6 March 2017]



**Fig. 3.** Pectoral sandpiper geographic distribution.

[[https://alaska.usgs.gov/science/biology/avian\\_influenza/species/species.php?code=PESA](https://alaska.usgs.gov/science/biology/avian_influenza/species/species.php?code=PESA), downloaded 5 March 2017]