

Problem Peeps

Text and Photos by
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Each year during fall migration, thousands of juvenile shorebirds begin their first extended migration to their wintering areas. Some of these birds appear in a plumage very different from their breeding parents, while others are only slightly different. This unique juvenile plumage lasts a short time (four to eight weeks), and fresh non-breeding feathers start to replace juvenile feathers by the beginning of September.

By becoming aware of a shorebird's molt cycle, the process of identification becomes easier. If you know that birds with juvenile plumage appear from early August through September as well as the times that birds with breeding and nonbreeding plumage are most common, part of the confusion that accompanies shorebird identification will disappear.

These three shorebirds are members of the sandpiper family and part of the complex known as "peeps." Five species of peeps breed in North America, and all share the same general physical features and physiology. Although most shorebirds can be identified by a combination of nonchangeable characters such as size, structure and behavior, peeps require a combination of subtle physical differences and plumage patterns. After much practice in studying the shape, structure and behavior of these small sandpipers, even plumage becomes a secondary I.D. tool.

Study these juvenile peeps carefully, and pick out subtle differences in structure, bill size and shape, and plumage. Good luck! **WB**

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Birder's I.D. provides an opportunity for you to test your bird identification skills. The identities of the birds with some I.D. tips and natural history information appear on page 57.

See pages 14-15.

Bird #1 — juvenile Semipalmated Sandpiper (*Calidris pusilla*): The small sandpiper on the left-hand side of the photo consistently gives birders trouble with identification. This is due in part to an I.D. process that relies on plumage only and a lack of awareness of molt patterns and timing. (See *Ornithology 101* on page 62 for a discussion of molt. —Ed.) To a beginning birder, all the peeps look terribly similar, and the subtle structural differences rarely are noticed. In this photo of two peeps side by side in similar postures, the subtle differences become more apparent.

Semipalmated appears somewhat streamlined in shape with relatively long, pointed wings. Its body shape is similar to Western Sandpiper, with a slightly less rounded, bulky trunk and breast. In comparison to the juvenile Least Sandpiper on the right-hand side of the photo, it is slightly bulkier with longer wings, a more attenuated or drawn-out rear end, and longer legs. Semi's bill is heavier and broader, especially near the tip. These features immediately separate the two species.

Bill shape is useful as one of several characters used to determine a final conclusion. Although Semi's bill length and shape varies with sex and geographic region (western-breeding Semis have shorter, straighter bills on average, while females of all regions have longer and often slightly decurved bills), most bills are broad-based with a somewhat heavy tip. Eastern Semis have longer bills on average, with females sometimes having long bills with fine, decurved tips, very similar to male Western Sandpipers.

Plumage details still are important. It is obvious to see the differences between the uniform, scaly appearance of Semi and the bright rufous pattern of Least. This juvenile Semi is a particularly bright individual, with a good amount of cinnamon-buff coloration to its back feather edges. Semis are quite variable with respect to juvenile and breeding plumage, ranging from bright cinnamon-buff to plain gray-brown.

Other plumage tips include an overall darkish cap and cheeks, mostly off-white underparts with indistinct markings at the sides of the upper breast, a slight buff wash to the throat and upper breast, and black legs. The head usually appears darker than juvenile and nonbreeding Westerns, which helps with distant birds.

Semipalmated Sandpiper breeds widely across open tundra regions from Alaska to eastern Canada, and the species winters primarily in Surinam, near South America. Smaller numbers winter in the Bahamas and West Indies, and a few winter in the southern United States. In spring and fall migration, the species might appear in the eastern two-thirds of the states. This juvenile Semi visited Jamaica Bay Wildlife Refuge in New York in August 2003.

Bird #2 — juvenile Least Sandpiper (*Calidris minutilla*): Least Sandpiper occurs in every state during migration. It is the most obvious peep in juvenile plumage — with broad, bright rufous edges to all back feathers — as well as the smallest shorebird in the world. Its size (6 inches long), relatively small head and fine-tipped, slightly drooped bill create a distinctive shape that stands out in a crowd.

With a compact, slender body and overall brown coloration, juvenile Least usually are not a problem with identification. From

mid-September onward, however, dull gray-brown nonbreeding feathers replace bright juvenile feathers, and size and structure become important I.D. tools.

Adult Least have yellow legs, which is obvious in the field, but juveniles can show greenish-yellow to grayish-green legs, which often become caked with mud. This is another reason to use various field marks to form a final I.D.



Juvenile Least have a more extensive brownish bib than other peeps and a brownish-rufous cap. The dark caps on Least and Semi highlight a pale eyeline. The brownish wash to the throat and upper breast often

give a hooded appearance to Least.

With its short legs, Least often appears to be crouching, which it does quite well when it senses danger. During these times, it becomes part of the muddy habitat that it prefers.

Least Sandpiper breeds widely in moist arctic regions from Alaska east to the Canadian Maritimes and breeds farther south than other peeps. Some birds winter along all coastlines of the United States, often using wet habitats many miles inland, while others migrate south to the West Indies and Central and South America.

Bird #3 — juvenile Western Sandpiper (*Calidris mauri*): This western counterpart to Semipalmated Sandpiper is common throughout its range, despite its very limited geographic breeding area. In juvenile and nonbreeding plumage, small-billed males can appear very similar to Semis in structure and plumage. Westerns are slightly heavier and more hunchbacked than Semis, but this is most obvious in a bent-over feeding posture. The longer legs, shorter wings and somewhat rounded body create a subtle front-heavy appearance, but this can vary.

Western has a different bill shape than Semi and Least, with a broad base and tapered, drooped bill. In females, the bill may resemble a short-billed Dunlin. Males, however, can just about overlap Semis' bills in length. The longer legs allow Western to feed in deeper water than both Semi and Least, and this often helps I.D. problem birds.

Juvenile Westerns show a very different plumage pattern on the back than Semi. Westerns show bright rufous edges only to the upper scapulars (upper part of back). This neat, crisp line of rufous feathers contrasts sharply with the mostly gray lower scapulars and wing coverts. The face and crown average paler than Semi in juvenile and nonbreeding plumage, often resulting in a subtle, pale eyeline. Mostly white underparts with fine streaks along the sides of the upper breast



and dark legs also appear on juvenile Westerns.

Western Sandpiper breeds in arctic coastal tundra in northern and western Alaska. Numbers of birds winter along all American coastlines except northern New England. Other Westerns migrate south through the West Indies, Central America and South America as far as Peru. This juvenile Western Sandpiper was photographed in Cape May, N.J., in September 1994. WB