

Semipalmated Sandpiper
27 Mar 1988
Riverton A., Fremont Co., IA
*S. Dinsmore
IBL 58:81, 59:77

Record Number: 88-04
Classification: NA

DOCUMENTATION

Steve Dinsmore
Ross Silcock

LETTERS

Bruce Peterjohn, 8 May 1989
Kim Eckert, no date
Guy McCaskie to Records Committee, 26 Sep 1989

REFERENCES

Field Reports: IBL 58:81
Records Committee: IBL 59:77

VOTE: 3 A-D, 2 NA, 1 abstain

A-D. This is an extremely early record, but presence of large number of shorebirds increases possibility of an early straggler. Least is effectively eliminated by size and leg color. However, a bird in basic plumage present some difficulties. As Hayman, et al. (1986) say of basic Semipalmated, "effectively indistinguishable from other dark-legged stints and field identification rests with structure of bill, legs, and call". This leaves us with Western, Rufous-necked, and Little. Since this description does not include anything about the leg structure and the call was not heard, this ID rests upon the bill. We are told the bill was "straight, dark, and much thicker at the base and the tip than the bill of a Baird's or Least sandpiper". This, of course, is perfect for the tube-like bill of Semipalmated and would eliminate Western, which usually would not be described as straight and also generally has a finer tip than Semipalmated. Hayman, et.al., described the Little Stint's bill as "rather fine at tip, sometimes faintly decurved". This doesn't fit our present bird. Rufous-necked Stint is not so easy to eliminate. Viet and Jonnson (1984) describe Rufous-necked bill as "usually straight, but is occasionally slightly drooped. The extent of variation in bill size is enough so that distinction from...short-billed Sempalmateds is not possible on this character alone". In Hayman, et.al., the bill is described as "slightly deeper at tip than in Little, but less deep than in Semipalmated and less laterally expanded at tip." Viet and Jonnson go on to say, "Rufous-necked Stints in basic plumage are very difficult to distinguish from Semipalmated Sandpipers on plumage characters alone, and one must rely on lack of (foot) webbing in the Rufous-necked". Plus: All characters described are consistent with Semipalmated. Precedents for this early date exist: 1 found dead at Racine, WI on 3-28-64; and 1 near Chicago on 3-31 to 4-3 in 1971 (Mlodinow, 1984). Also 1 April in Minnesota (Green & Janssen, 1975). I could not find similar records for Western Sandpiper. Little and Rufous-necked Stints are not recorded in the region, at least as far as I know. Minus: As suggested above, Rufous-necked Stint is not eliminated.

However, I don't know how one would convince anybody of a Rufous-necked in basic plumage in Western Iowa. More careful description of the bill size and shape as well as the leg structure would have been helpful. On balance, this seems to be a reasonable record. References: Green, J., and R. Janssen. MINNESOTA BIRDS - WHERE, WHEN, AND HOW MANY. University of Minnesota Press. 1975; Mlodinow, S. CHICAGO AREA BIRDS. Chicago Review Press. 1984; Hayman P., J. Marchant, and T. Prater. SHOREBIRDS, Houghton Mifflin 1986; Viet, R., and L. Jonsson. Field identification of smaller sandpipers within the genus *Calidris*. American Birds 38:853-876.

NA. The earliest date I could find away from the Gulf Coast is 1 Apr (Minnesota, Janssen 1987, Michigan, Bent 192). Possible basic plumaged peeps with dark legs include Semipalmated Sandpiper, Western Sandpiper, Little Stint, Rufous-necked Stint, Baird's Sandpiper, and White-rumped Sandpiper. Of these, Baird's and Western deserve the most consideration. Voice would have been helpful. See separate sheets. Recommend outside review.

NA. Western Sandpiper not considered? though a possibility. Western about as likely as Semipalmated at this early date. Many experts would not accept an extremely early Semipalmated without it being a specimen. A documentation by Silcock would have helped Dinsmore's case.

A-D. See attached notes, in lieu of my non-existent documentation. I also saw this bird.

REVOTE: 4-A-D, 2-NA, 1-abstain

A-D. I still feel that this report has sufficiently eliminated other possibilities, but would welcome comments from outside reviewer(s) who know more than we do.

A-D. Little Stint eliminated by size, would not be larger than leasts present. Western is eliminated by size, should be noticeably larger when compared with small peeps, and the straightness of the bill. I think the thickness of the bill at the base supports semipalmated over Rufous-necked, but in no way could be construed to be conclusive. The absence of Rufous-necked from the midwest records and the early warm weather patterns of 1987, also favor semipalmated. Helpful comparison that were probably noted by the documentor, but not included in the documentation would be size comparison's to Baird's and bill length comparisons to Baird's and Least's present.

NA. I think this bird was most likely a Semipalmated Sandpiper. The question is, however, can we be sure? Silcock's description and Dinsmore's "some narrow white edging to the scapulars and wing coverts" indicates that the bird was molting to alternate plumage, not in basic plumage as stated. I can't interpret the measurements in Silcock's reference. I would think that 0.41 is the standard deviation and, therefore, the 95% interval would be +/- 3 S.D. The source that I quoted (Harrington and Morrison 1979) shows that there could be overlap. Further, even if there were a difference, can it be perceived accurately in the field? It appears that this ID rests on one field mark (bill) and many experts have doubts about reliability of ID in field. I would be happy to see outside review.

NA. I agree that it would be best to have an outside opinion on this one. By looking at the research data a Semipalmated Sandpiper should be extremely unlikely on 3/37. Bill shape was mentioned but bill length was not in the documentation. Mention by Silcock of some indication of basic to alternate plumage does help but for the most part I think that this is one that could very well be a Semipalmated but I am not convinced enough to vote it as such.

A-D. Silcock documentation, although long time elapse, helps. Early records exist for IL and WI.

A-D (Perhaps I should abstain). Regarding extensive data attached, leading to NA based on (1) very early date, (2) no evidence of molt, and (3) field ID impossible, my comments: (1) moot--depending on committee and judgement. (2) I believe that the bird was indeed molting--see my notes. I spoke to Dinsmore about this (Dec 12, 1988) and he did not notice this "patchiness" for whatever reason. I clearly remember seeing this on the bird. (3) In my opinion, there is marked regional bias in ID of Semis. In western Iowa ID with some experience vs. Western Sandpiper is not difficult. Note that Western Sdp is v-rare in Iowa in spring. The bill on this bird (March 27, 1988) was clearly and noticeably short, straight, and not tapered or pointed. No Western Sdp has such a bill, regardless of length. I think the first A-D analysis is excellent! (naturally).

2nd REVOTE: 1 A-D, 4 NA, 2 Abstain

NA. My reading of the limited references I have initially indicated to me that this was most probably correct. However, I do have to respect the ability of the various outside reviewers and can see that they raise enough doubt to make me decide to err on conservative side of this vote.

A-D. Bill description of both Silcock and Dinsmore eliminate all but 10% of male Western Sandpipers that overlap. Size and non-streaked upper breast further support a Semipalmated. Probability stand enough on the side of Semipalmated that is should be recorded as a Semi.

NA. Agree with Peterjohn and McCaskie comments.

NA. My prior analysis of this record is supported by Peterjohn's comments on bill shape not necessarily being diagnostic and a combination of several more field marks being needed to confirm this sighting. Eckert's comment on origin of bird also makes one think a little more about bill length argument. McCaskie's comments that bill could suggest Western as well as Semipalmated is significant as well. This is not an easy record on which to make a (beyond reasonable doubt) judgement.

Abstain. Having seen this bird I am still convinced it was a Semi--my comments apparently not circulated to outside reviewer's. [not true, see Eckert reference to Silcock comments/thk]. I agree some points in the documentation raise enough questions to doubt correct ID however. It is interesting that observer as far east as Ohio are finally realizing that Western Sdp is a fairly common to common fall migrant in the Great Plains.

SENT TO: Steve Dinsmore 4024 Arkansas Dr., Ames, IA 50010

88-04 Semipalmated Sandpiper, 27 March 1988, Riverton A.

VOTE: NA

COMMENT: After considerable research, I am still uncertain about the identification of this bird. My concerns involve the early date, lack of any evidence of molt to alternate plumage, and general difficulty in identification of this species in basic plumage. I recommend that we send this record to outside experts for evaluation. Some of the information I gathered is summarized below.

Date: Semipalmated Sandpiper winters along the coasts of South America with minimal evidence of wintering at the tip of Florida (Phillips 1975). This species is not an early spring migrant. It is rare before late April. I looked at various books for arrival dates and found the following early dates. I have no way of verifying that these birds were accurately identified.

--South Dakota (Whitney et al. 1978): 18 Apr 1954, 21 Apr 1968, 26 Apr 1964.

--Minnesota (Janssen 1987): 1, 8, 12, 14, 15 Apr (south); 7, 14, 20, 30 Apr, 7, 8 May (north).

--Iowa (Dinsmore et al. 1974): 11 Apr 1981, 19 Apr 1964, 21 Apr 1963. My notes for the first record underline the species but give no details; the other two are from F. W. Kent's yearly lists of dates for first sightings.

--Indiana (Keller et al. 1986): 5 May to 5 June (extreme dates eliminated).

--Indiana Dunes (Brock 1986): 3 May 1958 earliest.

--New York (Bull 1974): 3 Apr (coastal); 23 Apr (inland)

--West Virginia (Hall 1983): 28 Apr

--Bent (1927) lists early dates by state. The earliest are as follows: 1 Apr (Michigan); 3 Apr (Missouri); 12, 13 Apr (North Carolina); 15 Apr (Kansas); 16 Apr (Missouri, New York); 18 Apr (Indiana); 19 Apr (Iowa, Minnesota); 22 Apr (Massachusetts).

--Phillips (1975) states, "...The Semipalmated Sandpiper's winter range is largely limited to the vicinity of the coasts. Its apparent hollowness is probably partly due to very deficient collections along the Caribbean coast of Central America (and Mexico). Here I have no record between early fall and the last third of March, as yet. It is noteworthy that Van Tyne and Trautman (1945) witnessed northward departure of "peeps" (probably including pusilla) from Yucatan on March 31, while Weston (1965) reported Semipalmated in northwestern Florida on April 5, and it has reached Oklahoma by April 8 (Sutton, 1967; specimen examined). Thus March records in Mexico need not indicate wintering."

Plumage: The bird as described shows no evidence of molt from basic plumage. Alternate plumage is said to be acquired "between February and April" (Viet and Jonsson 1984). Western Sandpiper molts "during the period February to April" but tends to be earlier than Semipalmateds; Little Stilt molts "during February through May" and Rufous-necked Stint "during March to May" (Viet and Jonsson 1984). According to Phillips

(1975) oversummering birds are common in South America, with most remaining in basic plumage but some showing partial molt to alternate plumage. He argues against partial migration since this species is rare in the United States from 9 June to 9 July and especially from 18-24 June. This information argues against a Semipalmated Sandpiper arriving in Iowa in spring without at least some evidence of molt to alternate plumage.

identification: Dinsmore's identification is based on bill, leg color, and size of the bird. Call note is generally considered distinctive, but the bird was not heard. Authorities express varying opinions of identification of basic-plumaged peeps. I quote a few.

--Hayman et al. (1986) say, "In non-breeding, plain grey plumage, is effectively indistinguishable from other dark-legged stints and field identification rests with structure of bill and legs, and call. Note that palmations are visible only in ideal conditions."

--Viet and Jonsson (1984) say, "The basic plumage of the Semipalmated Sandpiper is extremely similar to that of the Western Sandpiper, and, except for structural differences, these two species are most difficult to separate. In a direct comparison Semipalmateds appear warmer or browner on the upperparts, so that the dark shaft streaks are difficult to discern, and they usually lack crisp streaks on the breast sides. Other characters are illustrated in Figure 9 and discussed under Western Sandpiper. These last details are of only average usefulness and are subject to modification through wear."

--Phillips (1975) says, "As was well known to older writers, bills vary both with species and sex; males are shorter-billed than females, especially males, many of which match female pusilla." He continues, "Some Semipalmateds have relatively wider, stubbier bills than any Western (Fig 1); but this difference holds only for certain populations (Palmer, 1967; Quillet et al., 1973; and others)." Further, "Of what value, then, are the usual Field Guide characters of bill length and colors? It would be just about as easy to identify by sight the two races of Willet ..., which no one attempts. Clearly, more attention must be paid to voices. These are hard to describe, and authors who mention them at all give varying descriptions..."

--Zimmer (1985) says, "Female Westerns are unlikely to be mistaken for Semipalmated, but the shorter-billed males may be easily mistaken if bill length is used as the sole criterion." Zimmer, covering several points, continues, "Basic-plumaged birds are best identified on the basis of bill shape because many individuals of both species may be virtually identical in plumage. However, as pointed out earlier, adult shorebirds typically delay molt into basic plumage until they reach their wintering grounds. Since Semipalmateds are extremely rare in United States in winter, this means that

basic-plumaged individuals will almost never be encountered. Westerns do winter in southern coastal areas and therefore are commonly seen in basic plumage."

--Bill length helps separate Semipalmated from Western Sandpiper. The three populations of Semipalmated Sandpipers (Alaskan, central Canadian, eastern Canadian) have progressively longer bills from west to east (Harrington and Morrison 1979). The Alaskan and central Canadian birds migrate north through central United States, but the central Canadian birds tend to migrate eastward in fall. Thus spring birds in Iowa would be expected to have short to medium bills; however, the average difference between sexes in a given population (1.5 mm) is about as great as the average difference between birds of the same sex from the extremes of range (2.5 mm) and variation in birds of the same sex from the same range (3 mm). The bill length of the largest females from the central Canadian population would be about the same as the smallest male Western Sandpiper (21 mm).

--On morphologic grounds, the possibility of Rufous-necked Stint should also be considered, particularly in light of its later spring molt. Viet and Jonsson say, "Rufous-necked Stints in basic plumage are very difficult to distinguish from Semipalmated Sandpipers on plumage characters alone, and one must rely on lack of webbing in the Rufous-necked." Rufous-necked Stint is extremely rare on the West Coast and there is no precedence for occurrence in the Midwest.

In summary, acceptance of this record relies on acceptance of three improbables: what appears to be a record early spring migration date for United States, a bird at this date showing no evidence of molt to alternate plumage, and a field identification that many consider nearly impossible. Yet the possibility that the identification is correct is tantalizing. I think we should seek several outside opinions.

REFERENCES:

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From Bruce Peterjohn 5-8-89

✓ 88-04

88-18

18-19

COMMENTS CONCERNING THE IDENTIFICATION OF JUVENAL/BASIC PLUMAGED
WESTERN SANDPIPERS IN
THE FIELD

JUVENAL PLUMAGE:

In fresh juvenal plumage, Western Sandpipers can be positively identified by the rusty edgings to the scapulars, contrasting with the remainder of the gray-brown upperparts. Semipalmateds will never exhibit this contrast; while a few Semipalmateds may appear rather rusty in the field, the rusty edgings are distributed throughout the upperparts and not restricted to the scapulars.

Unfortunately, the rusty scapulars are not particularly visible in the field, especially on distant birds or under poor lighting conditions. In addition, these edgings are fairly quickly lost through feather wear; by the last week of September, it is not unusual to observe juvenile Westerns with uniform upperparts. Hence, the presence of rusty-edged scapulars indicates the sandpiper is a Western; the absence of these edgings does not necessarily eliminate either species.

FEMALE WESTERN SANDPIPERS:

In juvenal and basic plumages, most (98+%) female Western Sandpipers can be safely identified by bill characteristics. These females have relatively long and noticeably tapered bills, slightly down-turned near the tip. These bills are as long as or slightly longer than the width of the head (in profile). This characteristic is surprisingly useful, even on distant birds in poor light. With practice, it can be safely used on solitary individuals.

General size characteristics are not useful in the identification of these individuals. There is considerable overlap in wing length, tarsus length and weight between Semipalmated and Western Sandpipers. While a few female Westerns may appear relatively large, approaching a male White-rumped Sandpiper in size, these birds also have relatively long bills and would be easily identified by that characteristic.

MALE WESTERN SANDPIPERS:

Western Sandpipers lacking rusty-edged scapulars and tapered down-turned bills are the most difficult to identify in the field. These birds are normally males, whose measurements overlap female Semipalmateds in bill length, wing length, tarsus length and weight.

Two characteristics may be used to identify these individuals. The only characteristic that is diagnostic is their flight calls, which can be easily distinguished with practice (describing these calls on paper can be rather difficult, however). For silent birds, many (approximately 80-90%) can be identified by bill shape. Male Westerns have thinner and more tapered bills, while Semipalmateds have relatively thick bills with a rather bulbous tip. When both species are together for comparison, the difference in bill shape can be fairly obvious at close range. However, not every Western has a thin tapered bill

and some Semipalmateds lack the thicker tip; hence, this characteristic is not necessarily diagnostic by itself and should always be confirmed by flight calls, especially for exceptionally early/late individuals.

TIMING OF MIGRATION

The literature is full of erroneous arrival/departure dates for these species, especially Semipalmateds. In Ohio for example, there are a number of sightings of Semipalmateds as early as the last week of March and as late as early November. Yet, the few exceptionally early/late individuals that have been collected have all been Westerns. I suspect that a critical examination of specimens in other states would uncover similar results.

Careful study of migrant Western/Semipalmated Sandpipers in Ohio during the last decade has produced some interesting results. In autumn, Western Sandpipers are actually locally uncommon to fairly common migrants, occasionally gathering in flocks of 50-75+ individuals. Their migration normally peaks between September 15-October 10, and they are likely to outnumber Semipalmateds during late September and early October. The latest confirmed Ohio record of Semipalmated Sandpiper is only October 11, and there are very few acceptable sightings after October 1.

Concerning the three Iowa records, my votes would be as follows if I were on your records committee:

88-19 9 Oct. 1988 at Big Creek W.M.A.: **Accept**; the rusty scapulars and decurved bill are diagnostic for a Western Sandpiper.

88-18 8 Oct. 1988 at Saylorville Reservoir: **Accept**; the thin decurved bill would eliminate Semipalmated Sandpiper. Note: the absence of rusty scapulars does not necessarily indicate the bird was an adult; it could easily be a juvenile with worn scapulars. In the midwest, adult Westerns normally depart by August 15 and an October record would be exceptional.

88-04 27 March 1988 at Riverton W.M.A.: **Reject**; Described bill shape is not necessarily diagnostic by itself, and other characteristics (particularly call notes) were not noted. I am troubled by the description of this bird as "much chunkier" than a Least Sandpiper, which sounds more like a large female Western to me. Unusually early records such as this should be based on a description of all field marks, not relying on only one subjective characteristic (bill shape).

I am impressed with the thoroughness of the analyses of this record, and I do not pretend to know more than your reviewers. I am biased against Western records but this is reported as a Semi which tends to favor my acceptance. The date does not bother me since other peeps were present. The problems I have, however, are: 1) The ^{first} observer did not use Shorebirds or the Am. Birds article, which I feel are necessary before a Western vs. Semi ID can be safely attempted; 2) the two observers give conflicting descriptions on the plumage - one says basic with no molt, the other ~~says~~ described patchiness indicating molt; and 3) I cannot follow Ross' logic regarding bill length and the claimed Alaskan origin of this bird - why wasn't it a "central" bird, and why couldn't there be bill overlap? On these three points, I'd have to vote unacceptable, but at the same time I feel Semi is much more likely than Western. I'm also glad I don't have to vote on this in an official capacity!

Kim Echert

✓88-04
88-18
88-19

Guy McCaskie
954 Grove Street
Imperial Beach
CALIFORNIA 92032

September 26, 1989

I.O.U. Records Committee
Thomas H. Kent, Secretary
211 Richards Street
Iowa City
Iowa 52246

Dear Tom,

I have been sitting on this material for far too long and must apologize. I have been buried with other matters including an increased load at work.

I have expressed my opinion as to the identity of the gull, agreeing with the majority of your committee members that it is indeed a Slaty-backed Gull, and outlining the reasons I feel it could not be a Western Gull.

I find myself reluctant to make a positive identification of any the three shorebird records, though I feel all three were most likely Western Sandpipers (Calidris mauri). I know nothing about the abilities of the observers reporting the three birds, nor their familiarity with shorebirds, and would consider this an important factor in evaluating the records. All three shorebirds appear to have been in winter plumage or juveniles molting into winter plumage, and none of the three sightings is accompanied by the type of details that would enable an outsider like myself to properly evaluate the record. However, from what I know about the status and distribution of Semipalmated Sandpipers (Calidris pusilla) and Western Sandpipers in North America, both do occur in Iowa, this being confirmed by the information presented in IOWA BIRDS. As such the records are only being considered because of the dates upon which they were reported, and not because they are casual to accidental in the State. I do not feel there is reason to consider any of the three birds as anything other than Semipalmated or Western sandpipers, and do not understand why some committee members are even considering such species as Little Stint (Calidris minuta) and Rufous-necked Stint (Calidris ruficollis).

There is nothing in the account on the March 27th "Semipalmated Sandpiper" that indicated the observer even considered Western Sandpiper, and the only information in the account that one can use to evaluate the record is the description of the bill - "the bill was straight, dark, and much thicker at the base and the tip than the bill of a Baird's or Least sandpiper". This could indicate the bird was a Semipalmated Sandpiper, but the

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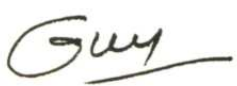
fact that the bill appeared "much thicker at the base ..." also suggests the bird could be a Western Sandpiper. Western Sandpipers regularly winter in the United States, and here in California are migrating northward by late March. On the other hand Semipalmated Sandpipers winter south of the United States, and do not normally arrive in the United States until April. As such I would expect an early "peep" in Iowa to be a Western Sandpiper rather than a Semipalmated Sandpiper. I suggest you consider the ability of the observer and his familiarity with shorebirds when evaluating this record. I personally feel it is exceptionally early for a Semipalmated Sandpiper anywhere in North America, but within reason for a Western Sandpiper.

There is nothing in the information presented about the October 8th bird that would lead me to believe the bird was anything other than a Western Sandpiper. In this case the observer had a Semipalmated Sandpiper nearby for size comparison. The bill on this bird was surely outside the range seen on Semipalmated Sandpipers, and probably on the long side for a Western Sandpiper if indeed it was "as long as the bill of a Pectoral". Since Western Sandpipers winter farther north than do Semipalmated Sandpipers I would expect late "peeps" to be Western Sandpipers rather than Semipalmated Sandpipers. Again I would suggest you consider the ability of the observer and his familiarity with shorebirds when evaluating this record.

There is nothing in the information presented about the October 9th bird that would lead me to believe the bird was anything other than a Western Sandpiper. Again the observer had Semipalmated Sandpipers present for direct comparison, and clearly compared the bill of the suspected Western Sandpiper with the bills on the known Semipalmated Sandpipers, and concluded it was "longer and had an obvious droop", certainly supporting the identification of the bird as a Western Sandpiper. Most juvenile Western Sandpipers here in the San Diego area as of this past weekend [September 24th] still show some rust on the scapulars, though advancing into winter plumage. As such I would consider it likely that a juvenile would still show some rust as late as October 9th while in general appearing quite pale. I feel the bird was probably a juvenile Western Sandpiper, but suggest you consider the ability of the observer and her familiarity with shorebirds when evaluating the record.

I trust some of this will be helpful to you in arriving at a conclusion on these records. Again, sorry to have sat on the records for so long.

Sincerely



Guy McCaskie

DOCUMENTATION FORM

Species? Semipalmated Sandpiper
 How Many? 1
 Location? Riverton W.A., Fremont Co.

Habitat? feeding with other shorebirds on large mudflat area

Date? 27 Mar 1988

Time? approx. 9:20-9:35 a.m.

Observers Name and address: Steve Dinsmore 4024 Arkansas Dr. Ames, IA 50010

Others who saw bird: Ross Silcock

Description of bird: By 27 Mar 1988, hundreds of shorebirds had already concentrated at Riverton W.A. due to the low water levels. In addition to a couple of hundred Pectorals and over a hundred Baird's Sandpipers we saw golden-plovers, yellowlegs, and a few Least Sandpipers. After looking through most of the shorebirds, we noticed a different peep in with some Baird's and Least sandpipers. This bird was slightly bigger than a Least and was much chunkier. The bird had dark legs, seen in direct comparison with the dark legs of Baird's Sandpipers and the yellowish legs of the Least Sandpipers. This bird was also still in basic plumage, making it much paler in color than the other peeps. The underparts were entirely white, except for a light gray wash on the upper breast. The upperparts were gray except for some narrow white edgings to the scapulars and wing coverts. The tail pattern was not seen well (though we could see that the rump wasn't all white), but the undertail was white. The bill was straight, dark, and much thicker at the base and the tip than the bill of a Baird's or Least sandpiper. We did not hear the bird call.

Similar species and how eliminated: similar species eliminated above

Viewing conditions and equipment: Viewing conditions were good with the sun directly behind us, although a stiff wind prevented optimal viewing conditions. Estimated viewing distance was 60-70 yards for much of the observation. I used a Bushnell 20-45x spotting scope.

Previous experience with species: I am very familiar with all of the peeps and their differences in all plumages.

References consulted: NGS Field Guide to the Birds of North America

How long before field notes were made? some notes written about 1 hour after the observation

How long before this form was completed? written at 8 p.m. on 27 Mar 1988

Notes on Semipalmated Sandpiper sighting, Riverton, Iowa March 27, 1988

This bird was seen in the company of Steve Dinsmore. Other shorebirds present at an unusually early date were several Baird's, Lesser and Greater Yellowlegs, and a few Least and Pectoral Sandpipers.

This Semipalmated was easy to pick out from the other birds because of its size, black legs, and short, stout bill with no taper towards the blunt tip. In southwestern Iowa we see many Baird's, and at this time of year the buffy alternate plumage of most Baird's, along with especially the bill shape (rather long and very thin) as well as the comparatively significantly larger size allow easy separation from Semiplamated Sandpiper.

I am assuming that this bird was not a Rufous-necked Stint, primarily because of location. I admit that I cannot say with certainty that this bird was not a Rufous-necked Stint. The other major possibility is Western Sandpiper. This species was eliminated for several reasons. In my experience, Semi and Baird's both stand rather horizontally, while Western is more vertical when these birds are walking or standing (ie not feeding). In Iowa, there is no overlap of bill size between Semi and Western (see attached info from Cramp and Simmons). This is certainly true in fall, when only the Alaskan population of Semis migrates through Iowa, but even in spring, when there are Central Semis present also, the bill length overlap is virtually nonexistent. Together with bill shape, bill length in my opinion adequately separates these species in Iowa if seen well.

The plumage, especially back and scapulars, indicated that molt was in progress, as the bird appeared "patchy", with dark and light feathers mixed. This is expected in Semis at this time of year, from molt-migration relationships in this species. According to Cramp and Simmons (attached), Semis from the Alaskan population often molt during fall migration while still in the United States, while birds from Central and Eastern populations molt on the South American wintering grounds after migration. It seems a fair assumption that spring molt would follow the same sequence in reverse. This would mean that Central and Eastern birds would have molted into Alternate plumage before arrival in the United States in spring, but that Alaskan birds would be in the process of molting while moving north through the central United States in spring.

Together with the field marks of bill, shape, size, and stance mentioned above, I believe that molt timing confirms identification of this bird as a Semipalmated Sandpiper from the expected Alaskan population.

These notes were typed July 29, 1988 from memory. At the time ^{of observation,} other than the early date, I had no problem with the identification. ~~My~~ My acceptance of the identification was based on the above information, of which I was aware at the time of observation.



along Pacific coast of Central America to Guatemala. Breeds in 3 more or less separated areas, and migrations of these populations studied by Harrington and Morrison (1979) on basis of biometrics and ringing recoveries.

ALASKAN population. Autumn and spring migration routes lie mainly through Great Plains region of Canada and USA, though in autumn some may spread further east. Recoveries between Alaska and Kansas staging area (3), and between Alaska and Florida (1) and Surinam (2).

CENTRAL CANADIAN population. Approaches elliptical migration pattern. In autumn, birds pass south-eastwards through James Bay, then south in corridor that intersects Atlantic coast in zone between Gulf of St Lawrence and Virginia (mingling there with Eastern population for mainly west Atlantic crossing; see below). Colour-ringing, James Bay, 1977, produced autumn-winter sightings in south-east Canada (267), Maine to Virginia (249), south-east USA (5), Bermuda (16), Caribbean islands (2), and South America (4) (Morrison 1978). Spring passage takes place across Gulf of Mexico and north through central North America in zone between Appalachian and Rocky Mountains, passing through Great Plains and to west of James and Hudson Bays.

EAST CANADIAN population. Major autumn passage through Gulf of St Lawrence area, where ringing has shown many make transoceanic flight direct to eastern Caribbean; uncertain proportion continues along Canadian coast, but few follow USA coast southwards (McNeil and Burton 1973, 1977). Majority use route over eastern North America passing out to sea in zone centred on south-east Canada, where highest numbers on Atlantic coast to be found in autumn, especially in upper Bay of Fundy (Morrison 1977). Spring passage route lies along Atlantic coast of USA, probably turning north-west near Canadian frontier; hence main route south and west of that followed in autumn.

Thus different strategies used in western and eastern parts of breeding range. Alaskan birds use same route on both migrations, and (together with Central Canadian population) also return earlier in spring, probably in response to earlier thaw in western Arctic; in some years, western spring passage almost complete when Atlantic coast passage just beginning. Some evidence that Alaskan birds pause in Kansas in autumn for wing moult, whereas Central and Eastern populations suspend moult until winter quarters reached (Spaans 1979). In autumn, prevailing airflow is from north-west, and Central population seems to have adopted strategy of downwind movement to Atlantic coast where estuarine foods abundant July-August (Harrington and Morrison 1979). In Gulf of St Lawrence, where peak autumn passage of adults 20 July-15 August and juveniles into September, moult is arrested to enable faster build-up of fat reserves; these birds then estimated to have flight-range capabilities averaging 2400 km (many individual capabilities exceeding 3000 km), sufficient for continuous overwater flight to

eastern Caribbean (McNeil and Cadieux 1972a). Spring migrants trapped Venezuela carried less fat and therefore had lower theoretical flight ranges (*c.* 2000 km), but still adequate for shorter west Caribbean crossing involved at this season (McNeil 1970). Many immatures spend boreal summer in South American winter quarters (Phillips 1975; Spaans 1978).

All 3 populations probably meet in South America and Caribbean; ringing in Surinam produced recoveries north-west to Alaska and north-east to Prince Edward Island; all but one of Central American recoveries were in spring, while most in Canadian maritime provinces and New England were in autumn (Spaans 1979). Peak numbers Surinam occur late autumn; fall rapidly after December and remain low in spring; this conforms to more westerly axis of return movement. The most southerly ringing recoveries concern 2 in Brazil (January, February), ringed as migrants in Ontario (June) and Kansas (May). Also 2 autumn recoveries notable for quick movement; Virginia to Guyana, 5000 km in 21 days; and North Dakota to Lesser Antilles, 6000 km in 17 days (Glutz *et al.* 1975).

Voice. Outside breeding season has 2 main calls, somewhat variable and at times blending. (1) Common call in flight a rather loud 'cherk', softer and less reedy than similar call in Pectoral Sandpiper *C. melanotos*; may be modified to quieter 'cher' or 'che' which in turn becomes conversational twitter in feeding flock. When flushed, 'serup cherp cherp' (Nichols 1920); this the 'chrüp' contrasted with typical 'chiet' of Western Sandpiper *C. mauri* (Nisbet 1963). (2) Short, soft, snappy 'chip' notes, often heard from flock about to land; modified to a hurried cheeping 'ki-i-ip' on flushing (Nichols 1920). Hence British vagrants reported to have a quiet yet strong 'peep' with no harshness (Buck *et al.* 1966; Harrison *et al.* 1968), and a soft 'chit' or 'krit', sometimes forming a trill (Talbot 1973), while 2 separate birds gave both a weak husky 'churup' or 'chirrup' and a faint sharp 'chit' or 'chip' audible only at close range (Daukes 1954; Diamond and Plumb 1965). Autumn vagrant, England, had up to 5 calls: (a) brief sharp 'chirrik', 'chirruk', or 'chirrip'; (b) 'chut-chut-chert' when alarmed; (c) 'chirt' or 'chit'; (d) a subdued 'keek' or 'kleep'; (e) 'tit . . . tit . . . tit tit', recalling Little Stint *C. minuta*, but with slower delivery (A Pym). Various calls and transcriptions listed by Wallace (1974), and sources listed by Phillips (1975); latter considered common 'chit-chit' call to be distinctive and higher-pitched than common call of *C. mauri*, while Stevenson (1975) believed low-pitched twittering notes (listed under call 1) to be best distinction from *C. mauri*. For voice in breeding season, see Savile (1951) and Höhn (1957, 1968b).

Plumages. ADULT BREEDING. Similar to Little Stint *C. minuta* but on average less bright rufous and chestnut; also less bright, more ochre, than Western Sandpiper *C. mauri*, lacking deep

chestnut. Crown with streaks more rufous-grey, less chestnut than in *C. minuta*; nape and hindneck greyer. Supercilium more pronounced. Feathers of mantle and scapulars with black-brown centres and tawny-buff, pale ochre, or grey margins, duller than chestnut types of *C. minuta* and darker than grey types. Fewer white feathers at sides of rump and fewer white lateral tail-coverts. Underparts white, chest-band grey, streaked by minute dark brown shaft-streaks (more mottled on somewhat buffish ground in *C. minuta*); flanks and under tail-coverts sparsely streaked dusky. T1 black-brown with narrow brown-grey margin (wide and chestnut in *C. minuta*). Wings like *C. minuta*, but shafts of p8-p9 usually more extensively brown at base and tip, pure white for short part only; p11 with narrower white margin; tertials brown without conspicuous rufous margin; median and lesser upper wing-coverts not edged rufous, but late-moulting *C. minuta* may also have largely grey-brown upper wing-coverts when otherwise in breeding plumage. ADULT NON-BREEDING. Similar to *C. minuta* and sometimes identifiable by structural characters only. Generally more uniform grey on upperparts with narrow dark shaft-streaks only (in *C. minuta*, central area of feathers tends to be darker, more tinged brown, and broad margin paler). Paler supercilium slightly more distinct. Chest much less streaked than in adult breeding, but almost always (at least at sides) some dark shaft-streaks present. JUVENILE. Like *C. minuta*, differences parallel those of adult breeding. Entire upperparts more coldly coloured, darker and less bright rufous, feather-edges narrower and varying from ochreous to buff-brown. Fewer white fringes to feathers of sides of mantle, but white fringes to scapulars may be quite prominent, though mostly confined to tips, where they form white spots. Forehead greyer than in *C. minuta*; supercilium tends to be more pronounced and ear-coverts darker. Chest-band complete or interrupted, grey, usually clearly streaked, occasionally buff, but flanks and under tail-coverts pure white. Central tail-feathers (t1) and long tertials edged narrowly buff, not broadly rufous. Median and lesser upper wing-coverts edged and tipped pale buff, not rich rufous-buff; inner median coverts margined darker rufous. IMMATURE. Like adult non-breeding. Tinge of upperparts on average more ochre-grey. Recognizable by rufous-margined inner median coverts; these usually lost by February-March. Afterwards only recognizable when some strongly worn primaries retained.

Bare parts. Iris dark brown. Bill black. Leg and foot dark olive to dark brown-grey or black. No differences between adult and juvenile.

Moults. ADULT POST-BREEDING. Complete, primaries descendant. Body (June-July-September, finished after arrival in winter quarters. Primaries September-December(-February), during migration on moulting areas in southern USA for western populations, in South American winter quarters for central and eastern populations (A L Spaans). ADULT PRE-BREEDING. Partial: most of body (but not most of back), some inner wing-coverts and tertials, and usually t1. February-April. POST-JUVENILE. Partial: body, tertials, central tail-feathers, and some wing-coverts. September-December, mainly in winter quarters; many have not started mid-October, but most in full immature non-breeding December, so moult apparently rapid. IMMATURE PRE-BREEDING. Partial: body, t1, inner tertials, and inner median wing-coverts. At same time as adult pre-breeding. Some moult outer or all primaries November-May. Those summering in winter quarters

apparently do not acquire breeding plumage, retaining immature non-breeding June-July.

Measurements. Southern Netherlands Antilles and Surinam, all year; skins (RMNH, ZMA).

WING AD	♂ 95.9 (1.48; 13)	94-98	♀ 100.1 (1.31; 13)	98-102
JUV	96.1 (2.09; 17)	93-100	98.3 (1.71; 14)	96-101
TAIL AD	39.3 (2.02; 16)	37-43	40.6 (2.46; 13)	37-45
JUV	36.6 (1.65; 10)	35-39	37.2 (1.19; 10)	36-40
BILL	18.6 (1.17; 29)	16.6-20.2	20.2 (1.25; 26)	18.4-22.8
TARSUS	21.3 (0.70; 29)	19.8-22.8	22.1 (0.58; 27)	21.0-23.5
TOE	18.5 (0.59; 23)	17.0-19.5	18.9 (0.64; 26)	17.3-20.1

Sex differences significant, except tail. Juvenile wing (♀) and tail (both sexes) significantly shorter than adult, but not ♂ wing; juvenile bill, tarsus, and toe similar to adult, combined.

Slight geographical variation in wing and bill length: breeding adults from (1) Alaska, (2) central Canada (Banks Island, Mackenzie and Keewatin Districts), and (3) eastern Canada (Baffin Island and eastern Hudson Bay area) (Harrington and Morrison 1979).

	WING ♂	WING ♀	BILL ♂	BILL ♀
(1)	93.2 (1.93; 23)	96.3 (1.80; 9)	17.3 (0.73; 23)	18.9 (0.41; 9)
(2)	95.1 (1.68; 21)	97.1 (4.20; 9)	18.0 (0.72; 33)	19.5 (0.72; 14)
(3)	95.8 (2.23; 34)	98.9 (2.09; 15)	19.6 (0.95; 42)	21.3 (0.91; 18)

expected largest (♀) =
18.9 + 0.41
= 19.31

Weights. Breeding adults, northern Alaska and north-central Canada, May-July: ♂ 25.0 (48) 20-30, ♀ 27.0 (28) 21-31 (Bee 1958; Kessel and Cade 1958; Irving 1960; Kessel and Schaller 1960; Parmelee *et al.* 1967). Autumn migrants, USA, mainly late August and September: New Jersey 28.1 (4.11; 102) 20-41 (Murray and Jehl 1964); inland North Carolina 29.0 (5.5; 27) 20-40 (Post and Browne 1976). Juvenile, September-November, Netherlands Antilles: ♂ 20.5 (2.89; 14) 16-26, ♀ 21.4 (3.63; 11) 14-26 (ZMA). For monthly variation, Venezuela, see McNeil (1970).

Smallest Western ♂ =
21.7
(see attached)

Structure. Wing long and narrow, pointed; similar to *C. minuta*. 11 primaries: p10 longest, p9 0-2 shorter, p8 3-8, p7 11-15, p6 18-23, p5 25-31, p1 47-51; p11 minute, concealed by primary coverts. When fresh, longest tertials reach to tip of p7-p8. Tail rather short, 12 feathers; tip shaped as in *C. minuta*: t4 and t5 shortest, t6 and t3 1-2 longer, t2 2-4, t1 5-9. Bill different from all other small *Calidris*: deep at base, culmen appearing concave, but cutting edges straight (unlike, e.g., many Least Sandpipers *C. minutilla*); middle and tip stouter than in other small *Calidris*, less needle-like, hardly constricted in middle, tip slightly swollen; 0.8-0.9 times head length, as in *C. minuta*, Temminck's Stint *C. temminckii*, Long-toed Stint *C. subminuta*, and *C. minutilla*. Relative length of bare tibia (5-11 mm) and tarsus similar to *C. minuta*; wing/tarsus ratio *c.* 4.5. Structure of foot different from other *Calidris*, except *C. mauri*: relative length of middle toe normal (*c.* 86% of tarsus), but other toes relatively long (outer *c.* 91% of middle, inner *c.* 89%, and hind *c.* 36%, instead of 84-89, 80-84, and 22-28%, respectively, in other small *Calidris*), and front toes connected by small webs, almost reaching 1st joint; apparently an adaptation for walking on very soft mud.

Geographical variation. Slight, involving size, especially of bill. See Measurements. JW, CSR

C. minuta by more pronounced supercilium, less rufous upper wing-coverts, and heavily marked chest. Forehead white, extended as broad supercilium with a few minute dusky streaks. Crown black-brown, broadly streaked chestnut; sides sometimes uniformly chestnut, contrasting with supercilium. Ear-coverts streaked rufous and brown. Feathers of mantle black-brown, with grey-brown tips and broad rufous edges. Scapulars chestnut with black-brown central streak, subterminally expanded to triangle; tip grey. Upper tail-coverts black-brown, widely tipped rufous. Underparts white, chest with broad band of small brown spots shaped like hearts or arrowheads, markings continued more sparsely on flanks. Central tail-feathers (11) black-brown, narrowly edged buff (like *C. pusilla*, not *C. minuta*). Wings like *C. pusilla*: upper wing-coverts brown-grey with dark shaft-streaks and pale edges retained from non-breeding, inners margined white, long tertials without rufous margins. ADULT NON-BREEDING. As *C. pusilla*, but upperparts essentially grey, perhaps with slight brown hue (Stout 1967). Specimens of known sex can be identified by relatively longer and more slender bill. JUVENILE. Like *C. pusilla* but feathers of upperparts more broadly edged orange-chestnut, especially scapulars, producing more variegated pattern. Forehead on average whiter and supercilium more pronounced. Chest-band delicately buff, more strongly streaked brown than *C. minuta* and *C. pusilla*. Median and lesser upper wing-coverts grey-brown with dark shaft-streaks and broad pale buff fringes, much paler than mantle, difference more pronounced than in *C. pusilla*; upperwing quite unlike *C. minuta*; inner median coverts darker grey-brown, edged rufous (Ridgway 1919; Wallace 1974; Prater *et al.* 1977). IMMATURE. Distinguished from adult non-breeding by rufous-edged inner median coverts, later in season by presence of some strongly worn outer primaries.

Bare parts. Iris dark brown. Bill brown-black or black. Leg and foot brown-black or olive, sometimes paler (Ridgway 1919; Wallace 1974).

Moult. ADULT POST-BREEDING. Complete; primaries descendant. Starts on arrival in winter quarters; birds wintering in southern USA and Mexico moult July–October, in northern South America October–February. ADULT PRE-BREEDING. Partial: head, neck, mantle, scapulars, underparts, inner or longer tertials, upper tail-coverts (often), some central tail-feathers, and part of tertial coverts and inner median upper wing-coverts. Mainly February–March in those wintering northern

South America, up to 1 month later in USA. POST-JUVENILE. Partial: late October–November. By mid-November, plumage usually first non-breeding, except for juvenile flight-feathers, wing-coverts, outer tertials, tail, and back to upper tail-coverts. Later in winter, variable amount of remaining juvenile replaced, but not flight-feathers and part of wing-coverts. IMMATURE PRE-BREEDING. Variable; either as in adult pre-breeding, or, in those summering in south, some scattered feathers only. Latter birds start immature post-breeding from May–June (Prater *et al.* 1977), former moult as adult.

Measurements. All parts of geographical range, all year; skins (BMNH, MCM, RMNH, ZMA).

WING AD ♂	97.1 (2.38; 9)	94–101	♀ 101 (1.38; 15)	99–103
TAIL AD	41.8 (1.05; 10)	39–45	42.2 (1.87; 19)	38–45
BILL	23.1 (1.00; 14)	21.7–25.3	26.7 (0.67; 20)	23.8–27.8
TARSUS	21.8 (0.68; 15)	20.8–23.0	23.4 (0.71; 21)	22.1–25.0
TOE	18.1 (0.84; 12)	16.8–19.5	19.4 (0.90; 20)	17.3–21.3

Smallest ♂ 21.7

Sex differences significant, except for tail. Juvenile wing averages 1.1 shorter than adult, juvenile tail 4.4 shorter; bill, tarsus, and toe similar to adult from about October.

Weights. ♂♂, California (USA), March and first half April, 24.2 (1.86; 135) 18–30; second half April and May, 25.6 (3.07; 156) 20–32; Vancouver Island (Canada) and Alaska, second half April and May, 27.9 (3.34; 103) 21–35; ♀♀ slightly heavier than ♂♂, maximum 42 (Senner 1979). New Jersey (USA), mainly September, 25.7 (15) 19–33 (Murray and Jehl 1964). Panama and northern South America, November–March: ♂ 23.9 (4.06; 5) 19–30, ♀ 26.7 (5.21; 5) 22–35, unsexed 23.2 (3) 22–25 (Burton 1973; Strauch 1977; RMNH, ZMA). For monthly fluctuations, Venezuela, see McNeil (1970).

Structure. Similar to *C. pusilla*, sharing peculiar foot of that species and its more normal shape of wing and tail. 11 primaries: p10 longest, p9 0.2 shorter, p8 5–6, p7 11–14, p6 19–22, p5 26–29, p4 32–35, p1 46–50; p11 minute, concealed by primary coverts. Bill relatively longer than in almost all other small *Calidris*, 1.0–1.2 times head length, equalled only by some *C. minutilla*. Depth at base of bill as in *C. pusilla*, but bill more slender, often slightly constricted, especially behind slightly bulbous tip, less parallel-sided; distal half of culmen often slightly decurved, tip appearing to droop, especially in ♀. Middle toe *c.* 83% of tarsus; outer toe *c.* 92% of middle, inner *c.* 90%, hind *c.* 35%. JW, CSR

Calidris ruficollis Red-necked Stint

PLATES 28, 29, and 37

[between pages 304 and 305, and facing page 37]

DU. Roodkeelstrandloper FR. Bécasseau à col rouge GE. Rotkehlstrandläufer
RU. Песочник-красношейка SP. Correlimos cuellirojo Sw. Rödhalsad snäppa

Trynna ruficollis Pallas, 1776

Monotypic

Field characters. 13–16 cm; wing-span 35–38 cm. Slightly larger and distinctly bulkier than Little Stint *C. minuta* (being 30% heavier), with shorter and deeper bill, slightly shorter legs, longer head (with more bulbous

forehead), more thickset body (with deeper vent), and longer wings; close in size to Semipalmated Sandpiper *C. pusilla*. Rather tubby stint, with stubby bill and more squat, rather longer-winged, shorter-legged silhouette