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## The Status of Small *Calidris* Sandpipers in the Hawaiian Islands, Documentation of Three First Records for the State

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### INTRODUCTION

The seven species of small *Calidris* sandpipers, collectively known as "peeps" in North America and "stints" in Eurasia, are notoriously difficult to distinguish in the field. Identification is fairly straightforward within each holarctic subregion (Nearctic, West Palearctic, and East Palearctic), but problems arise when members of different subregions meet as the result of extralimital occurrence. Field observers have recently become more successful in distinguishing vagrant individuals, however, basing identifications on a synthesis of field characters coupled with a better understanding of seasonal and age-related plumages. This effort has led to the documentation of many vagrants along the coasts of Europe and North America and has resulted in several detailed treatments of identification within this group (Wallace 1974, Prater et al. 1977, Cramp and Simmons 1983, Grant and Jonsson 1984, Veit and Jonsson 1984, Hayman et al. 1986).

Prior to 1983, most small *Calidris* reaching the Hawaiian Islands were either left unidentified or assumed to be Western Sandpipers (*C. mauri*) or Least Sandpipers (*C. minutilla*), the two most likely species to occur in terms of range. Because any of the seven species could potentially turn up in Hawaii as vagrants, however, we started scrutinizing small sandpipers more closely during the fall of 1983. We were surprised to find two Rufous-necked Stints (*C. ruficollis*), a Little Stint (*C. minuta*), and one to two Semipalmated Sandpipers (*C. pusilla*), among seven small *Calidris* observed. All three of these species were previously unrecorded in the Hawaiian Islands.

Since 1983 we have closely observed or reviewed photographs of all small *Calidris* sandpipers to reach the state. This paper provides (1) a summary of the 31 records (through 1987) that we consider to be satisfactorily identified, (2) complete documentation of the three first records mentioned above, and (3) a discussion of the status of each species in Hawaii. Our status assessments are based primarily on occurrences since the fall of 1983, as we are aware of only six records of small *Calidris* prior to this to be documented by specimen, photographs, or adequate field description (see accounts). We hope that this summary will encourage further scrutiny and identification of small sandpipers in Hawaii and will provide a basis for future status evaluations for each species.

Six of the seven small *Calidris* sandpipers have been recorded in Hawaii. The seventh, Temminck's Stint (*C. temminckii*) has much the same Palearctic range as does two of the other small *Calidris* species, and should be looked for in Hawaii, especially in the North-western Hawaiian Islands, where vagrants are typically Palearctic in origin (P. Pyle 1984).

The following accounts include all documented records of the six species that have been recorded. Descriptions and photographs are provided for the more significant occurrences, including the three first records for the Hawaiian Islands. "HRBP" numbers refer to photographs accessioned in the Hawaii Rare Bird Documentary Photograph File, maintained by the Bernice P. Bishop Museum and Hawaii Audubon Society. Identifications are based primarily on the information provided by Veit and Jonsson (1984) and Hayman et al.

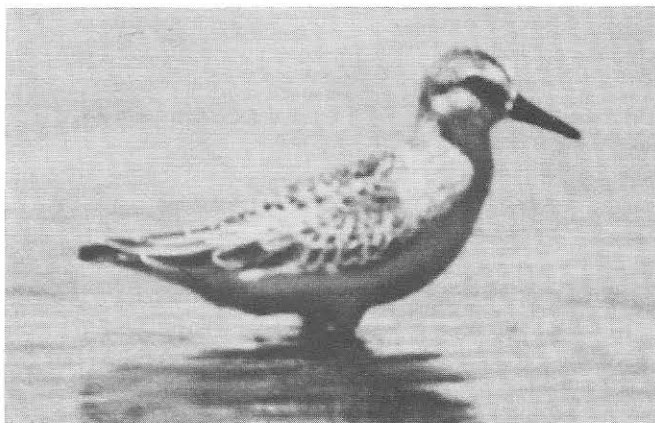


Fig. 1. Semipalmated Sandpiper. Kii Pond, JCNWR, Oahu; 4 September 1984. Juvenal plumage. Note the stocky proportions; short, stout bill showing a swollen tip; and uniformly scaled upperparts.

Photo by J. Swenson (HRBP No. 251)

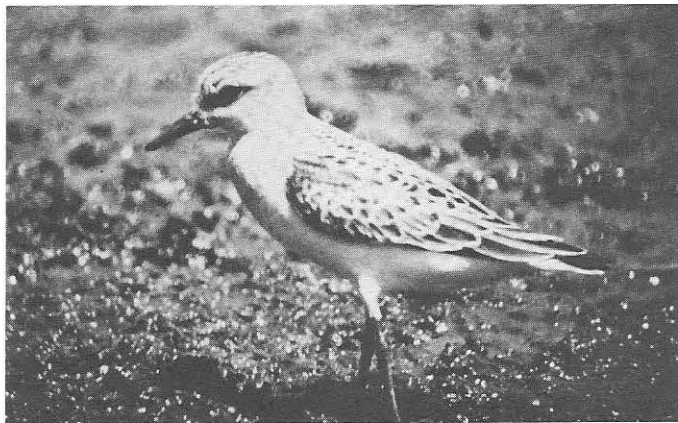


Fig. 2. Semipalmated Sandpiper. Waipio Peninsula, Oahu; 6 September 1984. Juvenal plumage.

Photo by P. Donaldson (HRBP No. 671)



Fig. 3. Western Sandpiper. Aimakapa Beach, Hawaii Island; 22 September 1984. Juvenal plumage.

*Photo by R. David (HRBP No. 437)*

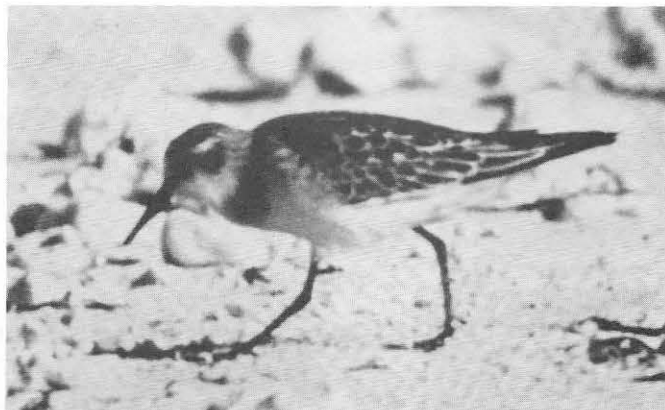


Fig. 4. Little Stint. Kure Atoll; 26 September 1983. Juvenal plumage. Note the slender, down-curved bill and long-winged, long-legged posture.

*Photo by P. Pyle (HRBP No. 274)*



Fig. 5. Little Stint. Kure Atoll; 26 September 1983. Note the unwebbed toes, prominently-forked eyeline and the anterior portion of the "V" pattern in the back.

*Photo by P. Pyle (HRBP No. 275)*

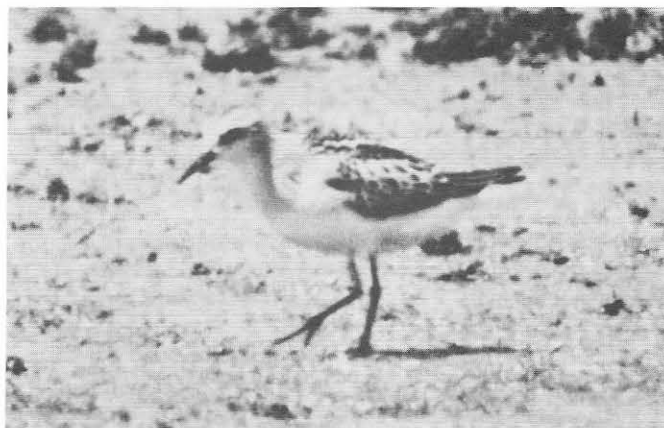


Fig. 6. Little Stint. Waipio Peninsula, Oahu; 25 September 1985. Juvenal plumage. Note the prominently forked eyeline, unwebbed toes, and long-legged posture.

*Photo by P. Donaldson (HRBP No. 660)*



Fig. 7. Little Stint. Waipio Peninsula, Oahu; 25 September 1985. Note the distinct "V" pattern on the back.

*Photo by P. Donaldson (HRBP No. 661)*

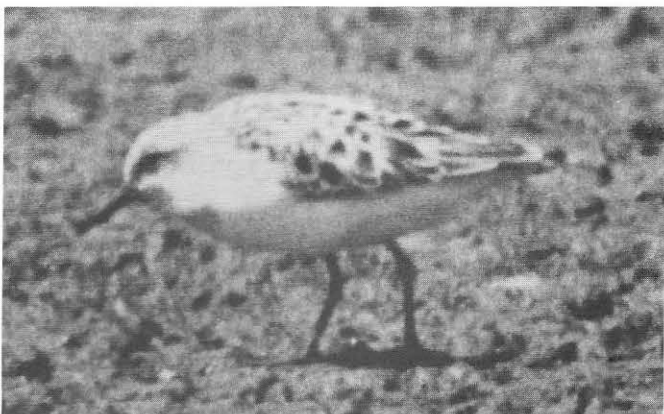


Fig. 8. Little Stint. Waipio Peninsula, Oahu; 30 April 1987. Transitional plumage between basic and alternate. Although the posture is more typical of Rufous-necked Stint, the plumage indicates Little Stint (see account).

*Photo by P. Donaldson (HRBP No. 664)*

(1986). These works and the others mentioned above should be referred to by observers encountering small *Calidris* in the future. In addition, nine ornithologists (listed in the acknowledgements) who are knowledgeable in the identification of small *Calidris* have reviewed photographs and descriptions of one or more of the records. The opinions of these "record reviewers" are indicated by their initials in the species accounts.

#### SPECIES ACCOUNTS

**Semipalmated Sandpiper** (*Calidris pusilla*). Three definite Semipalmated Sandpipers have been recorded in Hawaii: an overwintering individual in 1983-84 at the James Campbell National Wildlife Refuge (JCNWR) and Amorient Aquafarm near Kahuku, Oahu; a bird present in the sugar cane settling ponds of Waipio Peninsula, Oahu (hereafter "Waipio") from 31 August through 11 September 1984; and one present at Waipio on 19 August 1986. A bird observed at Waipio on 19 August 1980 (Donaldson); one reported from Kealia Pond, Maui, on 31 December 1979 (Kepler and Kepler 1980); and another seen and photographed (HRBP Nos. 315, 358-360) at a distance at Amorient Aquafarm on 8 August 1983 (Donaldson; different from the overwintering bird) were possibly Semipalmated Sandpipers; however, the observations did not eliminate other small *Calidris*, particularly Rufous-necked and Little Stints.

The overwintering bird was found at JCNWR on 29 August 1983 by Donaldson, who tentatively identified it as a juvenal-plumaged Semipalmated Sandpiper. On 4 September, P. Pyle and J. Swenson studied the bird for several hours, confirmed the identification, and were able to obtain several photographs (HRBP Nos. 248-252; Fig. 1). The bird was seen throughout the winter at both JCNWR and the adjacent Amorient Aquafarm by several observers, including R. Pyle. By November, it had molted into basic plumage and was photographed by Donaldson (HRBP Nos. 534-535). It was last seen by Donaldson on 1 March 1984. The following field marks were recorded by P. Pyle on 4 September 1983:

Legs and feet black; toes clearly with palmations. Bill medium-length, thick at base, swollen at tip. Crown heavily streaked black; superciliary short, unforked; loreal area black; eye line and auricular patch dark and well-defined. Upperparts very uniform in pattern and coloration; mantle feathers, scapulars, and wing covers uniformly

dark gray with paler gray edging. Underparts white; breast patches restricted and indistinct. Posture stout and upright; wing tips short, equidistant in length to the tail and extending < 10 mm beyond tips of tertials. Call given most often when flushed, a rolling, lowish-pitched "prirt-prirt."

The above-noted features are all very typical of a juvenile Semipalmated Sandpiper and combine to eliminate the other small *Calidris* species. Five out of five record reviewers (DD, SH, JM, DP, RS) conclusively supported this identification.

Both of the fall Waipio birds were found and observed only by Donaldson. They were studied at close range and in good light, and they displayed many of the same features as the 1983 individual. Field marks noted on both individuals were the short, blunt, and swollen-tipped bills; distinct black lores and auricular patches; and uniformly grayish and scalloped upperparts with little or no rufous. Again these features combined to eliminate the other small black-legged sandpipers. The 1984 bird was photographed (HRBP Nos. 671-674; Fig. 2).

These are the first documented records of Semipalmated Sandpipers in the Hawaiian Islands, although individuals occurring before 1983 may have been misidentified as the similar Western Sandpiper, of which there are many reports. Semipalmated Sandpipers breed commonly in Alaska, migrate primarily in a southeasterly direction across North America, and winter in the Caribbean and eastern South America (DeSante and Pyle 1986; A.O.U. Check-list 1983). They are rare on the west coast south of Alaska (Roberson 1980). As the species breeds in Alaska, its occurrence in the Hawaiian Islands is not entirely unexpected, although it should be considered a vagrant here. It is possible that these birds reached Hawaii by flying in a mirror image direction to the species' normal migratory route, a mechanism proposed by DeSante (1973) by which vagrants reach S.E. Farallon Island off California. This species should always be considered by future observers encountering small, black-legged *Calidris*.

**Western Sandpiper** (*Calidris mauri*). Many reports of Western Sandpipers in the Hawaiian Islands exist, but most lack the details to distinguish this species from the other small *Calidris*. There are eight well-documented records, as follows: 30 December 1966, male, Kure Atoll (Clapp and Woodward 1968; specimen); 7 October 1979,



Fig. 9. Rufous-necked Stint (behind Sanderling, *C. alba*). Aimakapa Beach, Hawaii Island; 3 August 1983. Worn alternate plumage; note the straight, stout bill and lack of streaking in the face.

Photo by P. Pyle (HRBP No. 670)

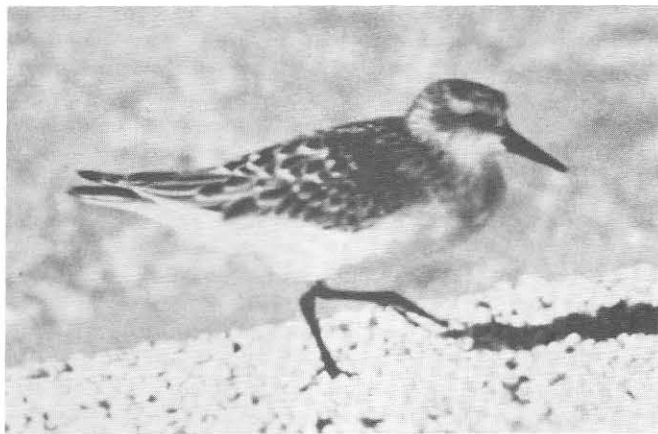


Fig. 10. Rufous-necked Stint. Kure Atoll, 13 October 1983. Juvenal plumage. Note the straight and stout bill, stocky proportions, unwebbed toes, and lack of a distinct "V" on the back.

Photo by P. Pyle (HRBP No. 281)





Fig. 11. Rufous-necked Stint. Aimakapa Beach, Hawaii Island; 20 August 1986. Worn alternate plumage. Note the similarity to the bird in Fig. 9.

Photo by R. David (HRBP No. 500)

juvenile, Waipio Peninsula, Oahu (Donaldson field notes); 23 September-16 October 1983, juvenile, Kure and Midway Atolls (P. Pyle 1984; HRBP Nos. 369, 604); 20-22 September 1984, juvenile, Aimakapa Beach, Hawaii Island (David; HRBP Nos. 437-438; Fig. 3); 9 November-1 December 1986, juvenile, Kealia Pond, Maui (David, P. Pyle field notes); 4 October 1987, juvenile, Kealia Pond, Maui (David field notes); and 22 November 1987, juvenile, Aimakapa Beach (David; HRBP No. 713).

In all cases the birds were identified as Western Sandpipers by their relatively large size, black legs, long and drooping bills, and grayish upperparts with varying amounts of rufous present in the mantle feathers and scapulars. Several of the birds, including the three sight-only records, had broad rufous edging to the scapulars and inner wing coverts contrasting sharply with entirely gray outer wing coverts and mantle feathers, an upperpart pattern that, among the small *Calidris* species, is virtually diagnostic of Western Sandpipers in juvenal or first-basic plumage.

Western Sandpipers breed commonly in Alaska and winter abundantly along the west coast and fairly commonly along other coasts of North America (DeSante and Pyle 1986). The number of records in the Hawaiian Islands indicates that this species is indeed the most frequently occurring of the small, black-legged *Calidris* and suggests that many of the reported Western Sandpipers prior to 1983 were correctly identified. It might be expected annually in the main Hawaiian Islands and, perhaps, less frequently as far west as Midway and Kure.

**Little Stint (*Calidris minuta*).** There are three records of Little Stints in the Hawaiian Islands: a juvenile on Kure Atoll from 26 September to 10 October 1983; a juvenile on Waipio Peninsula, Oahu, from 14-25 September 1985; and a transitional-plumaged bird at Waipio from 25 April-2 May 1987. The Kure bird, the first record for the state, was studied daily by P. Pyle and photographed (HRBP Nos. 270-275; Figs. 4-5; see also P. Pyle 1984). It was seen along the atoll's beaches and occasionally in the antenna field. It was approached to within 10 m and was viewed in excellent lighting conditions. The following synthesizes extensive field notes which were recorded on several different days during the bird's presence on the atoll:

Legs and feet black; toes clearly unwebbed; bill black, medium-length, slender, slightly down-curved, tapered at tip. Crown brown, streaked with black; superciliary short, ill-defined, prominently-forked in front of eye; eyeline and auricular patch brownish, indistinctly defined. Upper-

parts moderately contrasting, feathers (including wing coverts) generally dark brown in the center and edged with brownish-rufous; the inner row of scapulars with distinct, pale buff edging (such that a complete and well formed "V" was present on the back). Underparts white; breast patches brown with distinct black streaking, extensive but not forming a complete breast band. Posture elongate and slender; legs long, about 1/2 of the tibiotarsus generally exposed (lacking feathers); wing tips elongated, equidistant with the tip of the tail and with 3-4 primary tips extending about 20 mm beyond tips of tertials. Called consistently when alarmed, a medium-pitched "chit" or "chit-chit."

The black legs, unwebbed toes, bill shape, and other plumage features eliminate all the small *Calidris* except for Little and Rufous-necked Stints, which are considered the most difficult of the group to separate (see Wallace 1979). Notable features of the Kure bird which indicate Little Stint rather than Rufous-necked Stint are the slender and down-curved bill, the prominently-forked eyeline, the rufous edging in the wing coverts, the entirely dark centers to the scapulars, the distinct "V" down the back, the long-legged and erect posture, and the call note (see Veit and Jonsson 1984, pp. 870-872). These features contrasted distinctly with those of a juvenile Rufous-necked Stint that arrived at Kure on 13 October 1983 (see account), and the call note and subtleties of the posture strongly indicated Little Stint, as based on the observer's previous and subsequent experience with both species. In addition, five out of six record reviewers (SH, JM, RS, RV, CW) who evaluated the slides and description believed the bird to be a Little Stint. The sixth (DP) thought it was possibly a Little Stint but felt that Rufous-necked Stint could not be entirely ruled out.

The juvenile at Waipio was found by Donaldson on 14 September 1985 and was seen by R. Pyle on 15 September. Numerous photographs were taken by Donaldson on 16, 23, and 25 September (HRBP Nos. 659-663; Figs. 6-7). It was last recorded by Donaldson on 25 September. Noted field marks included unwebbed toes (see Fig. 7), slender bill, prominently forked eyeline, rufous-edged upperparts and wing coverts, dark centers to the scapulars, distinct "V" down the back, and long-legged, slender posture (Fig. 7). Again, these characteristics are typical of juvenile Little Stint and combine to eliminate the other small *Calidris*.

The spring-plumaged bird was, again, found by Donaldson at Waipio on 25 April 1987, and was seen on 28 April by R. Pyle and A. Engilis, and on 30 April by R. David. It was photographed by Donaldson on 28 and 30 April and 2 May (HRBP Nos. 664-669; Fig. 8), and was last recorded by Donaldson on 2 May.



Fig. 12. Least Sandpiper. Waipio Peninsula, Oahu. 6 September 1984.

Photo by P. Donaldson (HRBP No. 675)

Although the bird's posture (see Fig. 8) seems to resemble a Rufous-necked Stint, the noted plumage and soft-part features of this bird are diagnostic of a Little Stint in molt between basic and alternate plumage. The bird had black legs and unwebbed toes (HRBP No. 665) which rule out all but Little and Rufous-necked Stints. The latter is eliminated by a combination of noted field marks: the fine bill, broad rufous edging to the tertials, streaking on the face and sides of the neck, white chin and upper throat, and completely streaked breast band (see Veit and Jonsson 1984, p. 870). The somewhat contradicting plumage and posture-related features of this individual emphasize the need to consider all field marks when identifying small *Calidris*, especially when separating Little and Rufous-necked Stints. This is the first small *Calidris* in Hawaii to be identified in spring although several other unsubstantiated reports exist of spring birds in alternate plumage.

The Little Stint breeds abundantly throughout Northern Europe, as far east as central Russia, and winters primarily in Africa and India (Hayman et al. 1986). It might be considered the least likely of the small *Calidris* to occur in Hawaii according to its range and migratory route. The species has a known tendency to wander, however, as evidenced by many extralimital records in both eastern and western North America, Asia, and elsewhere to the south of its range (DeSante and Pyle 1986, Hayman et al. 1986). The three records for the Hawaiian Islands are, thus, not entirely unexpected, although the species should be considered a vagrant in the state.

**Rufous-necked Stint (*Calidris ruficollis*).** There are four documented records of Rufous-necked Stint in the Hawaiian Islands. An adult in worn plumage was found at Aimakapa Beach, Hawaii Island on 3 August 1983; a juvenile was well-studied on Kure Atoll on 13-14 October 1983; an adult was present at Aimakapa Beach from 18 August-1 September 1986; and a juvenile was studied at Waipio, Oahu on 4 September 1987. An unidentified sandpiper photographed at a distance at Waipio on 26 August 1980 (Donaldson; HRBP Nos. 320, 322-323) resembles most closely a Rufous-necked Stint, but the identification is not conclusive.

The first Aimakapa bird (and first record for the state) was discovered by P. Pyle, P. Ashman, and A. Taylor. It was studied for about an hour, in good light, and as close as 5 m. Several photographs were taken (HRBP Nos. 244-247, 670; Fig. 9). The following description is taken from field notes recorded while the bird was under study:

Legs and feet pale gray with slight olive tinge; toes unwebbed; bill thin, medium-length, tapered at tip. Head coloration washed with pale buff; crown heavily streaked dark brown; superciliary buffy-white, somewhat indistinct; eye line and auricular patch diffuse, only moderately darker than head color. Nape buffy, contrasting with darker crown and upper back; mantle feathers, outer scapulars, and wing coverts dark brown edged thinly with buff; inner scapulars with broad and irregular buffy and rufous edging; primaries and secondaries worn. Chin and throat white; upper breast tinged lightly with pale rufous; breast patches fairly extensive, dusky with black streaks; center of breast flecked; belly and vent white. Outer rectrices white. Posture stocky and elongated; legs short; primaries attenuated; tip of longest primary extends 2-3 mm beyond tail and 15-20 mm beyond the tip of the tertials.

The apparently white outer rectrices and greenish-gray legs led to an initial, tentative identification by the observers of Temminck's Stint. Other features, however, particularly the unwebbed toes (HRBP No. 246), slight amount of rufous in the scapulars contrasting with brownish wing coverts, lack of streaking to the face and neck, rufous wash and heavy streaking on the breast, and short-legged, elongated posture unquestionably eliminate Temminck's Stint and

point to a worn, Rufous-necked Stint in alternate plumage (see Veit and Jonsson 1984, p. 871). Eight out of eight record reviewers (DD, SH, LJ, JM, DP, RS, LS, RV) confirmed this identification.

The Kure bird was studied by P. Pyle for a total of two to three hours on the beaches of the atoll, in excellent lighting conditions and as close as 10 m. Numerous photographs were obtained (HRBP No. 269, 281-282; Fig. 10; see also P. Pyle 1984). The following is taken from extensive notes recorded while the bird was under observation:

Legs and feet black, toes unwebbed; bill short, stoutish, uncurved, tapered at tip. Inner scapulars dark, broadly and irregularly edged buff and rufous creating diffuse "V" pattern over back; outer scapulars edged rufous, contrasting with buffy-gray, pale-edged wing coverts. Superciliary pale gray, short, slightly forked above eye; eyeline and ear coverts dusky brown and ill-defined. Throat white; upper breast completely washed dull rufous-brown; breast patches faintly streaked brown; belly and vent white. Posture squat (hunched) and short-legged (only about 1/4 of the tibiotarsus usually exposed); wing tips attenuated, extending slightly beyond tip of tail and with four primaries extending up to 20 mm beyond tips of tertials.

Again, all noted soft part, plumage, and posture-related features confirm this bird to be a Rufous-necked Stint and combine to rule out Little Stint (see the analysis of the Little Stint present on Kure 26 September-10 October, just previous to this bird's arrival). Six out of seven record reviewers (DD, SH, JM, DP, RS, CW) supported this identification, with the seventh (RV) feeling that Little Stint could not be ruled out.

The second Aimakapa bird was discovered by J. Lepson on 18 August 1986, who tentatively identified it as a Temminck's Stint. David studied the bird on 19 August, identified it as a Rufous-necked Stint in worn, alternate (breeding) plumage, and obtained several documentary photographs (HRBP Nos. 498-500; Fig. 11; a photo also appears in R. Pyle 1987). It frequented both the lava intertidal zone of the beach (exactly where the bird of 3 August 1983 was seen) and the edges of the pond. Donaldson and R. Pyle observed it on 22 August, and it was last seen by David on 1 September. The photos and field notes recorded by David, Donaldson, and R. Pyle indicate that the stint closely resembled the bird of 3 August 1983 (see above), except that the unstreaked rufous wash of the face, throat, and upper breast was more prominent. This and the other soft part, plumage and posture-related features (as noted for the 1983 bird) combine to eliminate the other small *Calidris* species, including Little Stint.

The initial identification of this bird as a Temminck's Stint was made because the bird displayed greenish-gray legs. While confirming the bird as a Rufous-necked Stint, however, David discovered that the legs appeared greenish because they were coated with an algae found on the lava on which the bird fed (Fig. 11). Observers of small *Calidris* should be aware that the substrates in which the birds feed can often obscure the true color of the legs, leading to misidentifications. The similarity in age, appearance, location, timing, and habits between this and the 1983 bird leads us to suspect that the observations could pertain to the same individual.

The juvenile at Waipio was studied for about an hour by R. Pyle and A. Engilis. Field notes indicate that it very closely resembled the bird on Kure (see above description), with black legs, unwebbed toes, a straight and broad bill, stout but long-winged posture, slightly forked eyeline, rufous-edged scapulars contrasting with grayish-brown wing coverts, and lack of a distinct "V" on the back being noted. Together, these features are diagnostic of Rufous-necked Stint.

Rufous-necked Stints breed in arctic Russia and western Alaska and winter in Southeast Asia and Australia (A.O.U. Check-

list 1983). They regularly migrate through Micronesia (Pyle and Engbring 1985, 1987), suggesting a direct transpacific crossing (Hayman et al. 1986). Vagrants have been recorded in Europe and several times on both coasts of North America (Hayman et al. 1986, DeSante and Pyle 1986). Thus, the occurrence of this species in the Hawaiian Islands is not unexpected.

**Least Sandpiper** (*Calidris minutilla*). There are 12 documented occurrences of Least Sandpipers in the Hawaiian Islands, as follows: 17 March 1967, Kahuku, Oahu (Clapp and Pyle 1968; specimen); 30 September-17 October 1982, Waipio, Oahu (Donaldson field notes); 25 September-6 March 1982, Aimakapa and Opaepa Ponds, Hawaii Island (Patton and Scott 1985; P. Paton, A. Taylor field notes); 13-17 October 1983, Aimakapa Pond (David; HRBP Nos. 714-716); 8 January-1 April 1984 (2 birds), Waipio (Donaldson, R. Pyle; HRBP Nos. 679-682); 20 February 1984, Honouliuli National Wildlife Refuge (R. Pyle, W. Donagho; HRBP No. 361); 31 August 1984 (2 birds) - 27 February 1985, Waipio (Donaldson, R. Pyle; HRBP Nos. 658, 675-678; Fig. 12); 27 October 1985 (2 birds), adults, Amoriant Prawn Farm, Oahu (A. Engilis field notes); 8 November 1985-17 February 1986 (2 birds), Waipio (Donaldson, R. Pyle, P. Pyle field notes); 29 August-28 September 1986, Waipio (Donaldson, R. Pyle field notes); 14 April 1987, Kealia Pond, Maui (Donaldson, David, R. Pyle field notes); and 21 September through December 1987 (2-3 birds), Waipio (Donaldson, R. Pyle, P. Pyle field notes).

The repeated occurrence of at least two wintering birds on Oahu (primarily at Waipio) suggests that these birds may be returning each year, although probably at least eight different individuals are documented for the state. Field marks noted on all or most birds were: yellow legs; scaly brown upperparts (including wing coverts) with no to a moderate amount of rufous present; heavily streaked, complete breast bands; and short-legged and short-winged postures. The distinctive, high-pitched call note, best transcribed as "kreep," was noted for most of the records. These features combine to eliminate the other species of small *Calidris* (see Veit and Jonsson 1984; pp. 873-874). As with Western Sandpiper, many additional reports of Least Sandpipers exist (including many at Waipio) which were probably correctly identified, but which failed to adequately address the other yellow-legged *Calidris* species.

The Least Sandpiper breeds throughout arctic North America and winters abundantly on both North American coasts, as far south as northern South America (A.O.U. Check-list 1983; DeSante and Pyle 1986). It seems to be the most regularly occurring of the small *Calidris* species in Hawaii, particularly on the more southeasterly islands, an expected pattern given the species' range and migratory route. It is also the only species of the group that regularly winters in the state.

**Long-toed Stint** (*Calidris subminuta*). The Long-toed Stint has been documented in the Hawaiian Islands only once: a specimen collected on Midway Atoll on 26 August 1967 (Clapp 1968). The species breeds throughout the U.S.S.R. and winters in India, Southeast Asia, and Australia (Hayman et al. 1986). It is a regular migrant in Micronesia (Pyle and Engbring 1985, 1987) and the Aleutian Islands and has been recorded very infrequently as a vagrant to Europe and western North America (Hayman et al. 1986, DeSante and Pyle 1986). As the species' range is similar to that of the Rufous-necked Stint, it can be expected to recur in Hawaii, primarily in the Northwestern Islands.

## CONCLUSION

In summary, the number of documented occurrences of each small *Calidris* species in the Hawaiian Islands generally reflects what might be expected in consideration of the species' ranges, abundance, and migratory and vagrancy patterns. The two most common species in western North America, Least and Western Sandpipers, are those most commonly recorded in the Hawaiian Islands, with 20 well-documented occurrences between them. The more eastern Semipalmated Sandpiper (three records) can be expected in small numbers as a vagrant to Hawaii due to its abundance in Alaska and its long-distance migration route.

The smaller number (eight) of documented records of Palearctic species might reflect the decreased amount of coverage that the Northwestern Hawaiian Islands receive, as compared to the southeastern islands of the chain. As expected, however, the most northeastern of these species, the Rufous-necked Stint, has been documented the most times (four records) in Hawaii. The occurrence of three documented Little Stints is somewhat surprising in terms of the species' range, although its abundance in Europe, long-distance migratory patterns, and tendency for worldwide vagrancy might help explain the Hawaii records. Only one Hawaiian Island record of Long-toed and none of Temminck's Stints might be explained by these species showing less tendency to wander. We hope that more records of these and the other small *Calidris* species will be documented by future observers in Hawaii.

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## RECENT OBSERVATIONS MARCH - MAY 1988

(Editor's note: This article is excerpted from Bob Pyle's record of bird observations for the Hawaiian Islands. Refer to future issues of *American Birds* for a full account.)

ABBREVIATIONS: FFS = French Frigate Shoals; H = Hawaii Is.; K = Kauai Is.; M = Maui Is.; Mo. = Molokai Is.; O = Oahu Is.; JCNWR = James Campbell Nat. Wildl. Ref. on Oahu; KMCAS = Kaneohe Marine Corps Air Station on Oahu; PHNWR = Pearl Harbor Nat. Wildl. Ref. on Oahu; HRBP = prefix for Hawaii Rare Bird Documentary Photograph numbers.

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SHOREBIRDS -- Solitary Black-bellied Plovers appeared at several localities on Kauai and Oahu this spring, while on Maui the flock at the NW end of Kealia Pond grew from 5 to an unprecedented 9 birds on 10 Mar. (DP). A Gray-tailed Tattler, the common tattler of the western Pacific, was seen for the first time in the main Hawaiian Islands at Kii Ponds, JCNWR on 13 Apr. (GH). Two days later it was photographed (HRBP-773) with breeding-plumaged Wandering Tattlers (PD) and was seen and heard calling on 19 Apr. (PD), but disappeared after that.

An adult (North American) Whimbrel, a rare migrant to Hawaii, was seen well near South Pt., H. on 4 May (BM). Migrating Bristle-thighed Curlews on Laysan Is. peaked at about 150 birds, with a high count on the south ledge at about 85 on 28 April to 6 May (JM). Of these 84 were banded. On Lisianski, 30 were banded from among 80 counted on 16-17 May (JM). Though bristle-thighed Curlews are seldom reported in spring from the main Hawaiian Islands, 3 were found at South Pt., H. on 17 Apr. (DP). As many as 3 Bar-tailed Godwits were seen regularly at Laysan Is. from 15 Apr. to 12 May (JM). At Waipio, O. a group of dowitchers, both Short-billed and Long-billed, coming into breeding plumage was counted at 7 to 13 birds between 5 and 15 Apr. (PD, DP et al.). Another group of 6-10 was reported at Kii Ponds, JCNWR on 3 and 15 Apr. (RC, PD).

NATIVE FOREST BIRDS -- A survey conducted by government biologists in the core range of endangered forest birds on Molokai reported only one glimpse of an *Oloma'o* on 18 May (AE), a species not seen since the USF&WS surveys of 1979-80, when 5 different birds were sighted. Common 'Amakihi, 'Apapane, and 'Tiwi occurred in densities and distributions roughly similar to the survey 10 years ago. Moloka'i Creeper, if they still survive, eluded the biologists; the last firm sighting of this species was 25 years ago (the USF&WS surveys of '79/80 did not detect it).

During a survey in the Hanawi Natural Area Reserve, M., an 'Akepa was heard singing on 11 Mar., and one was watched for several minutes on 19 Mar. (AE). These were the first sightings of 'Akepa on Maui in more than 10 years. All other native forest birds were seen, except for the Nukupu'u. The very rare Po'ouli was observed 5 times in 8 days.

**FOREIGN SONG BIRDS** -- During the Molokai survey in May, Japanese Bush-Warblers were heard at virtually every station. First reported on Molokai in 1980, the bush-warbler population has exploded beyond belief. Such an abundant subcanopy insectivore must surely impact native insect life and possibly native birds. Birders on Molokai should be forewarned that the bush-warbler's song when heard rising from gulch cliffs has caused professional biologists to shout "Oloma'o!" The bush-warbler's plumage suggests a thrush, and this diminutive bird magically takes on large proportions when spotted in the elfin forest. Worse still, bush-warblers add confusion to wishful identification of female and juvenal Moloka'i Creepers. Size, plumage, and bill shape are annoyingly alike; the bush-warbler even gives a "cht! cht!" call similar to the Maui (and presumably Moloka'i) Creeper. Birder beware.

Further evidence of resurgence for the Red-billed Leiothrix on Oahu was provided by at least 5 heard at Kuaokala Game Management Area in the Waianae's on 9 Apr. (AE, RC).

Yellow-billed Cardinals spreading south along the western coast of Hawaii Is. have reached Milolii and nearby Honomali Bay, where immatures were seen on 29 May (TP). A male Great-tailed Grackle seen 26-27 May at Magic Island in Ala Moana Park, Honolulu (GC, PD, RLP) was obviously not the female reported periodically since 1980 at Waipio Peninsula, about 20 km across town. Whether these birds are tramps off a ship or made it across the Pacific on their own steam is a matter of hot debate; however, all agree that these two should not get together.

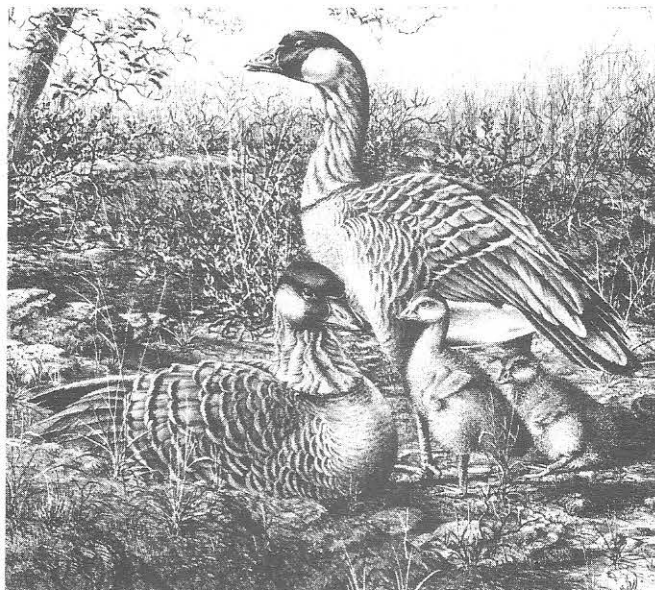
Thane K. Pratt

#### HAS NOMINATING COMMITTEE

The nominating committee has been appointed for the upcoming elections for the 1989 HAS Board of Directors. Bruce Eilerts will head this year's committee, and other members include Sheila Conant, Craig Harrison, and Robert Pyle. Hawaii Audubon members are invited to submit nominations for 1989 Board of Directors positions. Nominations should be submitted to the nominating committee by 30 September 1988.

#### HAWAII AUDUBON SOCIETY PHOTO AND ART EXHIBIT AND CONTEST

The next HAS Photo and Art Exhibit/Contest will be held in conjunction with National Wildlife Week during March 1989. Next year's exhibit/contest will feature two themes: Hawaii and Islands of the Pacific. Categories for both themes will include wildlife, plants, natural landscapes, and man and nature. The location of the upcoming event will be announced later in the year. Anyone interested in participating should get out their cameras, brushes and pencils, now! For further information, please write the Hawaii Audubon Society, P.O. Box 22032, Honolulu, Hawaii 96822, and include a telephone number.



Detail from Daniel Van Zyle's stone lithograph "Hawaii's Own, Nene."

#### A NEW VIEW TO NATURE

Five Island artists come together this October in an exhibition of "Nature's Art" at Territorial Savings and Loan.

From backyard birds to butterflies to endangered species, artists Patrick Ching, Charles Davis, Dorothea Hyde, Ipo Nihipali and Daniel Van Zyle each bring their own perspective to an exhibit that draws attention to the nature of Hawaii.

Exhibition coordinator Daniel Van Zyle says that "Nature's Art" is meant to "excite people to appreciate what is outside their windows, across the street, and around the next valley: for the more people appreciate our environment, the more people will want to protect it."

The month-long exhibition opens 3 October 1988 at the downtown offices of Territorial Savings and Loan (corner of Bishop and Merchant Streets) and is a unique showcase for the diverse talents of Hawaii's naturalist artists.

Daniel Van Zyle

#### FUNDRAISING COMMITTEE NEEDS HELP

The Hawaii Audubon Society is growing. In conjunction with the National Audubon Society, we will be opening an office this fall. A revised and enlarged edition of *Hawaii's Birds*, featuring new and more photographs, is in the works. We are becoming more active in the protection and enhancement of native ecosystems, promoting research in Hawaiian natural history, supporting graduate students in their environmental studies, and educating school children about the natural world.

These activities require money. To expand our income base, Hawaii Audubon has established a fundraising committee. We need dedicated volunteers to help with mailings, write grant requests, work on a phonathon, and generate new fundraising ideas. If you would like to join this committee, call Lynne Matusow at 531-4260.

Lynne Matusow





Audubon Hikers enjoy their point of destination during 17 July 1988 field trip to Sacred Falls, Oahu.

*Photo by Bruce Eilerts*

### **JULY FIELD TRIP REPORT SACRED FALLS**

The 17 July field trip to Sacred Falls was a great success. Twenty six participants turned out for the outing and were treated to a beautiful day. The hike began around 9:00 AM at the mouth of Kaluanui Stream and continued along the stream to the falls itself. All participants were shown native o'opu (gobies) and opae (shrimps) along with other forms of streamlife by Andy Yuen, a fisheries biologist with the U. S. Fish and Wildlife Service. Mountain apples were abundant along much of the trail and HAS hikers took advantage of the tasty fruits. Many species of birds were observed, including Red-vented Bulbuls, Red-crested and Northern Cardinals, Japanese Bush-warblers, White-rumped Shamas, Common Waxbills, House Sparrows, House Finches, Nutmeg Mannikins, Common Mynahs, Spotted and Barred Doves, and Japanese White-eyes. A lone White-tailed Tropicbird was observed flying around the waterfall and surrounding cliffs. The waterfall was flowing into a large, clear pool and provided relief for those hikers who brought along their bathing suits. After swimming and eating, the group returned to the trailhead around 12:30 PM.

*Bruce Eilerts*

### **SEPTEMBER FIELD TRIP KAWAINUI MARSH**

The next HAS field trip will be an outing to Kawainui Marsh on Sunday, 18 September. Kawainui is the largest marsh in the Hawaiian Islands and a hastily planned flood control project being proposed by the U.S. Army Corps of Engineers poses a potential threat to this important wetland.

Hawaii's four endangered waterbirds--the Hawaiian Stilt, Hawaiian Gallinule, Koloa, and Hawaiian Coot--are residents of Kawainui and the Marsh is utilized by migratory shorebirds and waterfowl. The Marsh is also a natural sediment trap that filters soil from storm runoff flowing into Kailua Bay. Biologist Diane Drigot and Judy Mick of the Kawainui Heritage Foundation will lead the tour. Participants should bring binoculars, sunscreen, and insect repellent. Meet in front of the State Library on Punchbowl Street at 7:30 AM or at the Kailua McDonald's at 8:30 AM.

During this outing all participants will be given a bus tour of various archeological and ecological areas of interest throughout the marsh. Call Bruce Eilerts at 599-4795 or Diane Drigot at 261-9404 for further information.

*Bruce Eilerts*

### **SEPTEMBER PROGRAM: ENDANGERED BIG ISLAND FOREST BIRDS**

The 19 September 1988 general meeting of the Hawaii Audubon Society will feature a slide presentation and discussion of current behavioral and ecological research on the Big Island in the U. S. Fish and Wildlife Service Hakalau National Wildlife Refuge. Dr. Leonard A. Freed, Associate Professor of Zoology at the University of Hawaii at Manoa, will report on some of the recent research he, his colleagues and students have been conducting in the koa-ohia forests of this new forest bird refuge. Since the research began, hundreds of birds have been banded and many nests have been found and observed. Dr. Freed is particularly interested in the evolution of social behavior in the 'Akepa, one of the refuge's endangered birds.

### **FREE ICE CREAM**

Free ice cream will be served to those volunteering for *'Elepaio* paste-up on Saturday, 24 September 1988 at Thane Pratt's house, beginning at 1:00 PM. Thanks to Sheila Conant, Lynne Matusow, Leeann Syrotuck, and Dorothy Weight for helping with this issue. Call 524-8464 for information.

## CALENDAR OF EVENTS

- Sept. 12 (Mon.) Board meeting at Sheila Conant's house, 3663 Alani Dr. at 7:00 PM. Call Bruce Eilerts (599-4795) for details.
- Sept. 18 (Sun.) Field Trip to Kawinui Marsh. Meet next to State Library on Punchbowl St at 7:30 AM or at Kailua McDonald's at 8:30 AM. Announcement on page 79.
- Sept. 19 (Mon.) General Meeting at Atherton Halau, Bishop Museum at 7:30 PM. Program: Endangered Forest Birds at Hakalau National Wildlife Refuge by Dr. Leonard A. Freed. Announcement on page 79.
- Sept. 24 (Sat.) 'Elepaio paste-up at Thane Pratt's house, 1:00 PM. Call 524-8464.

## TABLE OF CONTENTS

The status of small Calidris sandpipers in the Hawaiian Islands, documentation of three first records for the State. <i>Peter B. Pyle, Peter V. Donaldson, Reginald David, and Robert L. Pyle</i> .....	71
Recent Observations. <i>Thane K. Pratt</i> .....	77

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