Arrivals and departures of wintering Common Snipe in Central Brazos Valley of Texas

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The Common Snipe (Capella gallinago delicata), despite its wide distribution, remains a relatively unknown species. Prior to 1953 there were only 1213 bandings with 35 returns and recoveries (Aldrich, 1955). The monographic work of Tuck (1972) reveals the lack of knowledge concerning the Common Snipe on its wintering grounds and Fogarty et al (1977:205) indicate the need for extended research on this species, particularly on the wintering ground.

The wintering grounds of the Common Snipe range from Alaska to northern South America. Prime habitat for this species is low, moist meadow or wet pastures frequented by cattle (Bent, 1927), although coastal plains and freshwater marshes are also considered ideal habitats (Neely, 1959). The Central Brazos Valley of Texas affords many areas of excellent snipe habitat. Accordingly, these birds not only migrate through this valley, but also winter in the area.

Under the auspices of the Accelerated Research Program for Webless Migratory Game Birds, U.S. Fish & Wildlife Service, we studied Common Snipe in East-Central Texas from January 1968 to April 1974. The largest part of the study has been concentrated in Brazos and Burleson Counties of the Central Brazos Valley and, for the most part, in the river bottomlands. In this study we have accumulated data on the migrations of Common Snipe into and out of the Central Brazos River Valley in an attempt to define the wintering period and duration of migration flights through this area.

Materials and methods

Although several capture methods were explored, we adopted mist netting as our sole technique. Initially we employed 12.5 m x 2 m 4-pocket nets of 6.5 cm stretched mesh. However, we changed to 18 m x 2.7 m 2-pocket nets of 10 cm stretched mesh; this greatly reduced the many non-target birds that were caught with the smaller mesh. Further, the

added net length reduces the number of required poles and the time needed for net placement. Once we located snipe, we erected nets in random fashion in sets of 2 to 4 nets, occasionally in lines of 6 to 8. At times, wind and topography dictated placement of nets. Netting birds in the twilight hours and after dark proved more successful than daytime netting.

We analyzed the recaptures and recoveries of banded snipe to determine the arrival and departure of snipe wintering in the Central Brazos River Valley. To derive earliest and latest dates for wintering birds in the study area and to reduce chances that migrant snipe might be included, we designated snipe banded from 1 December through 18 February as wintering birds. These dates were selected on the basis of previous



fieldwork. Recaptures of birds originally banded within this time period form the basis for establishing early and late dates for the wintering populations in this area. This is supplemented by birds banded outside these dates and recaptured within the wintering dates. Finally, three recoveries from outside the study area aided in determining departure dates from the study area and from the breeding grounds.

Results and Discussion

Tuck (1972:265) gives the isochronal line of first heavy fall snipe flight for northern Texas and Oklahoma as 30 August; he reports the average date for first heavy spring flights from the same area as 1 March. For the Galveston area, migrant snipe have been reported as early as 3 July and as late as 6 October for the fall, and the height of the spring migration has been placed during the last two weeks of March (Williams, 1938). For Brazos County the average arrival and departure dates are 5 October and 15 April, respectively (Brazos Ornith. Soc., 1966). Prior to this study, the early and late dates for the county were reported as 1 October and 20 April.

In 1968 and 1969, we recorded snipe in Brazos County as early as 23 September, 8 days earlier than previously recorded. In 1974 Common Snipe were recorded in our area on 17 and 21 September. The latest spring date is 7 May, recorded in both 1967 and 1971. The first heavy fall flights into our area usually occurred in the first two weeks of October, correlating well with the arrival of the first masses of cold, Canadian weather fronts. Spring movements from the area usually began in the second and third weeks of March.

The following recaptures and recoveries from the more than 1900 birds banded during the 7 years of the study are the bases for determining arrival and departure dates of overwintering snipe. Tables 1 and 2 present extreme dates for birds on the study area. Two birds were banded on 4 October 1969 and subsequently recaptured on 11 and 12 December 1970 respectively. A snipe banded on 2 October 1970 was recaptured the same year on 1 and 5 December. These records indicate that wintering snipe have arrived by the first week in October. A bird banded on 1 February 1969 (1083-20741) was taken again on 28 March, the latest known date for a wintering snipe. The large numbers of recaptures during the "wintering" period of birds banded in mid- to late November (Table 2) suggest to us that our cut-off date of 1 December is too late. Similarly, the numbers of

Table 1. Extreme dates for birds banded in the "wintering" period (1 December—18 February).

Spring following banding		
Date banded	Date recaptured	
16 Feb. 68	15 Mar. 68	
1 Feb. 69	28 Mar. 69	
25 Jan. 70	7 Mar. 70	
6 Feb. 71	26 Mar. 71	
19 Feb. 72	26 Feb. 72	
2 Feb. 73	4 Mar. 73	
20 Jan. 74	20 Mar. 74	

Fall following banding		
Date banded	Date recaptured	
17 Feb. 68	30 Oct. 68	
31 Jan. 69	1 Nov. 69	
28 Jan. 70	14 Nov. 70	
18 Feb. 72	10 Nov. 72	
4 Feb. 73	30 Nov. 73	

Table 2. Recaptures in the "wintering" period for birds banded outside that period.

	Spring banded	
Date banded		Date recaptured
28 Feb. 70		12 Dec. 70

Fall ba	nded
Date banded	Date recaptured
18 Oct. 68	1 Feb. 69
25 Oct. 68	31 Jan. 69
7 Nov. 69	9 Jan. 70
16 Nov. 69	2 Dec. 69
10 Oct. 70	12 Dec. 70
10 Oct. 70	11 Dec. 70
18 Oct. 70	11 Dec. 70
18 Oct. 70	12 Dec. 70
7 Nov. 70	11 Dec. 70
7 Nov. 70	13 Jan. 71
7 Nov. 70	19 Dec. 70
18 Nov. 70	15 Jan. 71
18 Nov. 70	19 Dec. 70
18 Nov. 70	19 Dec. 70
18 Nov. 70 19 Nov. 70	19 Dec. 70 20 Dec. 70
20 Nov. 70	4 Dec. 70
20 Nov. 70 20 Nov. 70	6 Dec. 70
20 Nov. 70 20 Nov. 70	29 Jan. 71
20 Nov. 70	4 Dec. 70
21 Nov. 70	4 Dec. 70
21 Nov. 70	13 Jan. 71
21 Nov. 70	12 Dec. 70
22 Nov. 70	5 Dec. 70
22 Nov. 70	4 Dec. 70
9 Oct. 71	11 Jan. 72
28 Oct. 72	9 Dec. 72
5 Nov. 72	3 Feb. 73
19 Nov. 72	1 Dec. 72
20 Nov. 72	29 Dec. 72
21 Nov. 72	20 Jan. 73
30 Nov. 73	15 Feb. 74
30 Nov. 73	1 Dec. 73
30 Nov. 73	1 Dec. 73
11 Nov. 73	7 Dec. 73
17 Nov. 73	15 Dec. 73
22 Nov. 73	16 Jan. 74
22 Nov. 73	8 Feb. 74
22 Nov. 73	<u>8 F</u> eb. <u>74</u>

birds banded in late January and February and recaptured in late February and early March suggests that our cut-off of 18 February is too early. More appropriate dates for wintering snipe in the Central Brazos Valley are 10 November through 10 March.

At the same time, one recovery from outside the banding areas indicates the possibility of migrants in the study area as late as 20 November, as a snipe banded on this date in 1968 was shot near Ganado. Texas, on 8 January 1970, some 150 miles southwest of the banding site. This bird may have changed wintering grounds as the recovery occurred in the season following banding. However, we do have evidence of a high fidelity rate of snipe to local wintering grounds in the Central Brazos River Valley (Arnold, MS). Next, a snipe banded on 24 November 1968 has apparently begun migration during the last week in March as it was recovered on 29 March some 250 miles northeast of the banding area. Finally, a snipe banded 6 April 1968 on the Texas coast was shot 50 miles northeast of Edmonton, Alberta, Canada, on 27 September 1969, indicating that some birds had not yet left the breeding grounds at this late date. The only comparable information is from eastern Canada where Tuck (1972:226-267) states that the major fall flights in Newfoundland and northern Ontario occur in September and October, with only stragglers left in November.

This technique of mist-netting in late afternoon and early morning hours should be very useful in studying other shorebirds and rails in shallow marshes. We have captured Killdeer (Charadrius vociferus), American Woodcock (Scolopax minor), several species of "peep" sandpipers (Calidris spp.), yellowlegs (Tringa spp.), Soras (Porzana carolina) and Virginia Rails (Rallus limicola) using this technique.

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