

CASSIN'S SPARROW – FIRST RECORD FOR WYOMING AND RECENT RANGE EXTENSIONS

CRAIG A. FAANES, U.S. Fish and Wildlife Service, Minneapolis, Minnesota 55111
(Present address: U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, Jamestown, North Dakota 58401)

BRUCE A. HANSON, U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, Jamestown, North Dakota 58401

HAROLD A. KANTRUD, U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, Jamestown, North Dakota 58401

On 8 June 1978, Faanes observed a male Cassin's Sparrow (*Aimophila cassinii*) 2.5 km SW of Columbine, Natrona County, Wyoming. Observations were made from 1110-1120. Weather conditions consisted of a clear sky, temperature about 21°C and a light wind. Light conditions allowed for a clear view from 8-10 m.

When observed, the bird was perched on a Greasewood (*Sarcobatus vermiculatus*) shrub. Its song, heard three times, consisted of a high trill, slightly lower at the end. A call note, described as "tsseet," also was heard. The bird skylarked on several occasions, and upon reaching its zenith, began singing and "parachuting" to the ground, in a manner similar to the flight song of McCown's Longspur (*Calcarius mccownii*). This behavior suggested the bird was on a breeding territory, or advertising for a mate.

Other characteristics of the bird, recorded during the observation, included: medium sized sparrow, similar in size and shape to Song Sparrow (*Melospiza melodia*). Bill light gray throughout, broad at the base, and conical. Head slightly rounded in back, with a sloping forehead. Crown mottled gray, with auriculars lighter gray than the remainder of the head. Wings short, rounded and gray, darker than back, with a small yellow area at bend of wing. In flight, outer primaries and coverts dark gray, grading to light gray-brown from the secondaries to the body. Back gray, mottled with brown and with gray extending onto the rump. Underparts uniform gray throughout. The rounded, dark gray tail appeared rather long for the size of the bird.

Two Brewer's Sparrows (*Spizella breweri*) nearby allowed direct comparison with the Cassin's Sparrow. Major differences separating the two species included the presence of wingbars, white eyestripe and darker bill of the Brewer's. Song differences between the two species were also noted.

General habitat characteristics associated with the Cassin's Sparrow included a dry clay soil on a moderately steep south and southwest-facing slope. Vegetation of the area included sagebrush (*Artemisia tridentata*) and Greasewood, as predominant shrubs. Blue Grama (*Bouteloua gracilis*), Green Needlegrass (*Stipa viridula*) and Plains Prickly Pear (*Opuntia polyacantha*) were common in the ground layer.

Oliver K. Scott (pers. comm.) confirmed this as the first record of Cassin's Sparrow for Wyoming. The AOU Check-list (1957:603) describes the breeding range of this sparrow as extending from northern Mexico (southern Coahuila) through Texas and Arizona, northward to central-western Kansas and central Colorado. Bailey and Niedrach (Birds of Colorado, Denver Mus. Nat. Hist., 1965:809) cite a 1961 range extension of this species to southeastern Weld County near Buckingham, Colorado. Nebraska Bird Review (42:56-57, 1974) contains a description of a nest found in Perkins County, Nebraska, on 5 June 1974. Cassin's Sparrows were also reported during the 1974 breeding season in Garden, Hayes, Lincoln and Morrill counties, Nebraska. Richard Rosche (Suppl. 1 to 1977 Checklist of birds of northwestern Nebraska and southwestern South Dakota, privately printed, Crawford, Nebraska, 1978) observed a singing male Cassin's Sparrow on 12 June 1977 near Ardmore, Fall River County, South Dakota. This represents the first occurrence of this species in that state.

NOTES

On 11 June 1976 Hanson and Kantrud recorded Cassin's Sparrows and Brewer's Sparrows as common in sandy *Chrysothamnus* grasslands 6.4 km SE of Illiff, Logan County, Colorado. This habitat type extends for about 100 km just south of and parallel to the South Platte River in Morgan, Washington, Logan and Sedgwick counties. A disjunct tract of these choppy sands also appears on the 1:250,000 US Geological Survey topographic map (Scottsbluff, NK 13-9) as an area extending about 8 km into Deuel County, Nebraska, to within about 5 km of Chappell. On 12 June 1976 Hanson and Kantrud investigated this area and found about 10 territorial male Cassin's Sparrows in W $\frac{1}{2}$ NW $\frac{1}{4}$, Sec. 16, T12N, R45W. Two singing males were collected (USNM 568059, 568060; testes both birds 5 x 8 mm). Brewer's Sparrows, Grasshopper Sparrows (*Ammodramus savannarum*) and Lark Buntings (*Calamospiza melanocorys*) also were common.

Cassin's Sparrows were again observed in the Chappell, Nebraska area on 5 June 1979, when Faanes recorded two singing males 1.6 km east of the site discovered by Hanson and Kantrud in 1976.

The habitat in both locations was dominated by rabbitbrush (*Chrysothamnus nauseosus*), Prairie Sandreed (*Calamovilfa longifolia*), Red Three-awn (*Aristida longiseta*), Needle-and-Thread (*Stipa comata*) and Downy Brome (*Bromus tectorum*). Important forbs included Western Sagebrush (*Artemisia campestris*), prickly poppy (*Argemone polyanthemos*), Plains Prickly Pear and Lemon Scurf Pea (*Psoralea lanceolata*).

The general aspect of this habitat is very similar to Cassin's Sparrow habitat described by Hubbard (Am. Birds 31:933-941, 1977) as "grassland in which grow scattered to moderately dense mixtures of shrublike plants." Hubbard also noted the avoidance of pure grassland and dense shrubland by Cassin's Sparrow. This may explain why this species is apparently restricted to small areas of choppy *Chrysothamnus* grassland in northeastern Colorado and southwestern Nebraska.

There are indications that in other areas at the periphery of its breeding range, male Cassin's Sparrows exhibiting breeding behavior and possessing enlarged gonads may be non-breeders (Hubbard op. cit.). Although male territoriality provides a strong indication of breeding status, confirmation of breeding in peripheral areas must await the discovery of nests and/or dependent young.

Recent movements of Cassin's Sparrow outside its normal breeding range in more southerly regions have been well documented (Hubbard op. cit.; Witzeman et al., Am. Birds 32:1043, 1978; McCaskie, Am. Birds 32:1057, 1978) Our records suggest that similar movements may also occur at the northern limit of the breeding range. In a period of only 5 years, Cassin's Sparrow has apparently extended its breeding range into Wyoming, Nebraska and South Dakota. Maximum extension was the Wyoming record, a distance of 350 km.

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