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THE McCOWN LONGSPURS OF A MONTANA PRAIRIE

WITH THREE ILLUSTRATIONS

By A. DAWES DuBOIS

Intent upon getting water from the nearest well by the shortest route, I was crossing a fenced quarter section of prairie on April 18, 1915, when a gray bird attracted me by his neighborly demeanor. He stood on the ground, singing his song within a few feet of me. When I stopped walking he only glanced up at me and sang again. Here was a bird worth knowing! Stranger though he was, his black cap, white throat, rich black patch on the breast, reddish brown "shoulder," white-edged tail, and short stout bill soon made known his identity. Later that day I came upon several others. It was not long until the McCown Longspur (*Rhynchophanes mccowni*) had become my favorite bird neighbor.

During the nesting season, in the locality referred to, on the prairie of Teton County, Montana, these longspurs were fully as numerous as Desert Horned Larks, and much more abundant and more evenly distributed than Chestnut-collared Longspurs (*Calcarius ornatus*). They made their homes on the high, dry portions of the prairie where the grass was too short to suit *Calcarius*. In such places, with few exceptions, they shared their dominion only with the horned larks.

In the spring migrations, McCown Longspurs began to arrive about the middle of April. The dates for four years were as follows:

First year (1915): Several arrived April 18; common April 20; few present May 2; again common May 3; abundant May 4 and thereafter.

Second year: First arrived April 14; common April 18; less numerous April 22 and 23; abundant April 25; common April 26 and thereafter.

Third year: First arrived April 13; maximum numbers by April 26, but never became abundant.

Fourth year: Heard flying over (bound for more northern breeding grounds) April 11; local summer residents arrived April 15.

The noticeable decrease in numbers the third year was believed to be due to the destructive storms of the preceding summer, and in part, also, to the encroachments of settlers who were breaking up broad stretches of the native prairie grass.

Observations of the fall migrations were meager, being hindered by the wandering disposition of the flocks, which form and shift from place to place after the young are on the wing. In the fall of the first year, I was absent until the 8th of October. In the second year these birds were not noted in August, though I looked for them especially on the 28th. The next year I saw a male on the 18th of August.

The female McCown Longspur (fig. 63) is a bird of no prominent marks, except for the white in the tail. At a nest where the bird permitted close observation, these notes were made from life: The upper surface of the head is uniformly covered with faint, fine,

wavy streaks, made up of buffy or light grayish-brown feather edgings on a darker gray-brown background. The face has a buffy appearance, with a line over the eye that is more whitish. A darker line extends backward from the eye, and another one backward from the lower mandible. The throat is white. There is just a faint suggestion of darker gray on the breast where the black patch adorns the male. The wrist of her wing shows a little of the reddish brown "shoulder" patch worn by her mate. There are no white marks on the outer surface of the wing, but only a pair of obscure buffy wing bars. When the bird takes flight, she shows, conspicuously, an almost black T-shaped design at the end of the white, spread tail. The sexes are alike in this tail pattern, which constitutes the best field mark (see DuBois, Condor, vol. 39, 1937, p. 104).

Fig. 63. Female McCown Longspur, incubating; photographed July 5, 1918, at nest 58.

The usual song of the McCown Longspur is a variety of warbles, clear and sweet. It is a joyous song. In the height of the nesting season it ripples through the air from many directions. It is usually delivered in course of a special flight.

The song-flight is a charming feat of grace. The male bird flies from the ground, in gradual ascent, to a height of perhaps six or eight yards, then spreads his white-lined wings, stretching them outward and upward, and floats slowly down to earth like a fairy parachute made buoyant with music. He continues to pour forth his song all the way down into the grass, and seems to swell with the rapture of his performance. Sometimes the descent is perfectly vertical. The song is delivered both while fluttering the wings and while making the parachute descent. The birds let their legs hang down beneath them while in flight. The floating descent was unique in my experience with birds, for though the Chestnut-collared Longspur also has a song-flight, it lacks the parachute descent.

Occasionally, while the bird is in the air, he utters a trio of staccato notes, each of decidedly different pitch, and separated by equal time intervals. The three notes are louder than the usual song; they are so short and clear, and have so pronounced a pause between them that the effect is very striking.

After a storm has passed and left the prairie dripping, and when the clouds are dispersing and the sun has come through, the entire population of longspurs and horned larks becomes united in a song of triumph. On one such occasion, in early June, I watched a very pretty demonstration. The day had turned partly clear after a cold driving rainstorm of thirty-six hours' duration; the birds were in exuberant spirits. On the ground, a short distance away, a male McCown Longspur pranced around his mate in a circle of about one foot radius, holding the nearer wing stretched vertically upward to its utmost, like the sail of a sloop, showing her its pure white lining, while he poured forth an ecstatic song.

At another time I saw a male standing at rest on a rock, holding one wing aloft and singing softly. Presumably his mate was in the grass near by. But the wing is not always lifted during the private musical salutations. A photograph of a male standing at rest on his rock was taken while he was singing so softly that the notes were just audible to me, a few yards away. His spouse was on the nest some twenty feet in front of him. The same day I saw a female raise both wings and hold them quivering; and immediately her mate ran past her, singing, and hoisting his white sail on the side toward her.

Three weeks from the day of first acquaintance with the species, a female jumped up, almost at my feet, disclosing a nest with four eggs. Had she sat tight she would not have been discovered. The nest itself was not easy to see. Dry grass blades hung loosely over it from the west. It is surprising how few such blades are necessary to make an effective

Fig. 64. Male McCown Longspur panting in the sun on lookout rock near nest 59; photographed July 6, 1918.

camouflage. This was the first of sixty-one nests to come to my attention in the course of four successive years. They have been described, with dates and other related details, in the Condor (vol. 37, 1935, pp. 64–68).

The nests were usually discovered by flushing the sitting female. This will occur occasionally as one walks across the prairie in the conduct of his daily affairs. The bird may be joined by her mate after she leaves the nest. Sometimes she sits closely, flushing only at the traveler's feet; or she may allow him to pass quite close to her without leaving the nest, provided his gaze does not betray his knowledge of her presence. At only one nest were the birds not seen. There was a certain female who was sometimes absent when I examined her nest, but who disclosed her solicitude on one occasion by flying overhead. Even if the nest is found before the female has begun sitting, a little observation will usually reveal one or both of the birds not far away.

Often the male may be seen near the nest when the female is incubating, or after she has left the eggs. One male fluttered over my head as I sat on the ground examining his nest. Sometimes the male will make his parachute descent near the visitor; or he may only stand on a fence post to watch. One master of the premises stood on a near-by rock nonchalantly singing a little song.

I found one female who resorted to an artifice similar to that of the Desert Horned Larks. After I had flushed her from the eggs, and had been seated for some time at the nest, she approached and deported herself very much as do the larks, running in the grass and pretending to hunt food, while she watched me. There is a great difference in individuals in regard to timidity or confidence displayed toward a human intruder. I once knew an intrepid female who went into her nest, to shelter the eggs from a shower, while I stood almost directly over it.

The parents become very solicitous for young that have left the nest. When I caught a fledgling near nest 59 (see list of nests, *op. cit.*, p. 65), on the day that it left, its father flew at my head, excitedly singing the trio of notes that is so characteristic. One day I managed to catch a youngster that was an excellent runner. Upon turning it loose I gave forth the most distressing squeaks of which I was capable. Quickly five adults appeared upon the scene and tried to lead me away. They alighted approximately in a row, well deployed, as though for battle; and when I followed, they all ran through the grass ahead of me, in company front, in a manner which was very amusing.

The usual complement of eggs was found to be either three or four. Clutches of five were rare. The eggs are deposited at the rate of one each day; at a nest which I visited both morning and evening, they were laid before 6:00 or 7:00 a.m. Incubation begins when the last egg is laid. A drilled egg, cautiously probed with a green grass stem, was returned to a nest and hatched a day or two afterward. The experiment was repeated at another nest where incubation seemed advanced. One of the three eggs was drilled May 30; six days later all three had recently hatched.

The female does all the incubating; I have never seen a male on the nest before hatching time. But after the young have arrived, the male is as busy as his spouse with the care of them. He does his part in sheltering them as well as in providing food. The young are given solid food from the beginning. At the nests observed most closely (nos. 58 and 59), grasshoppers made up by far the greater part of the diet, with now and then a moth or caterpillar, and small stuff the identity of which could not be determined. During the first days the parents swallow excrement taken from the young, but later this is carried away in the bill and dropped. On one occasion I saw a mother bird remove a large weed stem from the nest and fly away with it; soon afterward she removed from the bottom of the nest a small stem with excrement adhering to it.

Fig. 65. Male McCown Longspur feeding nestlings at nest 59; photographed July 12, 1918.

The female sometimes sings at her nest when her mate is approaching. An account of nest life observed from a blind, at nest 58, and details of behavior noted at nest 59, were published in Bird-Lore in March, 1923 (vol. 25, pp. 95–105).

The newly hatched young, as soon as dry, are protected above by fluffy natal down, about one-fourth inch long, of a whitish buff or pale dead-grass color similar to that of young Desert Horned Larks. The invisibility afforded by this covering is truly marvelous. The skin is light-colored but reddish. The tongue and inside of the mouth are of a strong pink color, without spots or marks of any kind. This distinguishes them from young of Desert Horned Larks (see Condor, vol. 38, 1936, p. 56).

When the nestlings are four days old, the feathers of their underparts become well sprouted, forming a longitudinal band along each side. When six days old, the natal down of the upper parts has been pushed out on the feather tips so that the covering is a combination of down and feathers. The young are well feathered at the age of eight or nine days. They leave the nest at the age of ten, when they can run at a lively rate, fluttering their wings if pursued. Two days later (age 12 days), as observed at nest 59, they are able to fly for short distances.

There were times when the appearance of a hawk soaring overhead, for example, a Ferruginous Rough-leg, caused a great commotion among the small terrestrial birds; but such occasions were quite unusual. The birds paid little attention to the Short-eared Owls and Marsh Hawks that hunted around the meadows in the vicinity. Raptorial birds in general were believed to be almost negligible factors in the lives of the longspurs at this place, though carcasses of fledglings were seen at a Short-eared Owls' nest, and at a nest of Swainson Hawks near the river several miles north.

Punctured eggs or broken shells showing tooth marks, noted in several instances, were thought to be the work of the common ground squirrels, though I never caught

one of these rodents in the act of plundering a nest. Whenever a ground squirrel approached a nest, the longspurs drove him away by swooping at him repeatedly, sometimes actually striking his back. Many nests were of course plowed under by the breaking plows of pioneer farmers. I have seen one or two go over with the turning sod, when it was too late to prevent it.

Of the night marauders very little was ascertained. Skunks and weasels played their part. Barbed wire fences, a source of danger to the horned larks, seemed not to menace the longspurs, probably because the latter are not given to rapid flights at low elevations.

Protracted rainstorms and late spring snows were by far the most destructive of all the mishaps which befell the young. Four days after a very destructive rainstorm I found one nest of McCown Longspur containing two living nestlings; but they were not many days old and probably had been in the egg shells during the downpour.

There was a deep fall of snow on May 25 of the second year, that ceased early on the 26th. I had previously marked a nest in which the bird was known to have begun incubating her four eggs on the morning of the 19th. The snow covered everything so completely that I could not find my marker; but in the afternoon of the 26th the marker-rock showed through the melting snow, and I uncovered the nest. The eggs had been in cold storage all of one day and part of another; but an hour or two after the nest was uncovered the female was sitting on the eggs. She continued to incubate until the 8th of June. That day she was absent morning and evening, though in the nest at noon. Before my return early the next morning the eggs and nest had been mysteriously destroyed. The bird had continued incubation about nine days beyond the normal period. Perhaps it was her first experience with eggs under the snow.

Excelsior, Minnesota, January 15, 1937.

MIGRATORY BEHAVIOR OF SOME GLAUCOUS-WINGED GULLS IN THE STRAIT OF GEORGIA, BRITISH COLUMBIA

WITH MAP

By G. D. SPROT

The recoveries of banded Glaucous-winged Gulls (*Larus glaucescens*) from the vicinity of the Strait of Georgia, British Columbia, that are dealt with in this article number 68, of which 12 are of birds more than 4 years old. Twenty-seven are from 665 birds banded by Mr. Theed Pearse between 1922 and 1931 on Mittlenatch Island; 4 are from 225 birds banded by Mr. Kenneth Alexander between 1926 and 1931 on Gull Island, Howe Sound; and 37 are from 590 banded by myself, with occasional help, between 1929 and 1934 on Bare and Yellow islands, Haro Straits.

Immature Mortality.—There is the same heavy mortality among Glaucous-winged Gulls up to three years of age as has been reported among the young of Herring Gulls and some other species of sea birds on the Atlantic coast of North America and in Europe. For 56 birds under 4 years of age, the casualty list is as follows:

Under 10 months	31
10 months and under 2 years	12
2 years and under 3 years	12
3 years and under 4 years	1

Winter and Spring Movements of Adults.—The 7 winter recoveries of birds over 4 years of age, banded as nestlings, are too few to permit any definite statement in regard to the migratory behavior of adults. About all that can be said is that there are indications of a dispersal (see dots marked A on map), to no great distance, in September.