

Smith's Longspur: A Case of Neglect

by
Alan J. Ryff

On 29 September 1985 at Chippewa Park in Thunder Bay, Thunder Bay District, Mike Matheson and Alan Wormington flushed a peculiar looking longspur whose tail flashed with extra white. Wormington subsequently showed this bird to Nick Escott and me. It proved to be a Smith's Longspur (*Calcarius pictus*). We observed it for over an hour at distances of 1-6 m. Since the streaks on its breast were more conspicuous than the streaks of the Smith's Longspurs illustrated in the National Geographic Society (hereafter NGS) guide (1983), we believed that this bird was an immature. But were we correct? This became a difficult question to answer.

Frank M. Chapman had less available information than his counterparts of today. In 1911, he concluded that figure 6 of a Fuertes' painting originally published in *Bird-Lore* is a juvenile Smith's Longspur because the white on its lesser wing coverts is inconspicuous (Chapman 1979b). The longspur at Thunder Bay lacked white epaulets. However, Kenn Kaufman tells us that the presence of a white shoulder patch is certain only for adult males in breeding plumage (Farrand 1983).

In Bent's life histories (1968), Smith's is the only species of

longspur to lack the descriptive subsection "*Plumages*." Just fragments of Oberholser's (1974) description match the field notes taken on the bird at Thunder Bay. Thus I had to seek information elsewhere. I studied the 62 specimens of Smith's Longspur at the University of Michigan Museum of Zoology, Ann Arbor (hereafter UMMZ). Because four of the specimens are juveniles, I began to see the misleading aspects of certain field guides.

Each juvenile was collected at Churchill, Manitoba: #83995, a male, on 5 August 1936; #83996, a male, on 5 August 1936; #166586, a female, on 28 July 1938; and #217737, a female labelled 22 days old, on 24 July 1966.

In addition to specimens and publications, I used my field notes, which Escott, Matheson, and Wormington verified at the time of observation. Furthermore, I was dependent on three of Wormington's black-and-white photographs of the bird.

The Smith's Longspur did not flock with the 450 or so Lapland Longspurs (*C. lapponicus*) that were scattered about the landfill at Chippewa Park. Overall, it was slightly smaller than the Lapland Longspurs. Either it stood with its plumage puffed out for minutes at a time, or it slipped through the

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grass like a mouse. Upon finding grasshoppers (Arcididae), it stunned and dismembered them by pecking, before eating them piecemeal.

Description

The tarsi, bill, tail, and belly were the primary characteristics used in identifying the bird as a Smith's Longspur. Its tarsi were pale flesh pink, unlike the dark tarsi of Lapland Longspur described by Balch (1982). Its symmetrical bill was more slender than the bills of nearby Lapland Longspurs.

The bill profile of McCown's Longspur (*C. mccownii*), when compared to that of Smith's Longspur, is highly asymmetrical, for the lower mandible angles sharply upward, and the base of the bill is much wider (NGS 1983).

The upper mandible of the Thunder Bay bird was dusky, with a darker tip, and its lower mandible was pink. With the exception of the bill profile of McCown's Longspur, the fall and winter bill of Smith's Longspur is unique among longspurs because the black or plumbeous-brown upper mandible contrasts with the light lower mandible, which can be brownish white, ecru drab, orange or light yellow. The tip of the bill is darker (Oberholser 1974). The colours mentioned by Oberholser are illustrated in Ridgway (1912). This colour contrast of the mandibles is evident in the photographs on page 281 of *The Audubon Master Guide to Birding: Volume 3* (Farrand 1983).

In fall and winter, the bills of adult and immature Chestnut-collared Longspurs (*C. ornatus*) are

grey (NGS 1983; Oberholser 1974). In every season, the upper and lower mandibles of Lapland Longspurs match each other in colour (Oberholser 1974).

The tail of the Smith's Longspur at Thunder Bay seemed shorter than the tails of the Lapland Longspurs. If it was indeed possible, I failed to see whether the rectrices were pointed, a diagnostic feature of first-winter longspurs (Balch 1982). In flight, the outer two pairs of rectrices of the Smith's Longspur were markedly white, whereas the white on the tails of the flying Laplands glinted weakly or did not show. This is because duskiness can dilute or obliterate the white on the outermost pair of a Lapland's rectrices (Roberts 1955). Furthermore, the next pair are dark, with just a terminal wedge of white (Roberts 1955). The striking tail patterns of McCown's and Chestnut-collared Longspurs have various amounts of white on every rectrix, except the middle pair (Roberts 1955).

The Smith's Longspur at Thunder Bay had an incomplete white eye ring, light-brown lores, a pale-buff supercilium, a thin black whisker, a clear buff chin and throat that contrasted with the breast, and an auricular patch, palest in the middle and margined with the same shade of dusk as on the nape.

The scapulars and the feathers of the back varied from dusky to black. The margins of the feathers on the upper back were pale buff, while those on the lower back were grey (yellow grey?). Some scapular margins were grey and others were pale buff. The greater coverts terminated into a white wing bar.

Emerson Kemsies (Bent 1968: 1632) contends that female and immature Smith's Longspurs "... may be distinguished ... by their buffy abdomens, which are concolor with the breast, and not almost white as in Lapland".

The colour of the breast, sides, belly, flanks, and undertail coverts of the bird at Thunder Bay was uniformly soft like winter grass. Smithe (1975) labelled the colour as pale pinkish buff (colour 121 D). Juvenile specimen #83995 (UMMZ) has this colour on its belly.

Identification Problems

So much for the bird's description, let us go into the controversies. The throats and bellies of the four juvenile specimens in UMMZ are pale buff, but their upper breasts are a much darker buff. This contrast can cause confusion with juvenile and immature Lapland Longspurs, whose breasts are buffy and bellies are whitish (Bent 1968). Where does one draw the line between a pale-buff and an off-white belly?

In addition to noting the Lapland's white belly and undertail, the NGS guide instructs us to compare the wing patterns of Lapland and Smith's Longspurs. The guide focuses on the wing of the Lapland: "Note also, especially in winter plumages, the reddish tertials and greater coverts" (p. 410). This is what the Smith's Longspur is supposed to lack.

However, the NGS artist erroneously illustrated the "reddish" wings of the immature female and juvenile Laplands by depicting them as colour 140, or Pratt's

rufous (Smithe 1975). Other than in the yellow or red light of a low sun, this colour is too vivid. The tertials and greater coverts of the UMMZ specimens of Lapland Longspur are duller, and can best be described as colour 136, or raw sienna (Smithe 1975).

Kaufman is cautious concerning the wing colour of Lapland Longspur: "Many winter birds of both sexes have extensive rufous in the wings on the edges of the greater coverts, tertials, and secondaries". Then Kaufman gives an absolute: "Smith's Longspur ... never has ... obvious rufous on ... wings" (Farrand 1983:278).

Red combines in different amounts with yellow, black, and white to form the hues, shades, and tints of brown, cinnamon, and rufous. Since some eyes are more sensitive to perceiving red than others, the recognition of obvious rufous or cinnamon is relative, especially when the two colours are in a combination.

The tertials and greater coverts of the Smith's Longspur at Thunder Bay were the same colour as those of the four juvenile specimens at UMMZ. Thin rufous, like a watercolour wash, overlays the cinnamon tertials and greater coverts of these specimens, giving their wings an eye-catching quality, which is precisely what the dull yellow-brown wings of the adult specimens lack. The colour of the wings, therefore, is a means of recognizing juvenile and, hence, immature Smith's Longspurs.

A longspur leaves the nest in juvenile plumage and goes through postjuvenile moult to attain immature, or first-winter, plumage.

This is a partial moult; the bird sheds its body plumage and, at least, its lesser wing coverts, but keeps its rectrices, remiges, and greater coverts (Dwight 1975).

Janet Hinshaw of the UMMZ staff helped me classify the colour on the outer webs of the tertials and greater coverts of the four juvenile specimens. Smithe (1975) labelled the colour tawny (colour 38), with highlights of clay (colour 123 B). Ridgway (1912) called it cinnamon rufous (plate XIV), with highlights of ochraceous tawny (plate XV). Villalobos-Dominguez (1947) placed the colour on his chart at "Hue OOS," ranging from 9° to 11°, with the highlights of 12°.

I described this colour as rusty in my field notes. At the time I was ignorant of Ridgway's (1912) and Smithe's (1975) subtle vocabulary. I still maintain that some observers would call the colour rufous. Therefore, I prefer Ridgway's name of cinnamon rufous.

The tertials and greater coverts of the winter male Smith's Longspur illustrated on page 411 of the NGS guide (1983) are those of an immature. Their colour resembles the juvenile specimens at UMMZ. The wing of the female Smith's Longspur illustrated on the same page matches the wings of the adult specimens of both sexes in summer and winter plumages.



Figure 1: Immature Smith's Longspur at Thunder Bay, Thunder Bay District, 29 September 1985. Photo by Alan Wormington.

Determining whether a longspur possesses or lacks reddish wings does not clinch its identification as either a Lapland or a Smith's Longspur. To complicate things, the tertials and greater coverts of some Laplands are the same colour as those of immature Smith's Longspur. An example is UMMZ specimen #58794, an immature female Lapland with pointed rectrices, collected 5 November 1927 at Fish Point, Tuscola County, Michigan. To make matters worse, the tertials and greater coverts of some Laplands are drabber than those of immature Smith's Longspur. UMMZ specimen #58797 is an adult male Lapland with rounded rectrices, collected 6 November 1927 at Fish Point, Michigan. Its wings are raw sienna, or colour 136 (Smithe 1975). Moreover, a Lapland painted by Fuertes and labelled figure 5 (Chapman 1979a) shows how drab a Lapland's wings can be.

One must expect people to work only with what they have. Imagine a birder inexperienced with autumn longspurs spotting an immature Smith's—with its cinnamon-rufous tertials and greater coverts—among a flock of drab winged Laplands. Being unaware that the immature is indeed a Smith's Longspur, the birder compares it with the Laplands illustrated on page 411 of the NGS guide and makes an identification based on the juvenile depicted at the bottom of the page, for its wings have the richest hue.

The date of the observation of the Thunder Bay bird, 29 September, is not necessarily too

late for a longspur to be in juvenile plumage. For example, as late as 12 October, Roberts (1955) observed a Chestnut-collared Longspur in juvenile plumage. He did not state whether this bird was a resident or a migrant. It was collected in Lac qui Parle County, Minnesota, which is at the eastern edge of the species' breeding range. However, Lapland Longspurs, which nest on the tundra like Smith's Longspurs, can begin to undergo postjuvenile moult in late July (Chapman 1979a).

Certain features on the breast, back, hindneck, crown, and upper-tail coverts of the Thunder Bay bird raise the question of whether it was in juvenile plumage or protracted postjuvenile moult.

The body feathers of juvenile passerines have an obvious texture. Dwight (1975:106) describes them as being "less distinctly pennaceous than those of the adults". The feather texture of the four juvenile specimens of Smith's Longspur appears obviously softer than those of the adult specimens. As a result of this softness, the dark streaks across the upper breasts of the juveniles are significantly wider and more diffuse than the streaks of the adult specimens.

Wormington's photographs (Figures 1 and 2) show that the Smith's Longspur at Thunder Bay did not have the breast streaks of a juvenile. Yet, they were more numerous and coalescent than those of most adult specimens at UMMZ. Specimen #68714 is a female collected on 17 February 1917 in Franklin County, Kansas. Her breast streaks match those of the photographed bird. Her

rectrices are too worn to determine whether they are pointed or rounded, but her wings are dull yellow brown, the colour of an adult.

My field notes omit what two of the photographs (Figures 2 and 3) show—two prominent white mantle stripes. Juvenile specimen #83995 has two whitish stripes on the back, which are questionably prominent if the plumage is rearranged in a lifelike position. No other UMMZ specimen of Smith's Longspur has two whitish mantle stripes.

Each of the four juvenile specimens has whitish highlighting that follows the rear edge of the hindneck, frames the auricular

patch, and continues as a thin line along the base of the throat. All three photographs show part of this highlighting, although the whitish line along the base of the throat is absent.

The median stripe on the crown of the Thunder Bay bird was white, with fine dark streaks. Specimen #83995, the one with the questionably prominent mantle stripes, is the only UMMZ specimen of Smith's Longspur to have scattered whitish feathers on the median stripe of its crown. Are these the emerging feathers of first-winter plumage? The median stripes of the other three juvenile specimens, as well as those of the adult specimens, are buffy.



Figure 2: Immature Smith's Longspur at Thunder Bay, Thunder Bay District, 29 September 1985. Photo by Alan Wormington.

The upper-tail coverts of the bird at Thunder Bay were redder, or rustier, than its cinnamon-rufous tertials and greater coverts. Oberholser (1974) states that the upper-tail coverts of the juvenile can approach russet, a colour defined as being more reddish than orange brown. Yet, no UMMZ specimen has russet on the upper-tail coverts.

Several features of the Smith's



*Figure 3: Immature Smith's Longspur at Thunder Bay, Thunder Bay District, 29 September 1985.
Photo by Alan Wormington.*

Longspur at Thunder Bay merit review. The cinnamon-rufous tertials and greater coverts determined that it was not an adult. The pattern of fine streaks across its upper breast showed that it was not in juvenile plumage, at least not completely. If the two whitish mantle stripes and the whitish highlighting at the base of the head were isolated tracts of juvenile plumage, the bird was in protracted juvenile moult. More likely however, these two features, as well as the white median stripe on the crown, the russet upper-tail coverts, and the conspicuous pattern of the breast streaks, are variables of fresh first-winter plumage. Yet, some adults in winter plumage may also have whitish mantle stripes and whitish highlighting on the head. To determine the range of these features will take more than just the 62 specimens at UMMZ.

Breeding Range

Compared with the immensity of North America, the breeding range of Smith's Longspur is just a strip along the outside edge of the arctic tree line. The birds nest from Anaktuvuk Pass in Alaska's Brooks Range to Hudson Bay in Ontario (Gabrielson and Lincoln 1959) and in the highlands of southern Alaska, southern Yukon Territory, and adjoining British Columbia (AOU 1983; Godfrey 1986).

The farthest south and east that Smith's Longspurs nest is the region of Cape Henrietta Maria (Godfrey 1986), which projects into Hudson Bay at 55° 09' north latitude and 82° 20' west longitude

(Figure 4). This headland is the most arctic portion of Ontario. In summer, the south coast of Hudson Bay is exposed to the Arctic air stream and has a mean July temperature of 12° Celsius or less (Fahlgren and Matthews 1985). Windswept tundra and permafrost are continuous along the coast. Just inland, however, tamarack (*Larix laricina*), black spruce (*Picea mariana*), and white spruce (*P. glauca*) form a patchwork of forest and tundra (Fahlgren and Matthews 1985). Consequently, Ontario's nesting Smith's Longspurs are limited to the seaboard.

Ontario Records

Northern Ontario records of Smith's Longspur, away from its breeding range, include several from the north shore of Lake Superior in Thunder Bay District. An immature female which was collected (specimen #57194, Royal Ontario Museum, Toronto) by George E. Atkinson in September 1892 at Port Arthur (now Thunder Bay) constitutes the first Ontario record (Fleming 1913). Tom Hince observed a male at Marathon on 24 April 1983 (Weir 1983) and what may have been a different male (although considered likely the same bird by the observer) 10 km away at Heron Bay on the same day (A. Wormington, pers. comm., 1986). There are two spring records for eastern Lake Superior: a female observed on 9 May 1981 at Caribou Island, Thunder Bay District, by J. Robert Nisbet (Baxter 1985; Wormington *et al.* 1986) and two males observed on the lawn of the Red Rock Lake

headquarters of Lake Superior Provincial Park, Algoma District, on 19 May 1979 by K. Whillans and M.R. Browning (Baxter 1985).

Joseph A. Hagar (unpublished ms.) saw a few and collected one individual (not preserved) during the period 24-27 August 1955 at Big Piskwamish Point (James Bay), Cochrane District (A. Wormington, pers. comm., 1986). This is the only Moosonee area record, but not totally convincing, as the call notes were described as "churr . . . churr", which corresponds rather well to Chestnut-collared Longspur, but not Smith's.

To date, the Ontario Bird Records Committee (OBRC) has rejected one record and accepted two for southern Ontario, now defined as the area south of the annual isotherm of 4° C (Wormington and James 1984). The rejected record is for Amherstview, Lennox and Addington County, on 24 September 1973 (Wormington 1985). The accepted records are of single birds for Long Point, Regional Municipality of Haldimand-Norfolk, on 20 April 1980 and from 31 October-2 November 1984 (Wormington 1986).

Two additional southern Ontario records for Simcoe County (Devitt 1967) are cited in Speirs (1985) but have yet to be reviewed by the OBRC.

Long Point, at 80° 15' west, may have the easternmost acceptable sightings of Smith's Longspur for Canada. If so, they are only 2° 5' east of the species' nesting range. Farther east, the records are of "accidentals" in the United States: Connecticut (AOU 1983), New

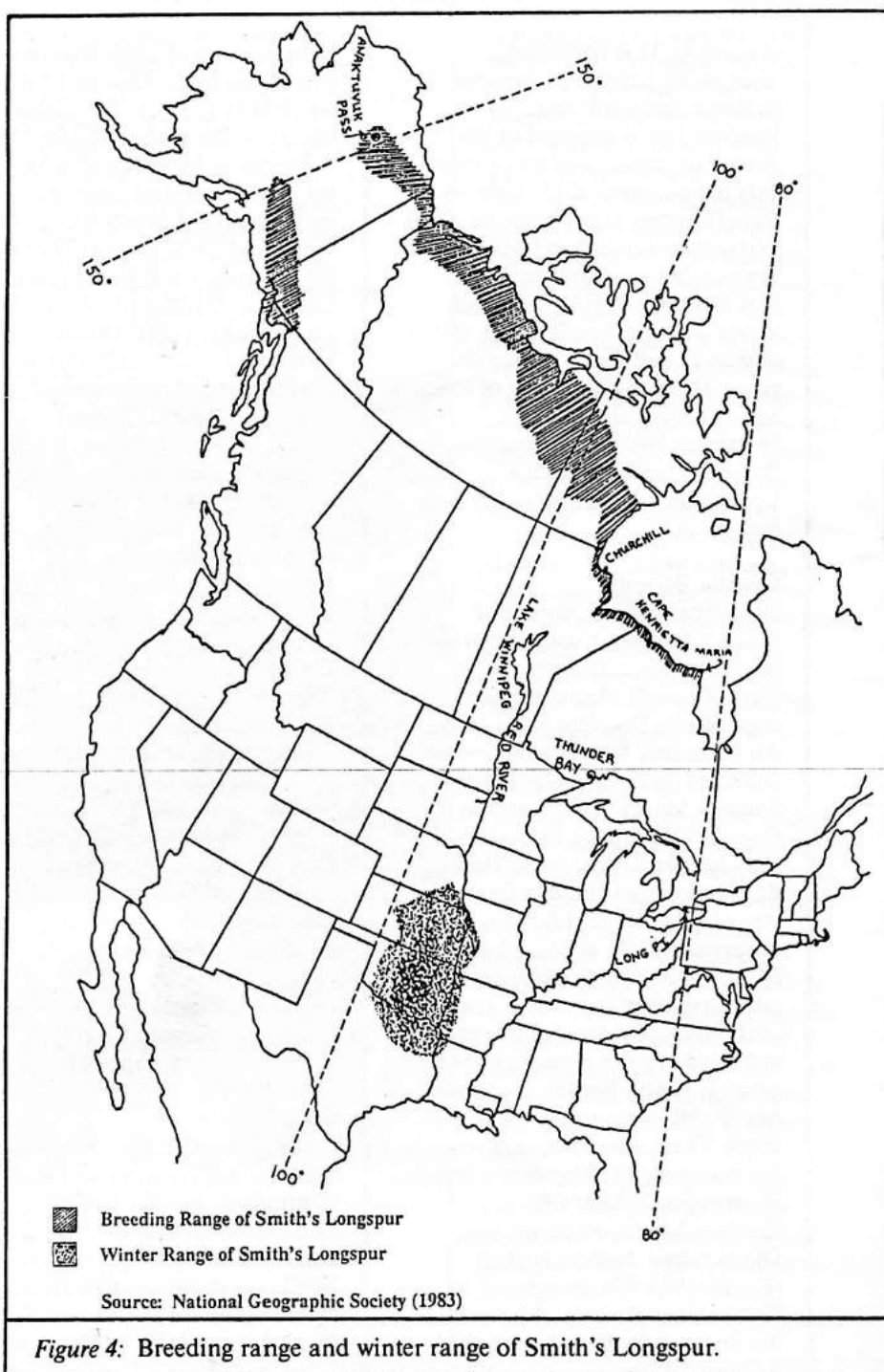


Figure 4: Breeding range and winter range of Smith's Longspur.

York (AOU 1983), Pennsylvania (Poole 1964), Maryland (Wilds 1983), and North Carolina (Potter, *et al.* 1980). There are two 19th-century specimens from Chester, South Carolina (Sprunt and Chamberlain 1970), which, at 81° 14' west, is farther west than Long Point.

Fall Migration Patterns

How does a September record of a Smith's Longspur on Lake Superior's north shore compare with the species' continental status as an autumn migrant?

Southbound longspurs migrating from Hudson Bay via 88° west longitude have to cross 780 km of forest before arriving at the top of Lake Superior. Fearing the lake's sealike vastness (82,414 km²), the longspurs gather along its shoreline in open areas, as the 450 or so Lapland Longspurs did at the landfill in Thunder Bay's Chippewa Park on 29 September 1985. From the top of Lake Superior the shoreline guides the migrants either to the southeast or to the southwest.

For the period 1979-1985, *American Birds* gives three fall records of single Smith's Longspurs for Duluth, Minnesota, located at the west end of Lake Superior. The dates of these observations span 9-26 September (Tessen 1980, 1981, 1983). For the period 1978-1985, *American Birds* gives for the "Western Great Lakes Region," three fall records which are south of Lake Superior, but east of Duluth. Curiously, each of the three records is at or near 89° west longitude. Thunder Bay is situated at 89° 19' west. The distance from

Thunder Bay is given for each record: 174 km south, one bird in Ontonagon County, Michigan on 20 October 1981 (Tessen 1982); 470 km south, several just west of Weyauwega, Wisconsin, on 22 October 1983 (Tessen 1984); and 546 km south, one in Columbia County, Wisconsin, on 29 September 1978 (Tessen 1979). Perhaps these birds found themselves at dawn out over the middle of Lake Superior on a north wind and had no choice but to continue south.

Is the autumn migration to the plains a direct flight from wherever each bird's nesting territory happens to be? Probably not. Let us consider possible reasons why.

Because Smith's Longspurs are birds of the tundra, they probably delay their southward crossing of the taiga. If weather permits, they remain within the narrow breeding range and follow the tree line southeastward across the District of Mackenzie and continue into the District of Keewatin. Near 95° west longitude, the west coast of Hudson Bay stops them. Thus, their numbers build up in Keewatin.

To the west of Keewatin, the literature may describe the species' migratory status accurately. Smith's Longspurs are considered casual in British Columbia and Montana (AOU 1983) and rare in Alberta and Saskatchewan (Salt and Salt 1976).

That most of the population may migrate due south from Keewatin alone is no coincidence. At the tree line, southern Keewatin spans the area from 95° to 102° west. These degrees of longitude probably

define the species' traditional flyway on the Great Plains. The key factor influencing this flyway was probably the presence of bluestem grass (*Andropogon gerardi*). As tall-grass prairie, this species once grew along 97° west longitude for 1,200 km, spanning the area from Winnipeg, Manitoba, to Lincoln County, Oklahoma (Godfrey 1966; Johnsgard 1979; Figure 5). In winter, tall-grass prairie was more likely to protrude through the snow than short-grass prairie which, for the most part, grew to the west of the 100th meridian (Johnsgard 1979)—where Smith's Longspurs are not typically reported in winter.

Before October arrives—the month when snow covers the entire Northwest Territories (Energy, Mines and Resources Canada 1974)—the birds must cross the great zone of boreal forest, regardless of where they happen to be on the arctic tree line.

The eastern shoreline of Lake Winnipeg is relatively straight and extends southward for about 300 km, conveniently guiding south-bound longspurs across the boreal forest of Manitoba. Flowing approximately along 97° west longitude, the Red River leads upstream (south) from Lake Winnipeg into the open plains of North Dakota and Minnesota.

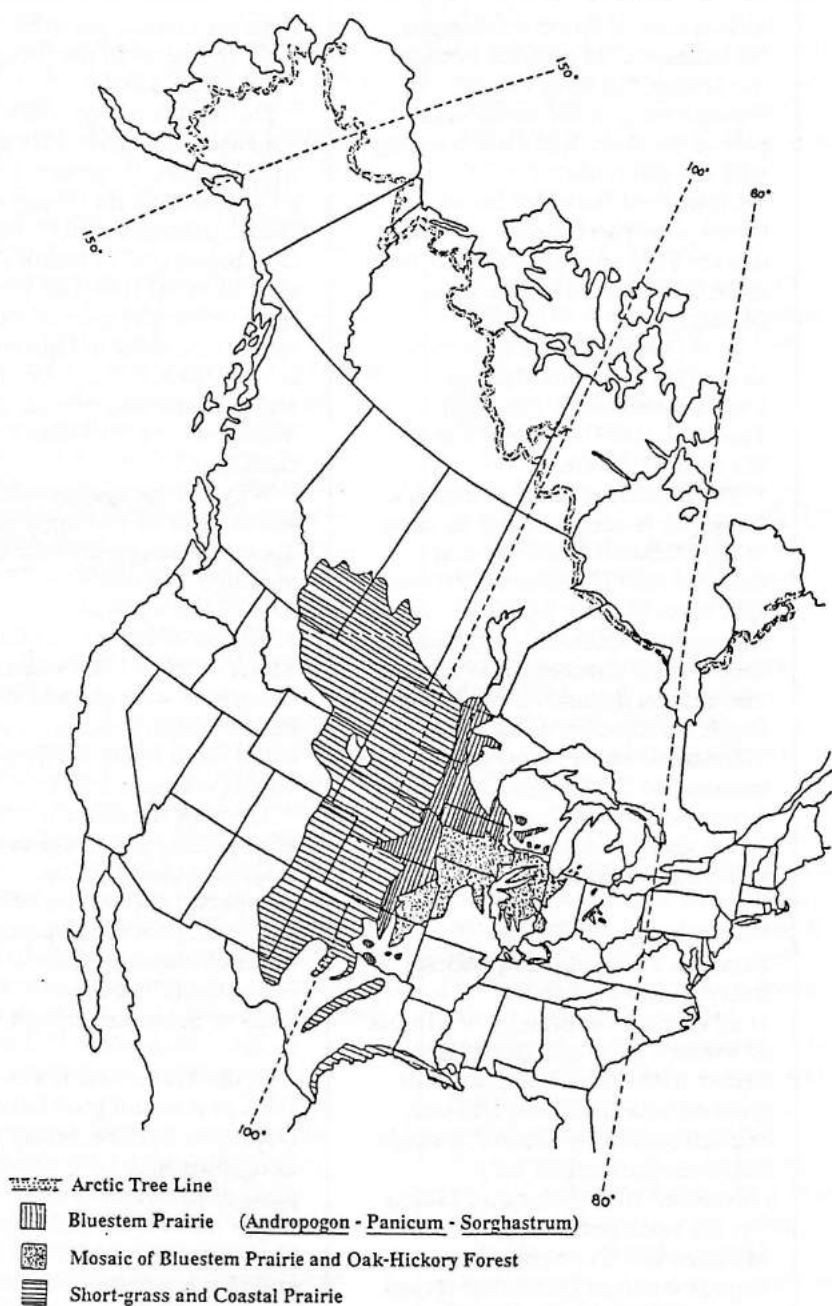
By 15 September, some Smith's Longspurs are on the edge of the Great Plains at Oak Lake, Manitoba (Bent 1968), which is 1,300 km south of the tundra and 70 km north of the United States/Canada border. In western Minnesota this species is a regular (but

rare) migrant, with dates ranging from 9 September–17 November (Green and Janssen 1975). It is an uncommon migrant in South Dakota, chiefly in the eastern half of the state, where the normal period of migration is "possibly" during late September and October (Whitney *et al.* 1978:269). In Nebraska it is an uncommon migrant in October (Bruner *et al.* 1903).

From 1977–1985, *American Birds* gives only three locations on the northern plains where Smith's Longspurs are reported somewhat consistently. All are between 96° and 98° west longitude. Deuel County in South Dakota is situated about 60 km south of the southernmost headwaters of the Red River (Serr 1979; Lamberth 1985, 1986). Daily counts of 25 birds are usual in Deuel County in fall (Serr 1979). The other two locations are Grand Forks in North Dakota (Serr 1979, 1980) and Rothsay Wildlife Management Area (Tessen 1978, 1979), a remnant of virgin prairie in Wilkins County, Minnesota. Both are within the drainage system of the Red River. The high counts were at Rothsay WMA, with 200 plus birds on 15 October 1977 and 61 on 21 October 1978 (Tessen 1978, 1979). The records for these three areas collectively occurred from 12 October to 4 November during the period 1977–1985.

Smith's Longspur is "normally unreported during autumn" in Iowa, Illinois, Indiana, Missouri, Ohio, and Kentucky (Peterjohn 1983a:189).

Mumford and Keller (1984:326) write in *Birds of Indiana* that the



Source: Godfrey (1966); Johnsgard (1979); Kuchler (1964); National Geographic Society (1947)

Figure 5: Extent of prairie habitat in North America.

arrival date of Smith's Longspur "is unknown" in autumn because the earliest fall date, being 7 November, is in the southwestern part of the state. But what is wrong with the fall reports for northwestern Indiana? Brock (1986) gives two October records, one for 1957 and one for 1983, both at the Indiana Dunes on Lake Michigan.

Bent (1968) gives 27 November as the late departure date for southwestern Ohio, although Thomson (1983) does not cite any fall records for Ohio.

The historical status of Smith's Longspur is contradictory in parts of the Midwest. Consider that Kumlien and Hollister (1903) write that, prior to 1852, Smith's Longspurs reportedly migrated in considerable numbers in Wisconsin. The authors themselves encountered Smith's Longspurs a few times in Wisconsin, where it was a fall transient in the southern counties. Seventy-one years later, Gromme (1974) gives it only accidental status for Wisconsin.

Winter Range

Kumlien and Hollister (1903:95) state: "Smith's Longspur . . . is not at all rare on the prairies of Illinois in winter". However, during the period 1980-1985, *American Birds* gives no winter records and only one fall record for Illinois: a single bird near Springfield on 5 November 1985 (Peterjohn 1986a). For the same period, adjacent Missouri has five November records and one December record (Kleen 1981; Peterjohn 1983a, 1983b, 1985a). Records in the latter half of February for Missouri and

Iowa are considered to be those of early spring migrants (Peterjohn 1984, 1985b, 1986b).

During the period 1980-1985, *American Birds* gives only one winter record for Iowa—a bird on a Christmas count (Peterjohn 1984). Although Bent (1968), Oberholser (1974), Imhof (1976), and the AOU (1983) all place Iowa within the species' winter range, according to Dinsmore *et al.* (1984:301) "Iowa lies north of, and perhaps formerly in, the wintering area for Smith's Longspur".

Why did the species perhaps winter in Iowa and apparently now does not? Longspurs take extra measures to avoid snow, the "white death" of the plains. For instance, on nights of heavy snowfall in the winter of 1982-1983, when Lapland Longspurs were abundant in Pawnee County, Kansas, Seltman heard them flying overhead at all hours (Williams 1983).

Through the centuries, the tall-grass prairie must have saved longspurs caught in the unexpected snowstorms of autumn and spring, for the impressive seed stems of bluestem grass, standing 1-2 m tall (Hitchcock 1971), are likely to protrude through the snow.

In the 19th century, when tall-grass prairie still grew from South Dakota to Indiana, Smith's Longspurs may have wintered in parts of Iowa and Illinois. But all things come to an end. The steel plough broke the prairie's back and in a few decades the tall grass was gone. Fewer birds returned each winter, for too many had starved in the aftermath of the

preceding winter's storms. Weakened by hunger, where would they go if they could? To the south there was no longspur habitat, just the wooded uplift of the Ozark Mountains and the wet bottomlands of the Mississippi River.

The progenitors of today's Smith's Longspurs did not turn eastward to winter in Iowa and Illinois. Instead, they continued due south via the safety of the 97th meridian—the way of the bluestem grass. Though the prairie is gone, the flyway remains. En route, the birds are sometimes reported in Kansas; for example, during the period 20 October–30 November 1984, Smith's Longspurs "invaded" Lyon, Morris, and Chase Counties (Williams 1985: 74). No numbers were given, but these three counties lie between 96° and 97° west.

Smith's Longspurs are common winter residents in Oklahoma (Wood and Schnell 1984), and with good reason. Here, at 35° north, the annual snowfall can be less than 2.5 cm, and the daily normal temperature can remain above freezing all winter (Visser 1954). Such mild conditions spell success for longspurs, even though crops and grazing cattle have transformed the Oklahoma grasslands.

Farther south, most records occur in east Texas, with the greatest concentration near the Oklahoma border (Oberholser 1974). Smith's Longspurs are casual in west Texas (Oberholser 1974) and perhaps casual in northeastern New Mexico (Bent 1968) and Arizona (AOU 1983).

Expanding agriculture and the building of airports have given

Smith's Longspurs the opportunity to expand their winter range into the formerly wooded sections of eastern Texas, northern Louisiana, and Arkansas. The old Municipal Airport of Shreveport had consistently been the Louisiana wintering site for Smith's Longspurs until at least 1971 (Lowery 1974). Farther east, 10 were at the airport of Stuttgart in east Arkansas on 17 November 1984, about 70 km from the Mississippi River (Purrrington 1985).

East of the Mississippi, the winter status of Smith's Longspur is nebulous in the South. Imhof (1976) states that it winters irregularly in western Tennessee and central Alabama. However, the AOU (1983) treats it as a transient for central Alabama. Bent (1968) and Oberholser (1974) list northwest Mississippi as a part of the winter range, but the AOU (1983) does not.

Spring Migration

In spring, tropical air often arrives in the United States as a southwest wind. Over the southern plains it collides with the polar air mass and forms violent cyclonic fronts, which may move quickly, sometimes pushing migrating birds to the northeast. This may be why Smith's Longspurs appear in spring to the northeast of the plains—in Iowa, Illinois, Indiana, and even Ohio—places where they are generally unreported in fall.

In March, migrant Smith's Longspurs can be easy to locate in the area of Springfield, Illinois, with the help of local birders (personal experience). They are

regular in March and April in the western third of Indiana (Mumford and Keller 1984). On 7 April 1982, a cold front with snow grounded an estimated 1,500 Smith's Longspurs in Parke County, Indiana (Peterjohn 1982). Most records for central and southwestern Ohio are in March and April (Thomson 1983). Thus far, there are no reports of flocks to the north in Michigan's Lower Peninsula, just a single record of a male for Midland on 25 April 1971 (Soulen 1971). Excluding the fact that Michigan is underbirded, where do the northbound birds of Indiana and Ohio go? Seemingly they are not regular in Wisconsin. Nor do they probably outpace the receding snow line in the upper Great Lakes.

The birders of Ontario should consider the following: Iowa has but nine Smith's Longspurs reports for 1900-1930 and only three for 1930-1981 (Dinsmore *et al.* 1984). However, an organized search in the spring of 1982 produced nine sightings for six counties during 21 March-18 April. Dinsmore *et al.* (1984:301) state that Smith's Longspur is probably regular in Iowa, but overlooked on account of its rarity and uneven distribution in migration. Furthermore, "the species prefers grassy fields, where it is not likely to be encountered by birdwatchers. . . . Spring flocks may contain breeding plumage males, which are easy to identify. Females and winter plumage birds are more difficult to separate from other longspurs".

Summary

All that follows is speculation. The majority of Smith's Longspurs in autumn migration follow the breeding range southeastward via the tree line to southern Keewatin. From there, they cross the boreal forest to the Great Plains. The flyway then follows the former belt of tall-grass prairie, approximating the 97th meridian, from Manitoba to the main winter range in Oklahoma.

The immature Smith's Longspur that was observed at Thunder Bay, Ontario, on 29 September 1985 may belong to the nesting population of Ontario, which uses the north shore of Lake Superior as a flyway toward the plains. If this is not the case, then the bird at Thunder Bay was a mere stray, southbound from Keewatin or Manitoba.

Since the wings of adult Smith's Longspurs are a dull yellow brown, the bird at Thunder Bay was an immature on account of its cinnamon-rufous tertials and greater coverts. Furthermore, its conspicuous pattern of breast streaks, two whitish mantle stripes, whitish highlighting at the base of the head, white median stripe on the crown, and russet upper-tail coverts may be variables of fresh first-winter plumage.

Acknowledgements

I thank Alan Wormington for showing me the Smith's Longspur at Thunder Bay, for providing me with three of his black-and-white photographs of the bird, and for providing data on northern Ontario observations. Janet Hinshaw of the University of

Michigan Museum of Zoology assisted in my examination of Smith's Longspur specimens.

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A Birding Site Guide to Prince Edward County

by
Terry Sprague

Location and Access

Prince Edward County lies just off the north shore of eastern lake Ontario between Brighton, Northumberland County and Napanee, Lennox and Addington County. Prior to the construction of the Murray Canal in 1889, which severed the northwest corner of the county to connect the Bay of Quinte to Presqu'île Bay, Prince Edward County was a peninsula. It has a total area of 100,000 hectares or 1,000 square kilometres. The population of Prince Edward County is about 22,000. The largest centre is the Town of Picton, with a population of 4,800. In the Town of Wellington and Village of Bloomfield, there are 1,000 and 750 inhabitants, respectively.

There are four main access points to the county, three of which are from Highway 401. To the west, follow Highway 33 via the Wooler Road exit to Carrying Place. At Belleville, take Highway 62 (formerly Highway 14) across

the Norris Whitney Bridge into the county, or take the Marysville exit and follow Highway 49 near the east end of the county. Access is also possible from Highway 33 at Adolphustown via the Glenora Ferry if travelling from Kingston.

Habitat and Ornithological Significance

Much of Prince Edward County is composed of shallow soils which result in an extensive hectareage of untilled pasture fields, ranging from barren flats to those either sparsely or densely populated with red cedar. These conditions provide excellent habitat for nesting populations of Upland Sandpipers, Grasshopper Sparrows, Savannah Sparrows, and Field Sparrows, as well as Clay-colored Sparrows in specific areas.

Elsewhere there is a mixed variety of habitat, from cultivated fields, hardwood forests and extensive marshlands to scrub cover consisting of field invasions

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