

LAPLAND LONGSPUR - CALCARIUS LAPPONICUS

Taxonomy: Kingdom: Animalia Phylum: Chordata Class: Aves Order: Passeriformes Family: Calcariidae Genus: Calcarius
Species: C. lapponicus

Habitat:

Biomes: Breeds in Arctic tundra in wet meadows, grassy tussocks, and scrub; in migration and winter in plowed fields, stubble, and open grasslands.

Distribution:

In US: It breeds across Arctic Europe and Asia and in Canada and the northernmost United States. It is migratory, wintering in the Russian steppes, the southern United States, Northern Scandinavian arctic areas and down to coastal Southern Sweden, Denmark and Great Britain. This is the only Eurasian species of the longspur buntings, and while it probably did not evolve there, it has been present in Eastern Europe for at least about 30,000 years.

In Other Countries: ^^^^^^^

Holistic Description: A common songbird of the Arctic tundra, the Lapland Longspur winters in open fields across much of the United States and southern Canada.

Species Richness: 5 SUBSPECIES

Population Dynamic: CHECK THREATS

Evolution and Systematics:

Evolution: Subfossil feather found in peat moss deposit in n. Greenland (82°02'N, 34°21'W), north of current breeding range, was aged between 6,050 and 8,000 yr before present.

Systematics: Weak cline of increasing paleness from Greenland to Aleutians. Slight variation in bill size and wing length also noted.

Number of Species: 5 SUBSPECIES

Number of Genera: 5 SUBSPECIES

Physical Characteristics:

Size and Length: Length: 5.9-6.3 in (15-16 cm) Weight: 0.8-1.2 oz (22.3-33.1 g)

Wingspan: 8.7-11.4 in (22-29 cm)

Coloration: The Lapland longspur is a robust bird, with a thick yellow seed-eater's bill. The summer male has a black head and throat, white eyestripe, chestnut nape, white underparts, and a heavily streaked black-grey back. Other plumages have a plainer orange-brown head, a browner back and chestnut nape and wing panels.

General Body Features: Medium-sized sparrow-like bird. Short, thick, pointed bill. White outer tail feathers. Rufous patch in wings. Streaked sides. Smudge on breast. Breeding male with black face and chest, yellowish eyestripe, and rufous nape.

Special Features of the Body: NONE

Special Features of the Head and Sensory Organs: NONE

Dentition: BEAK/LAMELLAE/GIZZARD

Special Features of the Limbs and Digits: NONE

Any Special Internal Anatomy: NONE

Sexual Dimorphisms: In the male, nape is bright rufous orange; crown, lores, ear coverts, chin, throat, and upper breast black, forming a distinctive facial mask and bib, bordered on sides of breast and throat by white stripe, which continues as a yellowish stripe above and behind the eye. Females relatively nondescript without black facial mask and with remaining colors duller. Head has "an open-faced expression" created by pale lores and centers to ear coverts, whitish supercilium, blackish lateral crown stripes, and a prominent blackish border to ear coverts.

Differences Between Juvenile Stage and Adult: Back, rump, crown, nape, and scapulars Dusky Brown to Jet Black heavily streaked with Cinnamon, Tawny and whitish along sides of feathers; crown and nape more finely streaked with faint median crown stripe; streaks densest and whitest on nape giving appearance of whitish collar.

Behavior:

Diurnal, Nocturnal, or Crepuscular: Diurnal

Activity: It breeds in wet areas with birch or willow, and on bare mountains, and winters on cultivated land or coasts. The bird is often seen close to the tree line, and likes to feed in mixed-species flocks in winter. Its natural food consists of insects when feeding young, and otherwise seeds. The nest is on the ground. 2-4 eggs are laid. During the winter, the longspur feeds on seeds. They pick them on the ground, rarely feeding directly on plants. They will forage around the same area for a period varying between a few minutes and an hour, then fly away looking for a new foraging area. Their seed diet is composed mainly of seeds from grass, foxtail, cultivated millet, crabgrass and wheat.

Locomotion: Adults walk and run on ground, only occasionally hop; on snow in winter and early breeding season, run between plant stalks; winter flocks often on the move, frequently flushing, flying high, usually settling far from original position.

Communication and Perception: Song a series of loud, squeaky, jingling notes. Calls a variety of zeeeps, chips, and rattles. Alarm note a wheezy "tee-hu."

Home Range: On breeding grounds, males establish territories before pairing with females, usually before females arrive on breeding grounds, often singing from song perches, performing Flight Song Displays, or chasing intruders. Male territorial defense wanes as all females in population begin incubation. Females do not defend territories or chase intruders, but rarely wander far from male territory.

Degree of Sociality: Highly gregarious in winter. Medium (30–100) to large (>5,000) flocks during migration and on wintering grounds. Males arrive on breeding grounds in small to medium flocks (10–110); females later and initially keep apart from males.

Level of Aggression: During breeding season, before incubation complete, fights and chases by males common in both territorial and mate-guarding contexts, though often hard to distinguish contexts. Before females settle on male territories, males chase all males entering territories defined by song perches and Flight Song Displays; after pair formation, chases directed mostly at males that approach or sing near female.

Migration: Short-distance complete migrant. Annual migration of North American and Greenland populations from arctic breeding grounds to temperate regions of U.S. and s. Canada.

Predators:

Predators: Pomarine Jaegers, Parasitic Jaegers, Gyrfalcons, Peregrine Falcon, Snowy Owl, Weasels, Arctic Foxes, Common Raven, Norway Rat.

Anti-Predator Defenses: Female gives Distraction Displays when flushed from nest or when chicks handled by biologists; male flutters low around intruder and gives tew call when nest approached and female is incubating. Distraction Display: Female hops and flutters over ground with neck extended; head lowered; tail fanned, wings spread, dragged, or jerked; gives si - si - si - si call.

Diet and Nutrition:

Adult Diet: Their seed diet is composed mainly of seeds from grass, foxtail, cultivated millet, crabgrass and wheat. During the breeding season, the birds migrate to the north, where their diet switches to arthropods.

Juvenile Diet: Nestlings are only fed arthropods, which also constitute the diet of the parents at that time of the year.

Special Adaptations for Getting Prey: They pick them on the ground, rarely feeding directly on plants. They will forage around the same area for a period varying between a few minutes and an hour, then fly away looking for a new foraging area. The birds often catch insects in mid-air, but do forage through vegetation when climatic conditions prevent the insects from flying. Longspurs can consume between 3000 and 10,000 prey items (insects or seeds) per day, depending on their energy needs. Dipteran larvae and adults form the major part of their insectivorous diet.

Reproduction:

Mode of Reproduction: Monogamous

Mating System: Usually socially monogamous but occasionally bigamous and trigamous.

Mating Season: February to May

Courtship: Courtship and copulation proceed by male performing Grass Display usually while singing whisper song, with female creeping low, through vegetation <1 m away giving Inciting Display and calling zeep-zeep; male drops vegetation and performs intense Advertising Display, pointing bill straight up and dragging wings as he nears female; male then performs Fluffed Display.

Territoriality: HOME RANGE

Mating: Female performs Soliciting Display, and male mounts and copulates; after copulation, male in Fluffed Display walks in front of female; female stands up, raises bill and tail, and gives chatter call.

Nest Placement: Nests usually well hidden in vegetation, frequently in wet meadows with water nearby, often in side of bank or hummock and protected by overhanging vegetation, or in tussock or mound. Also, in vegetation in drier situations, sometimes on relatively flat ground and exposed from above. Nests often in tussocks or hummocks of moss, grass, sedge, or willow.

Nest Description: Female excavates nest in a hollow in ground or vegetation. Nest typically composed of tightly woven cup of dead grasses, together with some leaves, over foundation of mosses. Usually warmly lined, often with white ptarmigan feathers, sometimes with feathers of raven, eider, or other species, fur of musk ox, hare, lemming or dog, or willow cotton. Occasionally lined only with grass.

Egg-Laying: Clutch Size: 3-7 eggs Number of Broods: 1 brood Egg Length: 0.8-0.9 in (1.9-2.2 cm) Egg Width: 0.4-0.6 in (1.1-1.6 cm) Incubation Period: 11-13 days Nestling Period: 6-10 days

Hatching and Incubation/Gestation: Helpless.

Development: Altricial. Eyes closed.

Parental Care: Both sexes feed nestlings but male feeding contribution varies considerably; males with largest and most extensive black bib and flanks feed least, whereas males with small bibs and white flecking on black feathers feed as much as females.

Lifespan: Up to 5 years.

Conservation:

Official Federal Status: Least Concern

Special Statuses in Individual States: NONE

Threats: Lapland Longspur is common and widespread, but there is little information on population trends. There are reports that local populations have declined in some areas. Partners in Flight estimates a global breeding population of 130 million, with 43% spending some part of the year in Canada, and 42% breeding and migrating through the U.S. The species rates a 6 out of 20 on the Continental Concern Score. Lapland Longspur is a U.S.-Canada-Stewardship species and is not on the 2014 State of the Birds Watch List.

Conservation Efforts: ^^^^^^

Extra Facts:

1. Some winter flocks of Lapland Longspurs have been estimated as large as four million birds. During snowstorms, such flocks sometimes collide with lighted structures such as radio towers, and thousands can be killed in a single night.
2. The Lapland Longspur breeds in the high arctic with continual daylight during the summer, and a breeding male may sing at any hour of the day. Despite the lack of a real dawn, the male tends to sing most in the early morning.
3. Longspur refers to the elongated claw of the hind toe.
4. The oldest recorded Lapland Longspur was at least 5 years old when it was recaptured and rereleased during banding operations in Alaska.

Notable Species:

1. C. l. Subcalcaratus
2. C. l. Alascensis
3. C. l. Coloratus
4. C. l. Kamtschaticus
5. C. l. lapponicus