

Nature Calgary Bird Study Group - Speaker Series

Birding the Grasslands - Part 1. Passerines by C. Eric Tull

Speaker at Bird Study Group meeting May 2008

Introduction

- I came to Alberta in 1974
 - started work doing bird transects on the prairies
 - fell in love with the grasslands and the grassland birds
- my topic "Birding the Grasslands" is potentially very open-ended
 - so I have restricted it to songbirds, and to some extent, to my favourite songbirds
 - [Birding the Grasslands - Part 2. Non-Passerines](#) is available on the web as a second workshop
- not intended so much as an identification workshop, but rather as a chance to get to know the birds
- emphasis is on
 - behaviour
 - song
 - flight song
 - habitat
 - where to find it



© [Alan MacKeigan](#)

Baird's Sparrow
© Al MacKeigan

[Horned Lark](#) -- [Western Meadowlark](#) -- [Savannah Sparrow](#) -- [Vesper Sparrow](#) -- [Clay-coloured Sparrow](#) -- [Chestnut-collared Longspur](#) -- [McCown's Longspur](#) -- [Sprague's Pipit](#) -- [Lark Bunting](#) -- [Bobolink](#) -- [Baird's Sparrow](#) -- [Grasshopper Sparrow](#) -- [Brewer's Sparrow](#) -- [Western Kingbird](#) -- [Loggerhead Shrike](#) -- [Lark Sparrow](#) -- [Rock Wren](#) -- [Say's Phoebe](#) -- [Yellow-breasted Chat](#)

Grasslands Habitats

- some great photos of grassland habitats and inhabitants
 1. [Original Fescue Grassland, Southwest Alberta](#) © INMAGINE [Source](#)
 2. [Two Track Prairie Vista, Central Shortgrass Prairie, Northeast Colorado](#) ©

- "Fort Photo" [Source](#)
3. [Evening Lineup, Southeast Colorado Prairie](#) © "Fort Photo" [Source](#)
 4. [From Prairie to Peaks En Plein Air, Colorado?](#) © "Fort Photo" [Source](#)
 5. [Wide Open Prairie, Northeast Colorado](#) © "Fort Photo" [Source](#)
 6. [Prairie, Colorado?](#) © "Fort Photo"
 7. ["The World's Best Photos of Grassland and Prairie"](#) ©
 8. [Pronghorn](#) © Alan MacKeigan [Source](#)
 9. [Badger](#) © FOTOSEARCH [Source](#)

Five Widespread Species

- the commonest and most widespread species
- the ones you need to know first

Horned Lark



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- chest band, face markings
- long and thin when flies - a look about it that separates it from sparrows
- generally blackish tail but may show white outer tail feathers
- commonest grassland bird, abundant in a wide variety of open habitats
- returns very early - long breeding season
- can be incredibly abundant in open grasslands of southeast Alberta
- prefers short, sparsely vegetated prairies and agricultural lands - prefers bare ground to grasses taller than a few centimetres
- areas suitable for nesting in early spring often unsuitable by late spring or early summer because vegetation has grown too tall
- short song usually 3 ascending notes followed by a rapid, slurred series of chittered notes
- long song - a series of rambling notes, ending as short song
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Montana](#) recorded by R.C. Stein
 - [North Dakota](#) recorded by G.A. Keller
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Saskatchewan](#) recorded by W.W.H. Gunn
- song delivered from a perch, or on the wing 80-250 m high
- in flight, bird glides with wings and tail spread, then regains altitude and repeats the song.
- at end of the flight, closes wings and plunges directly to earth - when near ground opens his wings and may make an upward loop, and then may land on a song post

Western Meadowlark



© Alan MacKeigan [Source](#)

- returns early - not as early as horned lark
- the true prairie "sign of spring"
- large, chunky, short tail, prominent white outer tail feathers
- flight similar to that of grouse, alternating periods of gliding with wings held stiff and periods of rapid wing beats below the horizontal
- very active and prominent in its territory
- will sit on perch and hunch down as you drive by
- most common in native grasslands and pastures, but also in other open areas
- several calls, including
 - chupp - single, explosive note
 - rattle
- complex melodious song - initial series of 1-6 rather pure whistles, and terminal phrase of 1-5 gurgling elements
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [North Dakota](#) recorded by G.A. Keller
 - [British Columbia](#) recorded by R.C. Stein
 - [Manitoba](#) recorded by W.W.H. Gunn
- [video of singing male, California](#) ©D. DesJardin Source:[Internet Bird Collection](#)
- sings more typically from perches - preference for highest perches with unobstructed views
- regular song also given on the wing
- true flight song - a hurried, ecstatic twittering or warbling, normally begun by several whistles at increasingly shorter intervals.

Savannah Sparrow



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- streaked breast, yellow over eye which can be quite light
- nothing diagnostic when you see it fly up from roadside
- widespread and common
- likes dense grass, overgrown meadows, slough edges, moist grasslands, areas that are damp or low-lying
- song high-pitched, buzzy, pattern
- several short staccato introductory notes followed by a more complex phrase of longer notes on different pitches
- somewhat suggestive of Song Sparrow
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [British Columbia](#) recorded by R.C. Stein
 - [Manitoba](#) recorded by G.A. Keller
 - [Alberta](#) recorded by R.C. Stein

Vesper Sparrow



© Alan MacKeigan [Source](#)

- [another great photo](#) © B. Craig Source: [BirdPhotographique](#)
- brown-streaked sparrow with white outer tail feathers
- flushes from road edges with diagnostic white outer tail feathers
- widespread and common
- broad range of grassland habitat types
- dry, open habitats with short, sparse, patchy herbaceous vegetation and some bare ground
- uses cultivated fields and pasture
- common along secondary roads in weedy roadside vegetation
- song sweet and musical, generally starting with 2-4 long, clear notes, followed by a downward slur and shorter flutelike trills, rising then falling in pitch
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [British Columbia](#) recorded by R.C. Stein
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Alberta](#) recorded by W.W.H. Gunn
- requires elevated perches for singing, such as fence posts, shrubs, or trees bordering fields
- singing greatest in early morning, with a second peak in evening around sunset

Clay-colored Sparrow



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- streaked crown, brown ear patch
- common species of open shrubland, thickets along edges of waterways, second-growth areas
- widespread where there are shrubs in grasslands
- song a series of 2 to 8 low flat buzzes, insect-like
- bizz buzz buzz
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Saskatchewan](#) recorded by R.C. Stein
 - [British Columbia](#) recorded by R.C. Stein
 - [Manitoba](#) recorded by W.W.H. Gunn
- sings throughout day on breeding grounds
- sings from perch 0.5-3 m above ground, sometimes well hidden, often conspicuous on top of shrub, low tree, fence line, or utility wire

Five Flight Songsters

- these 5 species have song flights
 - one of the fascinating aspects of prairie birding
- they have distinct and very prominent flight songs
- very different from their normal way of flying
- draws attention to singing male declaring his territory or attracting a mate

Chestnut-collared Longspur



© Alan MacKeigan [Source](#)

- male - black belly very obvious when faces you
- chestnut on nape of neck
- extensive white in short tail
- widespread and reasonably common
- prefers native prairie - typically arid, short- to mixed-grass prairie that has been recently grazed or mowed
- often perches near top of low bush or rock or wire fence and may sing from there
- song somewhat similar in quality to that of Western Meadowlark
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Manitoba](#) recorded by W.W.H. Gunn
 - [Manitoba](#) recorded by W.W.H. Gunn
- flight song - flies around territory with roller-coaster flight
- goes up 10-15m then after peak, sings during descent with spread tail, often flapping in descent
- will perform several such displays without landing
- where to find it
 - east of Brooks - Kininvie area - [map](#)
 - south of Cypress hills to Wild Horse and east to Saskatchewan - [map](#)
 - Pinhorn Grazing Reserve - [map](#)
 - Purple Springs - [map](#)
 - many other native grassland areas

McCown's Longspur

McCown's Longspur



© Alan MacKeigan [Source](#)

- gray bird with black bib and crown
- rusty in wings, white throat
- also has much white in tail
- open plains with sparse vegetation, native shortgrass prairie, or structurally similar habitats, such as overgrazed pastures
- some overlap with Chestnut-collared Longspur, but prefers sparser, shorter vegetation
- tinkling song, sometimes from a perch, more commonly as a flight song
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Montana](#) recorded by G.A. Keller
- flight song - male flutters upward to higher than Chestnut-collared Longspur does
- then descends, teetering with outstretched wings held back to display the vivid white lining, with tail fanned, and issuing a tinkling, warbling song and rarely

- flapping wings
- parachutes down - diagnostic field mark
- may alight on ground, but more typically rises up and repeats display
- [video of flight song](#) ©S. Siegel Source; [Internet Bird Collection](#)
- status (COSEWIC) - "special concern"
 - may become threatened/endangered because of biological characteristics and identified threats
- less common than Chestnut-collared Longspur
- where to find it
 - east of Brooks - Kininvie area - [map](#)
 - south of Cypress Hills to Wild Horse and east to Saskatchewan - [map](#)

Sprague's Pipit



© Alan MacKeigan [Source](#)

- [another great photo](#) © B. Schmoker [Source](#)
- obscure grassland species
- very difficult to see on the ground
- slender, thin bill, pale face, white outer tail feathers
- prefers well-drained native grasslands without shrubs, with grass 6-12 inches high
- status (COSEWIC) - "threatened"
- flight song - thin, relatively high-pitched, slightly descending tzsee-tzsee-tzsee-tzsee-tzsee-tzsee-tzsee, lasting about 3 seconds
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Manitoba](#) recorded by W.W.H. Gunn
 - [Manitoba](#) recorded by W.W.H. Gunn
- rises in undulating flight to 100 m or so, where it can be very difficult to see
- long periods of circling over territory, constantly flapping except while singing
- can display continuously for 10 minutes up to a record of 3 hours
- when singing, male extends wings horizontal to the body with tail slightly spread and enters a glide for the duration of the song
- at end of display, male plummets straight down and just before reaching the ground, levels off and flies a few metres before dropping into the grass
- where to find it
 - east of Brooks - Kininvie area - [map](#)
 - south of Cypress Hills - from sloping hills out onto level grasslands - [map](#)

Lark Bunting



© Alan MacKeigan [Source](#)

- male black with white wing patch - very noticeable
- female streaked, sparrow-like, with white wing patch
- preference for extensive natural grasslands and shrub-steppe
- males establish territories in what appears to be a colony
- song from perch or in flight
- consists of blocks of notes one after the other
- variety of whistles and trills, both sweet and harsh in tone
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Saskatchewan](#) recorded by W.W.H. Gunn
- aerial song flight is often described as "butterfly flight" with slow exaggerated wing beats
- flight song often given communally with as many as 5 or 6 males displaying simultaneously
- [video of singing male](#) ©S. Siegel Source; [Internet Bird Collection](#)
- densities of prairie populations vary greatly from one year to next, and between locations within a year
- difficult to say where to find it
- could be anywhere in extensive grassland areas of the southeast
- might try
 - east of Brooks - Kininvie area - [map](#)
 - Wild Horse area - [map](#)
 - Purple Springs area - [map](#)

Bobolink



© Alan MacKeigan [Source](#)

- male black with yellow on back of head and much white on back
- may be several males together as in small colony
- in my view, prefers lush grasslands or hay fields
- males sing in flight and from perches
- long, bubbly song, often given while flying low over their territories
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [British Columbia](#) recorded by R.C. Stein
 - [Manitoba](#) recorded by W.W.H. Gunn
 - [Manitoba](#) recorded by W.W.H. Gunn
 - [North Dakota](#) recorded by G.A. Keller
- song flight - flies in circular path
- wingbeats alter at moment song commences - beat in a hovering fashion, with wings barely attaining horizontal position at peak height
- wingbeats are more rapid than in silent flight
- head is usually up and tail down, exposing white on rump and fluffing out white

- plumage on shoulders
- scarce/scattered in Alberta
- where to find it
 - Writing-on-Stone Provincial Park - [map](#)
 - Horse Creek Road (northwest of Calgary)

Three Sparrows

- obscure grassland species
- most easily found and identified by their songs

Baird's Sparrow



© Alan MacKeigan [Source](#)

- orange on face, necklace of short streaks
- difficult to observe when on ground
- mixed-grass and fescue prairie with scattered low shrubs and weedy vegetation
- ungrazed to moderately grazed tracts of native prairie
- favours larger patches of native prairie away from roads
- likely to be found and identified by song
- song composed of series of quick, clear introductory notes usually with trilled ending
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Montana](#) recorded by R.S. Little
 - [Manitoba](#) recorded by W.W.H. Gunn
- generally sings from tops of grass clumps and available shrubs, where it is often visible
- appears partially nomadic, sometimes exhibiting dramatic shifts in population densities from one year to the next

- likely an evolved response to shifting habitat suitability due to the unpredictable influences of fire, drought, and the movements and grazing of bison
- may be difficult to find
- might try east of Brooks - [map](#)

Grasshopper Sparrow



© Alan MacKeigan [Source](#)

- [another great photo](#) © T. Munson [Source](#)
- obscure sparrow with yellow spot and clear buffy breast
- often locally distributed
- prefers thicker, brushier sites in shortgrass prairie
- more likely to occupy large tracts of habitat than small fragments
- common song delivered from fixed perch
- 2 short, staccato, high-pitched preliminary notes followed by a long, dry, insect-like stridulation tsick, tsick, tsurrrrrr sustained song - usually delivered from fixed perch but also in flight
- more musical - long, sustained (5-15 seconds) series of short, buzzy notes varying slightly in pitch
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [North Dakota](#) recorded by G.A. Keller
 - [North Dakota](#) recorded by G.A. Keller
 - [Manitoba](#) recorded by W.W.H. Gunn
- scarce in Alberta
- a few traditional sites
- try Purple Springs area - [map](#)

Brewer's Sparrow



© Alan MacKeigan [Source](#)

- [another great photo](#) © J. Prudente [Source](#)
- like dull Clay-colored Sparrow with fine streaks rather than stripes in crown
- bird of sage shrublands - the commoner the sage the commoner the Brewer's Sparrows
- sings almost exclusively from elevated positions in shrubs, primarily sagebrush
- song consists of variety of buzzing, bubbling, wheezing, and trilling on different pitches
- short song of 1-3 buzzy trills
- long song of 5-10 trills
- some song recordings © [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Colorado](#) recorded by W.W.H. Gunn

- [Wyoming](#) recorded by R.S. Little
- [Oregon](#) recorded by G.A. Keller
- [video of singing male](#) ©D. DesJardin Source; [Internet Bird Collection](#)
- look for it in extensive sage flats areas of southeast Alberta
- try Sage Creek (north of Wild Horse) - [map](#) - or other sage flat areas
- try Purple Springs - [map](#)

Two Farmstead/Shelterbelt Species

- usually around areas in grasslands where there are nearby trees and shrubs
- have two of my favourite grassland species
- a number of other species are found in this habitat

Western Kingbird



© Alan MacKeigan [Source](#)

- conspicuous and colourful
- widespread in riparian zones of the prairies, farm shelter belts, and prairie towns
- human presence in many of these habitats is often important
- calls short choppy - given very frequently
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Manitoba](#) recorded by W.W.H. Gunn
 - [Manitoba](#) recorded by W.W.H. Gunn
- forages by aerial hawking and perch-to-ground flights, often with acrobatic flying maneuvers
- vigorously defends a small territory around its nest

Loggerhead Shrike



© Alan MacKeigan [Source](#)

- grey, black mask, large head,
- open country with short vegetation: grasslands, pastures with fence rows, riparian areas, farm shelterbelts
- becoming scarcer in Alberta
- try area northwest of Leader, SK
- status (COSEWIC) - "threatened"
- look for it anywhere in southeast where there are shrubs or trees
- in my experience song rarely encountered
- sit-and-wait predator that uses high perches
- may hover when foraging
- usually makes short flights between perches by dropping down to a low level and,

with fast beating of short wings, ends by rising upward to alight on perch

Three Badlands Species

- badlands are a unique and spectacular habitat
- few Canadians know we have such spectacular badlands in Canada
- in addition to these three another songbird to watch for on the badland slopes is the Mountain Bluebird

Badlands Photo

- some great photos of badlands
 1. [Red Deer River and Badlands, Dinosaur Provincial Park](#) ©H. Tarrant [Source](#)
 2. [Erosion, Writing-on-Stone Provincial Park](#) ©R. Rasmussen [Source](#)
 3. [Milk River, Writing-on-Stone Provincial Park](#) ©R. Rasmussen [Source](#)

Lark Sparrow



© Alan MacKeigan [Source](#)

- striking head pattern, breast spot, prominent white tail corners
- open habitats or ecotones
- brushy coulees, badlands, with mixture of bushes, shrubby grasses and bare earth
- may be found near farmsteads
- sings from elevated perches such as fence posts, tops of small trees or shrubs
- song is a melodious jumble of rich notes and trills ranging in pitch and volume and interspersed with unmelodious harsh buzzes or churrs
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [British Columbia](#) recorded by W.W.H. Gunn
 - [British Columbia](#) recorded by W.W.H. Gunn
 - [Oregon](#) recorded by R.S. Little
 - [Utah](#) recorded by K.J. Colver
- males perform turkey-like strutting with tail upright, flashing white tail spots, and wings dropped to the ground
- unique behaviour of passing a twig from male to female during copulation
- where to find it
 - Dinosaur Provincial Park - [map](#)
 - Writing-on-Stone Provincial Park - [map](#)

Rock Wren



© Alan MacKeigan [Source](#)

- large thin bill, finely streaked breast, frequently bobs
- arid or semiarid areas with exposed rock outcroppings, badlands
- requires barren substrate with little or no vegetation for foraging and crevices for nest-building
- more easily heard than seen
- most frequently heard call note often described as "tick-ear," given with an energetic bob
- song consists of repeated series of syllables,
- "kerie kerie kerie, chair chair chair chair, deedle deedle deedle deedle, tur tur tur tur, kerie kerie kerie trrrrrrr"
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Colorado](#) recorded by G.a. Keller
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Saskatchewan](#) recorded by W.W.H. Gunn
- where to find it
 - Dinosaur Provincial Park - [map](#)
 - Writing-on-Stone Provincial Park - [map](#)

Say's Phoebe



© Alan MacKeigan [Source](#)

- grey flycatcher with tawny belly and dark tail
- in Alberta, inhabits badlands, prairie coulees, riverbanks, and prairie farms
- may call from ground or a perch
- all despondent
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Saskatchewan](#) recorded by W.W.H. Gunn
 - [Alaska](#) recorded by L.J. Peyton
- may be repeated frequently
- phee-eur call is the most common vocalization
- some other common calls
- foraging flights usually direct, but often erratic during extended pursuits
- frequently hovers while foraging
- where to find it
 - Dinosaur Provincial Park - [map](#)
 - Writing-on-Stone Provincial Park - [map](#)

One Last Riparian Species

- the tree/shrub habitat along prairie rivers and streams
- another of my arbitrary favourites

- one of many species found in this habitat

Yellow-breasted Chat



© Alan MacKeigan [Source](#)

- large bright yellow unwarblerlike warbler
- in Alberta found along streams in low, dense vegetation without a closed tree canopy
- wide variety of calls and highly variable songs - collection of whistles, cackles, mews, catcalls, caw notes, chuckles, rattles, squawks, gurgles, and pops
- some song recordings ©[Macaulay Library, Cornell Laboratory of Ornithology](#)
 - [Utah](#) recorded by R.S. Little
 - [British Columbia](#) recorded by W.W.H. Gunn
- male frequently sings while concealed in dense thickets but may sing while exposed on prominent perch
- flight display usually begins from a high perch from which male (while singing) descends, often in jerky bounces, with exaggerated wing-beats, drooping his often spread tail and sometimes dangling his legs
- [video of singing male](#) ©D. DesJardin Source; [Internet Bird Collection](#)
- scarce in Alberta
- where to find it
 - Writing-on-Stone Provincial Park - [map](#) - listen for it in dense shrubs on south side of the river

Some of My Favourite Grassland Sites

- Kininvie area - [map](#)
- Purple Springs - [map](#)
- South of Cypress Hills to Wild Horse - [map](#)
- Pinhorn Grazing Reserve - [map](#)
- Dinosaur Provincial Park - [map](#)
- Writing-on-Stone Provincial Park - [map](#)

Non-Passerines

- see [Birding the Grasslands - 2. Non-Passerines](#)

Acknowledgements

- [Alan MacKeigan](#)
 - for permission to use his photographs in this presentation
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 - as acknowledged and linked to through this presentation

- [Macaulay Library, Cornell Laboratory of Ornithology](#)
 - for sound recordings
- [Internet Bird Collection](#)
 - for bird videos
- [Birds of North America Online](#) (click here for [Calgary Public Library users](#))
 - for reference information