

Nature Calgary Bird Study Group - Speaker Series

Birding the Grasslands - 2. Non-Passerines by C. Eric Tull

Speaker at Bird Study Group meeting May 2009

Introduction

- Last year I prepared a workshop on [Birding the Grasslands - 1. Passerines](#)
- not intended so much as an identification workshop, but rather as a chance to get to know the birds
- emphasis was on
 - behaviour
 - song
 - flight song
 - habitat
 - where to find it
- the present workshop is a continuation of last year's workshop, dealing this time with the non-passerines



Baird's Sparrow
© Al MacKeigan

[Sharp-tailed Grouse](#) -- [Greater Sage Grouse](#) -- [Gray Partridge](#) -- [Swainson's Hawk](#) -- [Ferruginous Hawk](#) -- [Golden Eagle](#) -- [Prairie Falcon](#) -- [Long-billed Curlew](#) -- [Upland Sandpiper](#) -- [Mountain Plover](#) -- [Piping Plover](#) -- [Common Nighthawk](#) -- [Short-eared Owl](#) -- [Burrowing Owl](#)

Non-Passerines:

- generally larger than songbirds and in some ways more evident
- considerably less numerous than songbirds
- song is often not important for detection or identification

Three "Chickens"

- grouse or grouse-like birds
- remain on prairies year-round
- some have elaborate dances at leks for mate selection

Sharp-tailed Grouse



© [Alan MacKeigan](#)

- medium-sized cryptically-coloured grouse
- V-shaped marks on breast
- pointed tail with white sides often evident when it flies
- walks on ground, may crouch if disturbed
- usually seen flying only when flushed
- occasionally seen perched in trees or bushes
- breeding habitat dominated by relatively dense herbaceous cover and shrubs
- leks often on flatter sites with less vegetation than surrounding areas
- in winter, often relies on riparian or shrubby areas
- males may be near or at leks at any time throughout the year
- males gather at leks in late March and April in early morning and evening
- with outstretched wings, extended head and combs, expanded air sacs, and upturned tail, performs mating dance by rapidly stamping feet
- males alternate periods of dancing with standing still with wings outstretched
- disputes his territory within lek with other males
- females choose mates from among dancing males – for mating only, as male plays no further role in nesting or rearing of young
- photo of [dancing male](#) © D.J. Cox
- video of [dancing males at lek](#)
- widespread but scattered across Alberta grassland and parkland areas
- occurs in small numbers in boreal Alberta
- numbers vary considerably from year to year
- populations may cycle over a period of a number of years
- could be anywhere in southern Alberta
- might try [Writing-on-Stone Provincial Park](#)
 - there was a lek there 10 years ago
- might try Cypress Hills Provincial Park or Manyberries area

Greater Sage Grouse



source: [Digital Library System, USFWS](#)

- photo of [female](#) © [J. Prudente](#)
- very large grouse
- males larger than females
- long tail, blackish belly patch
- walks, does not run well
- usually resorts to hiding or flying if threatened
- strong flier

- highly sociable - groups of birds often found close together
- closely associated with sagebrush ecosystems
- adapted to a range of sagebrush habitat types
- lek sites have less herbaceous and shrub cover than surrounding habitats
- males gather at leks in late March and April primarily in early morning but sometimes in evening
- males dispute their territories within lek with other males
- males strut with tails fanned and upright, and chest and large ruff puffed out
- large pouches in ruff are expanded with plop sound
- alternate strutting with standing still
- intensity of strutting increases when females are present
- females choose mates from among strutting males
- photo of [strutting male](#) © [J. Prudente](#)
- video of [strutting males at lek](#) © [G. Patricelli](#)
- found in sage areas of extreme southeastern Alberta, but now very hard to find
- numbers have been plummeting – endangered species
- might find it in Manyberries or [Wild Horse](#) areas

Gray Partridge



© [Anne Elliott](#)

- photo of a [male](#) © [T. Munson](#)

- photo of a [male on snow](#) © [T. Munson](#)
- introduced European species
- smaller than Sharp-tailed Grouse
- gray-brown in colour with tan-orange on face
- male has dark belly patch
- rufous in tail evident in flight
- walks or runs rapidly on ground
- feeds on ground - video of [feeding birds](#) © *M.M. Swan*
- often flies up with explosive take-off
- flies with rapid wingbeats alternating with short glides
- usually seen in pairs or small groups in spring or in coveys of ~10 in fall and winter
- high reproductive capability with large clutches
- male remains paired with female during nesting cycle
- agricultural fields and grasslands
- best habitat appears to be where cereal grains dominate and where extensive hedgerows are present
- widespread in grassland and parkland areas of Alberta
- occurs around and within Calgary where there are areas affording shelter
- note: this species is often of interest to visiting birders coming from the East or the South

Four Raptors

- hawks, eagles and falcons found in grassland areas
- some are restricted to grasslands
- some are more widespread but are characteristic of the grasslands
- often seen flying, so identification of flying birds is important

Swainson's Hawk



© [Alan MacKeigan](#)

- photo of a [light morph adult](#) © *K. Bakker*
- photo of a [light morph adult in flight](#) © [B. Schmoker](#)
- audio of [Swainson's Hawk call](#) © *W.W.H. Gunn: [Macaulay Library](#)*
- buteo – bulky bodied hawk that soars on broad, rounded wings with short broad tail
- soars with shallow dihedral
- perches on high points such as power poles
- dark chest with light belly and light throat patch
- in flight, dark trailing edge of wing contrasts with pale leading edge
- back is relatively evenly coloured
- intermediate and dark morph birds occur in small numbers

- forages in open stands of grass-dominated vegetation, sparse shrublands, and small, open woodlands
- has adapted well to foraging in agricultural areas where crop is not too high nests in scattered trees or shelterbelt within these grassland, shrubland, or agricultural landscapes
- widespread across grassland and parkland areas of Alberta
- one of the commonest hawks in these areas
- often seen in open areas within Calgary

Ferruginous Hawk



© USFWS [Source](#)

- photo of a [light morph adult](#) © [B. Schmoker](#)
- photo of a [light morph adult taking flight](#) © [B. Schmoker](#)
- video of [light morph adult in flight](#) © [D. DesJardin](#)
- audio of [Ferruginous Hawk call](#) © [W.W.H. Gunn: Macaulay Library](#)
- buteo – bulky bodied hawk that soars on broad, rounded wings with short broad tail
- whitish below, whitish upper tail, white flash in upper primaries
- rufous across back and upper wings
- rufous legs contrast with white body in flight

- may hover like Rough-legged Hawk
- perches on high points such as power poles
- dark morph birds occur in small numbers
- flat or rolling grassland or sagebrush country
- may occur in areas with some croplands
- strong preference for elevated nest sites, such as lone trees, cliffs, utility poles
- will nest on level ground when elevated sites are absent
- posts with V-shaped nesting structure have been set out in grassland areas for their use
- widespread but scarce in grassland areas of southeast Alberta
- ranges to near Calgary area (Frank Lake)
- might try, among other areas
 - [Kinninvie](#) area
 - [Wild Horse](#) area
 - [Purple Springs](#) area

Golden Eagle



© [Alan MacKeigan](#)

- photo of an [adult](#) © *D.&M. Zimmerman*
- photo of an [adult in flight](#) © *W. Hull*
- photo of an [immature in flight](#) © *W.S. Clark*
- buteo-like but larger with long rounded wings
- soars on thermals or glides into wind
- flapping flight appears laboured
- adult overall dark brown with golden crown and nape
- subadult dark brown with sharply-defined white base of tail and white flash in wing
- will perch on high points with good view
- occurs primarily in grasslands, mountains and open desert
- forages in open habitats
- usually nests on cliffs but may nest in trees or on ground
- nests often have a wide view of surrounding area
- widespread but scarce across grasslands of Alberta
- nests primarily along the major river valleys where there are cliffs available
- might try
 - [Dinosaur Provincial Park](#)
 - [Writing-on-Stone Provincial Park](#)
- also nests in the mountains and large numbers migrate through the mountains going to and from the north

Prairie Falcon



© [John Carlson](#)

- photo of an [adult](#) © [B. Schmoker](#)
- photo of a [bird in flight](#) © [B. Schmoker](#)
- photo of another [bird in flight](#) © [T. Munson](#)
- Peregrine-sized brown-backed falcon with eye-line and pale moustachial stripe
- streamlined powerful flier with pointed wings and longish tail
- dark wing linings evident in flight
- often flies low over grasslands in search of ground prey
- open habitats, including grasslands, desert and alpine tundra
- nests primarily on cliffs, but also in trees and on man-made structures
- nests on ledges or cavities on cliffs or in stick nests built by other cliff-nesting birds
- often heard near nest before it is seen
- alarm call shrill yelping kik-kik-kik
 - audio of [Prairie Falcon calling](#) © W.W.H. Gunn: [Macaulay Library](#)
- widespread but scarce across grasslands of Alberta
- nests primarily along the major river valleys where there are cliffs available
- might try

- [Dinosaur Provincial Park](#)
- [Writing-on-Stone Provincial Park](#)
- also breeds in foothills and mountains

Other Prairie Raptors

- other raptors regularly found in the grasslands include
 - Red-tailed Hawk
 - Rough-legged Hawk (in migration)
 - Northern Harrier
 - Merlin (near riparian areas and shelterbelts)
 - American Kestrel
 - Peregrine Falcon (population numbers are recovering)

Three Dryland Shorebirds

- in Alberta, usually found in dry grasslands - not near water
- two are widespread but scarce
- one is only marginal in Alberta and very hard to find

Long-billed Curlew



source: [Digital Library System, USFWS](#)

- photo of an [adult](#) © S. Messick

- photo of an [adult in flight](#) © [B. Schmoker](#)
- very large shorebird with huge long bill that is decurved at end
- cinnamon wing linings evident in flight
- often detected by ear
 - alarm call of short repeated notes
 - long drawn out curl—e-e-e-e-u-u-u
 - audio of [Long-billed Curlew calls](#) © *W.W.H. Gunn*: [Macaulay Library](#)
- male has display flight during early breeding season
 - climbs silently with rapid, fluttering wing-beats
 - with wings set glides down to close to ground then climbs again
 - repeated calls while on downglide
- nests primarily in short-grass or mixed-prairie habitat with flat to rolling topography
- may nest in agricultural fields
- widespread but uncommon in grassland region of Alberta, with range approaching Calgary

Upland Sandpiper



© Ronnie D'Entremont

- photo of an [adult](#) © *W. Hull*
- photo of an [adult on a post with wings raised](#) © *B. Craig*
- video of [adult in field](#) © *B. Wayman*

- medium-sized sandpiper with small head, thin neck and short bill
- often perches on top of fence posts
- typically holds wings erect briefly after alighting on perch or ground
- on breeding grounds flies with stiff-winged flutter
- may nest in loose colonies with several pairs in the same general area
- alarm call is a repeated short note
- gives long drawn-out wolf-whistle call
- audio of [Upland Sandpiper calls](#) © W.W.H. Gunn: [Macaulay Library](#)
- in display flight over nesting area, male glides with outstretched wings and gives wolf-whistle call
- open dry grassland habitat
- preference for taller grasses
- widespread but uncommon in grassland region of Alberta
- also occurs further north
- range includes Calgary area (eg, Horse Creek Road)

Mountain Plover



© [John Carlson](#)

- photo of a [breeding-plumaged adult](#) © S. Messick
- video of a [winter-plumaged adult](#) © D. DesJardin
- Killdeer-sized plover with drab sandy-brown colouration, lacking a breast band

- bird of open, flat, dry habitats with low, sparse vegetation
- in grasslands, occupies areas of extreme disturbance, such as overgrazed or recently burned areas
- seems a secretive bird – difficult to find
- occurs in very small numbers in extreme southeastern Alberta
- existence in Canada is only marginal
- has nested in [Wild Horse](#) and Onefour areas

One Wetland Shorebird

Piping Plover



source: [Digital Library System, USFWS](#)

- photo of an [adult](#) © T. Vezo
- video of a [adult on beach](#) © A. Elzinga
- small plover with single neck ring
- pale back, colour of dry sand
- orange legs
- alarm call is a single piping note
- audio of [Piping Plover call](#) © W.W.H. Gunn: [Macaulay Library](#)
- nests on sand or gravel beaches on shores of large, isolated and often saline lakes
- may also nest on alkali flats, river islands and other bare shoreline habitats
- endangered – numbers are dropping

- intolerant of human disturbance
- in Alberta, primarily found on shores of lakes in grassland and parkland region between North and South Saskatchewan Rivers, and east of Red Deer River

Other Wetland Shorebirds

- other shorebirds that breed at wetlands within the grasslands include
 - American Avocet
 - Black-necked Stilt
 - Killdeer
 - Wilson's Snipe
 - Marbled Godwit
 - Willet
 - Spotted Sandpiper
 - Wilson's Phalarope
- many other species stop on their way through during spring and fall migrations

Three Day-flying Nightbirds

- belong to families of birds normally considered nocturnal – owls and goatsuckers
- these species can sometimes be found flying or sitting out during daylight

Common Nighthawk



© [John Carlson](#)

- photo of an [adult in flight](#) © [B. Schmoker](#)

- photo of a [perched adult](#) © [B. Schmoker](#)
- mottled-brown bird with large eye and small bill, long wings and tail
- usually seen (and heard) flying when it hunts flying insects
- long pointed wings with white transverse bar
- erratic swooping bat-like flight
- frequent loud penetrating peent call given when in flight
- during nesting season, males display by diving and making a booming sound with their wings
- audio of [peent call and boom](#) © *W.W.H. Gunn*: [Macaulay Library](#)
- may perch on post or lengthwise on fencerail in open habitat relying on its cryptic colouration for camouflage
- wide range of habitat types, including grasslands and other open areas and openings in forests to the north
- widespread but uncommon in grassland, parkland and boreal regions of Alberta
- generally to the east of Calgary
- considered a threatened species as numbers have dropped

Short-eared Owl



© [Alan MacKeigan](#)

- photo of an [adult in flight](#) © *G. Tepke*
- medium-sized owl usually detected in flight
- big-headed appearance in flight
- often seen foraging during the day with moth-like, buoyant, slow, deliberate wing beats
- hunts low above the ground, with slow, agile, maneuverable flight, flapping alternating with gliding and sometimes hovering
- video of an [adult in flight](#) © *J. del Hoyo*
- found in open country, including grasslands, arctic tundra, marshes, other open habitats, and some agricultural areas
- numbers in an area, which are correlated with abundance of small mammals, fluctuate considerably from year to year
- widespread but scarce in grassland and parkland regions of Alberta, but with fluctuating and overall decreasing numbers

Burrowing Owl



© Alan MacKeigan [Source](#)

- photo of a [family group](#) © *A. Grosset*
- video of an [adult by its burrow](#) © *D. DesJardin*
- audio of [Burrowing Owl calls](#) © *W.W.H. Gunn*: [Macaulay Library](#)

- small long-legged owl that stands vertically on the ground
- nests in burrows dug by ground squirrels or other mammals
- look for them standing in fields on bare earth mounds beside a burrow
- in late summer may see whole family standing by one or more burrows
- found in dry, open, shortgrass, treeless areas, often in areas that have been heavily grazed
- endangered – numbers have been dropping precipitously
- occurs in southeast, but becoming very difficult to find in Alberta
- might try
 - [Kininvie](#) area
 - [Wild Horse](#) area
 - [Purple Springs](#) area

Grassland Passerines

- see [Birding the Grasslands - 1. Passerines](#)

Grassland Birds are in Trouble

- Grassland birds in Canada are among the groups that have declined over 40% since 1970, mainly due to habitat loss. ([State of Canada's Birds 2012, Environment Canada](#))
-
- ["Grass, Sky, Song: Promise and Peril in the World of Grassland Birds"](#) by Trevor Herriot, 2009, describes the joy of Canada's grasslands birds and the threats to their survival. Also read his blog, [Grass Notes](#). CBC Radio produced "Pastures Unsung", April 2007 using interviews with Mr. Herriot.
-
- Grassland birds are among the fastest and most consistently declining birds in North America; 48% are of conservation concern and 55% are showing significant declines...Eight of twelve sparrow species are listed as of conservation concern ([U.S. Dept. Interior, State of the Birds, 2009](#))
- Grassland birds have shown the most consistent and pervasive declines of all birds monitored by the Breeding Bird Survey, and are in need of conservation attention ([Blancher, Bird Studies Canada, 2003](#))
- Of the 47 grassland bird species...ten are red WatchList...the highest proportion of red WatchList species for any of the major habitat types ([National Audubon Society, 2007](#))

[COSEWIC](#) Status of Canadian Grassland Birds

- **Extirpated**

- Greater Prairie Chicken
- **Endangered**
 - Greater Sage-Grouse
 - Piping Plover
 - Mountain Plover
 - Burrowing Owl
 - Sage Thrasher
- **Threatened**
 - Ferruginous Hawk
 - Common Nighthawk
 - Sprague's Pipit
 - Loggerhead Shrike
- **Special Concern**
 - Long-billed Curlew
 - Short-eared Owl
 - McCown's Longspur

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](#)

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 - for sound recordings
- [Internet Bird Collection](#) and [YouTube](#)
 - for bird videos
- [Birds of North America Online](#) (click here for free access for [Calgary Public Library users](#))
 - for reference information