BIRDS IN FORT COLLINS

CITY OF FORT COLLINS NATURAL RESOURCES DEPARTMENT MASTER NATURALIST TRAINING

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TOPICS WE WILL COVER TODAY

- The appeal of birds
- Basic facts about birds
- Birds by the numbers
- Issues of food, water, and cover
- Hazards to birds
- Special birds of the Fort Collins area
- Key reference books and other resources



THE APPEAL OF BIRDS

- Certainly the "most watchable" group of animals
- Attractable to our yards for close looks
- Many colorful and interesting species
- Present in all habitats and seasons



BIRDS BY THE NUMBERS

- 9700+ species in the World
- 800+ species in North America
- 480+ have occurred in CO



- 375+ species on the Fort Collins/Larimer checklist
- 250+ species breed in CO
- 100+ spp. could be found in an average FC yard over a period of years with diligence
- Probably about 200 species present today somewhere in Larimer County

WHY IS COLORADO A GOOD PLACE FOR BIRDS?

- Little bit N, E, S, & W
- Elevational diversity
- Many habitat/vegetation types
- Varied topography (plains/desert all the way to mountain tops above timberline)
- Location in relation to migration flyways and weather systems
- Plenty of public land
- 1000's of miles of riparian habitat

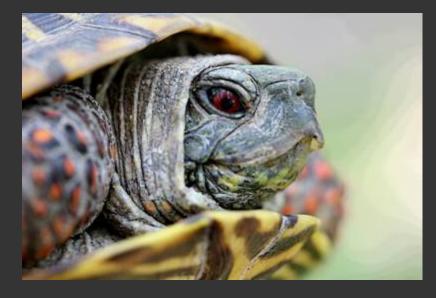
HORNED LARK

- Most abundant breeding bird in Colorado (robin is #2)
- Estimated 1-4 million breeding pairs
- Likes prairie and tundra areas (i.e., very short vegetation)



JUST THE RIGHT NUMBER

 You'll see more kinds of birds on a walk (maybe 15-30) than herps or mammals (maybe 3-5)



• You'll see more insects but they are too many, too small, and too hard to identify



BIRDING LISTS: A MATTER OF LIFE AND DEATH

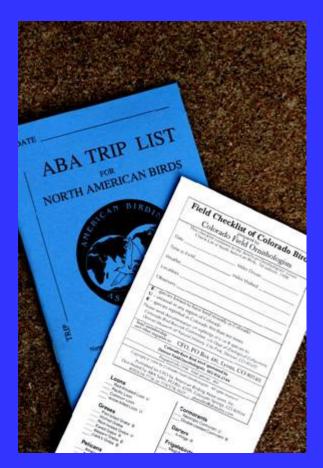
- Oh, the games we play!
- A partial list of lists:



- Life list (your stature as a human being is determined by this list – wear it on your chest)
- Year list
- County list
- Yard or special place list
- Species-seen-flying-north-on-Tuesday list
- Other lists (many, many other lists)

CHECKLISTS

- A fun way to keep track of what you see
- Usually arranged in taxonomic order
- Often contain info about seasonal status and abundance



BASIC FACTS ABOUT BIRDS



- Descended (probably) from theropod dinosaurs, "modern" orders going back about 65 million years (early Cenozoic)
- Most can fly (hollow bones)
- Many of them migrate long distances
- Key activities involve food and reproduction, also roosting, maintenance

HEAVIEST FLYING BIRD: KORI'S BUSTARD



- 42 pounds
- From Africa
- Nearest ones are 60 miles south of FC at the Denver Zoo
- Require special clearance from the Control Tower for take-off and landing

WHO AM I AND WHERE DID MY THIRD TOE GO?



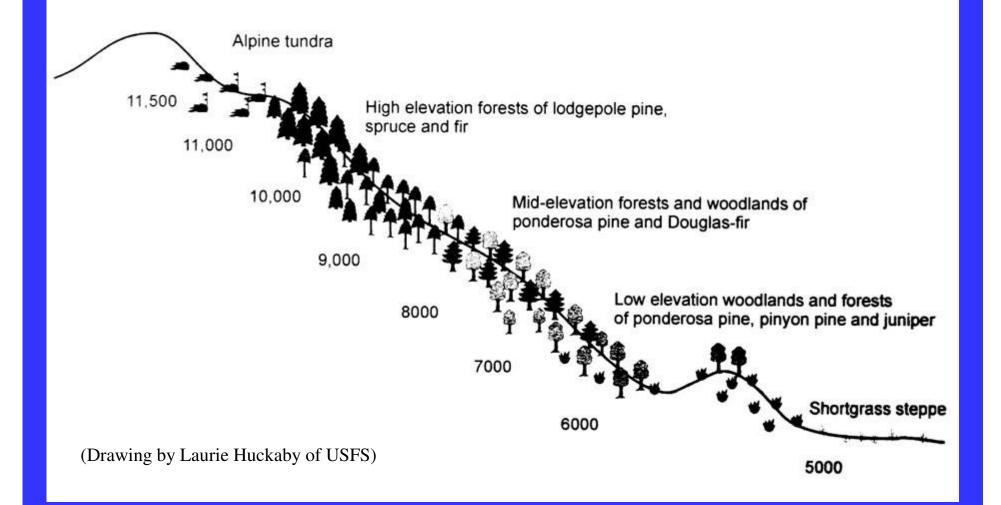
- Clue: I am big and flightless
- Because I can't fly, I feel the need for speed
- Answer (Ostrich)

ISSUES OF FOOD, WATER, AND COVER

- Like all wildlife species, birds need <u>food, water</u>, and <u>cover</u>
- Study of bird behaviors can be addicting and add great enjoyment to your birding



INFLUENCE OF ELEVATION ON BIRDS & THEIR HABITAT



BILLS, BILLS, AND MORE BILLS









A birds bill (beak) tells you a lot about what they eat









FEEDERS

- Feeding is for us, more than the birds
- Black oil sunflower seed is the best
- Keep feeders clean
- Provide water
- Cover nearby helps
- Accipiters are OK



SQUIRRELS & BIRD FEEDERS



- Probably best considered "part of the deal" (remember, they will inherit the Earth)
- Grandpa Leatherman
- Very few "squirrelproof" feeders really are

YUM, BUGS FOR LUNCH



- Insects are common food for birds in summer
- Lack of insects in winter is a major reason for migration
- At left, a rare pic of a flycatcher with a fly

HACKBERRY NIPPLEGALL PSYLLIDS



- Coming out of galls during spring migration
- Fat and plump nymphs in late summer/early fall within galls
- Coming out of galls during fall migration
- Over 25 spp. of birds observed eating them at Grandview Cemetery (FC)

Hackberry psyllid adult

EAT AT THE GRILL



- Evidence that birds are opportunists
- Many birds have learned "grilled" insects are abundant and tasty
- A fairly new phenomenon?



Model – T Ford, made the same year House Sparrows eating from the grills of automobiles was first reported: 1926!

FOOD MODIFICATION



- The common grackle above is an example of a bird that softens its food by soaking it in water.
- Other modifications
 - Subduing live prey
 - Cracking shells
 - Plucking
 - Pre-digestion (in "crop")

BLACK-TAILED PRAIRIE-DOG: KEY FOOD SOURCE

- Ferruginous Hawk
- Golden Eagle
- Other benefits
 - Holes used by
 Burrowing Owls
 - Mountain Plovers, Horned Larks and others feed on "mowed" prairie



SCAVENGERS



- Thank goodness they exist
- "Ice-off" time in March exposes dead fish
- Vultures and many other spp. clean up roadkill

BERRIES, FRUITS

- Crabapple
- Juniper
- Mountain-ash
- Hawthorn
- Rose
- Russian-olive
- Buckthorn
- Cotoneaster
- Honeysuckle
- Highbush Cranberry



"MAPLE SYRUP"



- Maple sap (sugar maple above and boxelder at right) is widely sought by birds and fox squirrels
- In late winter the flow may form conspicuous, bird-utilized "sapsickles"



CAVITIES

- Used by about 50 spp. of birds for nesting in CO
- Also used for roosting
- Not permanent
- Can indicate "hazard" in some situations
- Woodpeckers make almost all of them



NEST BOXES



- Boxes can mitigate natural cavity shortages
- This common "scout" project has pluses and minuses
- Dimensions are critical
- Expect surprises

BAT BOXES

- Mostly a "warm fuzzy"?
- Where's the data?
- Placement is critical
- Often modified (ruined?) by birds and squirrels
- Arboreal litter?



UNNATURAL HAZARDS TO BIRDS



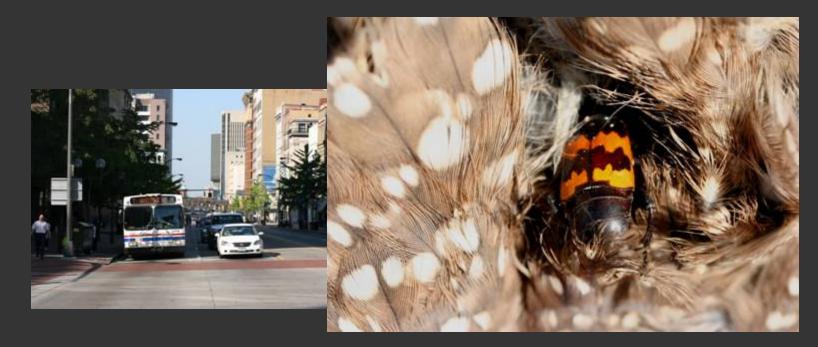
- Domestic pets
- Windows
- Fishing line
- Motor vehicles
- Unclean feeders
- Poaching
- Pollution
- Habitat loss

REFLECTIVE WINDOWS

- Lots of birds die this way
- Can be prevented by placing hawk silhouettes on glass, changing type of glass, increasing overhang, etc.



VEHICLES



- Many birds are killed along highways
- If possible do not put food or cover plants near roadways
- Salt is an attraction, along with seeds and carrion
- Also, birds have learned to forage on car grills for cooked insects

WEST NILE VIRUS

- Major impact on birds in CO beginning about 2002
- Among the groups affected: corvids, chickadees, screechowls
- Vectored by *Culex* mosquitoes



UNNATURAL NEST MATERIALS



- Bailing twine, monofilament fishing line, and other very durable materials are added to nests and can be fatal
 - Feet get entangled
 - Fish hooks impale

THE ISSUE OF BABY BIRDS OUT OF THE NEST – WHAT SHOULD YOU DO?



- Basically, leave them alone
- Parents are probably nearby and will be back
- If not, that's life (and death) in the city
- Don't call DOW or Humane Society (or Sue)

SPECIAL BIRDS OF THE FORT COLLINS AREA

- We have the best of north, south, east, west, high and low.
- Out-of-state birders seek our prairie birds, owls, "chickens", and rosy-finches.



THE YUPPIE FLAMINGO



- Should be the official bird of Fort Collins
- Plastic subspecies is the one normally seen in our area (bird at left is alive in a zoo)
- Like lawns

BLACK-CROWNED NIGHT-HERON

- Relatively short, thick neck for a heron
- Indeed, feeds a lot after dark
- "Cattail Chorus Croaker"
- Most migrate by the time of our late fall ice-up



CANADA GOOSE



- At least 3 subspecies in our area (plus the new split-off species Cackling Goose)
- Major efforts to encourage them in FC by Gurney Crawford of DOW et al, mid-1950's
- Like to graze bluegrass

WILSON'S WARBLER

- Nests in willow carrs in the mountains
- An ABUNDANT migrant in FC in the fall, uncommon in the spring (i.e., "circular migration")
- Similar to Yellow Warbler except for cap



EURASIAN COLLARED-DOVE



- Came to U.S. from Bahamas
- Spread across entire Lower 48 quickly
- New arrival in Colorado (early 1990's)
- Now common in FC
- May breed year-round

CEDAR WAXWING

- Very "classy" look
- They love berries
- Red primary feather tips look like sealing wax
- Related to the more northern Bohemian Waxwing
- Sometimes get "drunk" on old fruit



AMERICAN DIPPER



- Characteristic of fastmoving streams and rivers of the West
- Dives in to capture aquatic insects
- Has its own "swim goggles"
- Also called "Water Ouzel"

BLACK-BILLED MAGPIE



- One of the corvids (jays and crows)
- Long, streamer tail feathers make it easy to ID
- This species hard hit by West Nile Virus
- Loud and raucous but beautiful

AMERICAN KESTREL



- Smallest falcon in NA
- Eats grasshoppers in summer, rodents in winter
- Hovers in one spot to watch for prey
- Our only hawk that's a true cavity-nester

TURKEY VULTURE

- Bald is beautiful (and functional)
- Major consumers of carrion
- Big roost on W. Mountain Ave. (to be eliminated?)
- Called "buzzards"
- Hold wings in a "V" while soaring





THE CLEAN-UP CREW









WESTERN TANAGER



- Should be our state bird (a knock-yourglasses-off beautiful species)
- Lives mostly in ponderosa pine forests
- Highly migratory
- Eats insects and fruit

GREEN-TAILED TOWHEE

- Not that well-known to casual observers
- Breeds in montane sagejuniper areas
- Seen in many FC NAs during migration/summer
- A type of sparrow
- One of its calls sounds like a cat "mew"



WHITE PELICAN

- Largest wingspan of any NA bird (9 feet!)
- In flight, often mistaken for Whooping Cranes
- Fishes cooperatively
- Only 3 nesting colonies in CO



MOUNTAIN BLUEBIRD



- Breeds in the mountains
- Winters south of FC
- One of the earliest spring migrants (what do they find to eat?)
- Nest box trail benefactor

NORTHERN SHOVELER

- Big schnoz
- Uses beak to filter thru mud and shallow vegetation
- Feeds in circling groups to create whirlpool
- Males somewhat resemble mallard color scheme

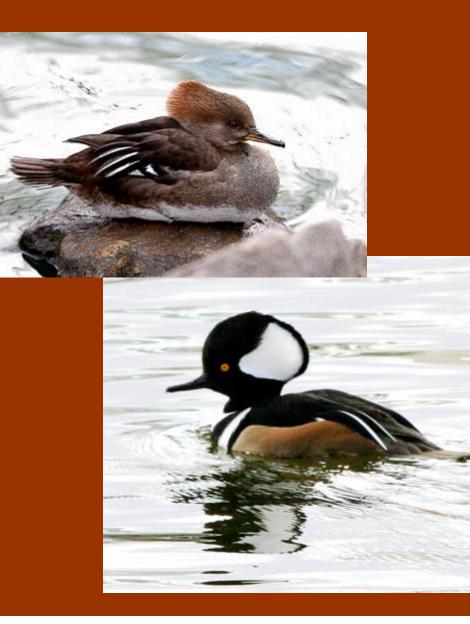


BULLOCK'S ORIOLE

- Very closely-related to Baltimore Oriole (they sometimes hybridize)
- Makes the typical hanging-bag nest
- Prefer willows and cottonwoods



HOODED MERGANSER



- Uncommon in ponds, usually near the river
- Occasionally winters at City Park, Cottonwood Hollow, etc
- Breeds in the high mountains
- Nests in tree holes

AMERICAN ROBIN



- Very familiar and common
- Large numbers now winter in our area
- "1st robin of spring" is an urban legend
- Eat lots of annelid worms and fruit

SHARP-SHINNED HAWK

- The smallest of the accipiters or "chicken hawks"
- Eat mostly birds
- <u>Commonly terrorize bird-</u> <u>feeding operations</u>
- Amazing aerial "dog-fighters"
- When consuming prey, start with the "sweetbreads"



YELLOW-BELLIED SAPSUCKER



- Rare winter visitor from the East
- Grandview Cemetery has more records than anywhere else in CO
- Often very wary
- Feed by pecking holes and then drinking sap

SAPSUCKER SAP WELLS



- Begin as beak-sized holes and are later enlarged
- Many other animals feed at sap wells (note all the flies at left)
- Sapsuckers are "keystone species"
- Usually do not harm tree

HUMMINGBIRDS



- Does anyone not like hummingbirds?
- Favor tubular flowers: salvia, catmint, trumpetvine, etc.
- 3 species to be expected in FC
 - Broad-tailed (nests in the mountains, west edge of town)
 - Rufous (migrant, shows up about 4th of July)
 - Calliope (migrant, mostly August-September)

GREAT BLUE HERON

- Our most-common "wader"
- Flies with neck kinked
- Nests in colonies called "heronries" (not "rookeries")
- Mostly migratory (a very few winter here)



WESTERN MEADOWLARK



- Common bird of grasslands and the prairie
- Often sings when a car passes thru its territory
- Very similar to the Eastern Meadowlark
- Somewhat migratory

WESTERN SCRUB-JAY

- Local in the foothills, hogback, Owl Canyon
- Diet is varied and includes tree fruits, pine seeds, dogfood
- Much more common in southern half of CO near Gambel oaks



PINE GROSBEAK



- Normally in the High Country above 9,000'
- May invade the lowlands, like FC, during winter when food is short
- What would you guess they eat?

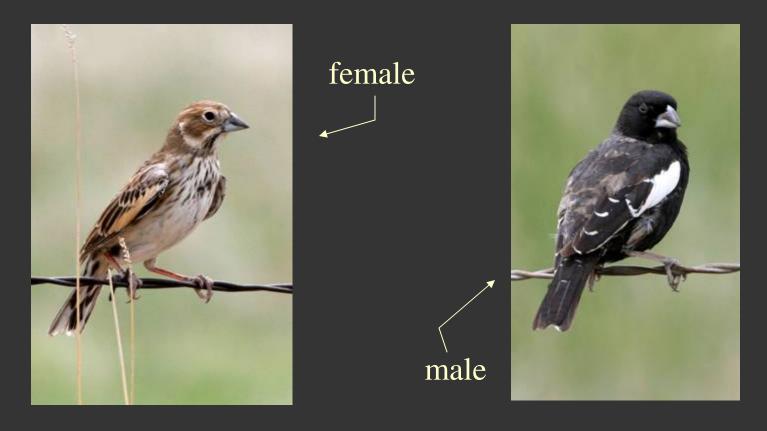
female

EASTERN KINGBIRD



- One of the flycatchers
- Very feisty and often seen chasing hawks
- Bright red-orange crest rarely visible
- White at end of tail
- Seen at many NAs

LARK BUNTING



- Our Colorado State Bird
- Found exclusively in shortgrass prairie
- Legislative money-saver?

ROCK WREN



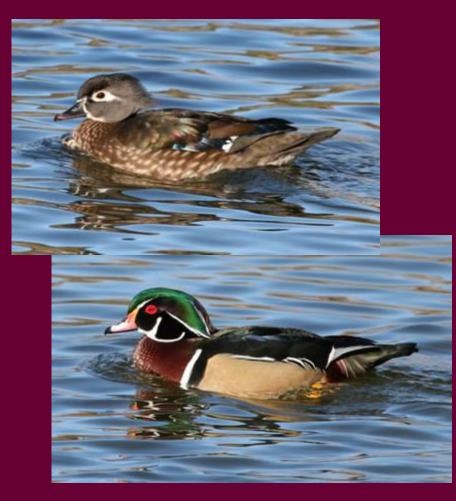
- Its favorite letter is "A"?
- More often heard than seen
- Puts pile of pebbles at its front door

FERRUGINOUS HAWK

- In the "buteo" group of hawks
- Highly-associated with prairie-dogs
- Mostly white
- One of the most charismatic species on FC Open Space lands



WOOD DUCK

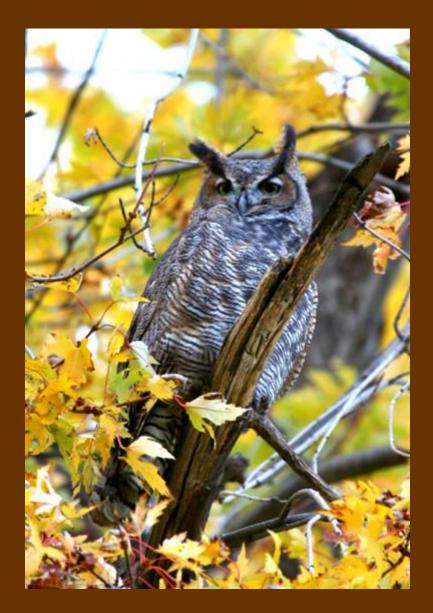


- Common in Fort Collins along the Poudre River
- Nest in tree cavities
- Like to eat R. olives and other "mast"
- Great example of "sexual dimorphism"



GREAT HORNED OWL

- Our default "hoot owl"
- Ferocious
- Can nest as early as December-January
- "I love squab."
- Utilizes old crow nests



BELTED KINGFISHER



- Noisy resident of the Poudre River corridor
- Plunges in the water for small fish
- Nests in deep holes in river banks
- Punk hairdo
- Lots of personality

BALD EAGLE

- Not uncommon in and around FC in winter
- Mostly scavenges for dead fish and waterfowl
- A few pairs nest in the area of Windsor and Greeley



NORTHERN FLICKER

- Western ones "red-shafted", eastern ones "yellow-shafted"
- Mostly eat ants and R. olives
- Wannabe percussionists?
- The main woodpecker guilty of putting holes in human structures
- Guess what the president of National Audubon Society is named?



GREATER ROADRUNNER



- A bird around here in the future?
- Presently occurs north to an area about 200 miles southeast of here (Kit Carson, CO)
- Climate change is real and causing some tangible n-s range extensions

OPTICS



- <u>Binoculars</u> are your best friend as a birder
- <u>Spotting scopes</u> of 20-60 power are useful for far-off, stationary birds (ducks, for ex.)
- <u>Camera</u> (used to capture the moment and documentation)

BINOCULAR FEATURES

- Field of View
- Brightness (light gathering ability)
- Power (7-8X is best, 10X <u>at most</u>)
- Weight
- Close focus
- Eye relief
- Feel in your hands
- Waterproofing
- Lens coating
- Armor
- Cost (\$250-\$1900)
- Brand (no cheepos)



FIELD GUIDES



- You can't tell the players without a program
- Lots to choose from
- Most birders have several
- Size matters
- Remember Colorado is <u>both</u> East & West

BEST* BIRD BOOKS

• FIELD GUIDES

- Sibley
- National Geographic
- Kaufman
- Peterson (West)
- <u>All The Birds</u>
- * in general avoid books with CO in title and those that illustrate via photos (my opinion only)



• <u>REFERENCES</u>

- Terres' <u>Encyclopedia</u> of N.A. Birds
- Erlich's <u>The Birder's</u> <u>Handbook</u>
- <u>The Sibley Guide to</u> <u>Bird Life & Behavior</u>
- The Stokes guides to behavior (various)
- Specific group guides
- <u>Birds of N.A.</u> (on-line)
- Many others!



HAVE FUN BEING A MASTER NATURALIST!!!