

# NATURE MAPPING JACKSON HOLE

Make your wildlife sightings count!



JACKSON HOLE



WILDLIFE  
FOUNDATION

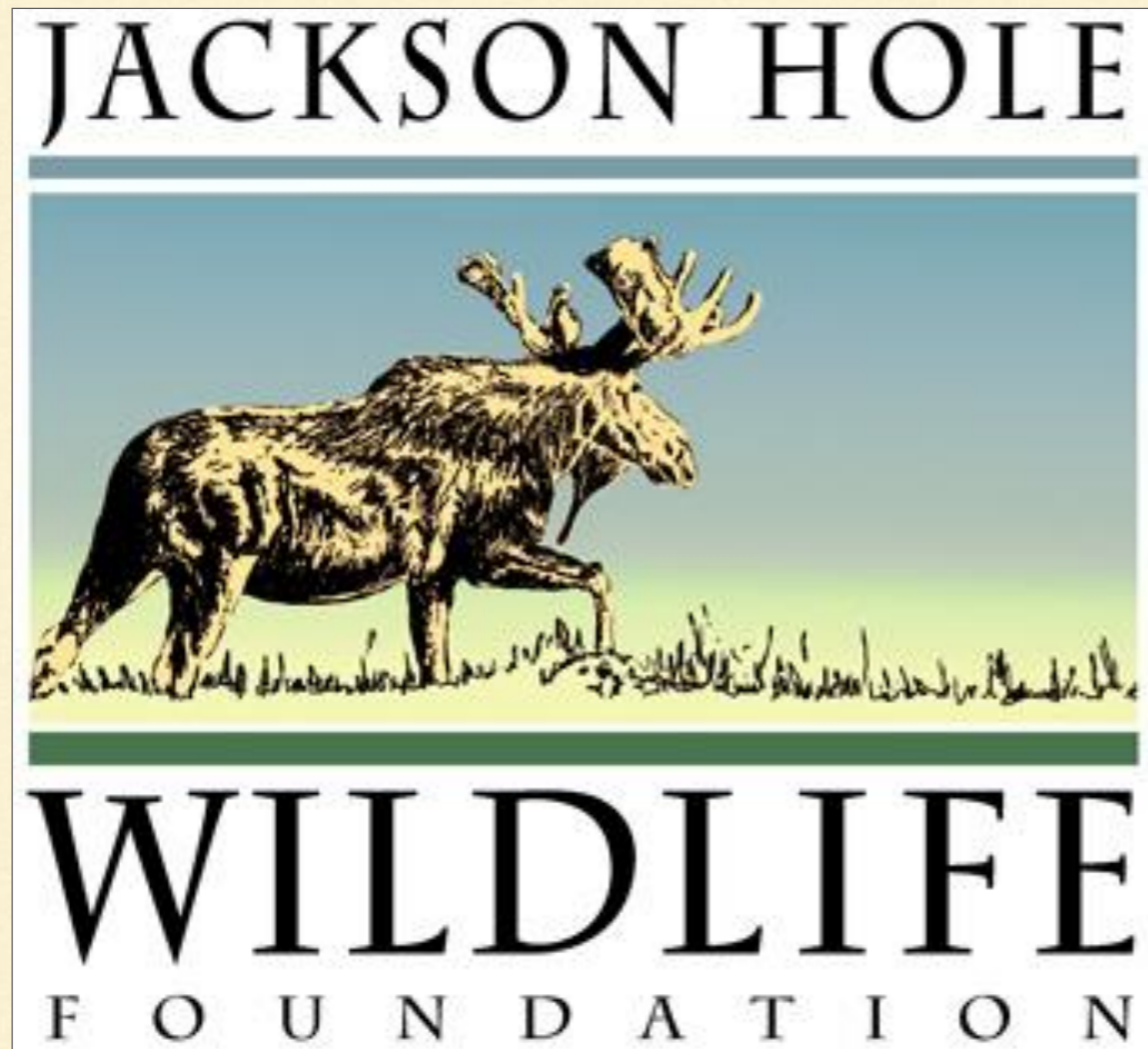
Rev: 02.05.2



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# THE JACKSON HOLE WILDLIFE FOUNDATION


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**advances wildlife  
conservation  
driven by science,  
collaboration, and a  
community of  
volunteers**

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JACKSON HOLE  
 CELEBRATING  
  
 30 Years  
 WILDLIFE  
 FOUNDATION



# SPRING - GREAT TIME TO START

- **First of Year – FOYs**

- **Migrations of mammals and birds**

- **Baby animals**



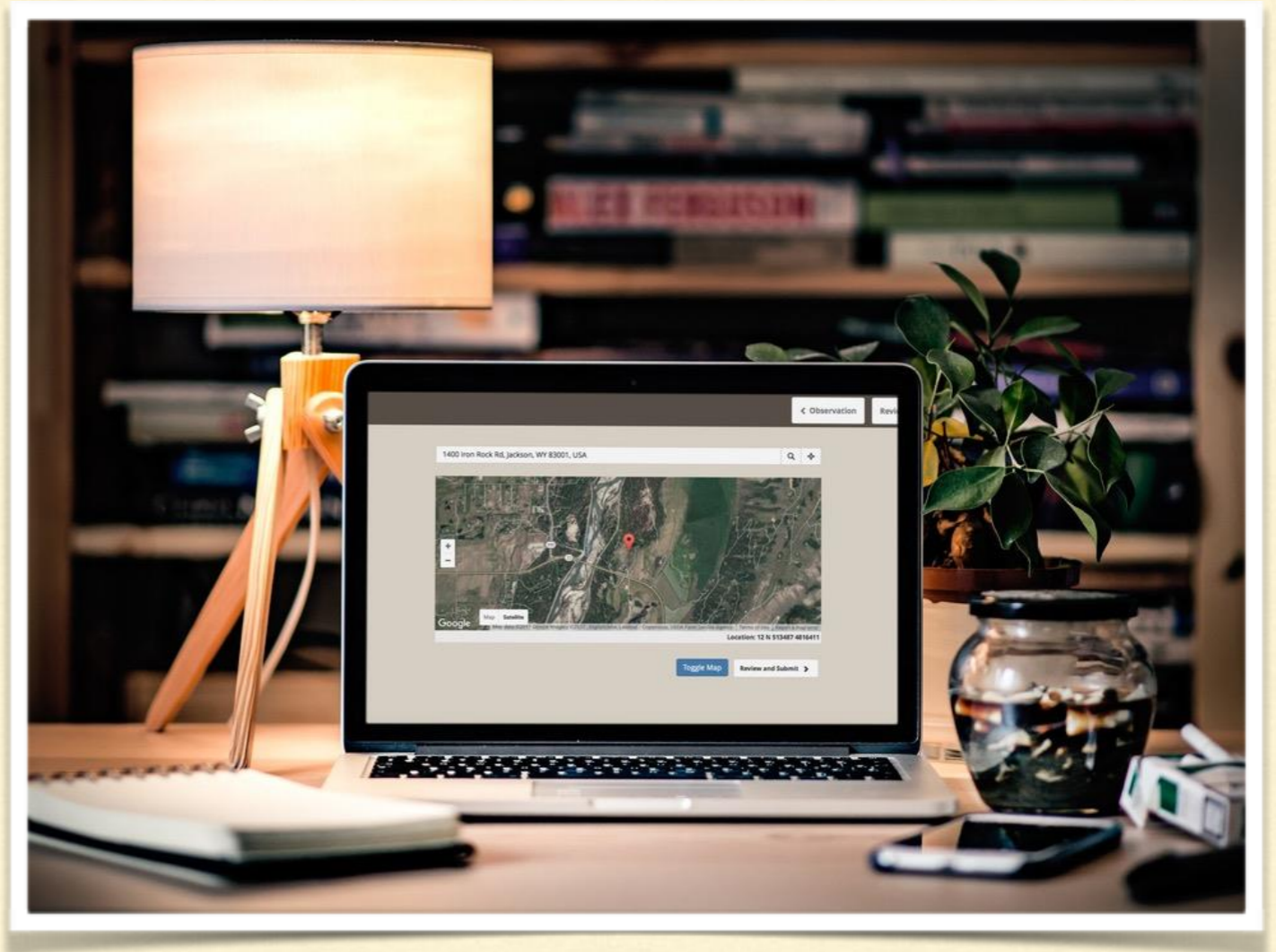
# OBJECTIVES FOR TODAY

Understand the importance of accurate observations

Know how to access and navigate the NMJH system including: login, updating your account, entering observations, and editing observations

Understand the importance of following protocols

Learn about current projects and future trainings available to trained Nature Mappers



# NMJH GOALS:

Keeping common species common  
(studying all species not just high-profile species or species of concern)

Increasing citizen's knowledge of and appreciation for wildlife in Teton and Lincoln Co, WY and Teton Co, ID

Engaging citizens in long-term wildlife data collection

Informing management decisions that favor wildlife sustainability

Contributing data to the Wyoming Game & Fish Department's Wildlife Observation System



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# THE DATA PROCESS:

- Trained Nature Mappers enter their data in the field using the app or online later (preferably within a week of collecting it)
- The data is examined by trained biologists
- If there are questions, the biologist will contact the citizen scientist and ask for clarification or further information
- Any necessary edits are made to the data
- The data is verified and sent off at the end of the year or pulled for partners as needed



**WHEN IN DOUBT, LEAVE IT  
OUT!**

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# PRIVATE LAND CONSIDERATIONS

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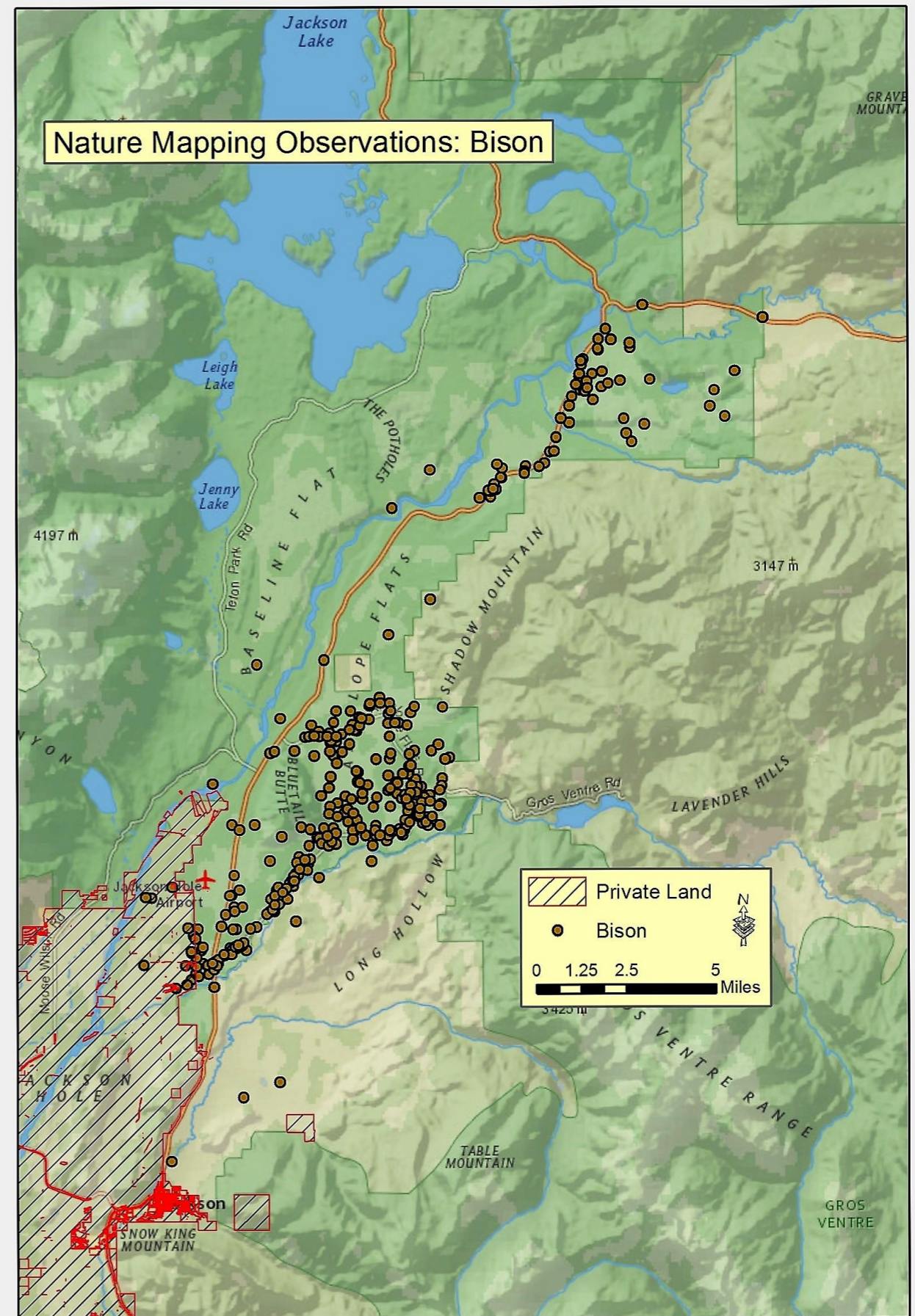
- Please do not trespass on private lands, view from the road or friend's property.
- Ask the owner if you can Nature Map a species.
- Always be courteous – you are a Nature Mapper ambassador.
- If in doubt, please stay out.





# DATA USED FOR:

- Wyoming Game & Fish Dept.
- County/Town Comp Plan
- Proposed pathways
- County subdivisions planning
- Wildlife Crossing strategy
- Radar Sign placement
- Focal species research
- Trail construction
- LDR and NRO Amendment

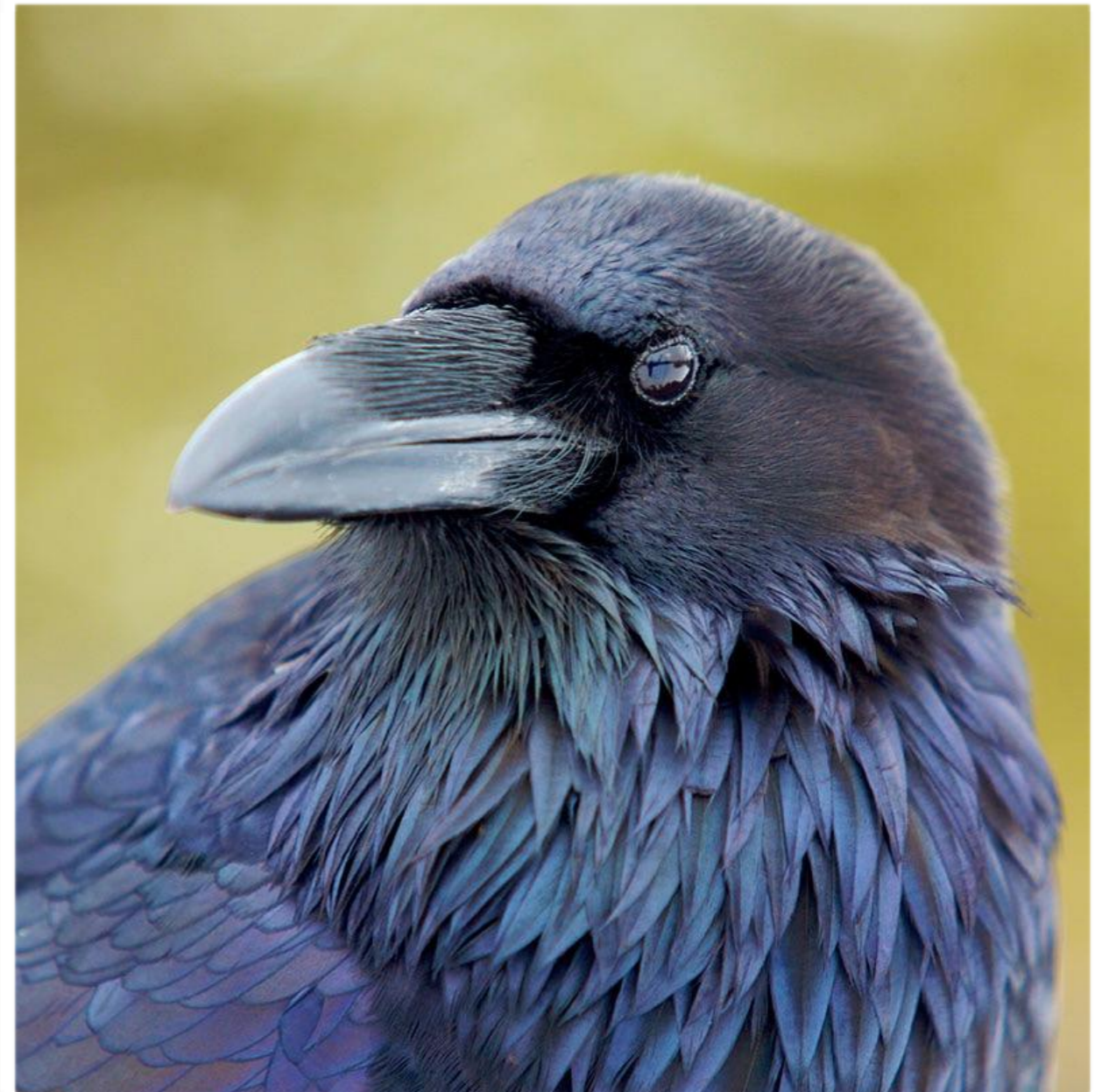


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# NMJH PROJECTS

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- Casual Observations
- Project Backyard
- Moose Day
- Mountain Bluebird monitoring
- Bird Banding



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# CASUAL OBSERVATIONS

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- Out and about in western Wyoming and eastern Idaho
- Most of the observations
- Includes roadkill – Wildlife-Vehicle Collisions (WVCs)



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# PROJECT BACKYARD

- From the house or other "set" location
- Has own protocols
- Total observations for the week (e.g. top number of pine siskins, magpies, elk-- entered once.)
- Important for wildlife care on private land



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# MOOSE DAY

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- February 22, 2025
- Work in teams
- Assigned areas
- Nature Mapping data complement WGFD data (private land vs. public land)



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# MOUNTAIN BLUEBIRD NESTBOX MONITORING PROJECT

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Photo by Vicki Morgan



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# MAPS

(MONITORING AVIAN PRODUCTIVITY AND SURVIVORSHIP)

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# FUNDAMENTALS OF OBSERVATIONS

- 
- 
- The species seen
- How many individuals
- Where (location)
- When: date and time
- Additional data: sex, age, activity, and observation notes





# SPECIES ID, DETAILS, AND DEFINITIONS



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# SPECIES ID: SQUIRRELS



Uinta Ground Squirrel –  
“Chisler”



Golden Mantled Ground  
Squirrel

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# SPECIES ID: RED SQUIRREL

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# SPECIES ID: CHIPMUNKS

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Least Chipmunk



Yellow Pine Chipmunk

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# SPECIES ID: AMERICAN BADGER

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# SPECIES ID: WOLVERINE

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photo © Jeff Copeland

# SPECIES ID: GRIZZLY AND BLACK BEARS

Know your bears!

**Black Bear**

- Front track: A circular mark on the track indicates the claw position.
- Front claw: 1-2" long
- No prominent shoulder hump
- Tall ears
- Straight face profile
- Short claws

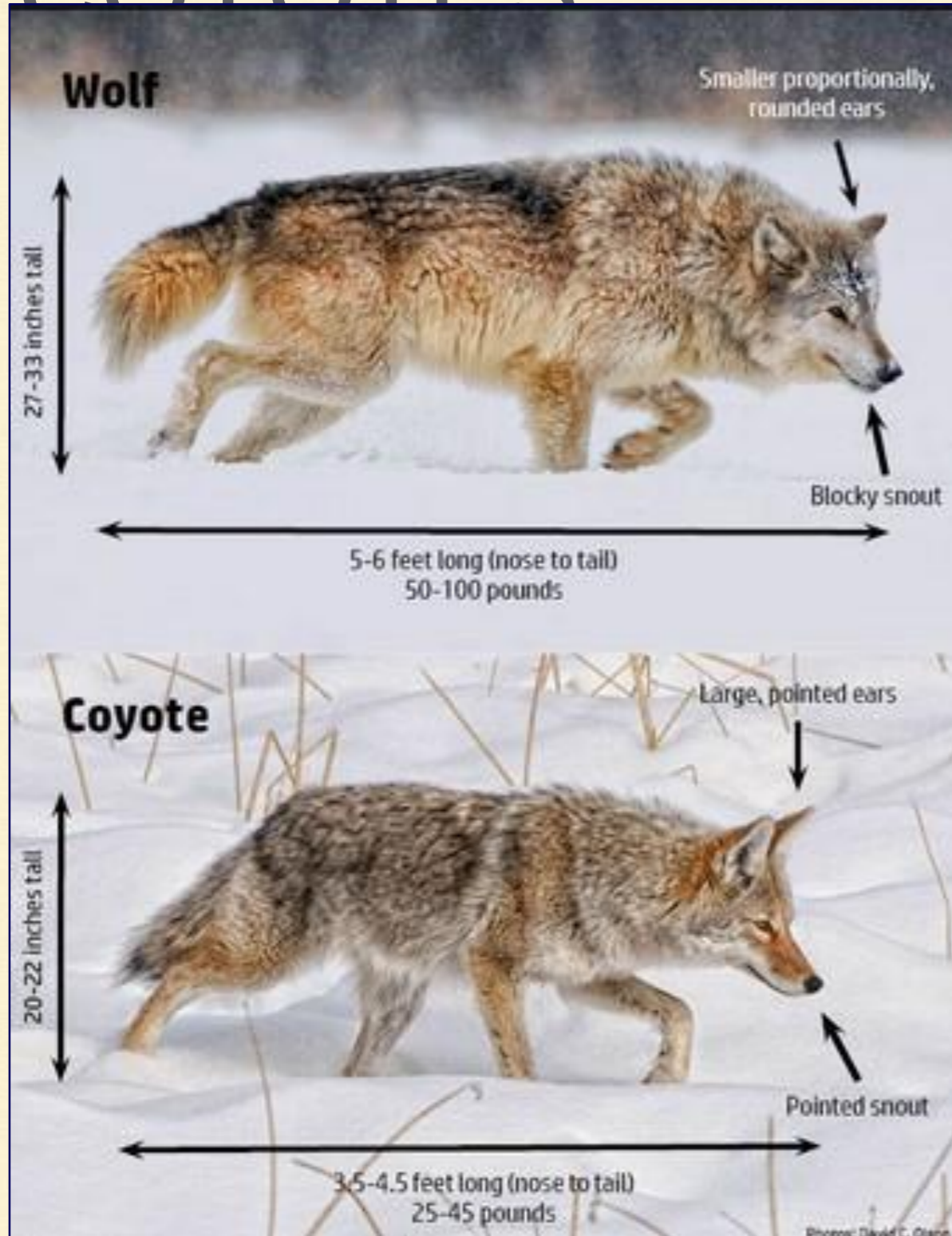
**Grizzly Bear**

- Front track: A circular mark on the track indicates the claw position.
- Front claw: 2-4" long
- Shoulder hump
- Short rounded ears
- Dished face profile
- Long claws

**Color and Size can be misleading.**  
Look for a combination of characteristics.

©2011 Center for Wildlife Information, Photo by Chuck Burdette

# SPECIES ID: WOLVES AND COYOTES



Know your Canids!





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# SPECIES ID: MULE DEER

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1. Big ears 2. White tail with black tip 3. "Y" branching pattern to antlers

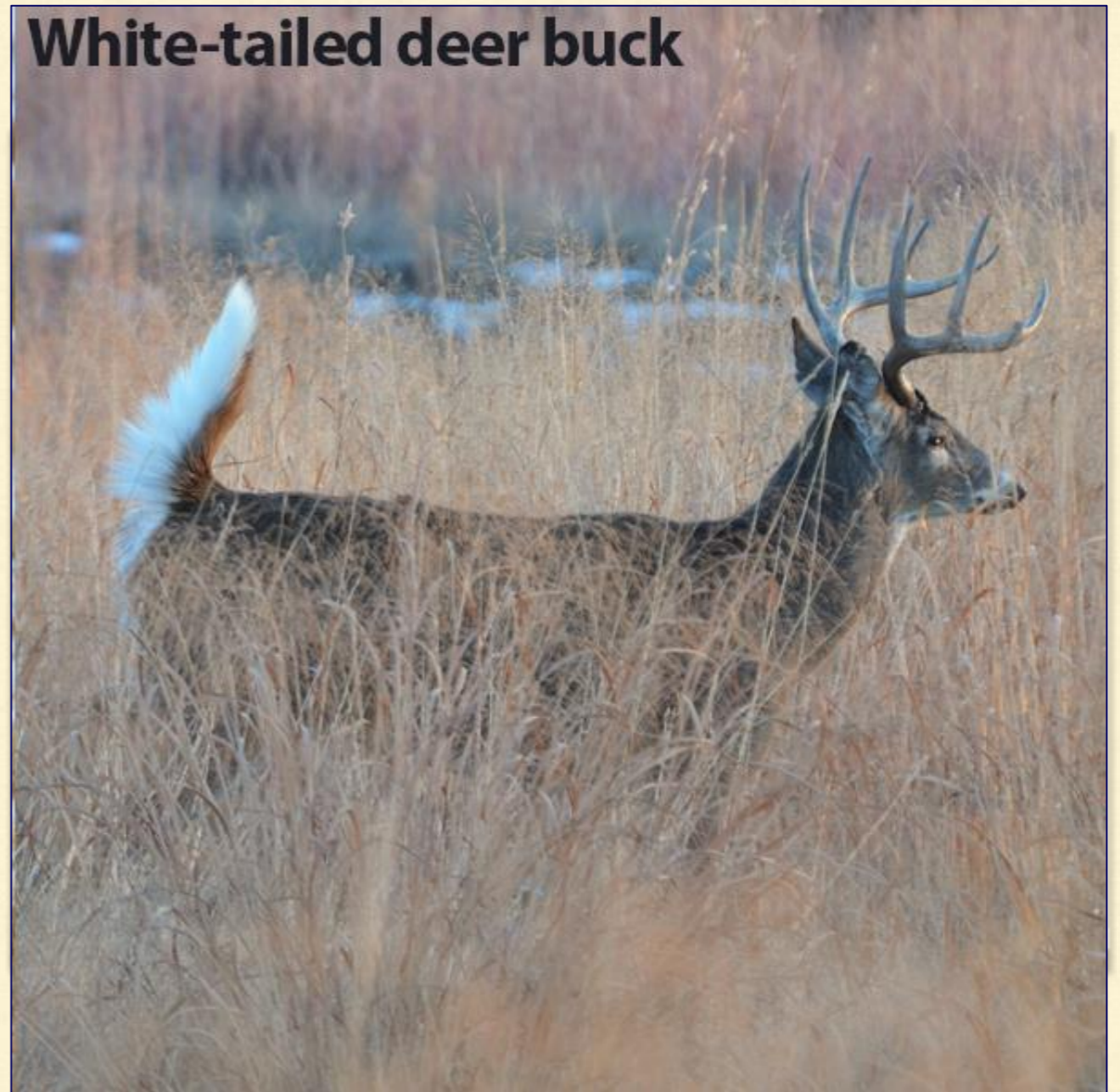


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# SPECIES ID: WHITE-TAILED DEER

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- Smaller ears – although hard
- Long tail with white underside
- Antlers branch from one main beam
- Mostly found in riparian areas on the West Bank, Gros Ventre River, near South Park and Alta



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# SPECIES ID: WHITE-TAIL VS. MULE

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Main beam with single, vertical points



Antler with multiple forks

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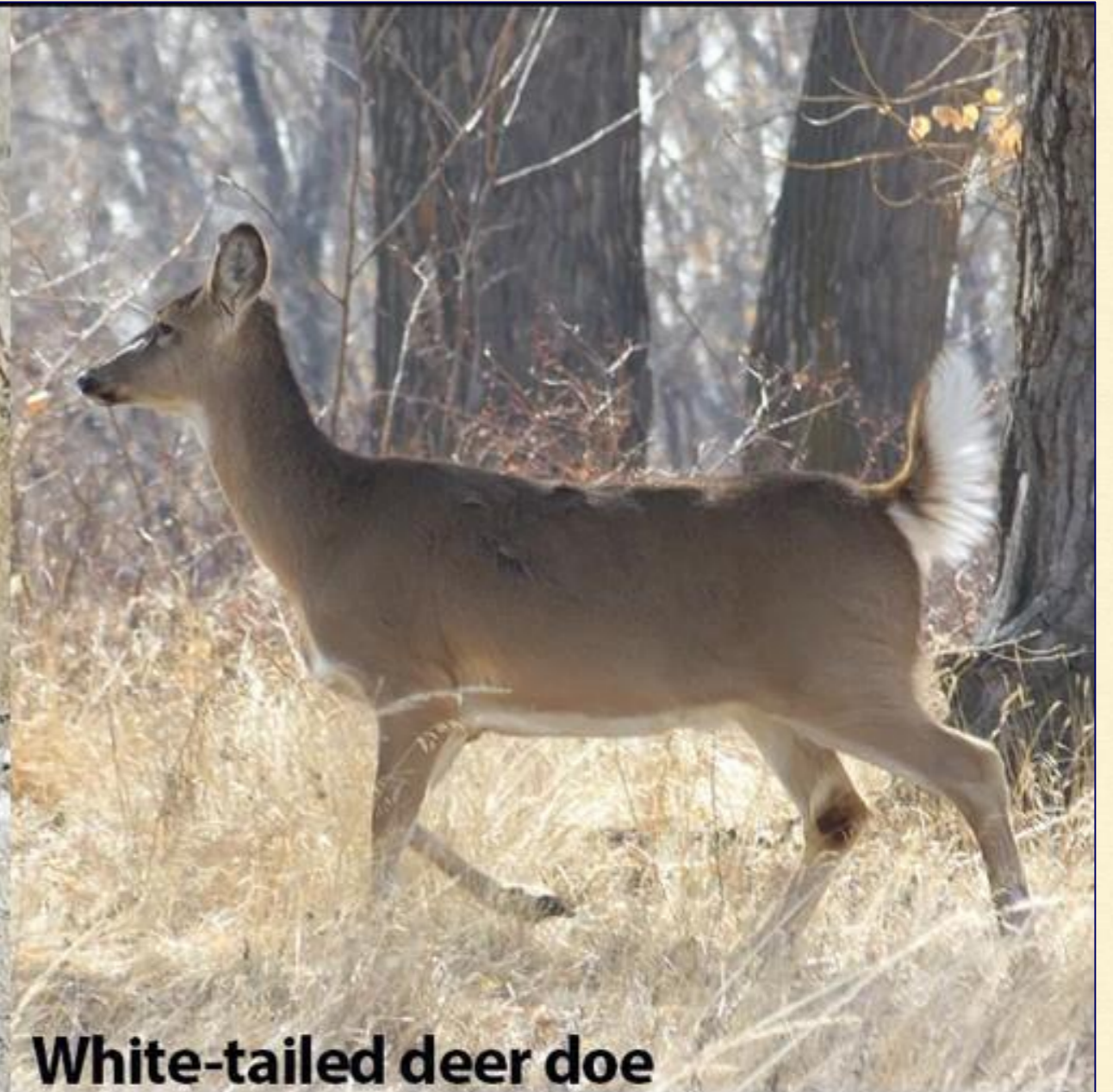
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# WHITE-TAIL VS. MULE DEER DOES

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**Mule deer doe**



**White-tailed deer doe**

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# SPECIES ID: ELK

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1. Long main beam with tines
  2. Shaggy dark mane
  3. Buffy rump
-

# SPECIES ID: ELK



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# SPECIES ID: MOOSE

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**SPECIES ID:  
TRUMPETER SWAN**





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# SPECIES ID: TUNDRA SWAN



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# SPECIES ID: BARROW'S GOLDENEYE



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# SPECIES ID: COMMON GOLDENEYE



# SPECIES ID: RAPTORS OF JH



Photo by Henry Holdsworth



Photo by Lars Petersson



Photo by Alex Lamoreaux



Photo by Rodney Crice

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# SPECIES ID: GREAT GRAY OWL

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1. Concentric Facial Rings

2. No ear tufts

3. Overall Grayish Color

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# SPECIES ID: GREAT HORNED OWL

Photo by John Norton



Photo by Anne Auclair Moe

1. Single facial disc, reddish face
2. Ear tufts (may be lowered)
3. Brownish color, but variable

# SPECIES ID: RED-TAILED HAWK



Red tail



Highly variable



belly band

Photo by Alex Lamoreaux

Photos by Jerry Ligouri

# Red-tailed Hawk





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# SPECIES ID: SWAINSON'S HAWK

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# SPECIES ID: BALD EAGLE



Photo by Benjamin Hack



Photo by Matt Davis

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# SPECIES ID: GOLDEN EAGLE

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Photo by Bryan Calk  
etersson



Photo by Lars P

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# WHICH EAGLE IS WHICH?



Photo by John Reynolds

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# SPECIES ID: CHICKADEES



Black-capped



Mountain

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# SPECIES ID: WESTERN MEADOWLARK



# SPECIES ID: WAXWINGS

Bohemian



Photo by Daniel Jauvin

Cedar



Photo by Peter Hawrylyshyn

Photo by Margaret Viens



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# SPECIES ID: BLACK ROSY-FINCH

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# SPECIES SEX ID

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- Ways to identify male versus female
  - Not all animals sex can be identified
-

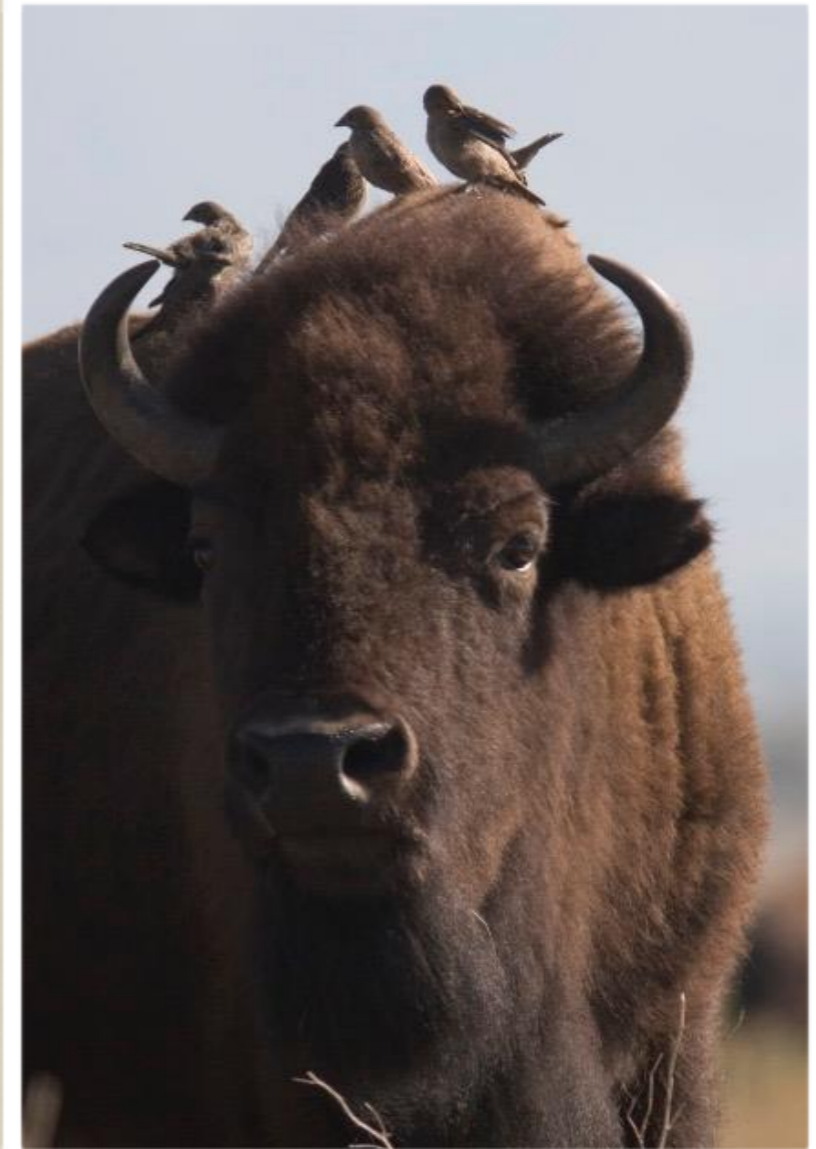
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# SEX: BISON MALE VS. FEMALE

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Male: Less curved  
horns



Female: More curved  
horns

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# SEX: BISON

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# SEX: MOOSE MALE

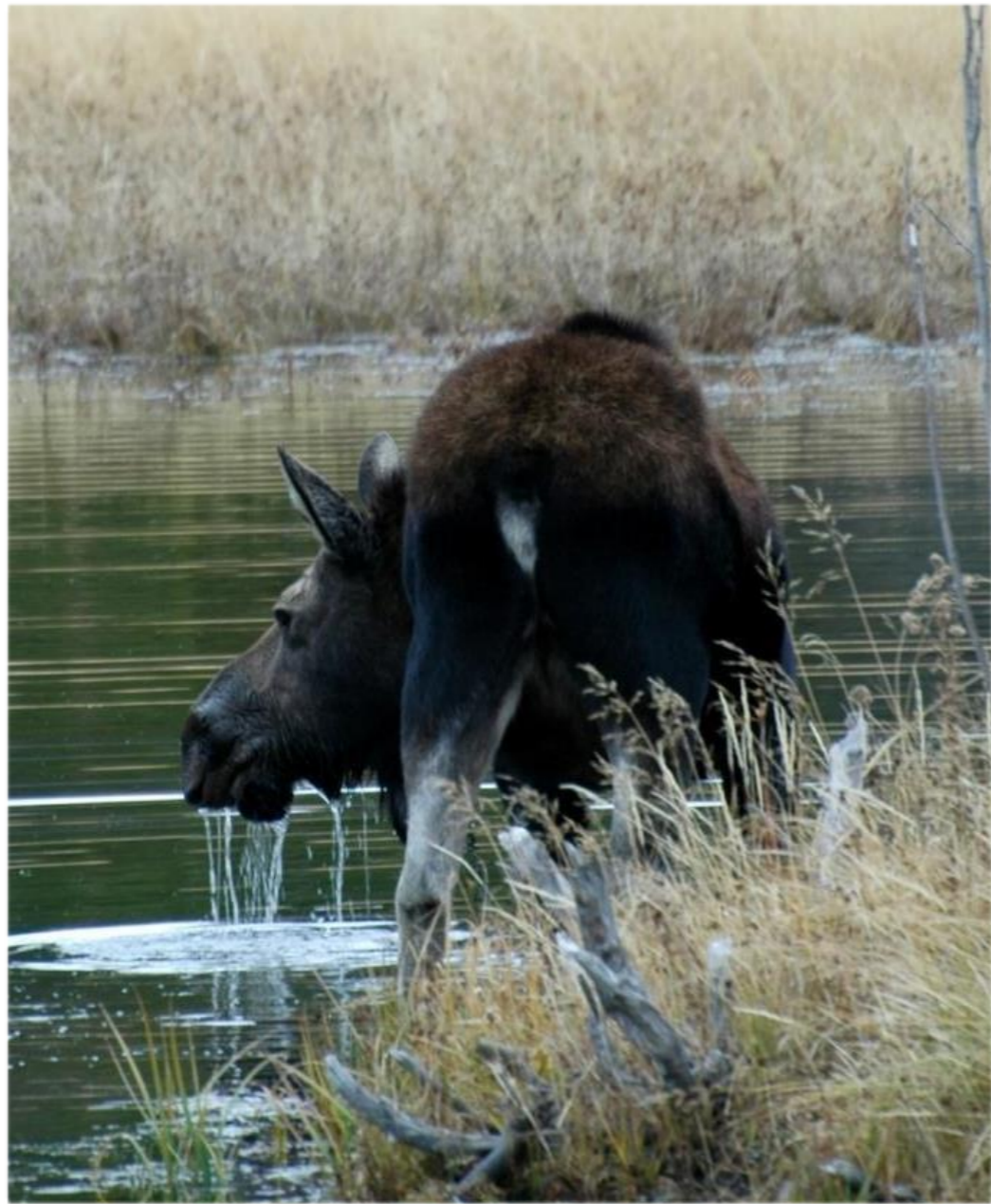
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# SEX: MOOSE FEMALE

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# SEX: PRONGHORN

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Male



Female

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# SEX: BARROW'S GOLDENEYE

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Male

Female

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# SPECIES ID: COMMON GOLDENEYE



Female

Male



---

# SEX: MOUNTAIN BLUEBIRD

---



Male



Female

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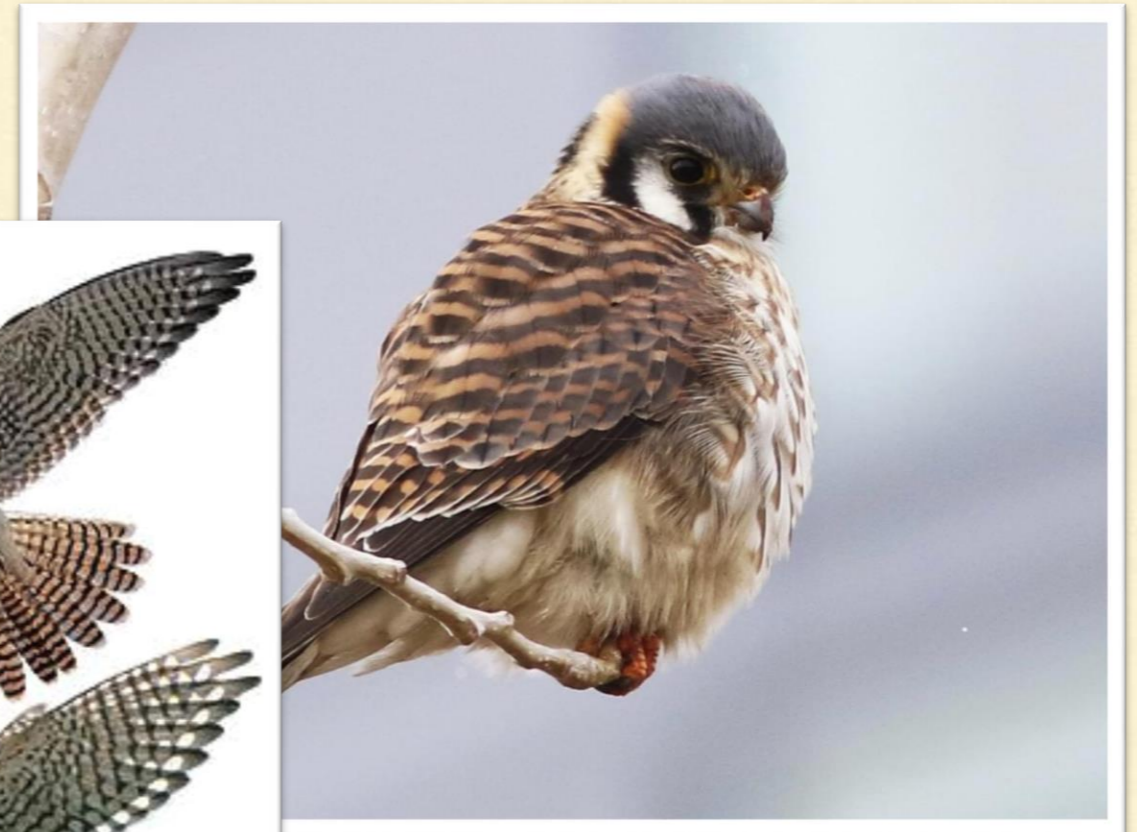
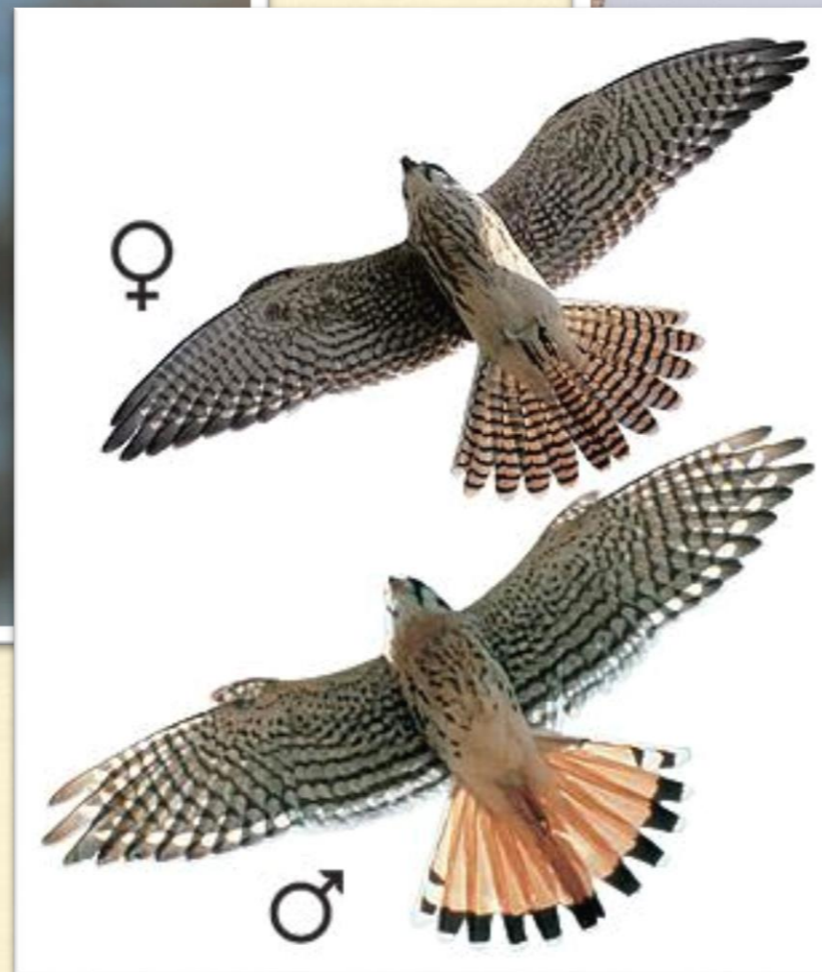
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# SEX: AMERICAN KESTREL

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Male



Female

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# SEX: UNKNOWN

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The sex of many species cannot be determined or observed:

- Squirrels
- Swans
- Snakes
- Many songbirds and raptors



Photo by Malcolm Gold

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# SPECIES AGE

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# AGE: JUVENILES

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- Juveniles: Young of the year
- Usually born after May 15th
- If don't know = Unknown



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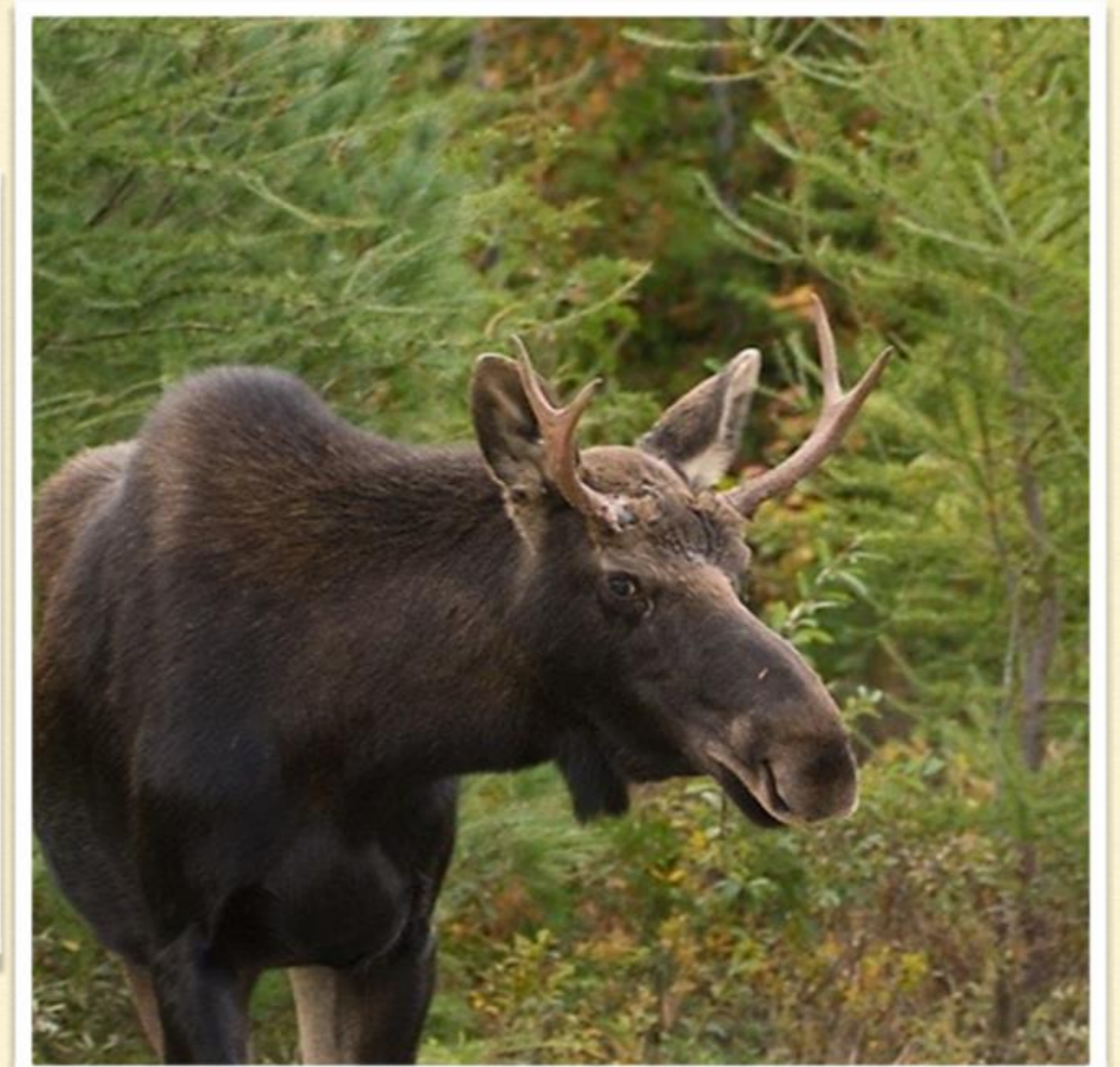
# AGE: BISON JUVENILE (L) YEARLING (R)

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# AGE: ANTLER SIZE DOES NOT TELL ALL



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# AGE: MOOSE JUVENILE OR ADULT?

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- Moose should be classified as adults or juveniles
- Cannot distinguish yearlings based on size
- Moose pictured right is adult male, even though small





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# AGE: JUVENILES

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## Subadults:

- Second spring to fourth spring
- Can be hard
- If not sure = **Unknown**
- Can add comments, too, e.g. immature bald



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# AGE: UNKNOWN/MIXED

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If large group (+/or little time): Unknown/Mixed

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# SPECIES ACTIVITY:

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- Resting/roosting
- Feeding
- Standing
- Walking
- Running
- Flying
- Swimming



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# ACTIVITY: SIGN (TRACK/SCAT)

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# ACTIVITY: ACTIVE BIRD FEEDER

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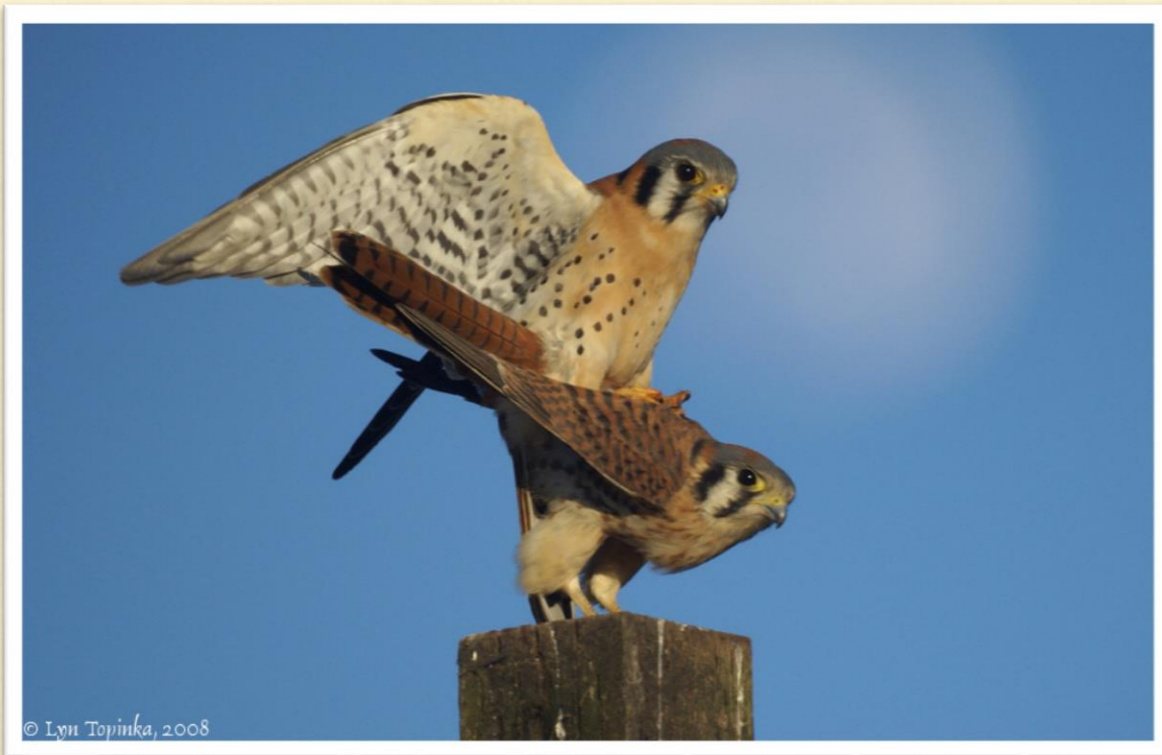


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# ACTIVITY: REPRODUCTION (BREEDING)

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- In the act or courtship behavior



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# ACTIVITY: TERRITORIAL

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- Singing
- Chasing



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# ACTIVITY: NESTING

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# ACTIVITY: UNDETERMINED

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- Variable
- Heard only

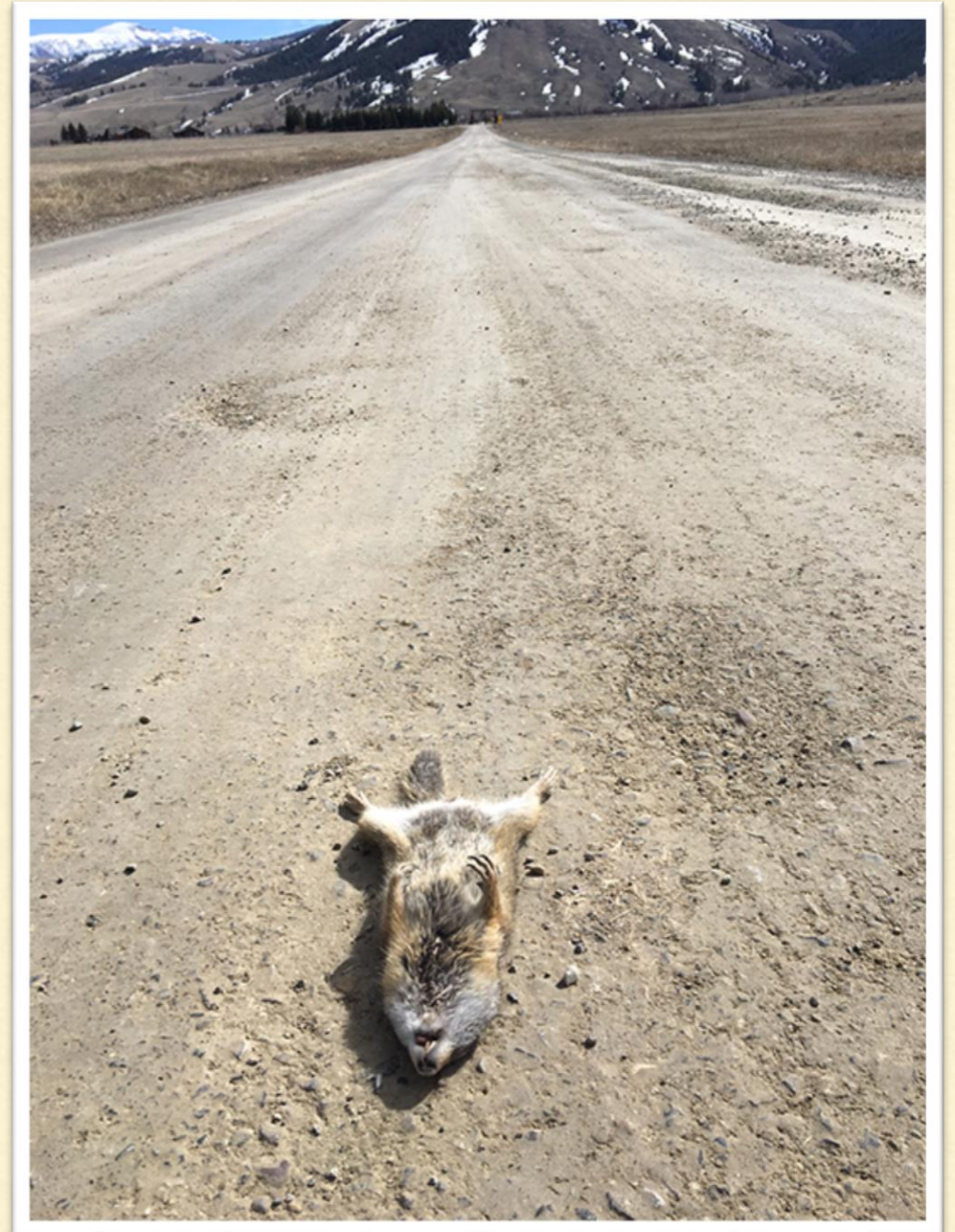


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# MORTALITY:

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- Cause Undetermined
- Fence
- Serious injury
- Powerline/ Electrocution
- Accident – Vehicle
- Predation
- Window Collision





**OBSERVATION – LIVE DEMO**

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# DATA COLLECTION PROTOCOL

- Animal Type (Mammal, Amphibian, Bird, etc.)
- Species (Mule Deer, Black Bear, etc.)
- Date
- Time
- Notes
- Age
- Quantity
- Activity
- Location (of animal)
- Photo (optional)





# OBSERVATION #1

One American Robin mapped on Jan 9, 2023 at 12:31 PM near the National Elk Refuge

---

- Amphibians
- Birds
- Mammals
- N/A
- Reptiles

**What species was it?\***

American Robin



## Occurrence

Spring  
AbundantSummer  
AbundantFall  
AbundantWinter  
Occasional

CANCEL

SAVE DRAFT

NEXT

Tip: Use the dropdown menu or begin typing to find your species

---

The screenshot shows a web application interface for 'Casual Observations'. On the left is a sidebar with navigation options: 'NATURE MAPPING', 'Add Observation', 'My Observations', 'All Observations', 'Photo Observations', 'Mountain Bluebird', 'Game Cameras', 'Data Verification', 'Data Export', 'Admin', and 'About'. The main content area is titled 'Casual Observations' and contains a form with several sections:

- A radio button selection for 'N/A' and 'Reptiles'.
- A section titled 'What species was it?\*' with a text input field containing 'Select or type species'.
- A section titled 'When did you make this ob:' with a text input field containing 'Thursday, 03/16/2023, 12:03 PM'.
- A section titled 'Notes' with a text input field containing 'Any notes about the observation?'.

Overlaid on the form is a date and time picker. The title of the picker is 'Thursday, 03/16/2023, 12:03 PM'. It features a calendar for the month of March 2023, with the 16th highlighted. To the right of the calendar is a time selection interface showing '12 : 03 PM' with up and down arrows for adjustment. At the bottom right of the picker are 'Cancel' and 'Ok' buttons.

Tip: Select the date by clicking the calendar and don't forget to change the time if you are entering data retroactively

Casual Observations

What species was it?\*

Greater White-fronted Goose

Occurrence

Spring Rare Summer N/A Fall Rare Winter N/A

When did you make this observation?\*

December 2022

October  
November 2023  
December 2022  
2021  
2020

Notes

Any notes about the observation?

CANCEL SAVE DRAFT

Casual Observations

1 2 3  
4 5 6 7 8 9 10  
11 12 13 14 15 16 17  
18 19 20 21 22 23 24  
25 26 27 28 29 30 31

Time 12:58 PM

Notes

Observed smaller goose with orange legs, feet, and bill white forehead above bill. Lacked the white chinstrap of Canada Goose. Also heard call that was squeakier and higher pitched than Canada Goose.

• Notes are required for species with a rare occurrence

CANCEL SAVE DRAFT NEXT

Tip: Occurrence helps you to know what is expected in the area at the time of year you are Nature Mapping. If a species is Rare, Accidental, or N/A, you will have to enter notes about what you saw in order to proceed.



What did you see?

Sex\*

Female

Male

Unknown

Age\*

Adult

Quantity\*

1

Activity\*

Standing/Perched

PREVIOUS

SAVE DRAFT

NEXT

Tip: **Do not guess!** If you are unsure about an animal's age, sex or activity, leave these details as unknown.

---

1

**Activity\***

Standing/Perched

**Mortality\***

N/A

Add another

PREVIOUS

SAVE DRAFT

NEXT


Tip: Mortality, while sad, is one of the more important pieces of data we collect. Roadkill data can be used to inform mitigation, so please don't leave out the dead!

---

**Where did you observe this species?****Location**

To update the observation location below:

- click directly on the map
- click the update your location button to get your current GPS coordinates
- or enter the values manually in the input boxes below the map for coordinates or UTM's

 UPDATE YOUR LOCATION



If entering the location manually, you can enter either the latitude and longitude or the UTM's.

Latitude

43.48044511996955

Longitude

-110.74325319354001

PREVIOUS

SAVE DRAFT

NEXT

Tip: Ensure the location is accurately portraying the location of the animal (not your location) before proceeding!

Turdus migratorius

American Robin

## Photos



Click here to take a photo or upload a photo from your device.

A photo can help scientists verify this sighting

PREVIOUS

SAVE DRAFT

REVIEW

Tip: Photos help our data vetters quickly verify your sightings. Your sighting with a photo could be featured in our monthly eNews!

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## Review Submission

### Casual Observations

Date and Time

Jan 9, 2023, 12:31 PM

Wildlife Type

Birds

Species

American Robin

[Edit](#)

### Observations

Observation 1

Sex

Unknown

Age

Adult

Quantity

1

Activity

Standing/Perched

Mortality

N/A

Notes

Perched on fence at NER

[Edit](#)

CANCEL

SUBMIT

Tip: Ensure that all data are correct before submitting. If you notice a mistake on your form, use the Edit button to fix the error.

---

## Review Submission



[Edit](#) ←

### Photos



CANCEL

SUBMIT

Congratulations! You have completed Observation #1!

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# GETTING YOU GOING

- Create an Account
- Login
- Settings
- Practice

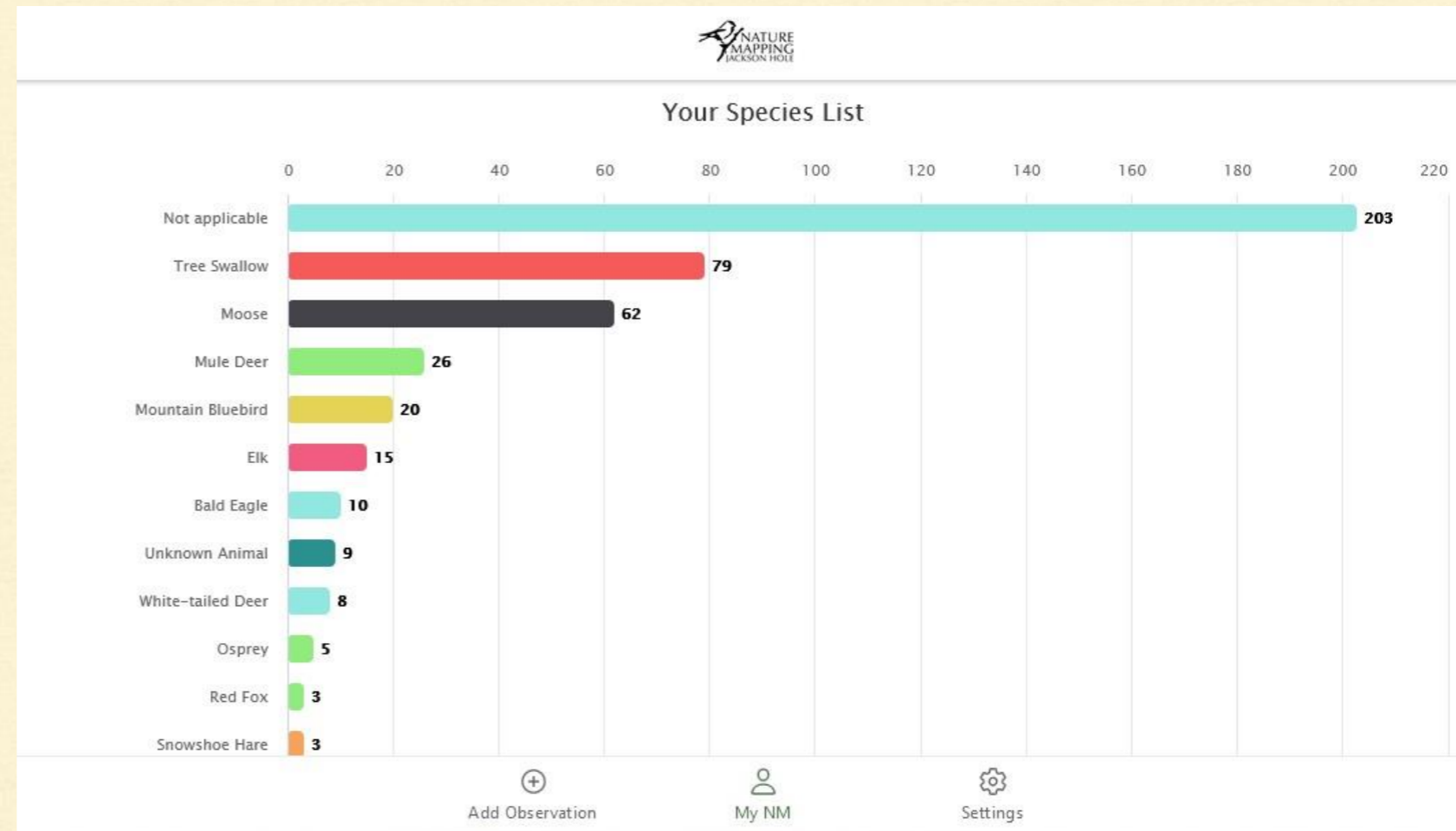
NATURE MAPPING JACKSON HOLE

Submitted Observations  
530 Observations

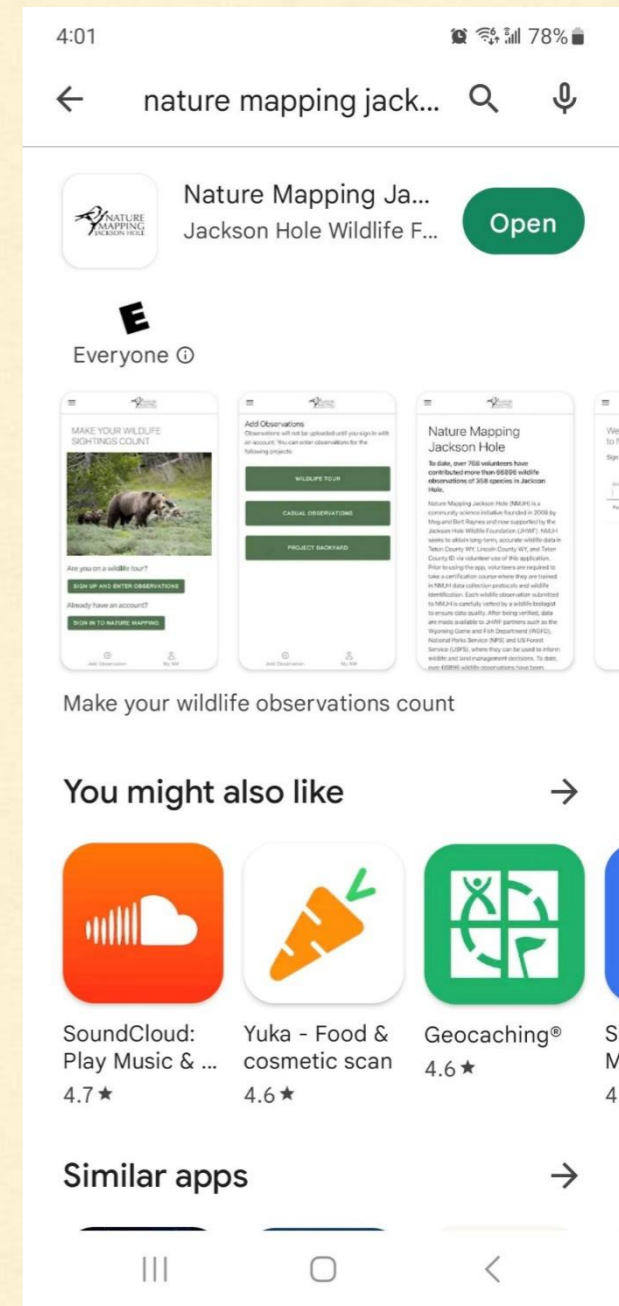
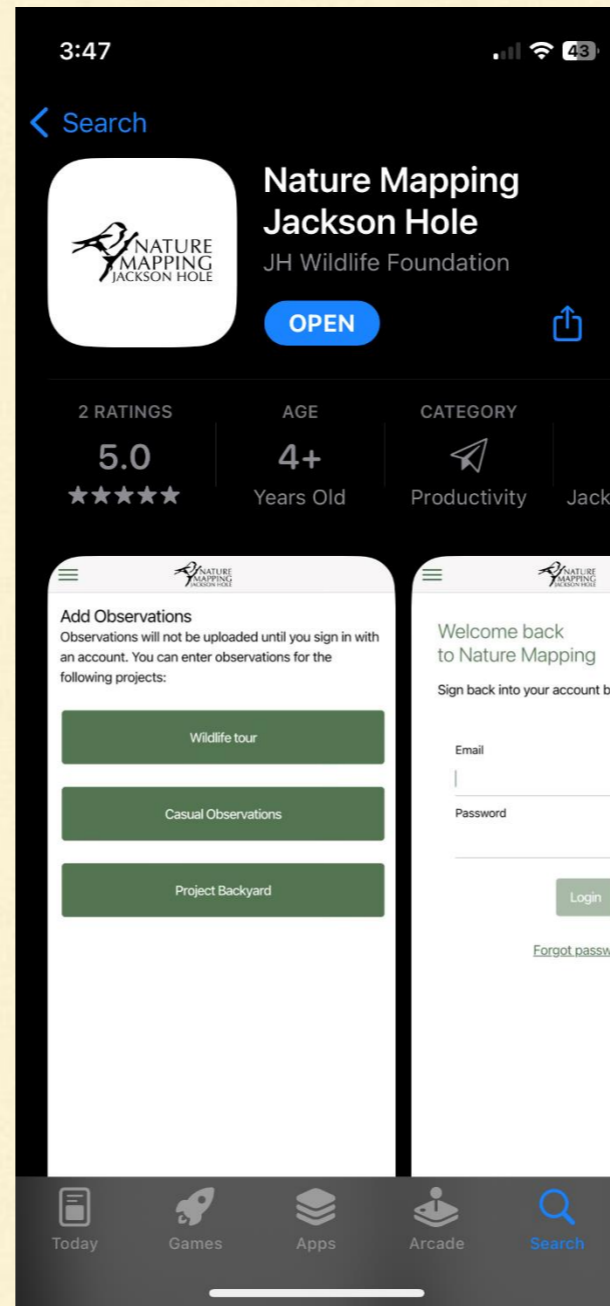
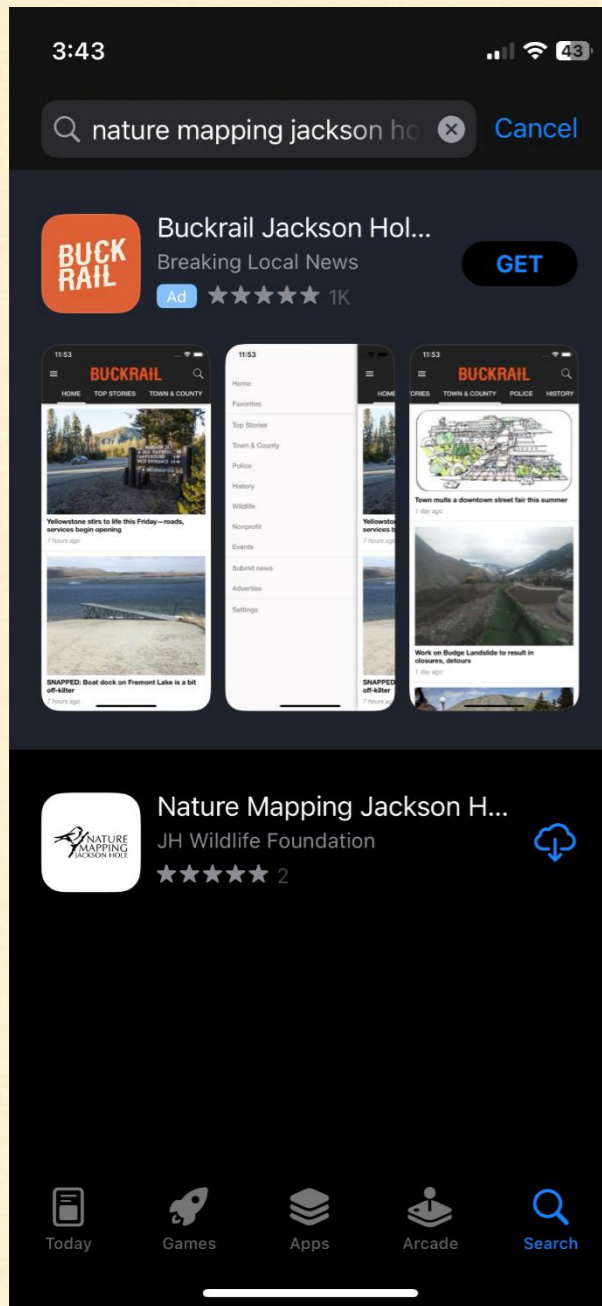
TABLE MAP

Project	Date	Species	Quantity	Activity	Age	Sex	Mortality
Project Backyard	1/6/2023	Evening Grosbeak	1	Active Bird Feeder	Unknown/...	Male	N/A
Project Backyard	1/5/2023	Sharp-tailed Grouse	2	Flying	Unknown/...	Unknown	N/A
Project Backyard	1/5/2023	Mule Deer	3	Feeding/Foraging	Unknown/...	Female	N/A
Project Backyard	1/5/2023	Northern Flicker	1	Active Bird Feeder	Unknown/...	Male	N/A
Project Backyard	1/5/2023	Mountain Chickadee	2	Active Bird Feeder	Unknown/...	Unknown	N/A
Project Backyard	1/5/2023	Black-billed Magpie	6	Active Bird Feeder	Unknown/...	Unknown	N/A
Project Backyard	1/5/2023	Black-capped Chic...	6	Active Bird Feeder	Unknown/...	Unknown	N/A
Project Backyard	1/5/2023	Pine Siskin	2	Active Bird Feeder	Unknown/...	Unknown	N/A

neighbors-to-nature-cache-creek-study/ Add Observation My NM Settings



# FINDING THE NATURE MAPPING APP



Search for “Nature Mapping Jackson Hole” in your App Store



# LOGGING IN TO NATURE MAPPING

NATURE MAPPING

- + Add Observation
- ✓ Data Verification
- ↓ Data Export
- 🔧 Admin
- 🌐 About
- 📄 Resources

ACCOUNT

- 🔑 Sign in
- +👤 Signup

← NATURE MAPPING JACKSON HOLE

Welcome back to Nature Mapping

Sign back into your account below.

Email  
hilary@jhwildlife.org

Password

LOGIN

[Forgot password?](#)

4:19

☰ NATURE MAPPING JACKSON HOLE

MAKE YOUR WILDLIFE SIGHTINGS COUNT

Want to join Nature Mapping?

Sign up and enter observations

Already have an account?

Sign in to Nature Mapping

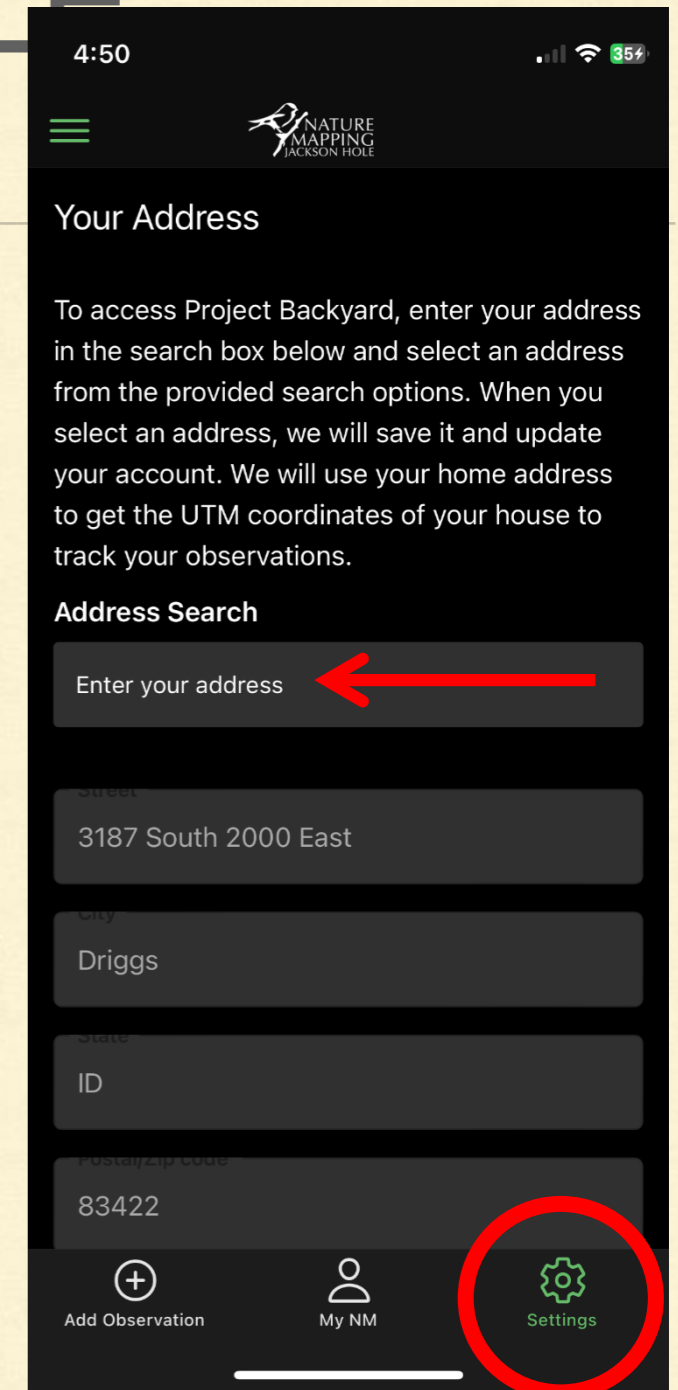
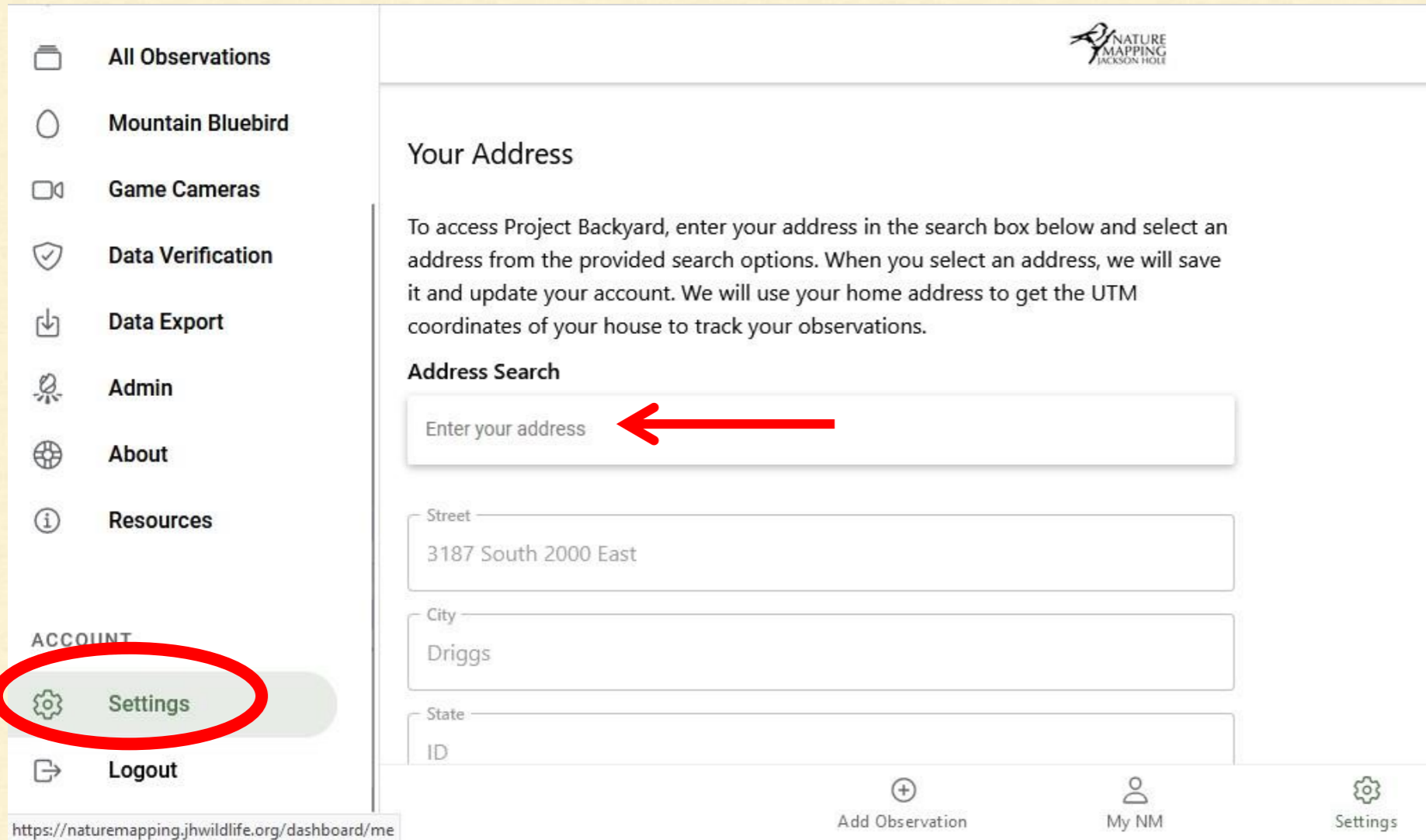
+ Add Observation

👤 My NM

**Username (email address)  
and password are case sensitive**

**If logging in for the first time, a Verification Code will be sent to your email**

# SETTING UP YOUR PROFILE



Add your address to your profile for access to Project Backyard

# RESETTING YOUR PASSW

NATURE MAPPING

- + Add Observation
- ✓ My Observations
- 📁 All Observations
- 🐦 Mountain Bluebird
- 📷 Game Cameras
- ✓ Data Verification
- 📄 Data Export
- 👤 Admin
- 🌐 About
- 📄 Resources

ACCOUNT

- ⚙️ **Settings**
- 🚪 Logout

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### Change Email

Your Email

hilary@jhwildlife.org

**UPDATE EMAIL**

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### Change password

Old Password

.....

New Password

.....

Passwords must be 8 characters and include numbers and special characters.

Confirm New Password

.....

**CHANGE PASSWORD**

4:50

NATURE MAPPING JACKSON HOLE

### Change password

Old Password

.....

New Password

.....

Passwords must be 8 characters and include numbers and special characters.

Confirm New Password

.....

**Change Password**

---

### Delete account

If you would like to delete your account, click

+ Add Observation   My NM   **⚙️ Settings**

# RESOURCES: [JHWILDLIFE.ORG](https://jhwildlife.org)

NATURE MAPPING

- + Add Observation
- My Observations
- All Observations
- Mountain Bluebird
- Game Cameras
- Data Verification
- Data Export
- Admin
- About
- Resources**

<https://jhwildlife.org/our-work/nature-mapping/neighbors-to-nature-cache-creek-study/>

5:03

NATURE MAPPING JACKSON HOLE

Add Observations

You can enter observations for the following projects:

- Beaver Project
- Casual Observations
- Game Cameras
- Moose Day
- Mountain Bluebird Nestbox Project
- Neighbors To Nature

Add Observation My NM Settings

Access resources for Nature Mappers from the app and website

# RESOURCES: [JHWILDLIFE.ORG](https://jhwildlife.org)

NATURE MAPPING LOGIN



MOOSE DAY

ABOUT US ▾

PROGRAMS ▾

LEARN ▾

BLOG

SUPPORT US



## Quick Tips for Nature Mappers

Veteran Nature Mappers will notice changes to the data entry platform starting October 14th, 2019. These changes are designed as upgrades to improve user experience by allowing citizen-scientists to submit wildlife observations “offline” on mobile devices. The upgrades also enable users to submit photos with their observations, add specialized projects with custom data fields, and enhance the platform’s overall security. [Read the press release.](#)

To enter your wildlife observations, you’ll need to navigate to [naturemapping.jhwildlife.org](https://naturemapping.jhwildlife.org) or use one of the links provided on this website. The links and resource materials on this page

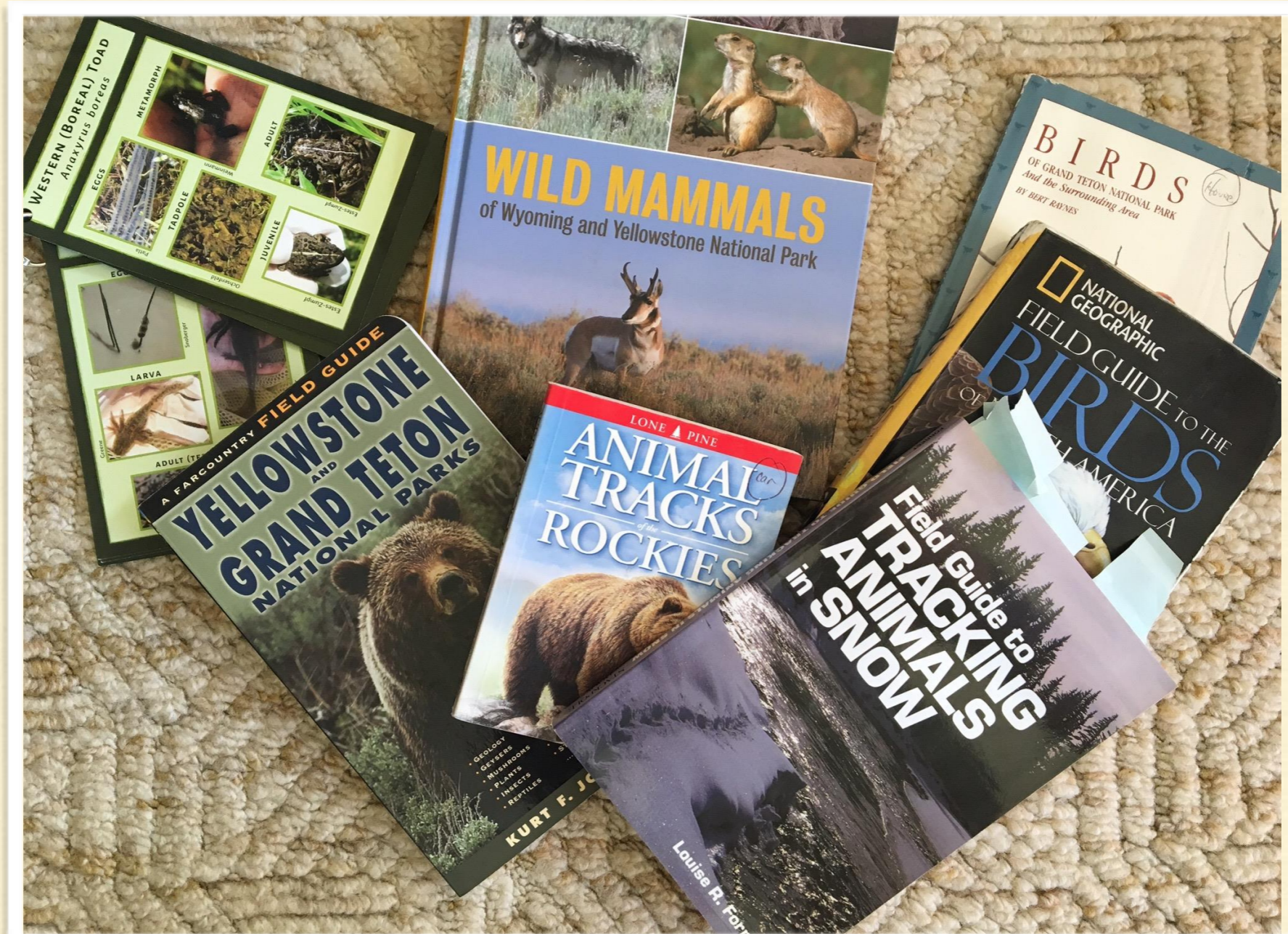
Donate



### NMJH Program Goals

- Keeping common

# RESOURCES: GUIDE BOOKS



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# RESOURCES: NMJH COMMUNITY

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# RESOURCES: JHWF YOUTUBE

**YouTube** Search

HOME VIDEOS PLAYLISTS COMMUNITY CHANNELS ABOUT

29 views • 1 month ago 59 views • 2 months ago 30 views • 5 months ago

CC

**Game Camera Footage of Wildlife Utilizing the Teton...**  
14 views • 5 months ago

**Amphibian and Reptile Continuing Education...**  
53 views • 5 months ago

**Elk Crossing at Wilson Bridge Ad**  
24 views • 6 months ago

**Antelope Crossing**  
19 views • 6 months ago

**The Pow Can Wait Ad**  
7 views • 6 months ago

**Slow Down Ad**  
34 views • 6 months ago

**Elk herd moving through winter closure zone**  
66 views • 6 months ago

**Beginning Birding Class with Hilary Turner**  
98 views • 7 months ago

**Snake River Corridor Film Teaser**  
3 views • 7 months ago

**The Snake River Corridor Project**  
162 views • 7 months ago

<https://docs.google.com/document/d/1Cg8726PLnZfKamF9AXv1NYL6RLnwjJ70KeE7RoIYF0k/edit?ts=60f6ff98#>



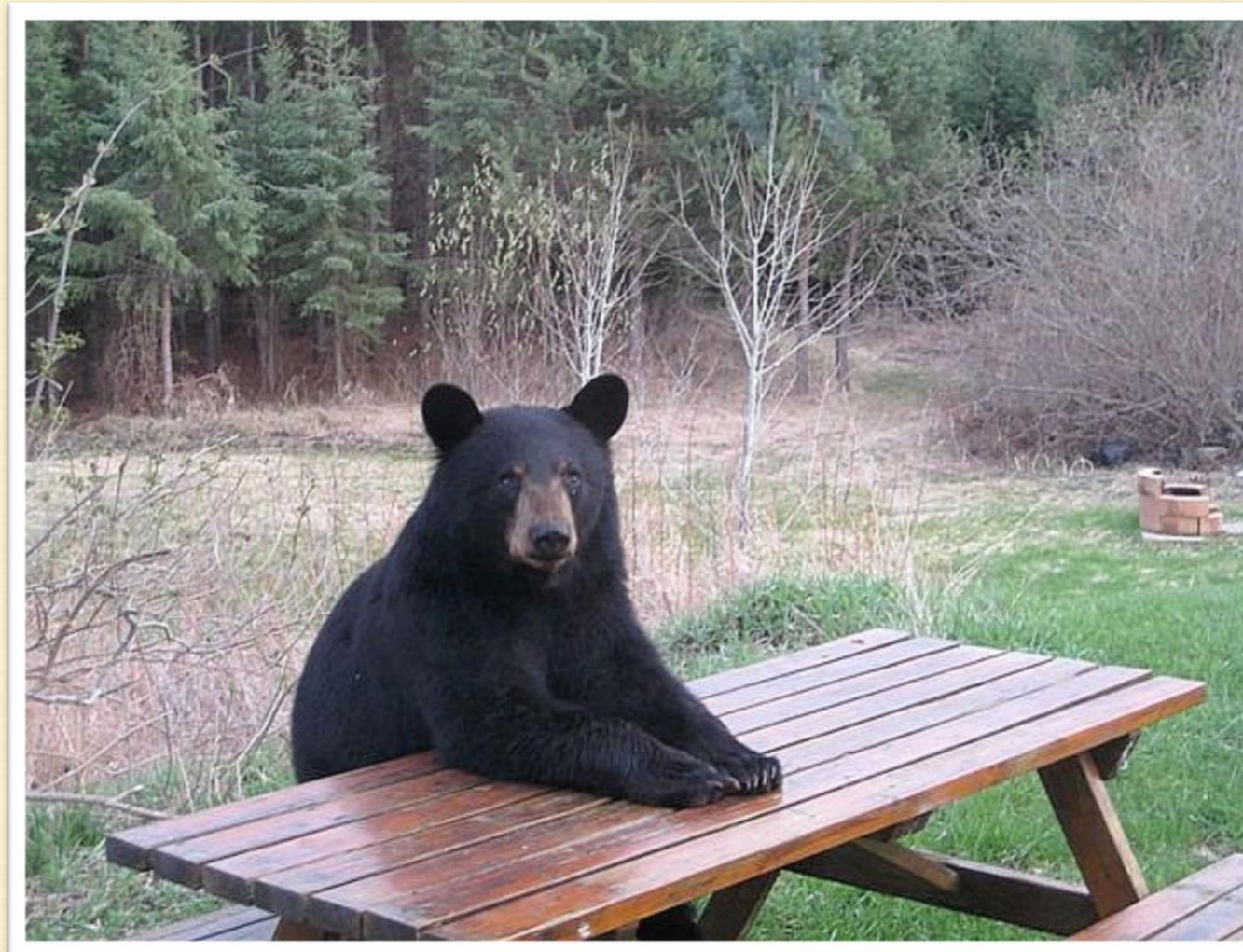
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# UPCOMING OPPORTUNITIES

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- Mountain Bluebird Nestbox monitoring
  - Email Ideas for continuing education
  - Email [jessie@jhwildlife.org](mailto:jessie@jhwildlife.org) to sign up or for assistance
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# Any Questions ?



“In every walk with nature one receives far more than he seeks.”

– John Muir