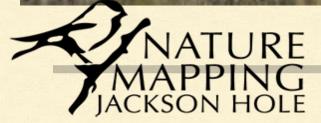
NATURE MAPPING JACKSON HOLE

Make your wildlife sightings count!



arkgocke.co



JACKSON HOLE

WILDLIFE FOUNDATION

THE JACKSON HOLE WILDLIFE FOUNDATION MISSION



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

JACKSON HOLE

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SPEED LIMIT

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:

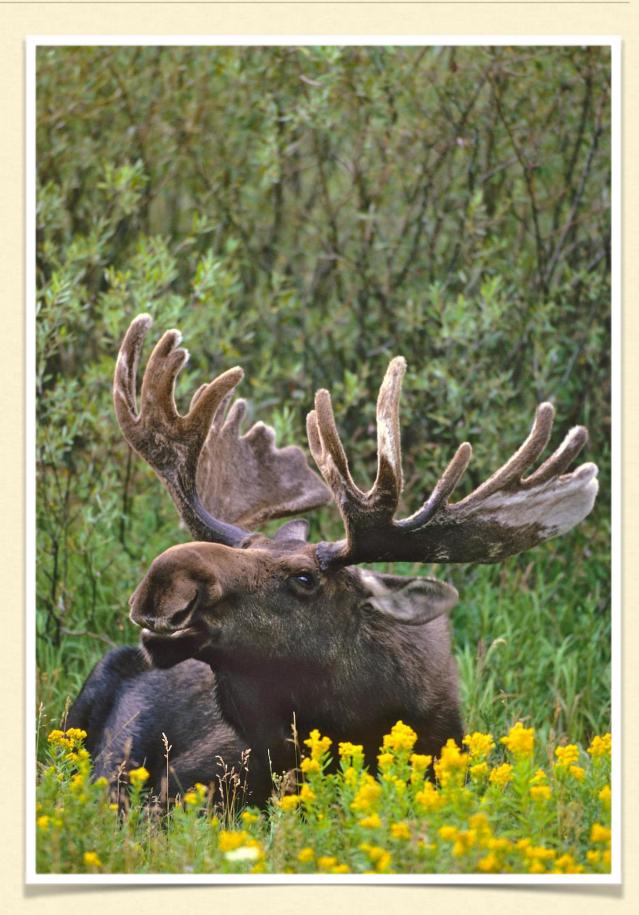
Keeping common species common (studying all species not just highprofile species or species of concern)

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 (WOS)



THE DATA PROCESS:

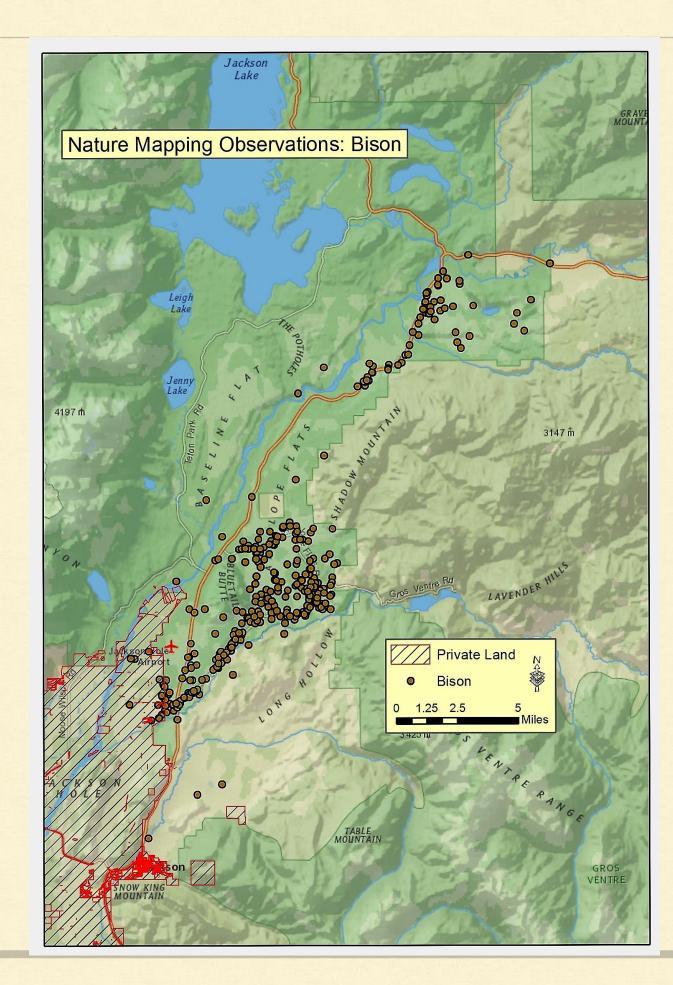
• Trained Nature Mappers enter their data in the field using the app or online later (preferably within a week of collecting it)

- 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!

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



PRIVATE LAND CONSIDERATIONS

- 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.



NMJH PROJECTS

- Casual Observations
- Project Backyard
- Moose Day
- Mountain Bluebird monitoring
- Species of Greatest Conservation Needs
- Bird Banding



CASUAL OBSERVATIONS

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



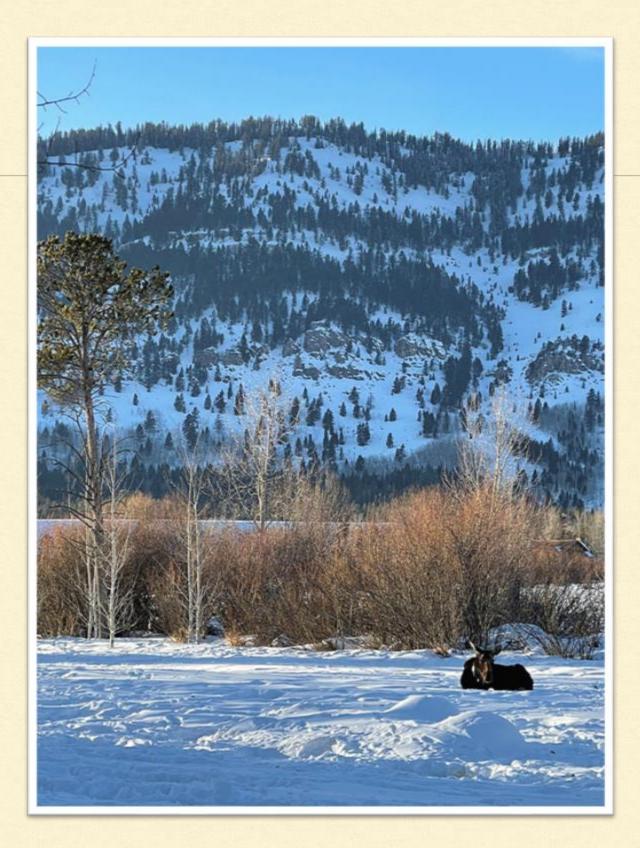
PROJECT BACKYARD

- 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



MOOSE DAY

- Late February/Early March
- Work in teams
- Assigned areas
- Nature Mapping data complement WGFD data (private land vs. public land)



MOUNTAIN BLUEBIRD NESTBOX MONITORING PROJECT



SPECIES OF GREATEST CONSERVATION NEED PROJECTS





MAPS (MONITORING AVIAN PRODUCTIVITY AND SURVIVORSHIP)





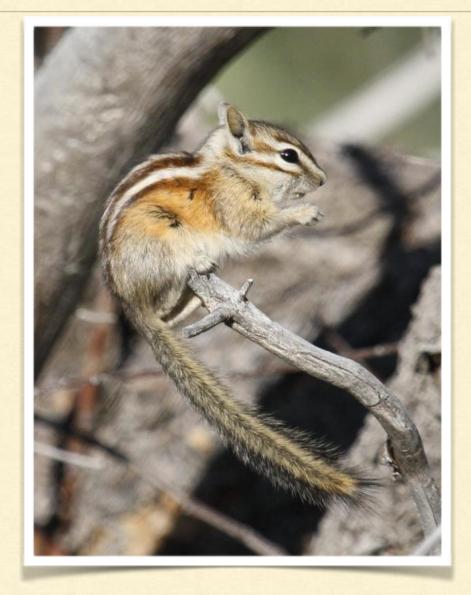
FUNDAMENTALS OF OBSERVATIONS:

- 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

SPECIES ID: CHIPMUNKS





Least Chipmunk

Yellow Pine Chipmunk

SPECIES ID: SQUIRRELS



Uinta Ground Squirrel – "Chisler"

Golden Mantled Ground Squirrel

SPECIES ID: RED SQUIRREL



SPECIES ID: WOLVERINE



SPECIES ID: AMERICAN BADGER



SPECIES ID: YELLOW-BELLIED MARMOT



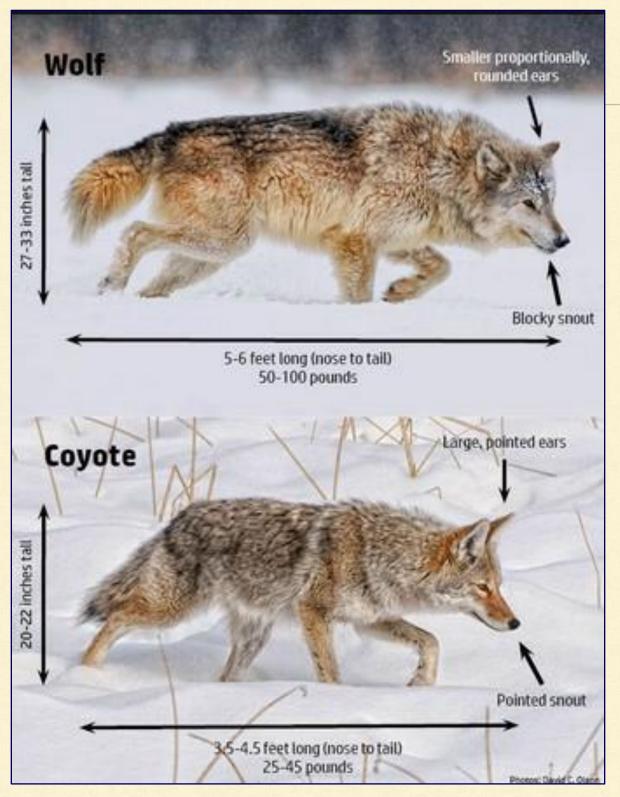
SPECIES ID: GRIZZLY AND BLACK BEARS

Know your bears!



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

SPECIES ID: WOLVES AND COYOTES



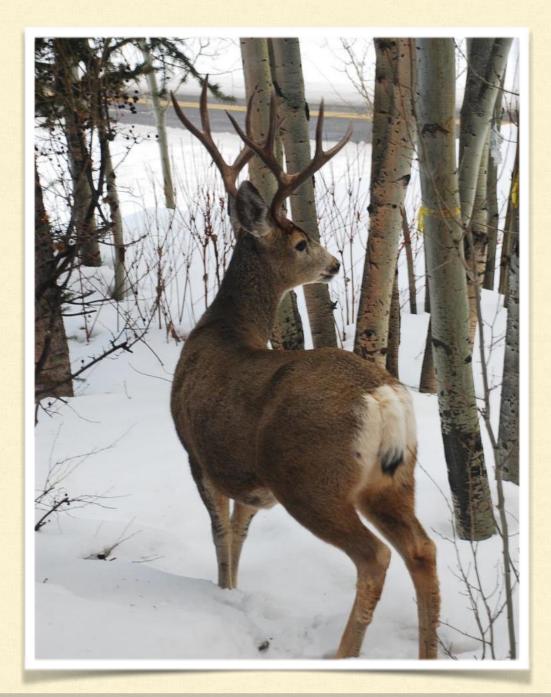
Know your Canids!



SPECIES ID: MULE DEER



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



SPECIES ID: WHITE-TAILED DEER

- 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



SPECIES ID: WHITE-TAIL VS. MULE



Main beam with single, vertical points Antler with multiple forks

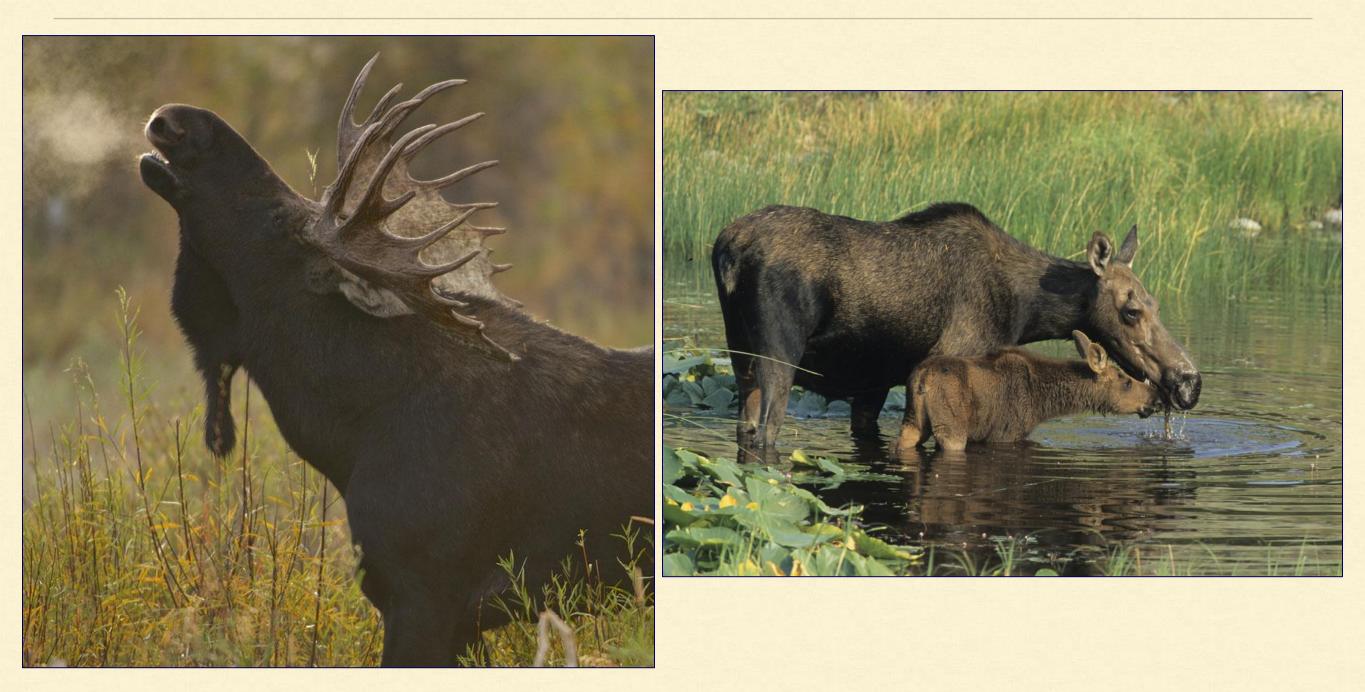
SPECIES ID: ELK





Long main beam with tines
 Shaggy dark mane
 Buffy rump

SPECIES ID: MOOSE



SPECIES ID: TRUMPETER SWAN

Photo by Frank Lehman

SPECIES ID: TUNDRA SWAN



SPECIES ID: BARROW'S GOLDENEYE



SPECIES ID: COMMON GOLDENEYE



SPECIES ID: GREAT GRAY OWL



SPECIES ID: GREAT HORNED OWL



Photo by John Norton



1. Single facial disc, reddish face

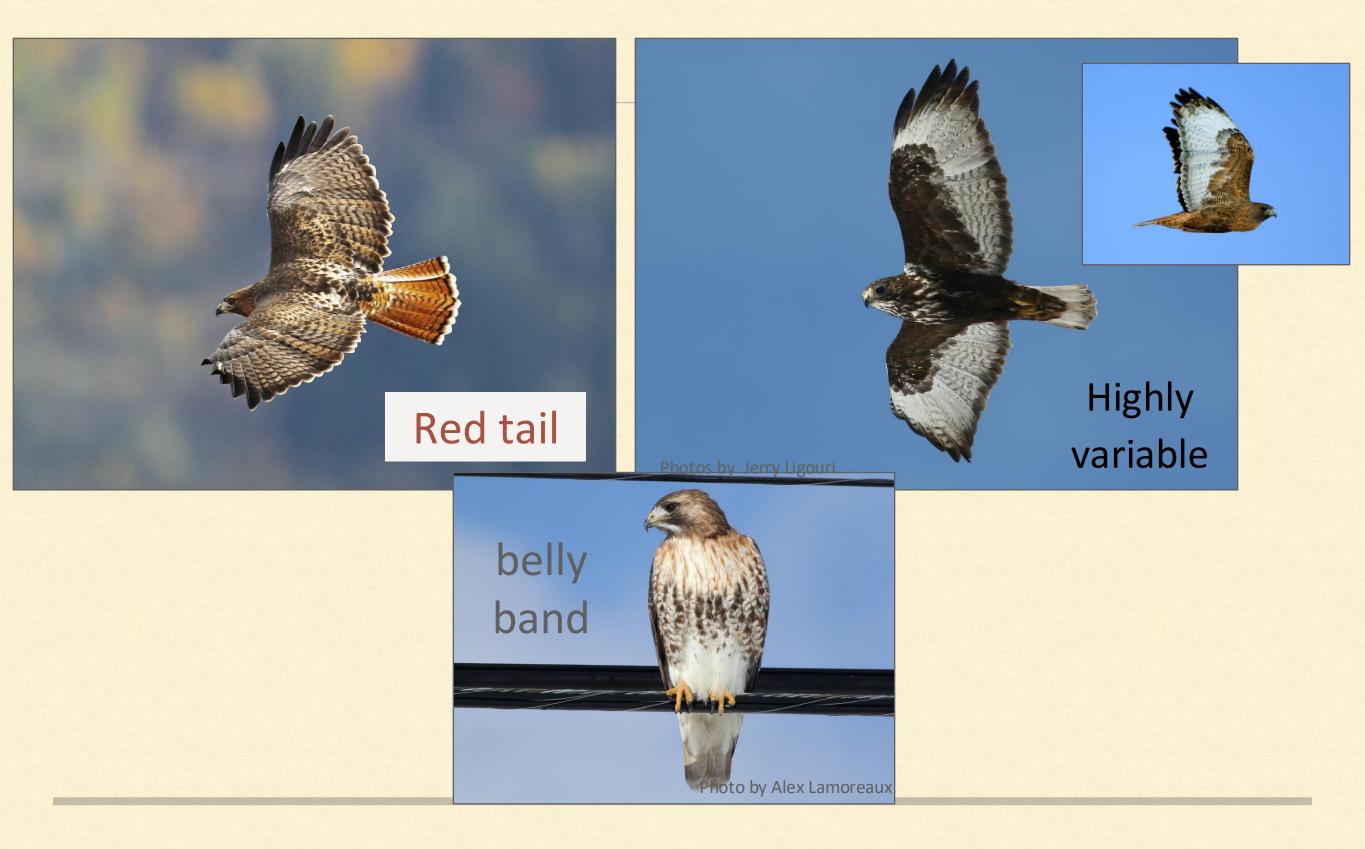
2. Ear tufts (may be lowered)

3. Brownish color, but variable

Red-tailed Hawk



SPECIES ID: RED-TAILED HAWK



SPECIES ID: SWAINSON'S HAWK



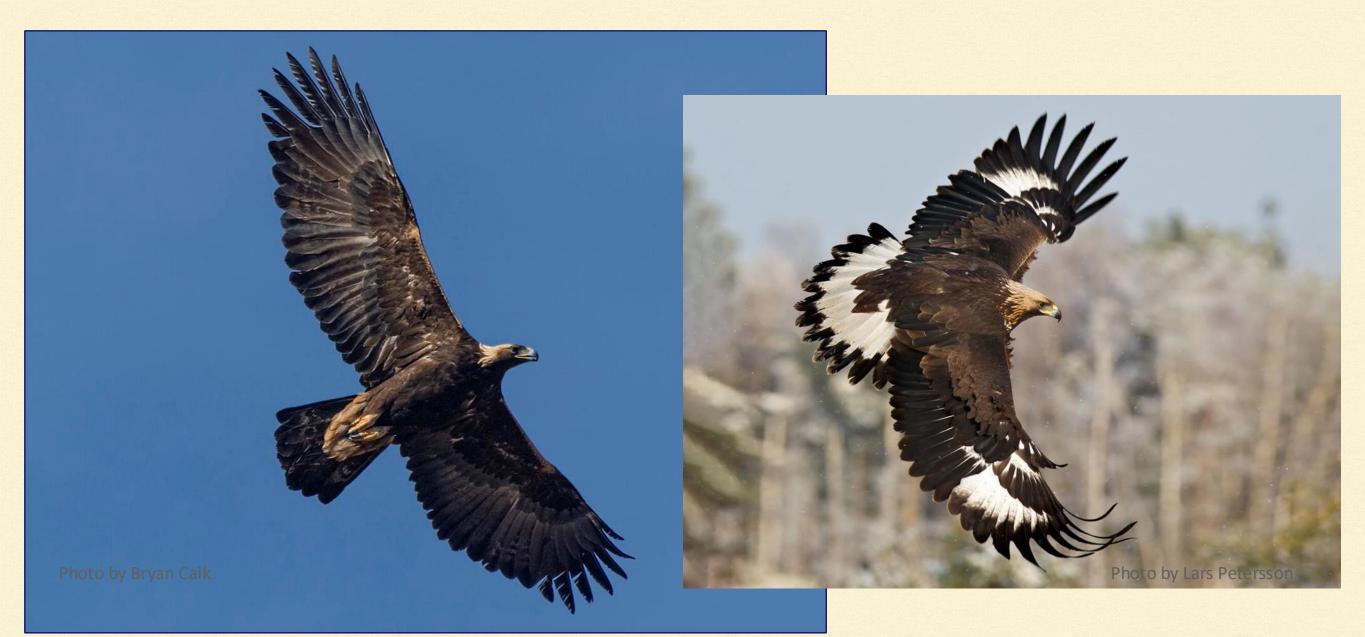
SPECIES ID: BALD EAGLE







SPECIES ID: GOLDEN EAGLE



WHICH EAGLE IS WHICH?



SPECIES ID: RUFOUS HUMMINGBIRD



SPECIES ID: CALLIOPE HUMMINGBIRD



SPECIES ID: BROAD-TAILED HUMMINGBIRD



SPECIES ID: BLACK-CHINNED HUMMINGBIRD



SPECIES ID: CHICKADEES





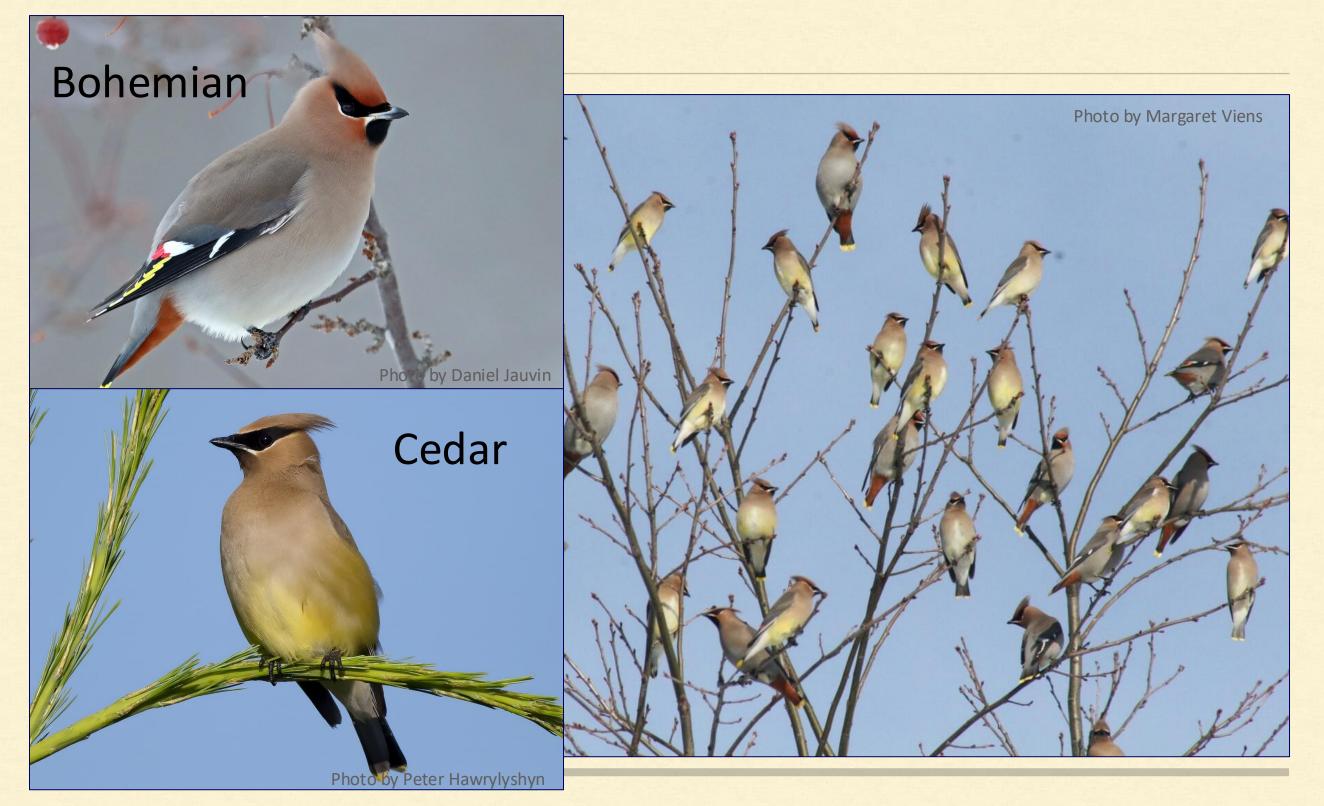
Black-capped

Mountain

SPECIES ID: WESTERN MEADOWLARK



SPECIES ID: WAXWINGS



SPECIES ID: AMERICAN GOLDFINCH



SPECIES ID: EVENING GROSBEAK



SPECIES ID: YELLOW WARBLER



SPECIES ID: WESTERN TANAGER



SPECIES ID: WESTERN TOAD



SPECIES ID: BOREAL CHORUS FROG



SPECIES SEX ID

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

SEX: BISON MALE VS. FEMALE

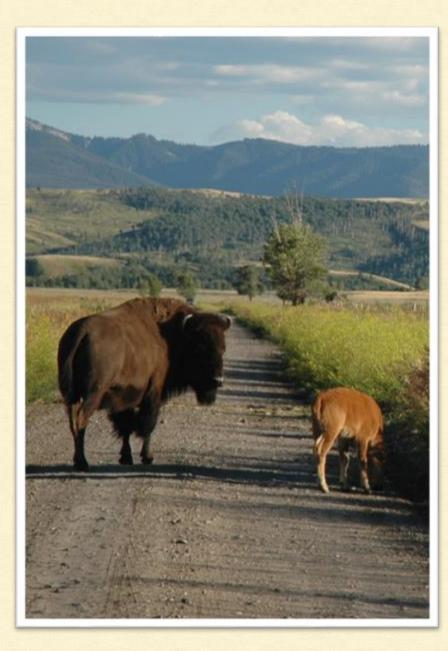


Male: Less curved horns



Female: More curved horns

SEX: BISON





SEX: MOOSE MALE



SEX: MOOSE FEMALE



SEX: PRONGHORN



Male

SEX: MOUNTAIN BLUEBIRD

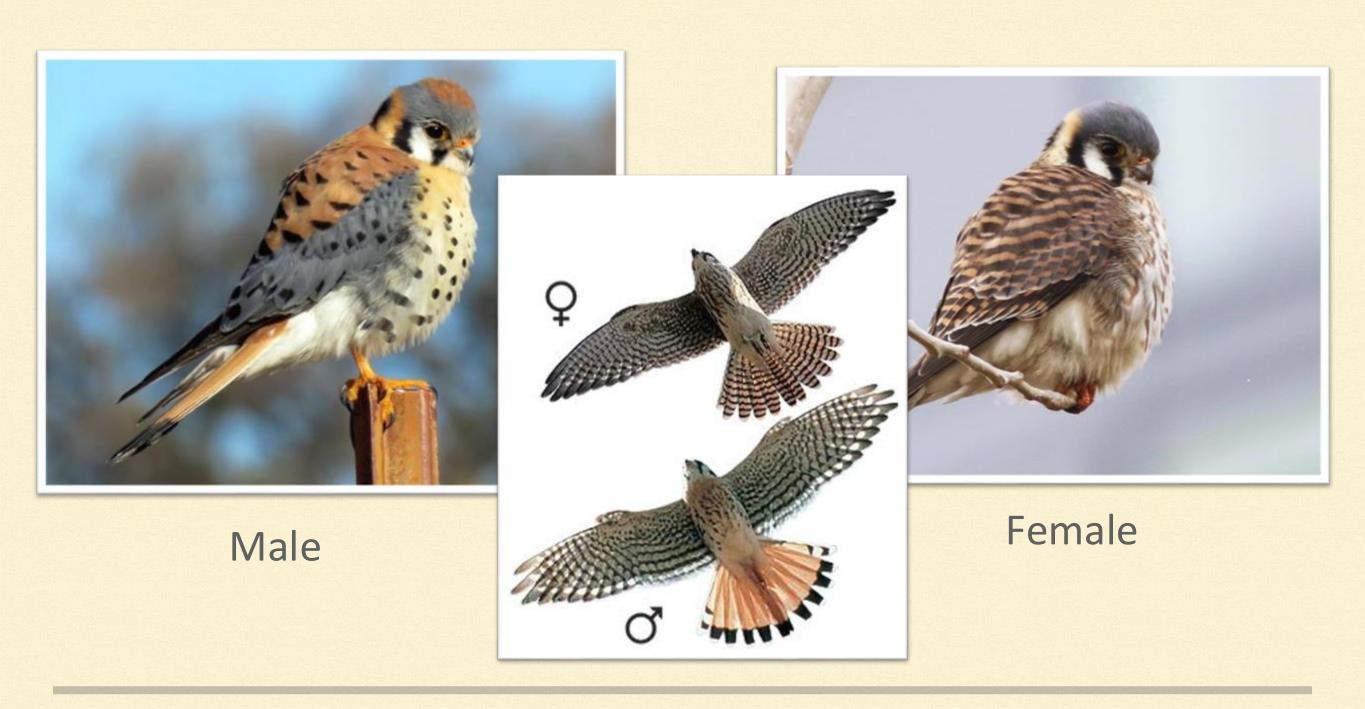




Male

Female

SEX: AMERICAN KESTREL



SEX: UNKNOWN

The sex of many species cannot be determined or observed:

- Squirrels
- Swans
- Snakes
- Many songbirds and raptors



SPECIES AGE

Photo by Malcolm Gold

AGE: JUVENILES

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



AGE: JUVENILES

Subadults:

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



AGE: BISON JUVENILE (L) YEARLING (R)



AGE: ANTLER SIZE DOES NOT TELL ALL





AGE: UNKNOWN/MIXED



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

SPECIES ACTIVITY:

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



ACTIVITY: SIGN (TRACK/SCAT)



ACTIVITY: ACTIVE BIRD FEEDER



ACTIVITY: REPRODUCTION (BREEDING)

In the act or courtship behavior





ACTIVITY: TERRITORIAL

- Singing
- Chasing





ACTIVITY: NESTING



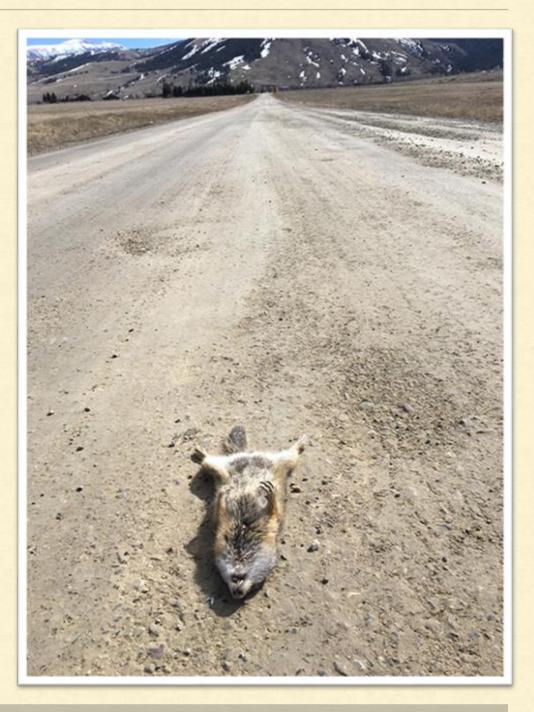
ACTIVITY: UNDETERMINED

VariableHeard only



MORTALITY:

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

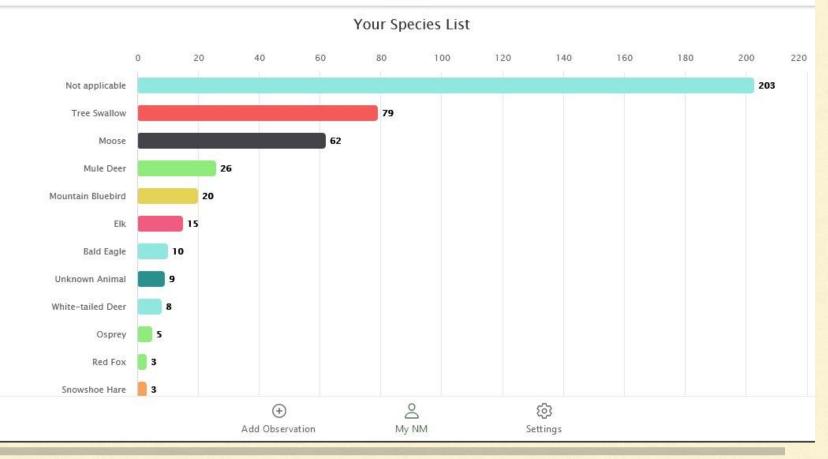


GETTING YOU GOING

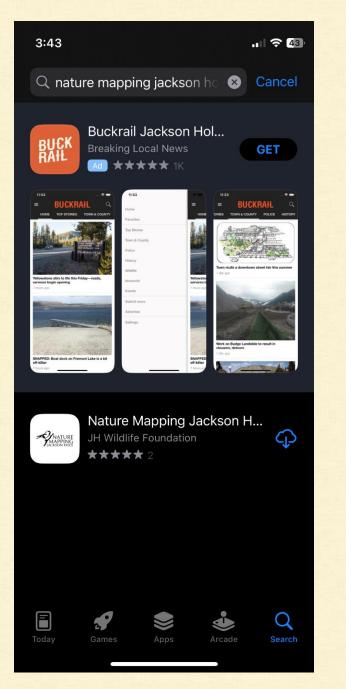
- Create an Account
- Login
- Settings
- Practice

ubmitted Ob 30 Observations	servations						
		TABLE			M	AP	
Project	Date	Species	Quantity	Activity	Age	Sex	Mortality
Filter by project		Filter by species		Filter by activity	Filter by age	Filter by sex	Filter by 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

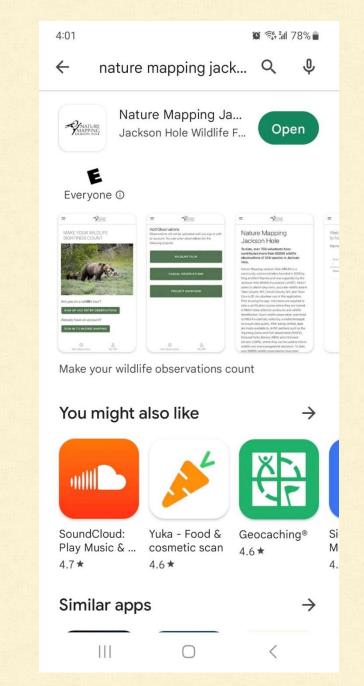




FINDING THE NATURE MAPPING APP



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Search	Nature N Jackson JH Wildlife F	Hole	đ
2 ratings 5.0 ★★★★★	AGE 4+ Years Old	CATEGORY	C Jacks
Add Observations Observations will not be uploa an account. You can enter obs following projects:	ervations for the	Welcome ba to Nature Ma Sign back into you	apping
Casual Obse Project Bac	rvations	Email Password	Login
		E	orgot passwc
Today Games	Apps	Arcade S	Q earch



Search for "Nature Mapping Jackson Hole" in your App Store

LOGGING IN TO NATURE MAPPING

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NATU	IRE MAPPING				
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÷ 0	Signup	Forgot password?		Want to join Nature Mapping	g?
		Torgot password:		Sign up and enter observations	

Already have an account?

Sign in to Nature Mapping

 \bigcirc

My NM

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Add Observation

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

				Your Address
ō	All Observations	WINATURE MAPPING MARSON HOLE		To access Project Backyard, enter your address
0	Mountain Bluebird	Your Address		in the search box below and select an address from the provided search options. When you
	Game Cameras	Tour Address		select an address, we will save it and update your account. We will use your home address
\oslash	Data Verification	To access Project Backyard, enter your address in the search box below and select an address from the provided search options. When you select an address, we will save it and update your account. We will use your home address to get the UTM		to get the UTM coordinates of your house to track your observations.
৶	Data Export	coordinates of your house to track your observations.		Address Search
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https://na	aturemapping.jhwildlife.org/dashboard/me	Add Observation My NM	Settings	+ <u>2</u> Ø
				Add Observation My NM Settings

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Add your address to your profile for access to Project Backyard

RESETTING YOUR PASSWORD

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	Change password	
	Old Password	
		Ø
	New Password	
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	Passwords must be 8 characters and in numbers and special characters.	clude
	Confirm New Password	
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	Change Password	
	Delete account	
	If you would like to delete your account of Add Observation My NM Se	ettings

NATU	IRE MAPPING
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UPDATE EMAIL	
Change password	
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Passwords must be 8 characters and includ	e numbers and special characters.
Confirm New Password	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
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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 – LIVE DEMO



RESOURCES: JHWILDLIFE.ORG

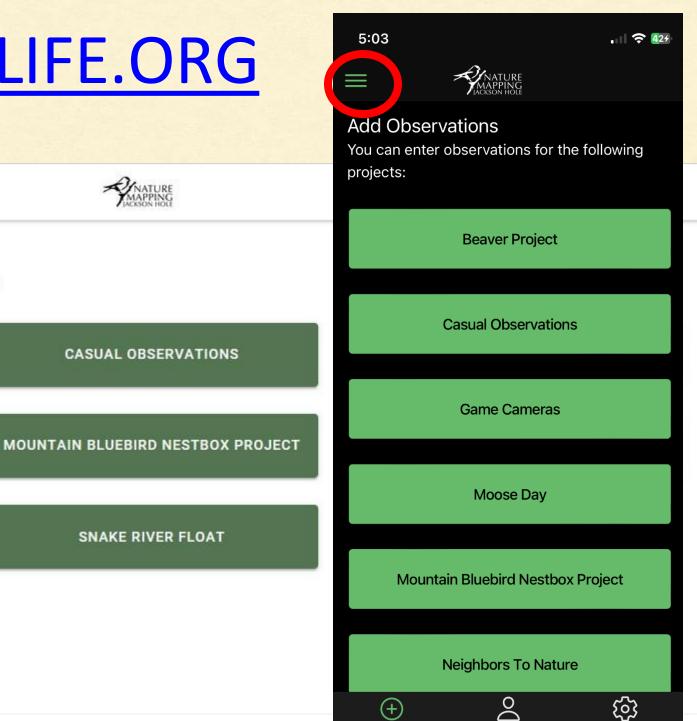
You can enter observations for the following projects:

BEAVER PROJECT

MOOSE DAY

PROJECT BACKYARD

Add Observations



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

NATURE MAPPING

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Add Observation

My Observations

All Observations

Mountain Bluebird

Game Cameras

Data Verification

Data Export

Admin

About

Resources

Access resources for Nature Mappers from the app and website

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Add Observation

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My NM

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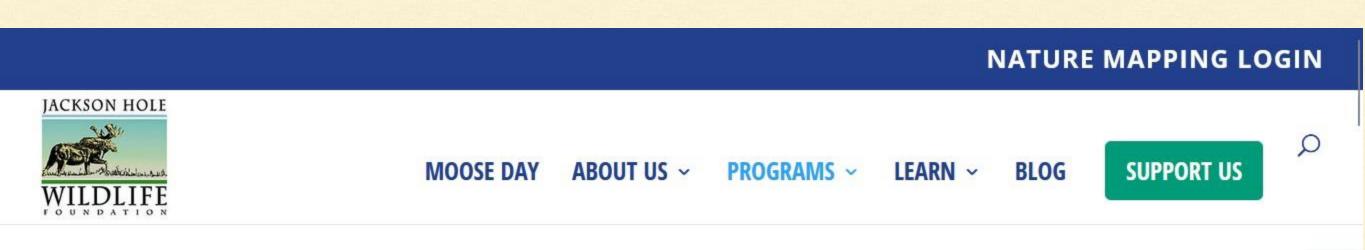
Setting

Add Observation

My NM

Settings

RESOURCES: <u>JHWILDLIFE.ORG</u>



Quick Tips for Nature Mappers

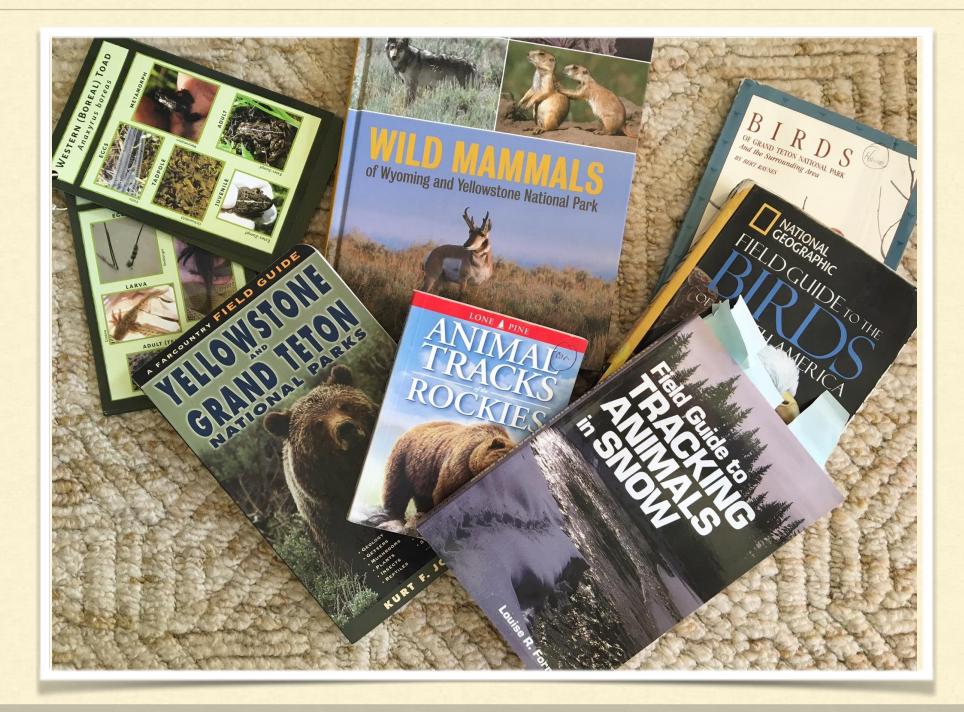
https://jhwildlife.org

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 citizenscientists 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.

NMJH Program Goals	
 Keeping common 	

To enter your wildlife observations, you'll need to navigate to naturemapping.jhwildlife.org or use one of the links provided on this website. The links and resource materials on this page

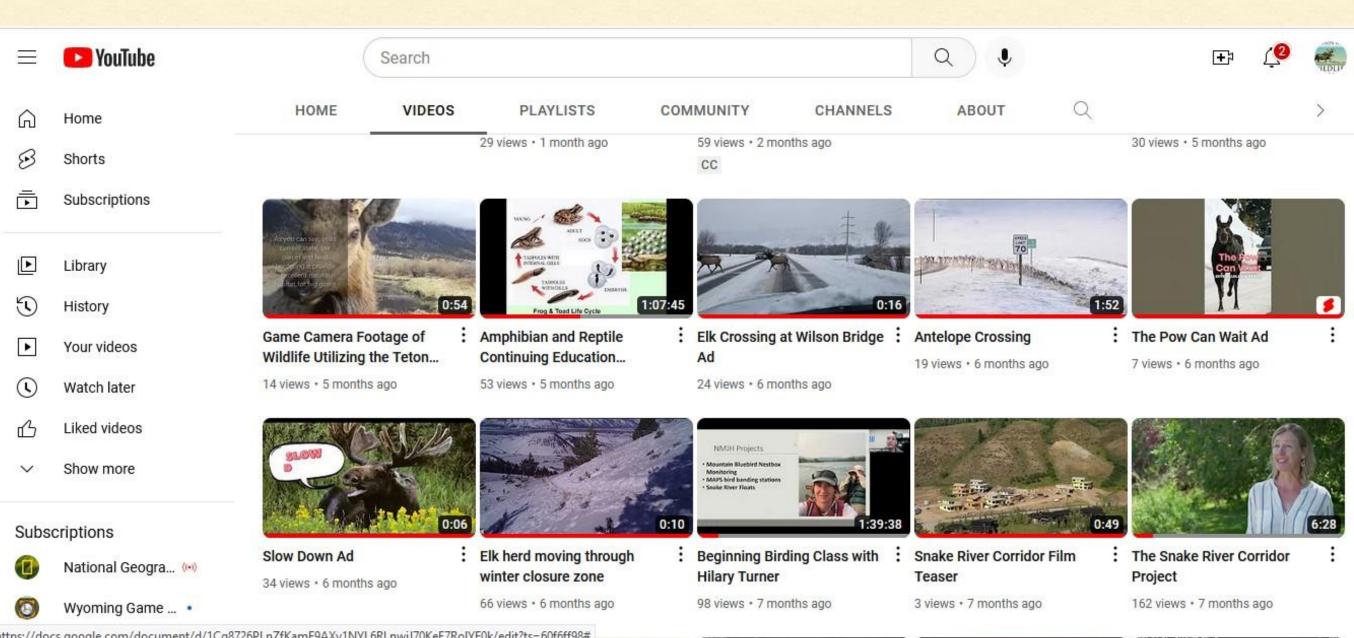
RESOURCES: GUIDE BOOKS



RESOURCES: NMJH COMMUNITY



RESOURCES: JHWF YOUTUBE



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

UPCOMING OPPORTUNITIES

- Amphibian surveys
- Pika surveying
- Cyber-tracking Class
- Black Footed-Ferret surveying





Any Questions?



"In every walk with nature one receives far more than he seeks." – John Muir