

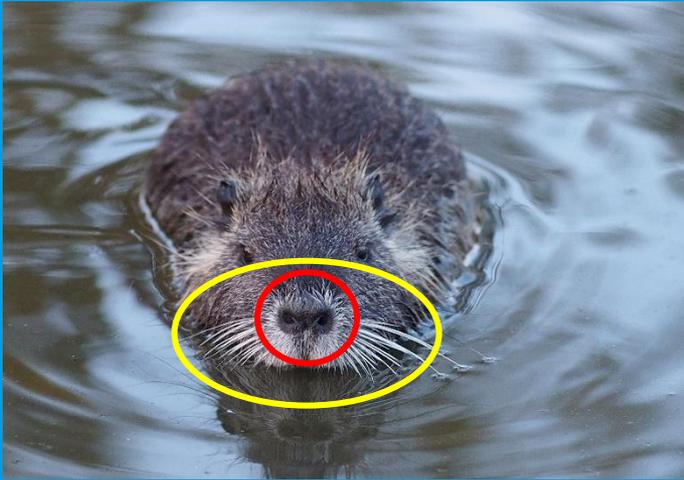
CAN YOU
SPOT THE DIFFERENCE
BETWEEN INVASIVE AND NATIVE CALIFORNIA SPECIES?



INSTRUCTIONS

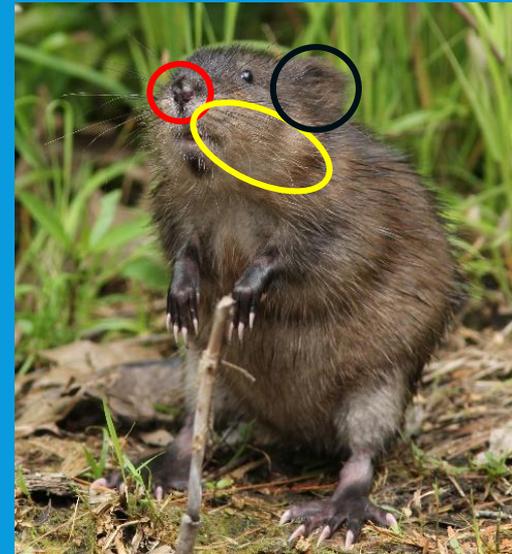
- Each of the following pages shows a native and invasive species.
- Study each photograph and the distinguishing features for each.
- Then, test your invasive species identification skills on a new set of photos!

NUTRIA VS. MUSKRAT



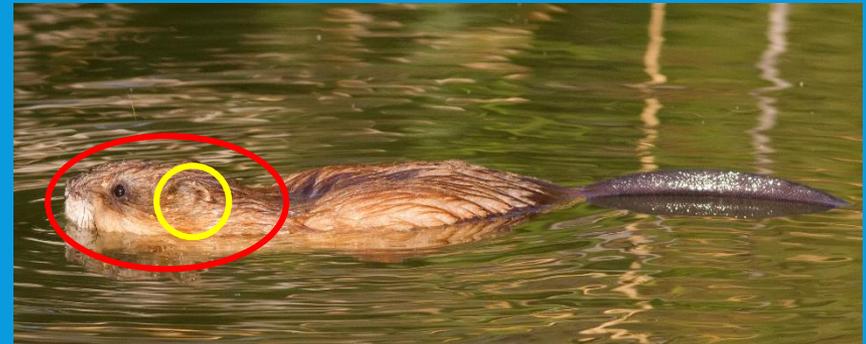
Feature	Nutria (Invasive)	Muskrat (Native)
Nose ●	Large, flattened, almost pig-like	Small, rabbit-like
Whiskers ●	Thick, white	Fine, black, can be indistinguishable from fur

NUTRIA VS. MUSKRAT



Feature	Nutria (Invasive)	Muskrat (Native)
Nose	● Large, flattened, almost pig-like	Small, rabbit-like
Whiskers	● Thick, white	Fine, black, can be indistinguishable from fur
Ears	● Lighter fur around dark ears	Ears and fur are the same color

NUTRIA VS. MUSKRAT



Feature	Nutria (Invasive)	Muskrat (Native)
Head 	Blocky, rectangular shaped	Rounded, tapered
Ears 	Lighter fur around dark ears	Ears and fur are the same color

NUTRIA VS. MUSKRAT



Feature		Nutria (Invasive)	Muskrat (Native)
Tail	●	Round	Flattened from side to side
Ears	●	Lighter fur around dark ears	Ears and fur are the same color
Nails	●	Black	White

NUTRIA VS. BEAVER



Feature	Nutria (Invasive)	Beaver (Native)
Whiskers ●	Thick, white	Fine, black, can be indistinguishable from fur

NUTRIA VS. BEAVER



Feature	Nutria (Invasive)	Beaver (Native)
Tail	Round	Flat

TADPOLE VS. LARVAE



Feature	Bullfrog tadpole (Invasive)	Salamander larvae (Native)
Gills 	No external gills	External gills present
Legs 	Rear legs develop first	Front legs develop first

BULLFROG VS. YELLOW-LEGGED FROG



Feature	Bullfrog (Invasive)	Sierra Nevada yellow-legged frog (Native)
Dorso-lateral folds (two ridges behind the eye down the side of the body). ●	None	Present

BULLFROG VS. YELLOW-LEGGED FROG



Feature	Bullfrog (Invasive)	Sierra Nevada yellow-legged frog (Native)
Leg color 	No yellow on rear legs.	Bright yellow coloration on underside of rear legs, often continues up to belly.

BULLFROG VS. TREEFROG



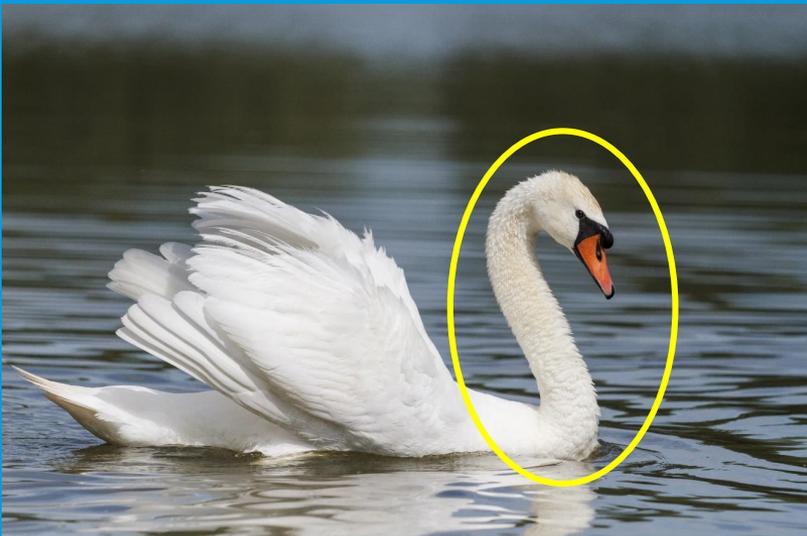
Feature	Bullfrog (Invasive)	Treefrog, aka Chorus Frog (Native)
Eye stripe ●	None	Distinct stripe
Tympanum ● (eardrum) behind eye	Obvious	May be present in other frogs, but not obvious

BULLFROG VS. RED-LEGGED FROG



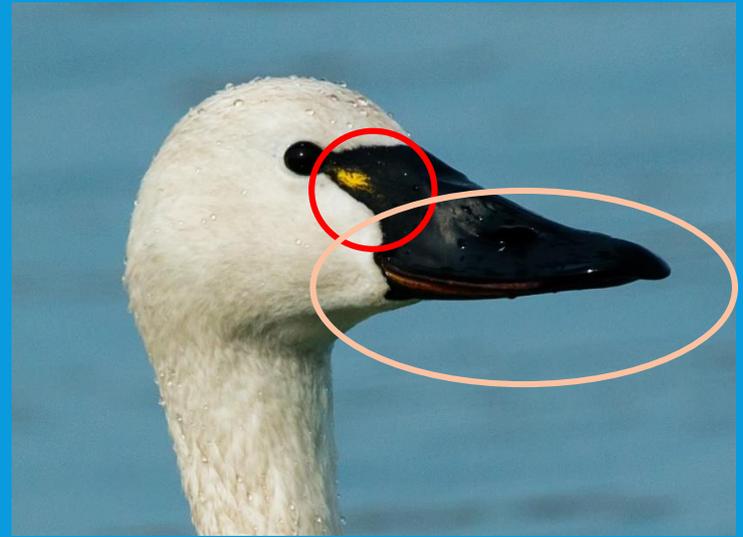
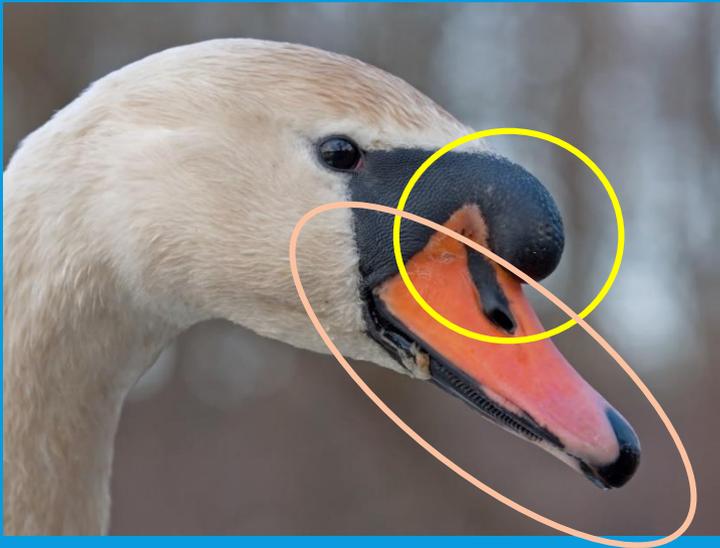
Feature	Bullfrog (Invasive)	California Red-legged Frog (Native)
Belly and rear leg color 	No red coloration	Red coloration on belly and rear legs

MUTE SWAN VS. TUNDRA SWAN



Feature	Mute Swan (Invasive)	Tundra Swan (Native)
Neck shape ●	S-shaped curve	Straight

MUTE SWAN VS. TUNDRA SWAN



Feature		Mute Swan (Invasive)	Tundra Swan (Native)
Bill color		Orange	Black
Bill knob		Black knob at base	No knob
Eye spot		No eye spot	Yellow spot at base of eye

NOW IT'S YOUR TURN
SPOT THE INVASIVES

WHAT IS IT?



A BEAVER!



Beaver: Nose lacks the white fur around the edges. Lighter colored fur on the face from the eyes down. Head and nose shape are similar to the nutria. Both nutria and beavers have a lighter colored fur around the ears.

WHAT IS IT?



A MUSKRAT!



Muskrat: Ears and surrounding fur are the same color. Whiskers are black. Fingernails are white, unlike the nutria which are black. Tail with ridge and appears smooth.

WHAT IS IT?



A NUTRIA!

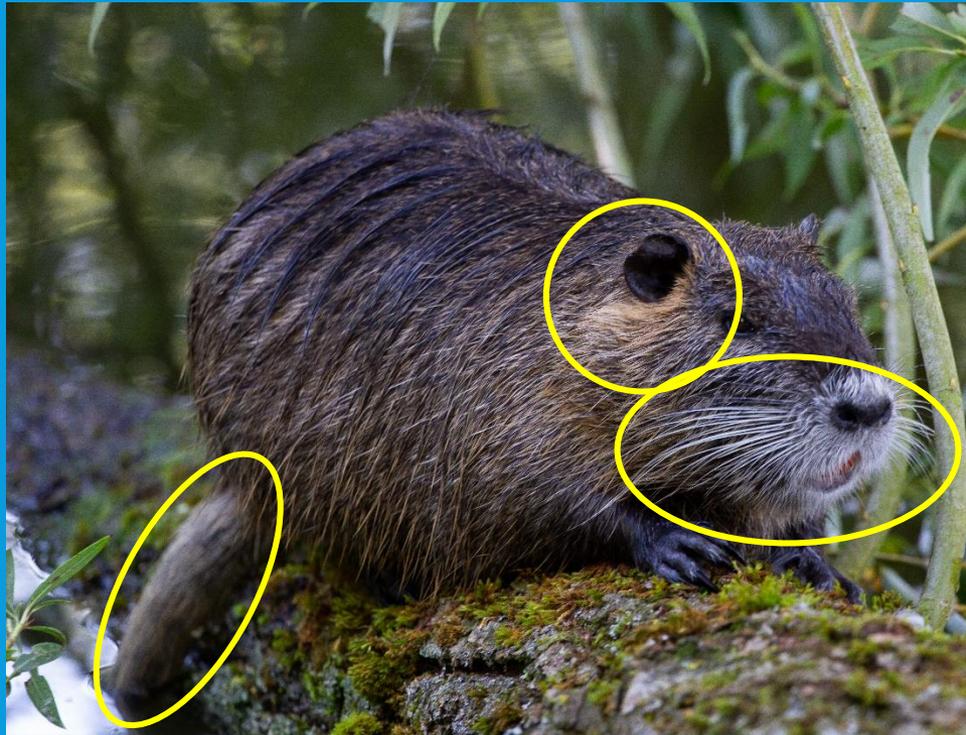


Nutria: Lighter colored fur surrounds the dark ears, making them very noticeable. Note the large, flat, almost pig like nose and white whiskers.

WHAT IS IT?



ANOTHER NUTRIA!

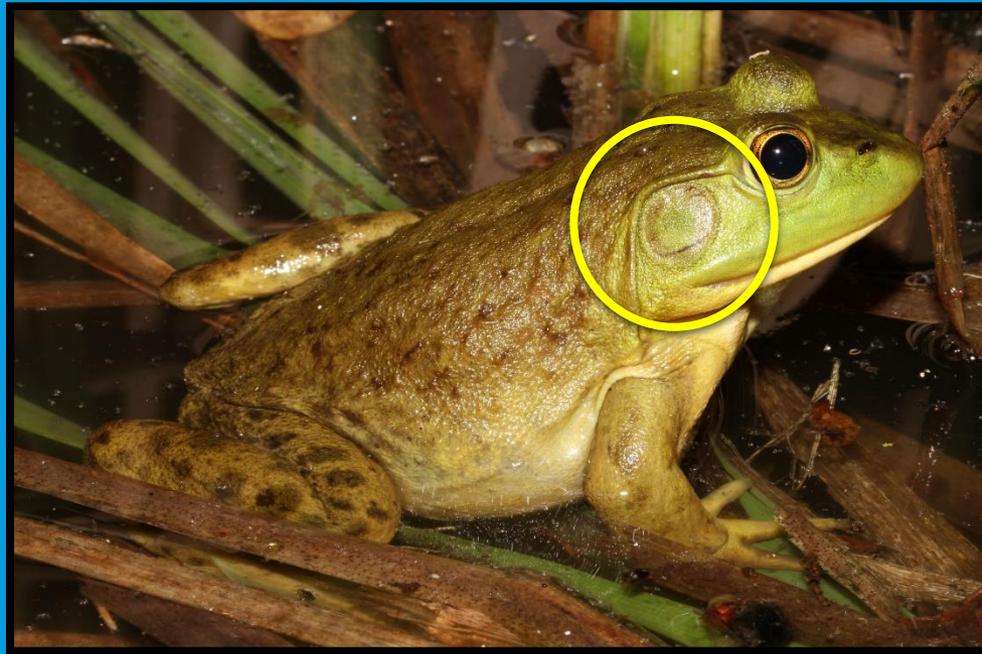


Nutria: Round tail, dark ears surrounded by lighter fur. The white whiskers are very thick and obvious, unlike the muskrat and beaver that have fine, black whiskers.

WHAT IS IT?



A BULLFROG!



Female Bullfrog: Note the tympanum (“ear drum”), which in females is about the same size as the eye. In males it’s larger. Female bullfrogs can be confused with native frogs, but the tympanum tells them apart.

WHAT ARE THEY?



YELLOW-LEGGED FROGS!

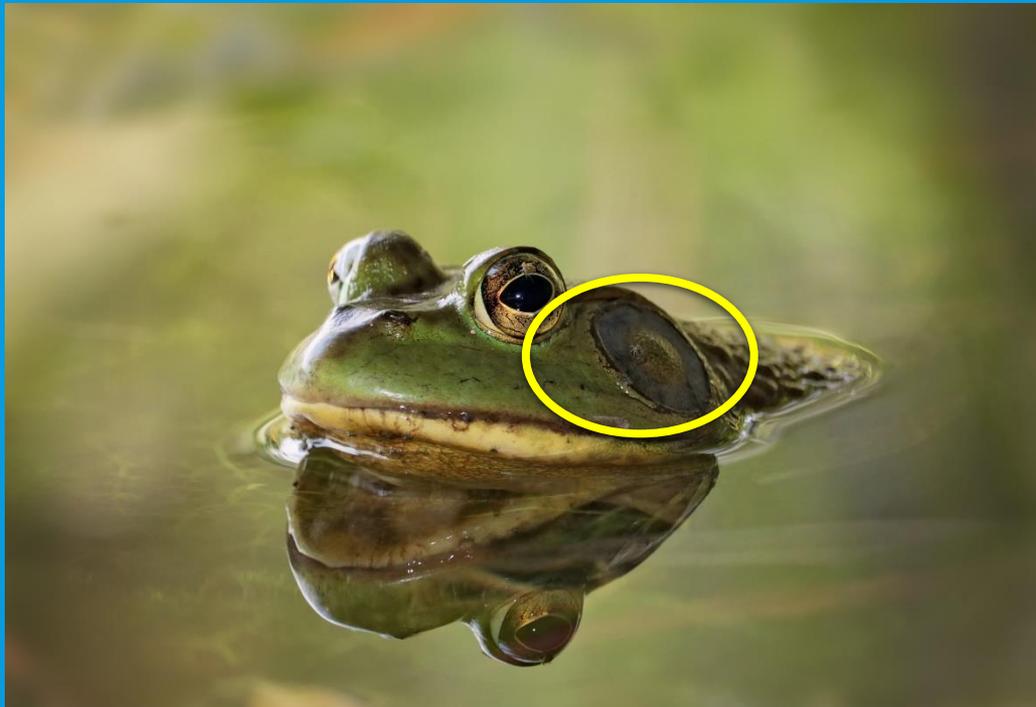


Sierra Nevada Yellow-Legged Frog: Note the dorso-lateral ridges on their backs but no obvious tympanum (“ear drum”) behind the eye. You can also see the bright yellow on the underside of the leg.

WHAT IS IT?



A BULLFROG!



Note the large round tympanum ("ear drum") behind the eye.

WHAT IS IT?



A BULLFROG TADPOLE!

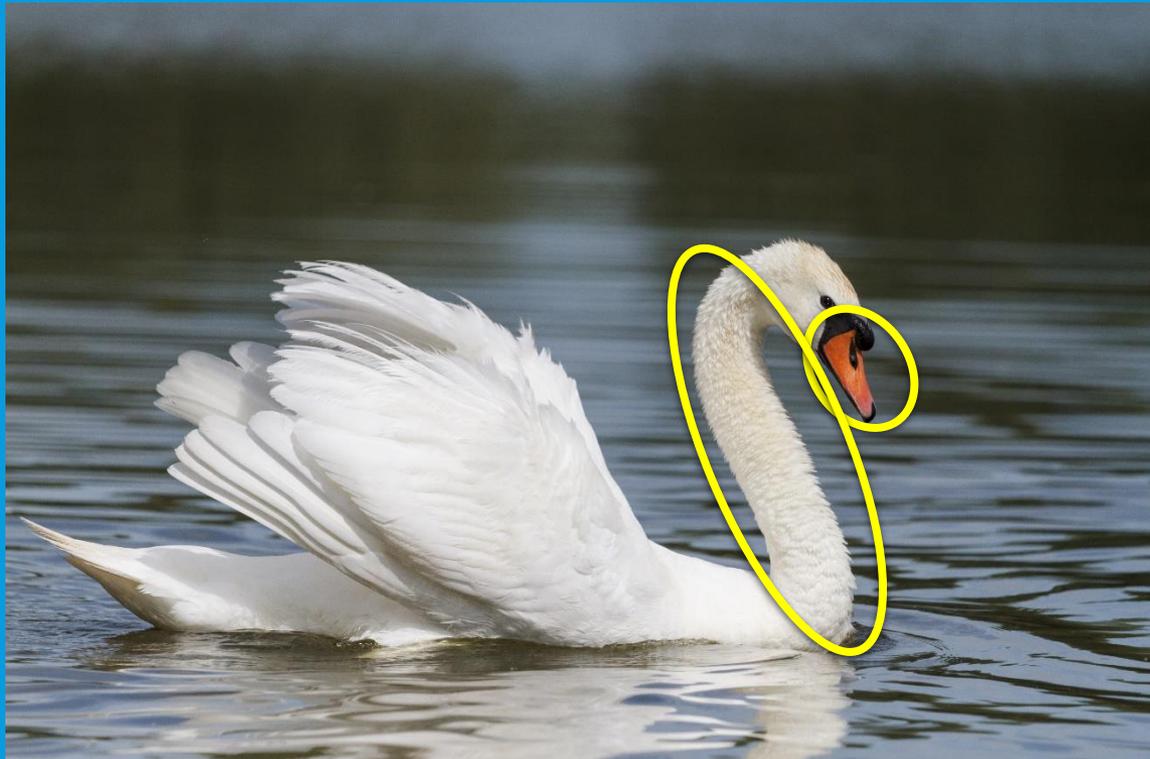


Note the developing rear legs and the lack of external gills.

WHAT IS IT?



A MUTE SWAN!



Mute Swan: Notice the orange bill and black bulbous knob at the base of the bill. Furthermore, mute swans tend to make a significant S-shape with their neck.

WHAT IS IT?



A TUNDRA SWAN!



Tundra Swan: The yellow spot at the base of the eye is visible from quite a distance! Tundra swans also tend to have a straighter neck than mute swans.

LEARN MORE ABOUT INVASIVE SPECIES

<https://wildlife.ca.gov/Conservation/Invasives>

Photos from Shutterstock, except slides 27-28 by James Erdman, CDFW Flickr.