



POCKET GUIDE TO THE AMPHIBIANS of WYOMING

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A Special Acknowledgement to Adam LaDell
Guide Design by Kristen Nielsen

KEY TOAD FEATURES



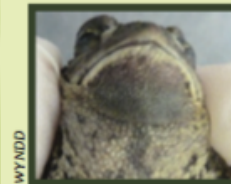
Cranial Crest

Warts

Dorsal Stripe

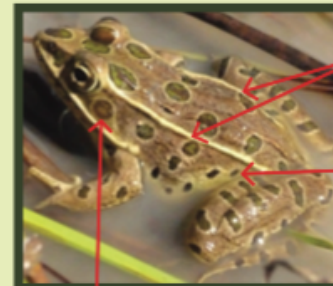


Nuptial Pads
(dark calluses on thumb
and first finger of
breeding **males**)



**Throat is
often dark
on breeding
males**

KEY FROG FEATURES



Dorsolateral Folds

Groin

Tympanum
(ear drum)



**Thumb is swollen
on breeding **males****



TIGER SALAMANDER

Ambystoma mavortium

EGGS



Snoberger

PAEDOMORPH (AQUATIC ADULT)



Snoberger

LARVA



Greene

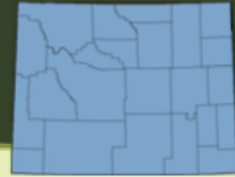
ADULT (TERRESTRIAL)



Abernethy

TIGER SALAMANDER

Ambystoma mavortium



Identification (terrestrial adult)

- Only salamander in Wyoming
- Dorsal color: black or dark green with variable mottling of yellow or olive blotches, stripes, or spots
- Smooth skin, long tail
- Total length: ~5.5 to ~8 inches

Paedomorph (aquatic adult)

- Alternate adult stage resembles very large larvae (gills present)
- Dark green or olive, often with small black spots or blotches
- Total length: ~8 to 12 inches



WGFD

Eggs & Larvae

- Eggs attached to submerged vegetation singly or in long cluster of 2-120 eggs.
- Larvae are olive green with small black blotches, wide heads, and **long, feathery gills**



Snoberger

Breeding Habitat

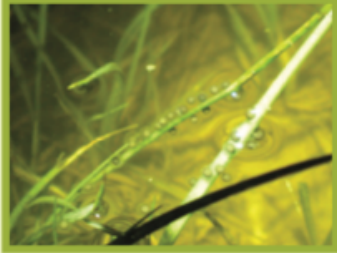
- Permanent or temporary, natural or man-made ponds, pools, stock tanks, and backwater or slow moving areas in creeks

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PLAINS SPADEFOOT

Spea bombifrons

EGGS



Keenan

METAMORPH



Brady

TADPOLE



Snoberger

JUVENILE



Keehn

ADULT



Estes-Zumpf

PLAINS SPADEFOOT

Spea bombifrons



Identification

- Dorsal color: light gray or brown with dark mottling, often with small orange warts
- Relatively smooth skin
- Ventral color: white
- Size: ~1/2 inch (metamorph) to ~2.5 inches (adult)
- **Vertical Pupils**
- Bony lump (boss) between the eyes



Snoberger



Baxter & Stone 1980

Eggs & Tadpoles

- Eggs in small mass attached to submerged vegetation
- Tadpoles often pale brown to greenish
- Tadpole eyes medial, anal vent on midline



Breeding Habitat

- After heavy rains in temporary puddles, ditches, pools, and ponds in prairies, sagebrush steppe, sandhill, and desert scrub

GREAT BASIN SPADEFOOT

Spea intermontana

EGGS



Snoberger

TADPOLE



© Lauren Livo & Steve Wilcox

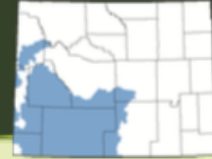
ADULT



© Lauren Livo & Steve Wilcox

GREAT BASIN SPADEFOOT

Spea intermontana



Identification

- Dorsal color: light gray, brown, or olive with small dark spots and small warts (often orange) present
- Relatively smooth skin
- Ventral color: cream or white
- Size: ~1/2 inch (metamorph) to ~2 inches (adult)
- **Vertical pupils**
- Glandular lump (boss) between the eyes



Walker

Eggs & Tadpoles

- Eggs in small mass attached to submerged vegetation
- Tadpole eyes are medial, anal vent on midline
- Tadpoles often pale brown to greenish in color



Baxter & Stone 1980



Breeding Habitat

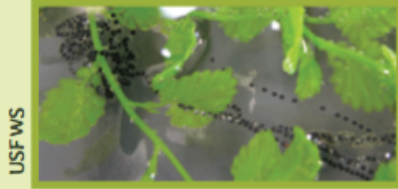
- After heavy rains in temporary puddles, ditches, pools and ponds in prairies, sagebrush steppe, sandhill, and desert scrub

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WYOMING TOAD

Anaxyrus baxteri

EGGS



USFWS

TADPOLE



WYNDD

METAMORPH



Estes-Zumpf

JUVENILE



WYNDD

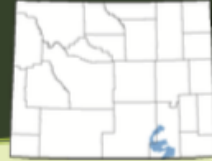
ADULT



WYNDD

WYOMING TOAD

Anaxyrus baxteri



Identification

- Endangered species, unlikely to be observed outside the Laramie plains
- Dorsal color: tan to dark brown with dark blotches surrounding warts
- Pale dorsal stripe
- Ventral color: cream or white with black spots
- Size: ~1/2 inch (metamorph) to ~2.5 inches (adult)
- **Cranial crests form parallel ridges;** may be fused to look like one wide ridge with a groove in the middle



WYNDD



Baxter & Stone 1980

Eggs & Tadpoles

- Eggs in long strings
- Uniformly dark black tadpoles with anal vent on midline
- Tadpole eyes are medial



Breeding Habitat

- Shallow water in temporary or permanent ponds, wetlands, oxbows, and flood-plains in the Laramie basin

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WESTERN (BOREAL) TOAD

Anaxyrus boreas

EGGS



Patla

METAMORPH



Weinmann

TADPOLE



Ochsenfeld

JUVENILE



Estes-Zumpf

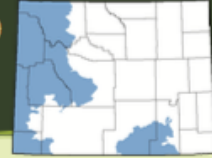
ADULT



Estes-Zumpf

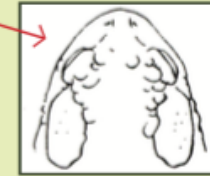
WESTERN (BOREAL) TOAD

Anaxyrus boreas



Identification

- Dorsal color: light olive to dark brown with dark raised warts
- White dorsal stripe
- Ventral color: white with black spots
- Size: ~3/4 inch (metamorph) to ~4.5 inches (adult)
- **No cranial crest**



Baxter & Stone 1980



Weinmann

Eggs & Tadpoles

- Egg strings with lots of jelly; usually wrapped around vegetation
- Tadpole eyes are medial
- Uniformly dark black tadpoles with anal vent on midline



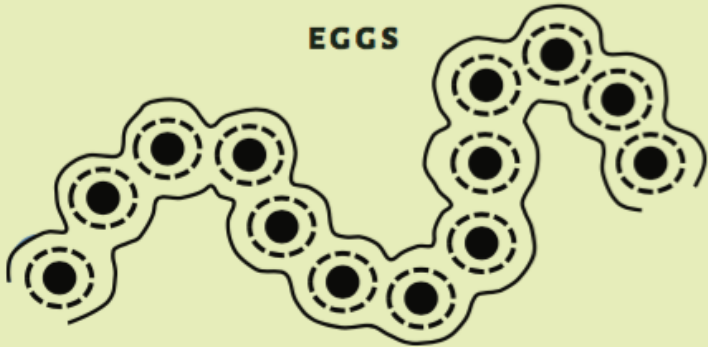
Breeding Habitat

- Shallow water in ponds, flooded meadows, and slow moving or pooled water on the edge of streams

GREAT PLAINS TOAD

Anaxyrus cognatus

EGGS



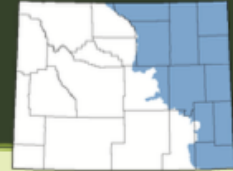
ADULT



WYNDD

GREAT PLAINS TOAD

Anaxyrus cognatus



Identification

- Dorsal color: tan to brown or olive with oftentimes symmetrical large greenish-black blotches surrounded by pale rings
- Dorsum covered with small warts
- Ventral color: cream or white with no spots
- Size: ~3/4 inch (metamorph) to ~5 inches (adult)
- V-shaped cranial crests** that join to form a lump (boss) above the snout (may be absent or weak in juveniles)



Greene

Eggs & Tadpoles

- Eggs in strings; outer jelly of string is scalloped, making eggs look like beads on a string (see back)
- Uniformly dark black tadpoles with anal vent on midline
- Tadpole eyes are medial



Baxter & Stone 1980



Breeding Habitat

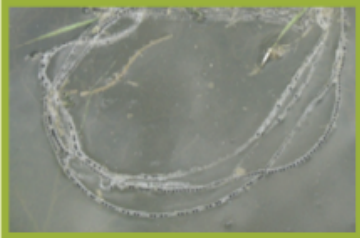
- Lower elevation temporary pools, ponds, and potholes, but occasionally permanent ponds and backwater or pooled areas of streams

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ROCKY MOUNTAIN (WOODHOUSE'S) TOAD

Anaxyrus woodhousii woodhousii

EGGS



WYNDD



Greene

METAMORPH



Vogel

TADPOLE



Snoberger

ADULT



WYNDD

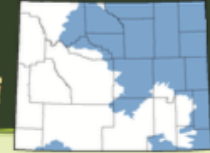
JUVENILE



Greene

ROCKY MOUNTAIN (WOODHOUSE'S) TOAD

Anaxyrus woodhousii woodhousii



Identification

- Dorsal color: mottled tan or gray to dark brown or olive with irregular dark spots and many warts
- White dorsal stripe
- Ventral color: cream, occasionally with black spots
- Size: ~3/4 inch (metamorph) to ~4.5 inches (adult)
- L-shaped cranial crests** (may be absent or weak in juveniles)



WYNDD



Baxter and Stone 1980

Eggs & Tadpoles

- Eggs in strings up to 10 feet long
- Dark tadpoles with gold flecking
- Tadpole eyes medial; anal vent on midline



Breeding Habitat

- Lower elevation ponds, reservoirs, lakes and backwater areas of streams and rivers

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BOREAL CHORUS FROG

Pseudacris maculata

EGGS



Snoberger

TADPOLE



Bish

Estes-Zumpf

JUVENILE



Greene

METAMORPH



Ochsenfeld

ADULT



Hamilton

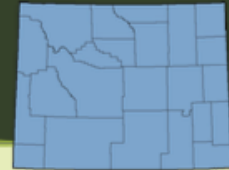
ADULT



Estes-Zumpf

BOREAL CHORUS FROG

Pseudacris maculata



Identification

- Smallest frog in Wyoming
- Size: 1/2 inch (metamorph) to ~1.5 inches
- Dorsal color: tan, green, or rust red
- Dorsal pattern highly variable, typically 3 sets of stripes down the back, but stripes often broken into spots
- Dark mask typically extends from nose to groin as a stripe
- **No dorsolateral folds**
- Often heard rather than seen. Call sounds like running a thumb nail along a comb (*criiiiiiiiik*)



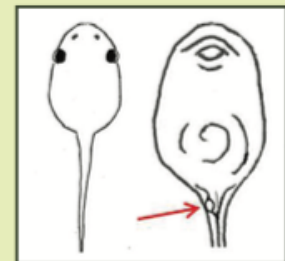
Bateson



Ochsenfeld

Eggs & Tadpoles

- Small egg clusters (less than 1 inch) wrapped around vegetation
- Only tadpole in WY with **lateral eyes** (eyes stick out to sides and form part of the body's profile)
- Anal vent is on the side



Breeding Habitat

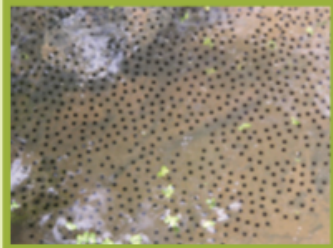
- Shallow water with emergent vegetation (ranging from wet meadows to reservoirs)

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AMERICAN BULLFROG

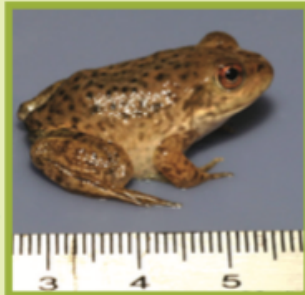
Lithobates catesbeianus

EGGS



WGFD

METAMORPH



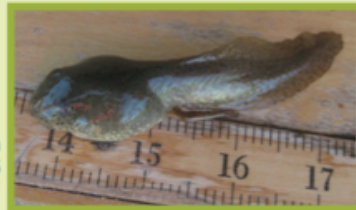
© Gary Nafis

JUVENILE



© Gary Nafis

TADPOLE



WGFD

ADULT



Engbrecht/Lannoo

AMERICAN BULLFROG

Lithobates catesbeianus



Identification

- Largest frog in Wyoming (may be introduced)
- Size: ~2 inches (metamorph) to ~6 inches (adult)
- Dorsal color: light green to dark olive or brown
- Dark spots or dark mottling
- Ventral color: cream to yellow with dark mottling
- **Dorsolateral folds end behind the tympanum (not continued down back)**



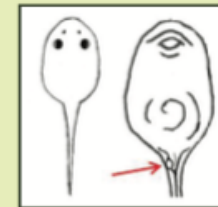
© 2006 James H. Harding

Eggs & Tadpoles

- Eggs in large floating sheet on surface (1 to 5 feet wide)
- Tadpoles can reach up to 5.5 inches
- Tadpole eyes are medial; anal vent is on the side



Engbrecht/Lannoo



Breeding Habitat

- Shallow portions of permanent water bodies with lots of vegetation; prefer warm water

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NORTHERN LEOPARD FROG

Lithobates pipiens

EGGS



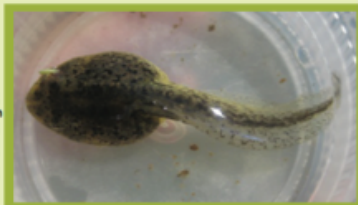
Snoberger

METAMORPH



Vogel

TADPOLE



Snoberger

ADULT (GREEN)



Keehn

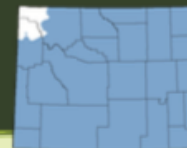
ADULT (BROWN)



Greene

NORTHERN LEOPARD FROG

Lithobates pipiens



Identification

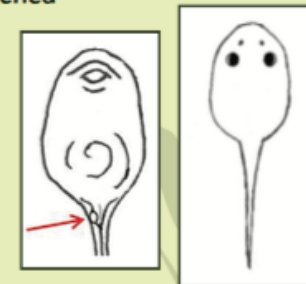
- Dorsal color: bright green, olive, or brown
- **Large, dark oval spots with pale edging**
- Skin is relatively smooth
- Ventral color: creamy white with no red present (on healthy frogs)
- **Prominent pale dorsolateral folds** from the eye down the length of the body
- Obvious tympanum (ear)
- Size: 1 inch (metamorph) to ~4.5 inches (adult)



Vogel

Eggs & Tadpoles

- Eggs in round cluster ~3 to 5 inches in diameter
- Eggs either on the bottom or attached to vegetation
- Tadpole eyes are medial and anal vent is on the side



Breeding Habitat

- Shallow water in marshes and semi-permanent or permanent ponds (beaver ponds, stock ponds, etc.), or slow moving backwater areas along rivers or streams

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WOOD FROG

Lithobates sylvaticus

EGGS



Walker

METAMORPH



Greene

JUVENILE



Estes-Zumpf

TADPOLE



© Brian Gratwicke

ADULT (BIG HORN MOUNTAINS)



Leuenberger

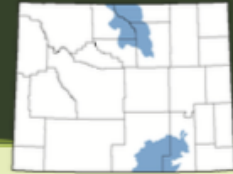
ADULT (SOUTHERN WY)



Estes-Zumpf

WOOD FROG

Lithobates sylvaticus



Identification

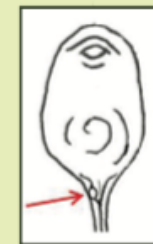
- Dorsal color: brown; Wood Frogs in southern WY have prominent white dorsal stripe
- Dorsolateral folds go from the eye to the groin
- **Dark face mask** (Zorro frog!) that extends just past the tympanum
- Size: ~3/4 inch (metamorph) to ~3.5 inches (adult)



WCFD

Eggs & Tadpoles

- Eggs in round cluster ~3 to 5 inches in diameter
- Eggs often in communal clusters just below the surface of the water
- Tail fin starts high on the body and is strongly arched
- Tadpole eyes are medial and anal vent is on the side



Breeding Habitat

- Shallow water in small permanent to ephemeral forest ponds and potholes or flooded meadows

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COLUMBIA SPOTTED FROG

Rana luteiventris

EGGS



Patla



TADPOLE



Charles Peterson

METAMORPH



Patla

JUVENILE



Patla

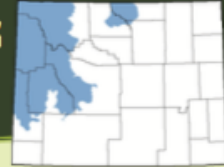
ADULT



Brady

COLUMBIA SPOTTED FROG

Rana luteiventris



Identification

- Size: 3/4 inch (metamorph) to ~3.9 inches
- Dorsal color: tan to dark olive or brown
- **Irregular dark spots, often with light centers**
- Dorsal skin has warty texture
- Dorsolateral folds present
- **Red to orange lower abdomen and legs**



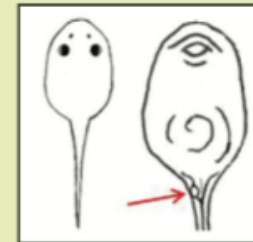
Leuenberger

Eggs & Tadpoles

- Eggs in round cluster (~3 to 8 inches)
- Egg masses are free floating and often in large communal clusters
- Tadpole eyes are medial, anal vent is on the side



Leuenberger



Breeding Habitat

- Shallow stagnant or slow-moving water ranging from temporary ponds and marshes to lakes and backwater areas of streams

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