Wetland Monitoring Amphibian Identification – Compiled by K. McGlynn , June 2018

Egg mass ID

Pacific chorus frog - Pseudacris regilla

A-PSRE



Individual egg masses contain **10 to 75 eggs**, measure one to two inches across (usually about half the size of a tennis ball) and are surrounded by a special jelly that swells up on contact with water. Egg masses are attached to sticks or emergent aquatic vegetation just below the surface, and often become camouflaged with algae and sediment. Eggs hatch more quickly in warmer water in three to five weeks.

Columbia spotted frog - Rana luteiventris

A-RALU



Spotted frogs breed during a short, two-week breeding window anywhere from early April to early June. Eggs are laid at the water surface in large, globular masses of 200 to 500 eggs. Eggs hatch in 8–22 days. Hatching time is influenced by temperature.

Long-toed salamander - Ambystoma macrodactylum A-AMMA



Eggs are pigmented, either laid in singles or in aggregates (in spherical or elongate shapes) from five to 100 in number. Eggs range in size but can be up to 2.5mm in diameter. Location of egg laying varies but can be found on submerged vegetation, woody debris, and rocks as well as on the substrate of the lake, pond, pool or slow moving stream. Females have been known to carry 85-400 eggs per reproducing year.

Western toad - Anaxyrus boreas

A-ANBO



Toad eggs look like a long gelatinous necklace. The eggs are evenly spaced in single file in a very long string of jelly. Many females lay their eggs loosely intertwined creating an extensive mat. Individual eggs are black above and white below. Northern leopard frog - Lithobates pipiens (CRESTON ONLY) A-LIPI



Eggs are laid in densely-packed, flat, rounded clusters the size of a grapefruit - around 4.5 in. (11.5 cm) in diameter, and are attached to vegetation under water, or rarely, left to lie on the bottom of still water. Several egg masses may be attached together communally. Egg masses of between 645 and 7,648 eggs have been reported. Eggs hatch into tadpoles in 2 - 17 days, depending on temperature.

American bullfrog - Lithobates catesbeianus

A-RACA



After mating, females lay masses of up to 20,000 eggs in a film on the water's surface; the eggs hatch in four or five days (depending on temperature). Tadpoles hatch out in July and remain in the ponds through that summer and the following winter, metamorphosing in August or September of their second year.

Tadpole/ larvae Stage ID

Pacific chorus frog - Pseudacris regilla

A-PSRE



The eyes of Treefrog tadpoles (*Pseudacris*) are located at the sides of the head. Less then 14 mm in SVL. Nostrils are large and very visibly noticeable. Tadpoles metamorphose in approximately two months.

Tadpole Anatomy



Columbia spotted frog- Rana luteiventris

A-RALU



Eyes located centrally on body as viewed from above. Spiracle located high on body, in middle of left side as viewed from side. Tail length up to 2 times body length. Dark with gold flecking above and iridescent bronze or pale gold below.

Long-toed salamander- Ambystoma macrodactylum

A-AMMA



Larvae grow quickly, developing front, then back, legs. When they reach about 7 cm, the larvae transform into terrestrial juveniles. These salamanders have lungs and have absorbed their fins and gills. They are now ready for life on land, and reach sexual maturity two to five years later.

Northern leopard frog - Lithobates pipiens (CRESTON, BC ONLY) A-LIPI



"Larvae (tadpoles) are dark brown to olive or gray on the back with a flecking of light gold and black, more concentrated on the sides, and then merging with a silvery-white or transparent belly. Tail length is less than 1.5 times the body length. The dorsal tail fin begins anterior to the tail musculature when viewed from the side. The anus is on the right side in front of the fin, not on the midline. The eyes fall within the outline of the head when viewed from above. Lateral oral papillae are strongly indented toward the corners of the mouth, and the lower mandible is noticeably thicker than the upper. The total length of tadpoles is 5.5 to 10.0 centimeters." (*Fieldguide.mt.gov*)

American bullfrog- Lithobates catesbeianus

A-RACA



The tadpole has an oval body with dorsal eyes. The dorsal fin terminates on the body and the tail tip is pointed. Tadpoles less than 25 mm total length are black with gold blotches and relatively short tails. Larger tadpoles are olive green with distinct inky black specks over the dorsal surface. The ventral surface is opaque cream to yellow colored with no metallic pigmentation. Tadpoles may attain a length of 110 mm total length or more before metamorphosis.

Western Toad- Anaxyrus boreas



Once laid, the eggs quickly develop into tadpoles that hatch and swarm in groups of hundreds or thousands of individuals through the warmest, shallowest water available. Tadpoles are charcoal grey to black and about 1 cm long. By the end of the summer, the tadpoles transform into toadlets and leave the water. Dense aggregations of toadlets are often found hidden along the shore of breeding sites, and clustered in piles when the weather turns cool.

Tadpole/ Metamorphosing stage ID



Western toad metamorph, Gosner stage 38.



Pacific chorus frog metamorph, Gosner stage 42



Columbia spotted frog metamorph, Gosner 43



Long toed salamander metamorph, Gosner 46+



Northern leopard Frog metamorph, Gosner 44



American bullfrog metamorph Gosner 43.

Amphibian Adult stage ID



Western Toad-Adult



Pacific chorus frog- Adult



Columbia spotted frog- Adult



Long - toed salamander - Adult



Northern leopard frog- Adult CRESTON ONLY



American bullfrog-Adult