

Keep Texas Wild

AMAZING AMPHIBIANS

These cool creatures love land and water.

» DOUBLE LIVES

WHAT DO FROGS, TOADS AND SALAMANDERS share in common? They're amphibians, a group of vertebrates (animals with backbones) that usually live first in the water and then on land. In fact, the word "amphibian" comes from two Greek words: "amphi" (double) and "bios" (life). That process of transforming from one body into another — think tadpole to frog — is called "metamorphosis," another combination of Greek words: "meta" (change) and "morphé" (form). Pretty cool, right? In Texas, we have 42 species of frogs and toads plus about 30 types of salamanders. Most live in the wetter areas of eastern Texas. They're all amazing for lots of different reasons.

Rio Grande
leopard frog

» AMPHIBIAN OR REPTILE?

Though similar in appearance, amphibians and reptiles are very different.

Ground skink

- Dry, scaly skin
- Breeds on land
- Embryos covered with hard shell



Western slimy salamander

- Moist skin, no scales
- Breeds in water
- Embryos covered with clear jelly



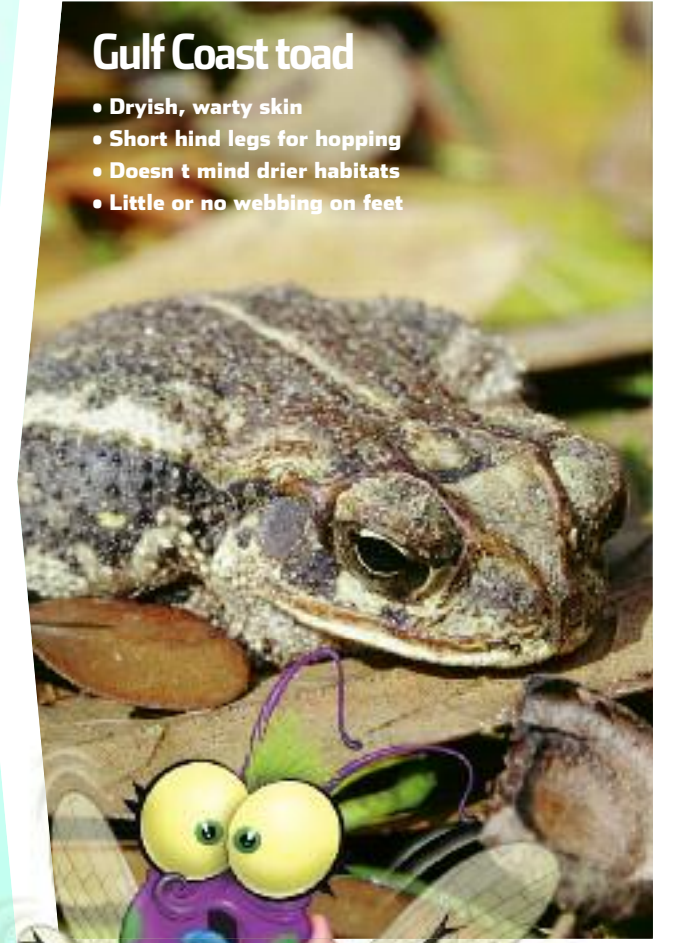
Southern leopard frog

- Moist, smooth skin
- Long hind legs for jumping
- Prefers to live near water
- Has webbed feet for swimming



Gulf Coast toad

- Dryish, warty skin
- Short hind legs for hopping
- Doesn't mind drier habitats
- Little or no webbing on feet



» Amazing Adaptations

Salamanders can regenerate tails and other body parts. If chased by hungry bird, a salamander can "release" its tail, which wiggles while salamander gets away.

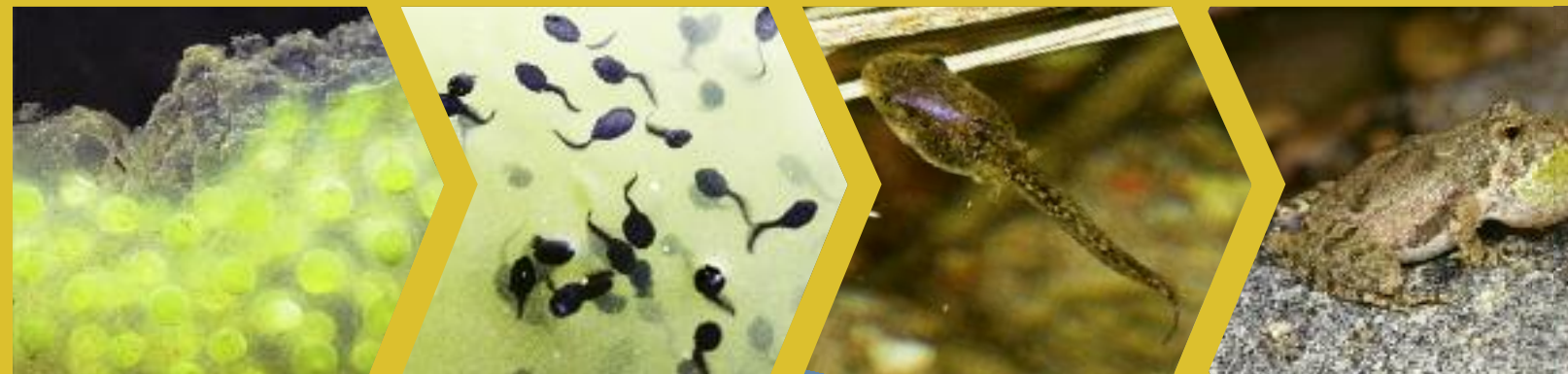
AMPHIBIAN CHECKLIST:

- * Have a backbone ✓
- * Cold blooded ✓
- * Live in water or moist places ✓

- * Usually breed in water ✓
- * Usually breathe first through gills, then lungs and skin ✓

» TINY TRANSFORMER

EGGS © DERRICK HAMRICK/ROLFNP.COM; TADPOLES © STEFAN HUWILER/ROLFNP.COM; OTHERS © JOHN C. ABBOTT



A TADPOLE'S LIFE CYCLE:

* Female releases eggs underwater; male fertilizes them. Embryos (covered with sticky jelly) stick to plants

* Tadpoles (larvae) live in water and breathe through gills

* They metamorphose into frogs (lose tails, get legs and lungs)

* Eventually, they live on land

Frogs and toads have sticky, long tongues to grab insects FAST.



» Amazing Adaptations

Skin colors help toads and frogs – like the green tree frog – to blend into their surroundings and hide from predators.



SALAMANDER © ROLF NUSSBAUMER/ROLFNP.COM; OTHERS © GRADY ALLEN

ILLUSTRATIONS © FIAN ARROYO



Spike's Activity Page



>> KEEPING IT WILD

AROUND THE WORLD, numbers of amphibians go down every year. Why? Amphibians are very sensitive to chemicals and garbage in water because they breathe and absorb moisture through their skin. Sometimes, parasites or diseases in the water even cause frogs to have deformed legs or other problems. Also, more neighborhoods, shopping centers and highways mean fewer homes left for amphibians, where they can live and reproduce. Starting now, you can protect these amazing animals! How?

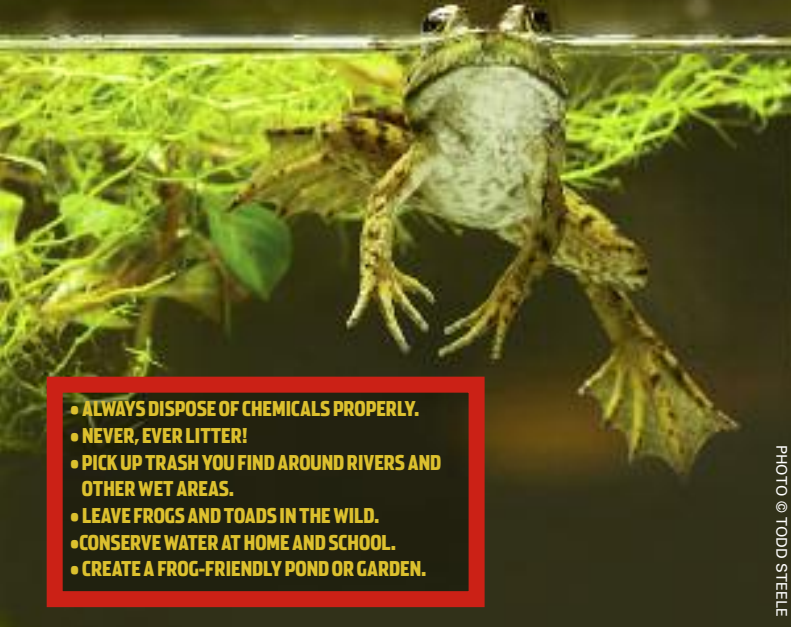


PHOTO © TODD STEELE

- ALWAYS DISPOSE OF CHEMICALS PROPERLY.
- NEVER, EVER LITTER!
- PICK UP TRASH YOU FIND AROUND RIVERS AND OTHER WET AREAS.
- LEAVE FROGS AND TOADS IN THE WILD.
- CONSERVE WATER AT HOME AND SCHOOL.
- CREATE A FROG-FRIENDLY POND OR GARDEN.

>> KEEPING IT WILD

FROG SCIENTISTS: Want to help our Texas frogs and toads? Become a frog scientist! Many Houston fifth-graders are participating in the Texas Amphibian Watch on Lake Livingston. First, teacher Carol Miserlian teaches them about different frog calls. Cricket frogs sound like marbles clinking together, and spring peepers sound like sleigh bells. After dark, everyone walks to the lake with flashlights, pencils and data sheets. As students listen, they write down what they hear on data sheets. Later, Miserlian sends all the information to the Texas Parks and Wildlife Department, so biologists can learn how amphibians are doing in Texas. www.tpwd.state.tx.us/amphibians



>> WILD SCIENCE



THESE AMPHIBIAN and reptile species in Texas are listed as endangered and threatened. That means we need to take special steps to protect them. Which ones are amphibians? Can you help them find their correct habitat?



>> NEXT MONTH: Native Plants



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