Frogs and toads are the most conspicuous members of a very secretive group of animals called amphibians. Frogs and toads are well known for their mating call and long, insect-catching tongue. They are excellent gauges of environmental health because of their close contact with aquatic, wetland, and terrestrial* environments. They have moist, sensitive skin that allows chemicals in the environment to pass into their bodies. Furthermore, their eggs lack a hard shell so their developing young also are directly exposed to the environment. The puzzling disappearance of some frog and toad species in remote, pristine parts of the world has scientists concerned about overall planetary health.

*see glossary

**Key**
1. wood frog, *Rana sylvatica*
2. northern leopard frog, *Rana pipiens*
3. chorus frog complex, *Pseudacris triseriata-maculata*
4. Fowler’s toad, *Bufo fowleri*
5. green treefrog, *Hyla cinerea*
6. green frog, *Rana clamitans*
7. spring peeper, *Pseudacris crucifer*
8. gray treefrog complex, *Hyla chrysoscelis-versicolor*
9. cricket frog, *Acris crepitans*
10. southern leopard frog, *Rana sphenocephala*
11. American toad, *Bufo americanus*
12. plains leopard frog, *Rana blairi*
13. bullfrog, *Rana catesbeiana*
14. eastern spadefoot, *Scaphiopus holbrookii*
15. eastern narrowmouth toad, *Gastrophryne carolinensis*
16. Illinois chorus frog, *Pseudacris streckeri illinoensis*
17. bird-voiced treefrog, *Hyla avivoca*
18. crawfish frog, *Rana areolata*
19. pickerel frog, *Rana palustris*
20. upland chorus frog, *Pseudacris feriarum*
**Frogs and toads are the early members of the Amphibia class.** Their young, called tadpoles, breathe through gills, which later become lungs. Adult frogs and toads have external or internal features that help them breathe. The toad, a land-dwelling amphibian, has smooth, moist skin that helps it breathe. The frog, a water-dwelling amphibian, has smooth or warty skin, which helps to prevent dehydration.

**The eastern narrow-mouth toad, a species of amphibian, is known for its ability to tolerate cold temperatures.** It has a unique ability to produce antifreeze in its blood, which allows it to survive in subfreezing temperatures. This antifreeze is produced in the liver and is stored in the blood cells. When the temperature drops, the toad's body temperature also drops, and the antifreeze in its blood becomes more concentrated, allowing it to stay alive.

**The toad’s diet consists of insects, earthworms, and other small animals.** It has a long, sticky tongue that it uses to catch its prey. The toad can also detect prey through its sense of touch, which is enhanced by the presence of tough, warty skin.

**The toad’s reproductive cycle involves laying eggs in water.** The eggs develop into tadpoles, which undergo metamorphosis into adult toads. This process takes place in water, and the toad’s ability to tolerate cold temperatures allows it to survive in subfreezing conditions.

**Conservation**

- **Illinois Natural History Survey**
- **Division of Natural Resources**
- **Illinois Department of Natural Resources**
- **Division of Fisheries Resources**
- **Illinois State Museum**
- **Division of Education**
- **Division of Local Government Services**

**Endangered Species**

**The toad’s unique ability to survive in cold temperatures makes it an important species for conservation efforts.** It is considered a vulnerable species, and efforts are being made to protect it from habitat loss and other threats. The toad’s status is monitored closely, and conservation efforts are ongoing to ensure its survival.