

# Scientists Breed See-Through Frogs



Scientists have bred new frogs with skin so clear you can see inside them.

The scientists who bred the frogs work at a university in Japan. They gathered frogs hatched from light-skinned parents. They bred those frogs so light-skinned tadpoles might hatch from their eggs.

With see-through frogs, scientists can see a frog's beating heart right through its skin. They can see blood pumping through a frog's body. If the frog is female, they can see the eggs inside her body. In addition, scientists are able to learn how a see-through tadpole's organs grow as it changes into a full-grown frog. "You can watch organs of the same frog over its entire life," one of the scientists said.

Scientists often use frogs in their research. When their experiments are complete, scientists cut open, or *dissect*, the frogs to study their organs. But using frogs in research upsets some people. That's why the scientists bred these see-through frogs. They bred the frogs to be "learning tools" for scientists and students. Now people can study frogs' without dissecting them.

## NEWS WORD BOX

university female tadpole  
organs research dissect  
experiments breed bred

Scientists are not able to breed as many see-through frogs as they would like. Breeding see-through frogs takes time. Only about one in 16 frogs that scientists breed will have clear skin.

## **MORE FACTS ABOUT SEE-THROUGH FROGS**

- This frog is the first four-legged, see-through animal to be bred by scientists. Some types of fish have clear skin.
- Some see-through frogs already live in the wild. Those frogs, called *glass frogs*, live in Central and South America.

## THINK ABOUT THE NEWS

What evidence have you seen in nature that illustrates how living things might change as they breed?