Learning Objectives

• Define and describe the importance of the amniotic egg.
• Describe reptile reproduction.
• Summarize parental care of reptilian young.

What are the advantages of a water-tight egg?

Obviously, water-tight eggs can be laid anywhere. They do not have to be kept constantly moist. There is no danger of the developing fetus dehydrating. Shown above is a turtle hatching.

Reptile Reproduction

Most reptiles reproduce sexually and have internal fertilization. Males have one or two penises that pass sperm from their cloaca to the cloaca of a female. Fertilization occurs within the cloaca, and fertilized eggs leave the female’s body through the opening in the cloaca. In a minority of species, the eggs are retained inside the female’s body until they hatch. Then the offspring leave the mother’s body through the cloaca opening.

Amniotic Eggs

Unlike amphibians, reptiles produce amniotic eggs (see Figure 1.1). The shell, membranes, and other structures of an amniotic egg protect and nourish the embryo. They keep the embryo moist and safe while it grows and develops. They also provide it with a rich, fatty food source (the yolk).
Reptile Young

Unlike amphibians, reptiles do not have a larval stage. Instead, newly hatched reptiles look like smaller versions of the adults. They are able to move about on their own, but they are vulnerable to predators. Even so, most reptile parents provide no care to their hatchlings. In fact, most reptiles don’t even take care of their eggs. For example, female sea turtles lay their eggs on a sandy beach and then return to the ocean. The only exceptions are female crocodiles and alligators. They may defend their nest from predators and help the hatchlings reach the water. If the young remain in the area, the mother may continue to protect them for up to a year.

Summary

- Most reptiles reproduce sexually and have internal fertilization.
- Reptile eggs are amniotic, so they can be laid on land instead of in water.
- Reptiles do not have a larval stage, and their hatchlings are relatively mature.
- Reptile parents provide little if any care to their young.

Review

1. Outline the structure and function of an amniotic egg.
2. Describe young reptiles.

References

1. Zachary Wilson. CK-12 Foundation . CC BY-NC
2. Zachary Wilson. CK-12 Foundation . CC BY-NC 3.0