

10.2 Darwin's Observations

KEY CONCEPT

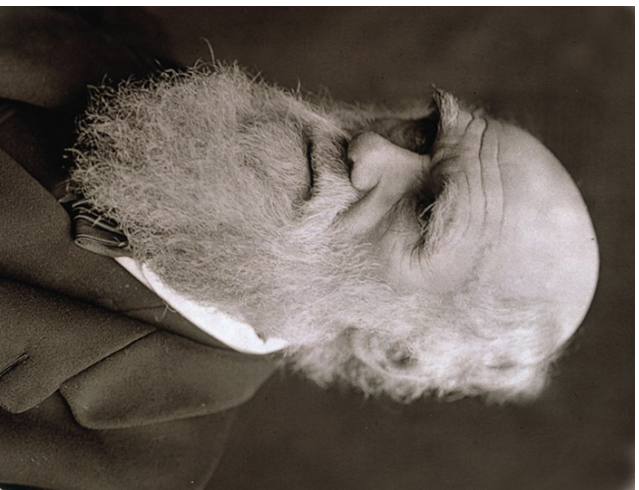
Darwin's voyage provided insight on evolution.



10.2 Darwin's Observations

➤ Darwin observed differences among island species.

- **Variation** is a difference in a physical trait.
 - Galápagos tortoises that live in areas with tall plants have long necks and legs.
 - Galápagos finches that live in areas with hard-shelled nuts have strong beaks.



10.2 Darwin's Observations

- An **adaptations** is a feature that allow an organism to better survive in its environment.
 - Species are able to adapt to their environment.
 - Adaptations can lead to genetic change in a population.



10.2 Darwin's Observations

- ▶ Darwin observed **fossil** and **geologic evidence** supporting an ancient Earth.
- Darwin found fossils of extinct animals that resemble modern animals.
- Darwin found fossil shells high up in the Andes mountains.



10.2 Darwin's Observations

- He saw land move from underwater to above sea level due to an earthquake.
- Darwin extended his observations to the evolution of organisms.



10.2 Darwin's Observations

FIGURE 2.2 Adaptations Within Species

Galápagos tortoises (*Geochelone elephantopus*) are evidence that species can adapt to their environments.

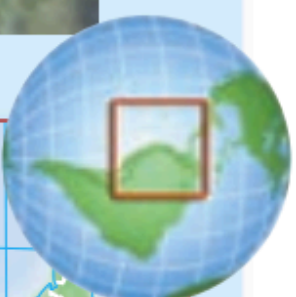


Dome-necked tortoises have a short neck and short legs, and live in areas with low vegetation.



Saddle-backed tortoises have a high shell edge, allowing them to stretch their long necks.

A Explain Why do these tortoises of the same species look different?



Galápagos Islands