

16.1 Darwin's Voyage

Darwin's Epic Journey

 Darwin developed a scientific theory of biological evolution

The process of change over time is called **evolution**

Darwin's Epic Journey

Darwin sailed on the HMS *Beagle*'s five-year voyage of South America.

Darwin collected specimens of plants and animals.



Observations Aboard the *Beagle*

Darwin noticed three distinctive patterns of biological diversity:

- (1) Species vary globally,
- (2) species vary locally, and
- (3) species vary over time.

Species Vary Globally

- different, yet similar, animal species inhabited separated, but similar, habitats around the globe.
example: rheas, ostriches, & the emu.
- but some species are found in only one place on the planet
example: kangaroo

Species Vary Locally

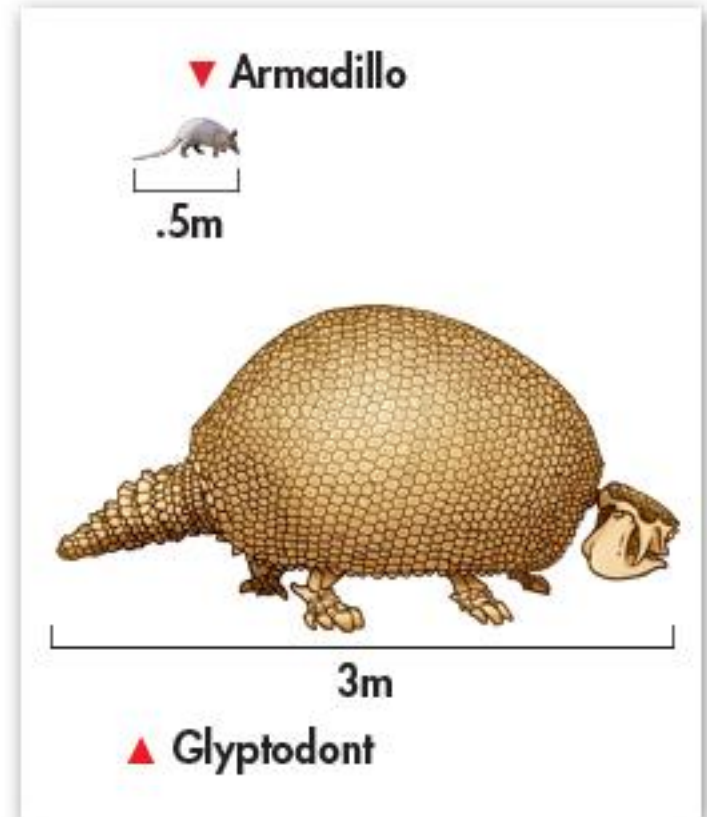
- different, yet related, animal species often occupied different habitats within a local area.

Examples: Galapagos tortoises, finches

Species Vary Over Time

Darwin collected **fossils** – preserved remains or traces of dead organisms.

Some fossils of extinct animals were similar to living species.



Putting the Pieces Together

The evidence Darwin collected suggested that species could change by some natural process.

