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Variation Among Tortoises



Darwin observed that the characteristics of many animals and plants varied noticeably among the different Galápagos Islands. Among the tortoises, the shape of the shell corresponds to different habitats. The Hood Island tortoise (right) has a long neck and a shell that is curved and open around the neck and legs, allowing the tortoise to reach the sparse vegetation on Hood Island. The tortoise from Isabela Island (lower left) has a dome-shaped shell and a shorter neck. Vegetation on this island is more abundant and closer to the ground. The tortoise from Pinta Island has a shell that is intermediate between these two forms.

Natural Selection & Artificial Selection

- **Natural variation**--differences among individuals of a species
- **Artificial selection**- nature provides the variation among different organisms, and humans select those variations they find useful.

Evolution by Natural Selection

- **The Struggle for Existence**-members of each species have to compete for food, shelter, other life necessities
- **Survival of the Fittest**-Individuals better suited for the environment more likely to live to pass on inheritable traits
- **Evolution**- **Cumulative** change in a species over time