# **Evolution and Ecology**

# Think of an animal that is interesting to you

• List/describe its traits

## What is evolution?

• It's the idea that living things (animals) can change over time.

# How is that possible?

- All animals have natural variation
- Genetics of a population can change over time





### Charles Darwin

- Noticed variation in animals
- Came up with an idea to explain how animals can change



### Charles Darwin and natural selection

- Natural selection- animals that have useful traits for their environment will survive and reproduce better than those without those traits.
- Useful traits will become more frequent as time goes on.

## What causes an animal to change?

- The environment is always changing
  - Animals must be adapted to their environment
  - Genetics change as the environment changes

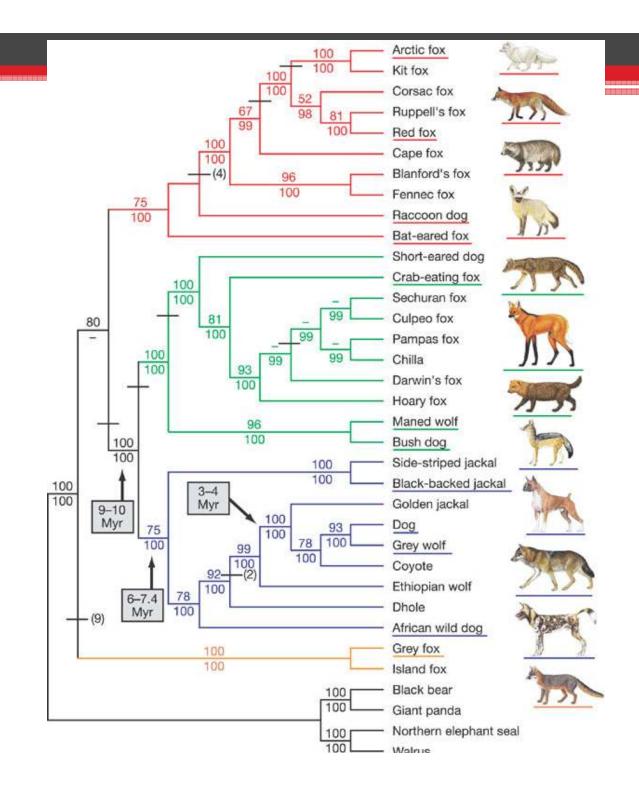
# What is an animal species?

- A group of populations that can successfully exchange genes through breeding
  - Produces offspring that can also reproduce



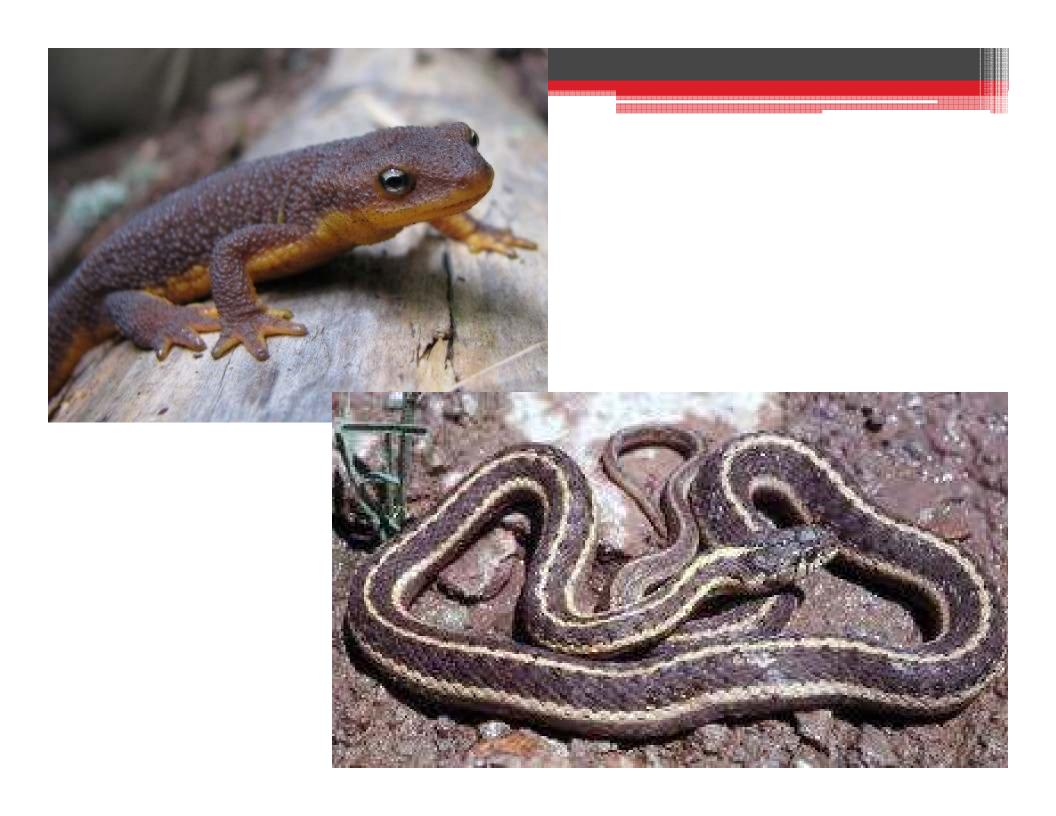
# Why are there so many variations of animals?

• Each animal species develops in response to the environment that it lives in.

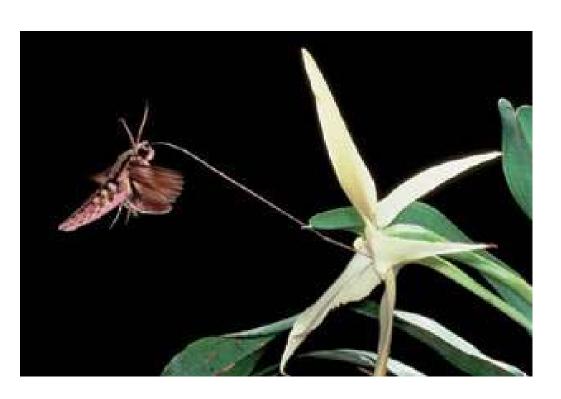


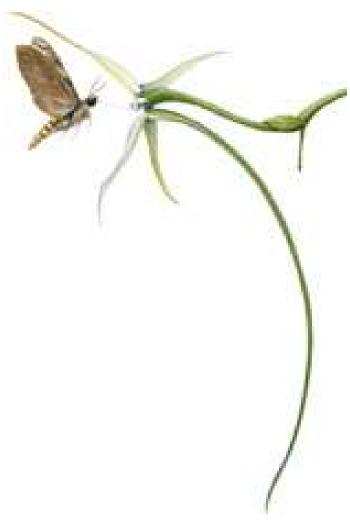
# Cool examples of evolution

















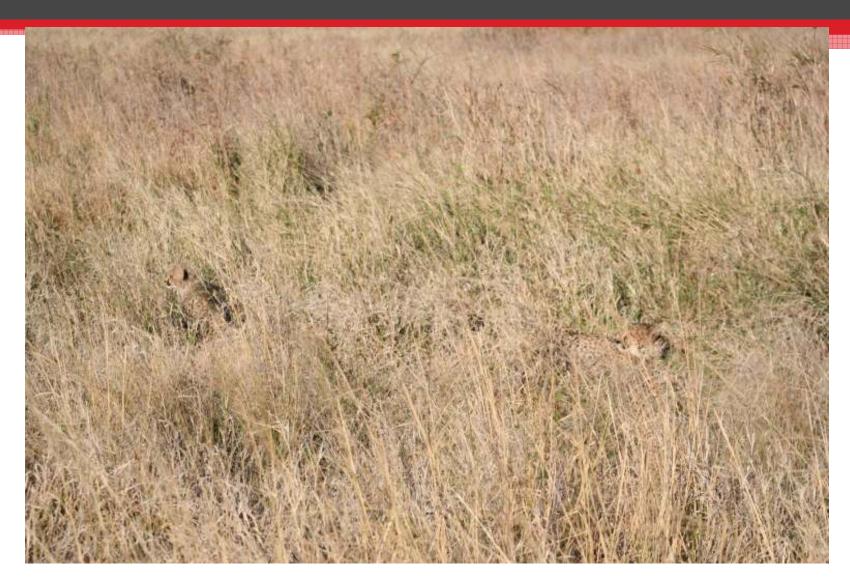












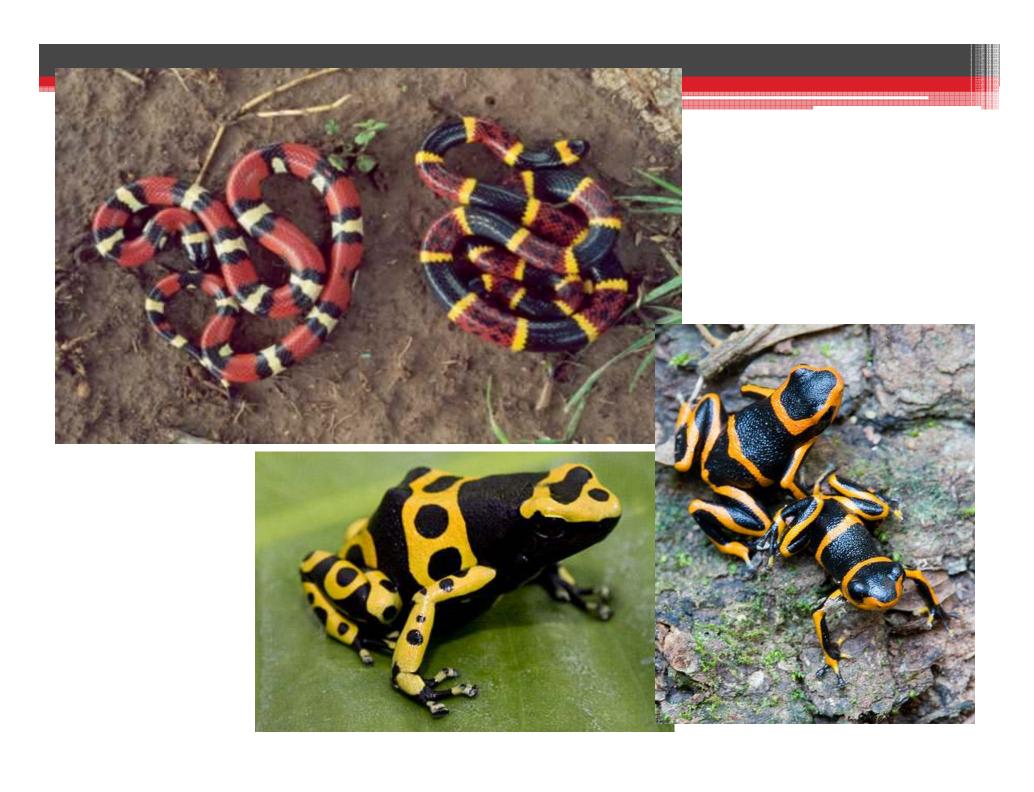
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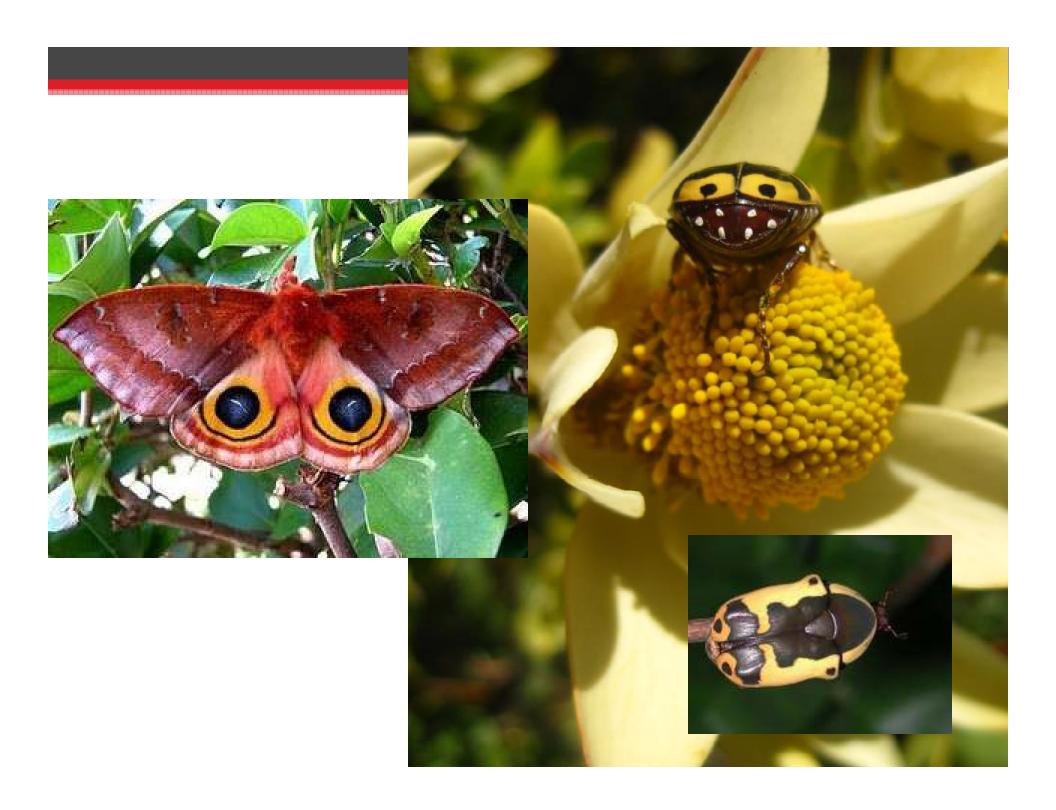
















Animals change and so do their environments

• Write about an animal