Life Cycles

Learning Objective: To find out about the work of naturalists.



What is a naturalist?



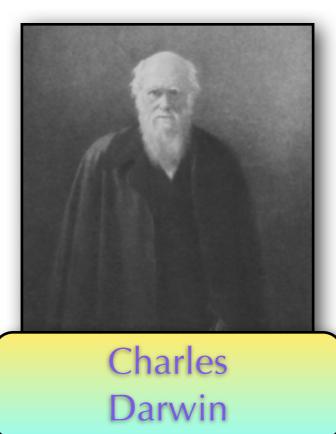


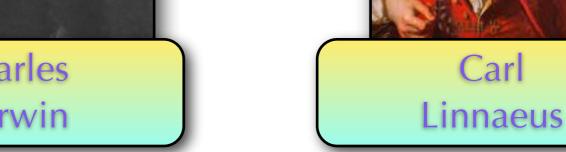
David Attenborough

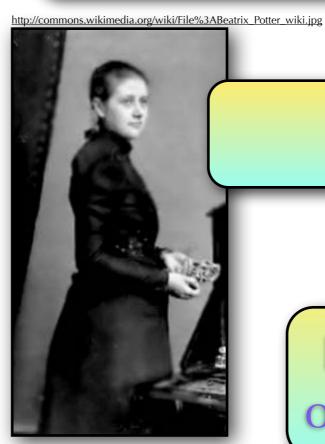


Steve Irwin









Beatrix Potter

Did you think of any of these?



http://commons.wikimedia.org/wiki/File%3ACarl_Linnaeus.jpg

Today, the definition of what a naturalist is and what they do is very broad.

Develop theories and ideas about changes in nature

Sketch, photograph, make notes and record measurements

Explore different environments

Educate people about animals

Observe animals in their natural environments

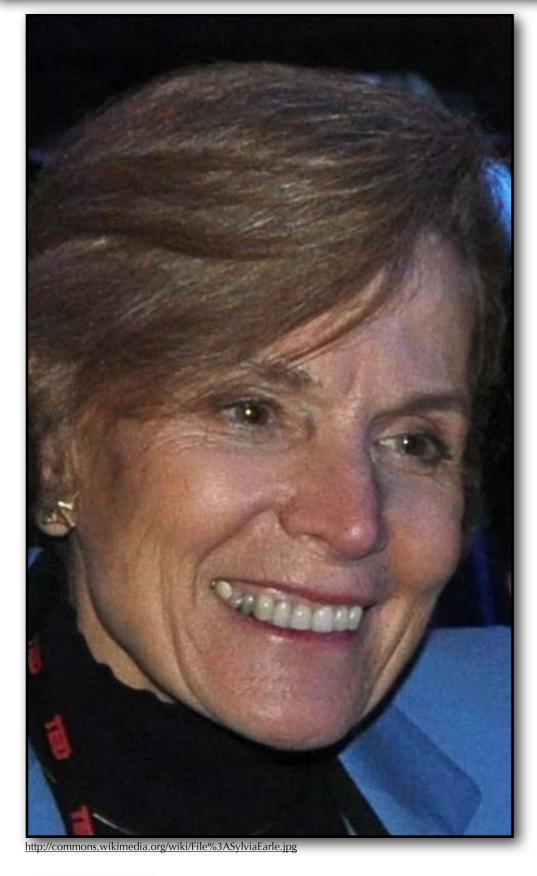
Try to protect the environment

Conduct research about animals and environments

Here are just some of the things naturalists do.





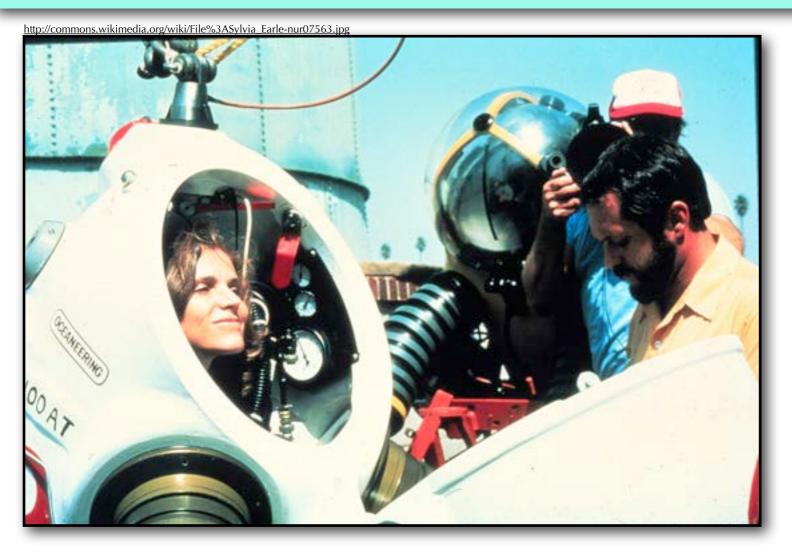


This is **Sylvia Earle**. She is a famous naturalist and oceanographer. For more than forty years she has conducted research into life at the bottom of our oceans.

During her career she has done some amazing things, including:

- Spending thousands of hours living and working in underwater laboratories
- Breaking the women's record for deep-sea diving in 1979
- Helped design and operate special submarines which allowed scientists to go deeper underwater than ever before
- Created Mission Blue, an organisation aiming to create protected areas of ocean, like nature reserves





"With every drop of water you drink, every breath you take, you're connected to the sea. No matter where on Earth you live. Most of the oxygen in the atmosphere is generated by the sea."

Today, Sylvia continues to educate people about the damage that human behaviour is doing to the oceans, and about what can be done to save the environment. She campaigns to raise awareness and change laws about pollution and the environment. She uses her own research and that of other naturalists to support her arguments.

"We need to respect the oceans and take care of them as if our lives depended on it. Because they do."

Discuss

and share your
responses to these
questions.



Can you remember some of Sylvia Earle's extraordinary achievements?

Why is the work of naturalists such as Sylvia Earle so important?

What do you think Sylvia hopes to achieve by educating and campaigning?

Many naturalists dedicate their lives to educating people about the harm humans can cause to the environment and to trying to make changes in the way we behave in order to protect the environment.

Some work for big businesses, governments or organisations such as charities and activist groups that protest against activity which can harm the environment.

Are there any problems with this?

Can you think of some reasons why naturalists might receive criticism?

Can you think of some reasons why naturalists might say misleading things?

http://commons.wikimedia.org/wiki/File%3ARachel-Carson.jpg



Rachel Carson was a naturalist specialising in marine biology. She started her career working for the U.S. government. She went on to write several books about conservation of the environment.

Carson became very famous when lots of people read her book, *Silent Spring*.

Silent Spring suggested that some pesticides, used to kill insects that attacked crops and carried diseases,

were also very bad for people and the environment. Lots of people in power believed her, and laws were changed. The use of certain pesticides was banned.





In recent years, lots of scientists and experts have criticised Rachel Carson for not being thorough in her research, and confusing readers by mixing her opinions in with scientific facts. They believe her writing misled politicians, and that lots of people have suffered in poorer parts of the world because of insects destroying crops and spreading diseases since the pesticide ban.



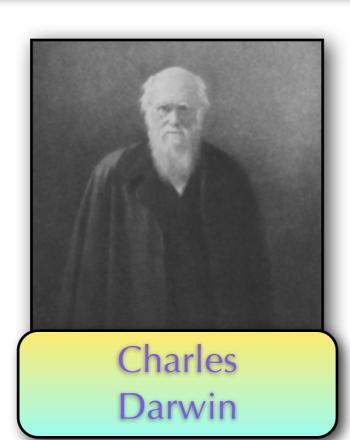
Important naturalists have the power and influence to change the way we look after the planet. What a big responsibility!

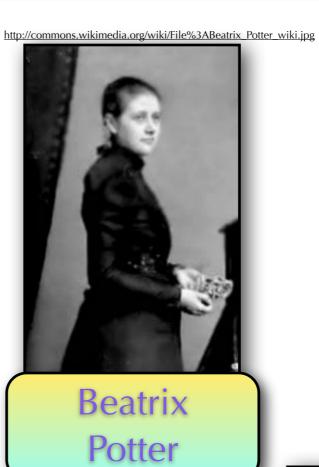


















Sylvia Earle



Jane Goodall



Irwin



