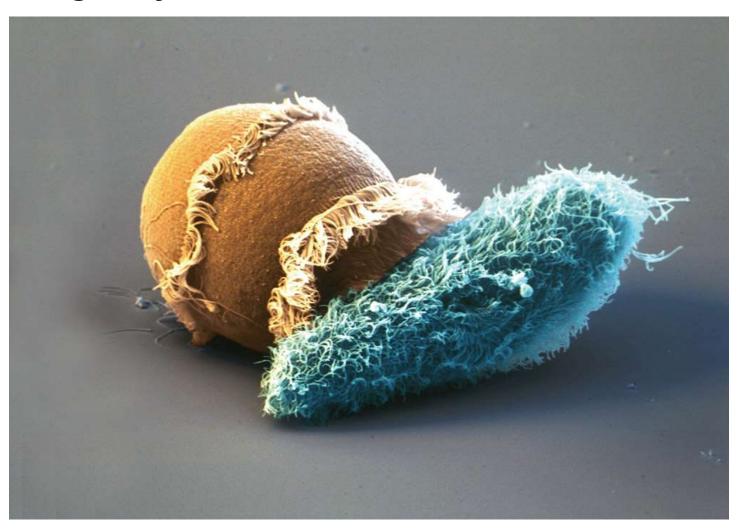
#### **KEY CONCEPT**

Fungi recycle nutrients in the environment.



#### Fungi may be decomposers, pathogens, or mutualists.

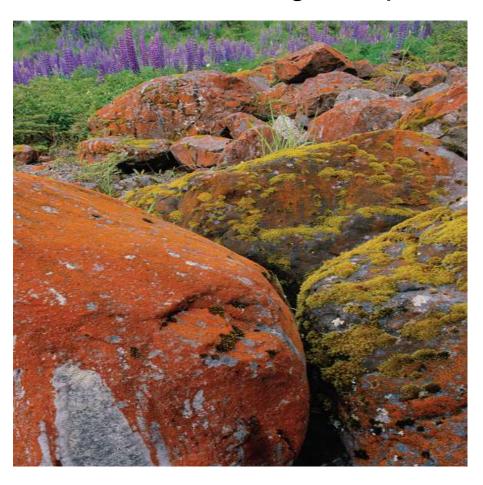
- Fungi and bacteria are the main decomposers in any ecosystem.
  - decompose dead leaves, twigs, logs, and animals
  - return nutrients to the soil
  - can damage fruit trees and wooden structures



- Fungi can act as pathogens.
- human diseases include ringworm and athlete's foot
- plant diseases include Dutch elm disease



- Fungi can act as mutualists.
- lichens form between fungi and algae
- mycorrhizae form between fungi and plants



- Fungi can act as mutualists.
  - relationships form between fungi and some insects



#### Fungi are studied for many purposes.

- Fungi are useful in several ways.
  - as food
- as antibiotics
  - as model systems for molecular biology