

13.3 Energy in Ecosystems

KEY CONCEPT

Life in an ecosystem requires a source of energy.



13.3 Energy in Ecosystems

- ▶ Producers provide energy for other organisms in an ecosystem.
- **Producers** get their energy from non-living resources..

Producers Are-

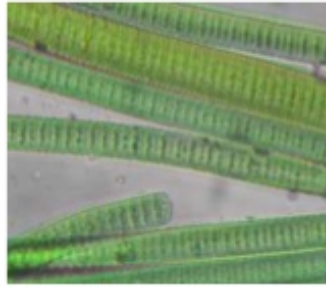
- Producers get their food and energy from the sun.
(PLANTS)
- They make their food through a process called photosynthesis.



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- ▶ Producers provide energy for other organisms in an ecosystem.
- **Producers** are also called **autotrophs** because they make their own food.

□ Examples of producers:



Photosynthetic Bacteria



Grasses



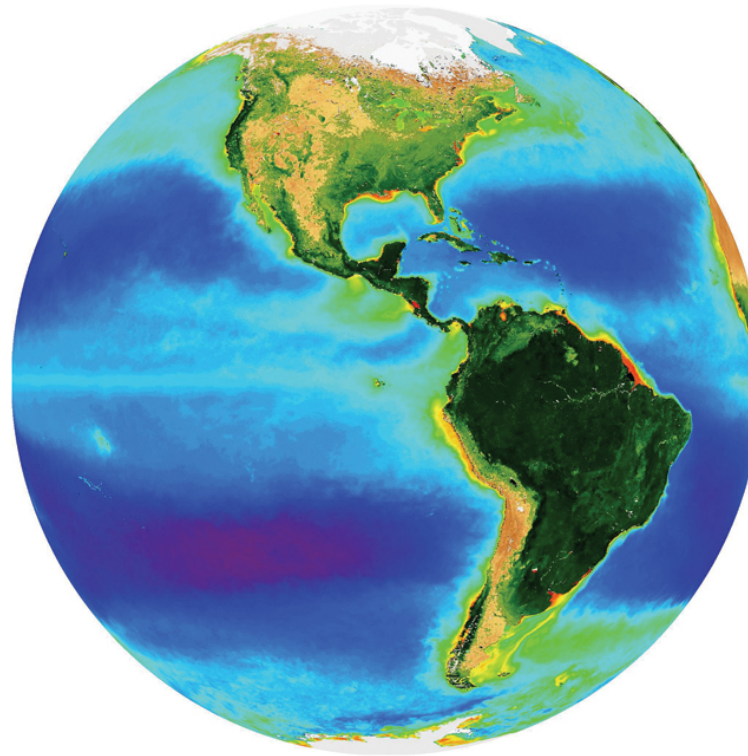
Shrubs



Trees

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- ▶ **Producers provide energy for other organisms in an ecosystem.**
- This chlorophyll image shows chlorophyll abundance to how the distribution of producers in the Western Hemisphere



* Dark green areas are heavily forested while yellow areas have limited vegetation.

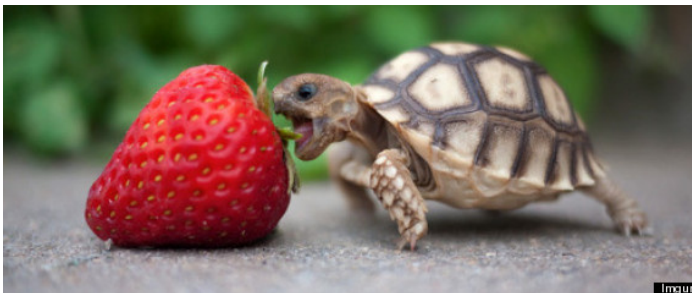
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- ▶ Producers provide energy for other organisms in an ecosystem.
- **Consumers** are organisms that get their energy by eating other living or once-living resources.



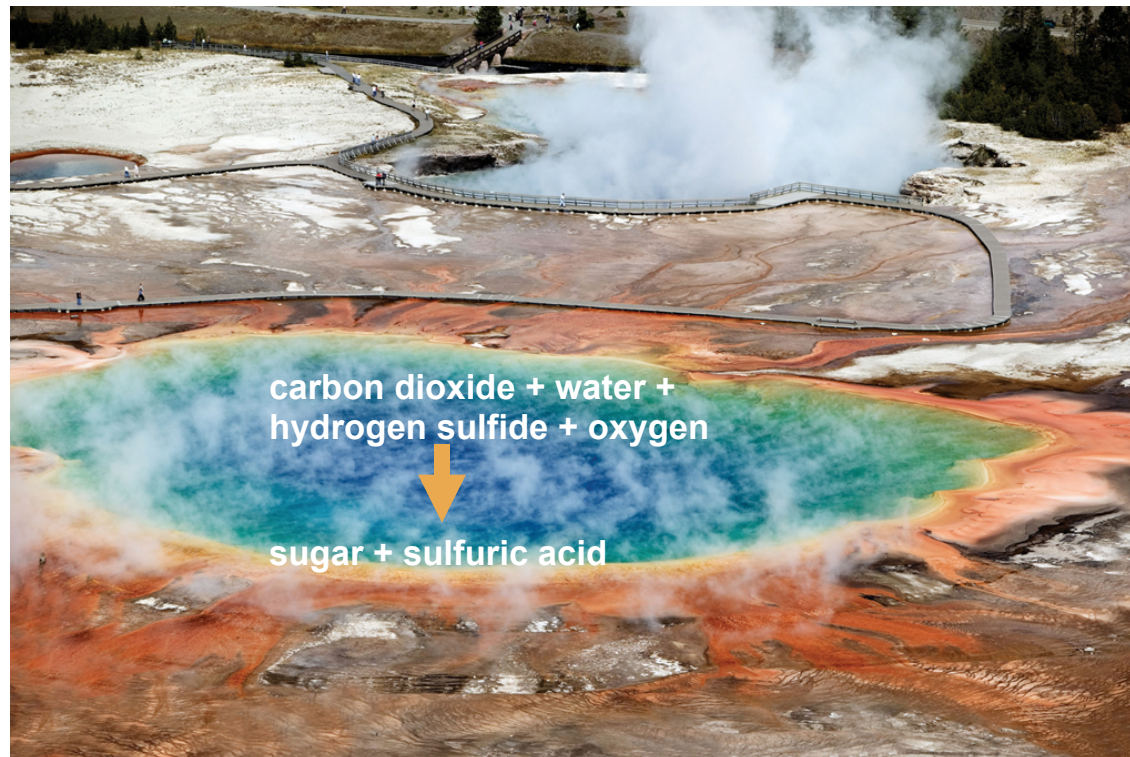
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- ▶ Producers provide energy for other organisms in an ecosystem.
- **Consumers** are also called **heterotrophs** because they feed off of different things.



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- ▶ **Almost all producers obtain energy from sunlight.**
 - **Photosynthesis** in most producers uses **sunlight** as an energy source.
 - **Chemosynthesis** in prokaryote producers uses **chemicals** as an energy source.



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▶ Processes by which producers obtain energy

