Trophic Levels of an Ecosystem
What is a trophic level?
What are the levels within a Trophic Cascade?
How do they affect each other in an ecosystem?
Trophic Levels of an Ecosystem

Watch the video below about the Trophic Pyramid
Also known as the Energy Pyramid

[Layout of the Energy Pyramid]
Trophic Levels of an Ecosystem

What is a Trophic Level?

- Each of several hierarchical levels in an ecosystem, comprising organisms that share the same function in the food chain and the same nutritional relationship to the primary sources of energy.

- The trophic level of an organism is the position it occupies in a food web. A food chain is a succession of organisms that eat other organisms and may, in turn, be eaten themselves. The trophic level of an organism is the number of steps it is from the start of the chain.

<table>
<thead>
<tr>
<th>Trophic Level 1</th>
<th>Producer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trophic Level 2</td>
<td>Primary Consumer</td>
</tr>
<tr>
<td>Trophic Level 3</td>
<td>Secondary Consumer</td>
</tr>
<tr>
<td>Trophic Level 4</td>
<td>Tertiary Consumer</td>
</tr>
</tbody>
</table>

Activity: Give an example of an animal at each level within our sagebrush ecosystem.
Trophic Levels of an Ecosystem

Class Share:

Each person will look up information about one of the trophic levels
- Define the role of ___________ (Producers, Primary Consumer ....)
- Name two organisms within that level

<table>
<thead>
<tr>
<th>Trophic Level 1</th>
<th>Producer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trophic Level 2</td>
<td>Primary Consumer</td>
</tr>
<tr>
<td>Trophic Level 3</td>
<td>Secondary Consumer</td>
</tr>
<tr>
<td>Trophic Level 4</td>
<td>Tertiary Consumer</td>
</tr>
</tbody>
</table>
Trophic Levels of an Ecosystem
Understanding Interactions

Explore Trophic Interactions with the following link
Trophic Cascades
Trophic Levels of an Ecosystem

Pick a native animal

Explain the Trophic Level of your animal
What is your animals potential impact on its ecosystem?
- What might happen if the species population increased?
- What might happen if the species population decreased?
Example: Turkey Vulture

Main Food Source
The turkey vulture only eats carrion. Carrion - the decaying flesh of dead animals. This means the turkey vulture is a scavenger. It soars over the land looking for dead animals.

Manner of Hunting
The turkey vulture forages by smell, an ability that is uncommon in the avian world, often flying low to the ground to pick up the scent of ethyl mercaptan, a gas produced by the beginnings of decay in dead animals.

Trophic Level
The turkey vulture is a decomposer. They consume animals of in the primary, secondary, and tertiary levels. The turkey vulture has few natural predators. Adult, immature and fledging vultures may fall prey to great horned owls, red-tailed hawks, golden eagles and bald eagles, while eggs and nestlings may be preyed on by mammals such as raccoons and opossums.