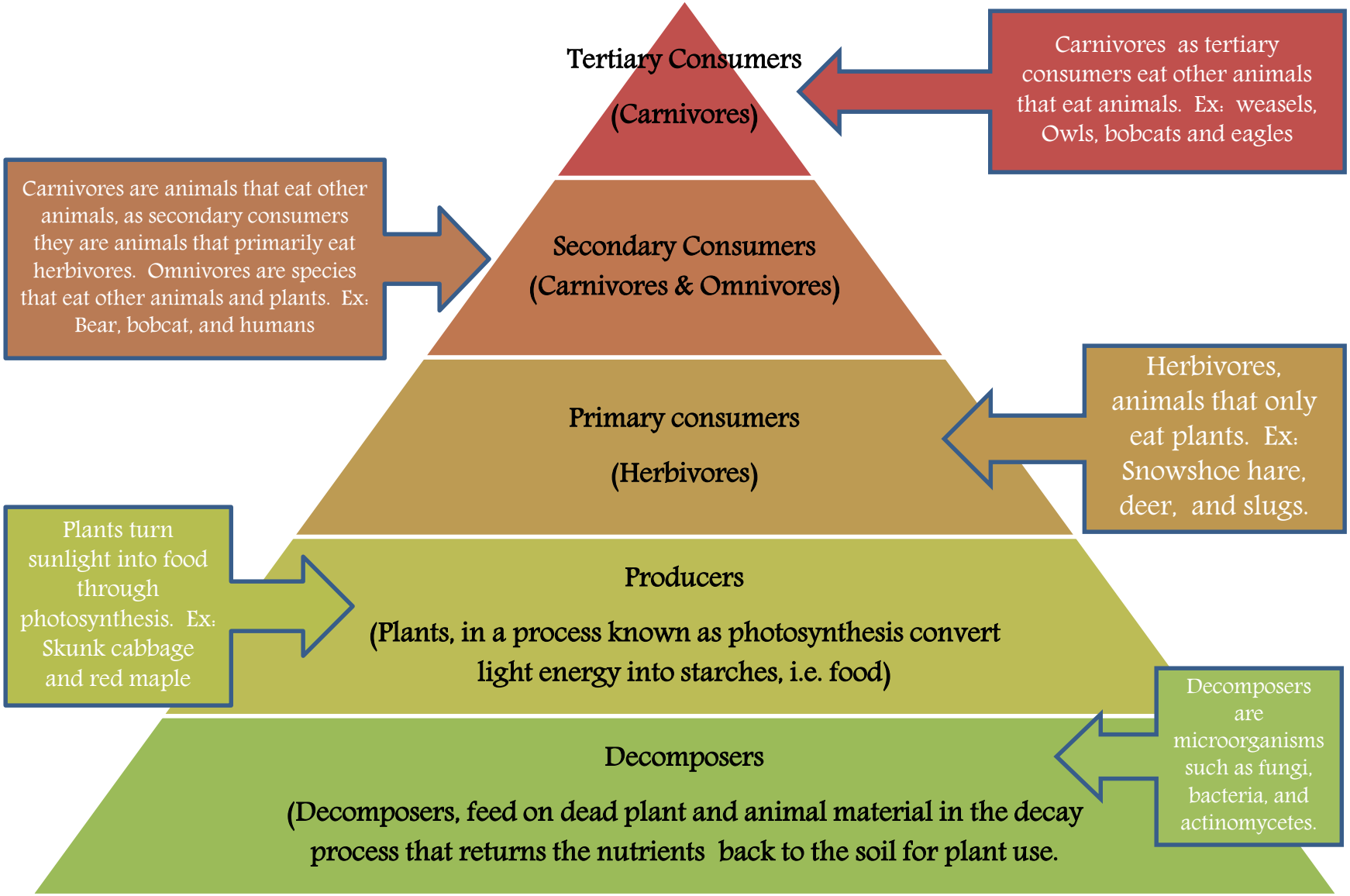
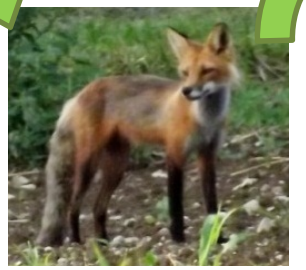
Food Webs and Energy Transfer



Energy Transfer & Cycling Through a Food Chain

Snakes eat frogs.



Foxes eat snakes.

Owls eat foxes.

Animals & plants die

Decomposers breakdown dead plant/animal matter in the decay process, and return nutrients to the soil.

Plants use returning nutrients as energy to grow

Plants produce food

Insects eat plants.

Frogs eat insects.

Potential Food Chains at Orono Bog

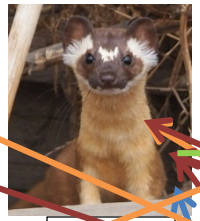
- Nectar and pollen > flies > northern leopard frog > garter snake > owl
- Dead plant or animal material > Fungi > slugs > frogs > weasel > coyote
- Bird eggs > red squirrel > red fox > bobcat
- Plants > snowshoe hare > bobcat
- Dead plant or animal material > ant > spider > frog > snake > owl

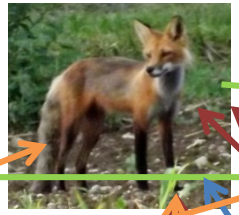
Real Food Webs are very complex, and food chains are merely simplified interactions of energy transfer.

For example: a coyote may eat a weasel, but a coyote may also eat berries, bird eggs, dead animals, mice, insects, snakes, grass…etc.

Food Web

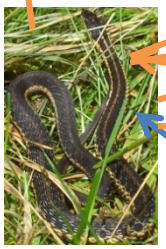
Coyote


Weasel

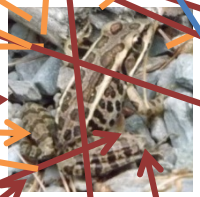

Red fox

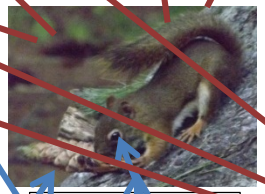
Owl

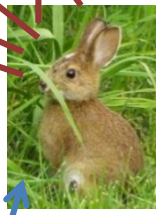
Bobcat


Garter snake

Spider


Frog


Red squirrel


Snowshoe hare

Fly

Ant

Slug

Nectar & Pollen

Dead plant & animal material

Bird eggs

Fungi

Plants