



Ever Wilder Farm  
10092 Big Creek Rd, Ellijay GA  
Ecology Handout #1

## VOCABULARY:

**Ecology** - The study of how living things interact with each other and their environment.

**Abiotic factors** - Non-living factors in an ecosystem, like sun, water, fire frequency, oxygen, minerals and others.

**Biotic Factors** - Living factors of an ecosystem.

**Ecosystem** - A biological community.

**Food chain** - A linear network in a food web, consisting of producers and consumers

**Primary producer** - Any green plant or any of the various microorganisms that can convert light energy or chemical energy into organic matter.

**Primary consumer** - Any organism that consumes primary producers.

**Secondary consumer** - Any organism that consumes primary consumers, including omnivores.

### Scale:

**Individual** - A specific organism.

**Population** - A group of organisms of the same species.

**Community** - A group of biotic factors

**Ecosystem** - The biotic and abiotic factors of a certain area.

## CRITICAL THINKING:

Let's take a closer look at one plant on the farm - passionflower (*passiflora incarnata*). When the plant grows a leaf it is a **primary producer**. When the gulf fritillary caterpillar feeds on the leaf it is being a **primary consumer**. Normally a bird might eat the caterpillar and act as a **secondary consumer**, but this is where things get interesting. The passionflower leaf contains a toxin that deters most herbivores, however the gulf fritillary has developed an ability to ingest this toxin! When the caterpillar feeds on the poisonous leaf, it becomes poisonous too! This toxin build up is sometimes enough to stop the **food chain**.

1. Can you think of another primary consumer for passionflower or another fruit producing plant?

2. What abiotic factors may affect where passionflower or other plants grow?

