

# Forest Diversity - Animals and Forest Age

Name:  
Science 7A 7B  
Due Date:

{\*\*An assignment in support of **Role of Fire in Our Forests Essay**}

**As you complete this, consider the following. A “stand” is a “smaller” section of a larger overall forest. The stand has a somewhat consistent age and type of forest. A diverse forest has different stands of different ages. This assignment looks at why that stand diversity is important to the ecosystem.**

## **Developing - What?**

1. Name three NATURAL agents of change (things that cause disturbances) in forest ecosystems:

Lightning caused fires, fungus, disease, insects, water shortage, snow.

2. Name three HUMAN CAUSED agents of change (things that cause disturbances) in forest ecosystems:

Cig buds that aren't put out, campfires with hot coals, and lanterns that spill over.

3. Name the three ages of forest stands discussed on the poster:

The first age is Young Open Stands Forests that are open and spacious, the second is Middle Age Stands that are partially open and partially not, and finally, Older Forest Stands that are old and growth.

## **Proficiency - So What?**

4. Name 3-4 needs of animals that can determine which animals prefer a particular forest age:

Older forests are thicker and provide good healthy cover for owls and other animals that need shelter. Younger forests have more berries and food and not as much cover because of recent fires.

5. Choose two of the forest ages/types and answer the following:

A. First age of forest stand: Young Open Forest 0-15 years

Brief Description of Forest (habitat, conditions, characteristics):

This forest is an open space with a bounty full of vegetation. It is a Stand after recent fire, when vegetation is healthy and clean. It is open with not much cover and animals are attracted to the Stand site because of the food and water sources.

5 Examples of animals that choose this forest type:

Animals that are closely associated with the Young Open Stands are skunks, western bluebirds, chipping sparrows, deer mouse, and the spotted towlee.

### **Why animals would choose this forest type:**

It offers a lot of vegetation and because these animals are small, it is ideal cover underneath the new vegetation. There are edible flowers, berries, and leaves that the animals can easily reach and eat. Many families of animals would move there because of the ideal location of food and possible water, so that families wouldn't starve.

**Second age of Forest stand:** Old Forest Stand 70 to 100+

### **Brief Description of Forest (habitat, conditions, characteristics):**

This forest is old, very old, fire has not gone through here for a long time. There is lots of moss for nesting, and the trees are harder and thicker due to the long time period. These trees are ideal cover for animals.

### **5 Examples of animals that choose this forest type:**

The animals that live in this area are: Owls, varied thrush, hoary bat, red tree vole, Cooper's hawk, pine Siskin.

### **Why animals would choose this forest type:**

The reason animals choose this type of forest is because while it may not be ideal for certain food sources, it is completely ideal for the hiding of family members of the animals.

### **Now What?**

6. How could forest managers use their knowledge of the above information to manage a forest for a diversity of wildlife?

Forest managers could make sure that different parts of the forest were a variety of stands, and to make it ideal for ALL animals to want to come and live in that area.

**How do wildfire and logging factor in to the forest types? Make connections between fire and logging and forest age/animal preferences.**

Fires and logging can be healthy and also unhealthy at the same time. Fires can get out of control, but controlled logging can be healthy when taking away trees that can harm the other trees in that forest.

Based on this knowledge, how should a huge section of forest look?  
Think in terms of forest diversity.

A forest that is totally diverse would have open areas in some parts, but have dense areas in others. A forest that is totally diverse would have also, parts that were closed in and old, along with parts that were 15-70 years old - middle growth-.

<b>Learning Target</b>	<b>Developing</b>	<b>Proficiency</b>	<b>Mastery</b>
<b>DISTURBANCE AND ECOSYSTEM CHANGE: I can explain how ecosystems change over time (including after disturbances), and infer how the changes (will) affect populations.</b>	<b>Answers show that you get the general idea that different animals prefer different aged forests and include some explanation of why they do.</b>	<b>Answers show understanding of how and why different animals use different aged forest stands. The benefit of a diversity of forest stand ages is explained.</b>	<b>+ specific details and/or examples, either from the reading or from personal experience, show a deeper understanding of the importance of forest diversity.</b>