STUDY GUIDE for "Acid Precipitation, Implications For Forest Productivity"

1) What is acid rain and what causes it?

2) List the detrimental effects of acid rain on aquatic ecosystems:

3) What is the average pH of precipitation falling in PA?

4) Which are affected most by acid rain, deciduous leaves or coniferous needles?

5) What is acid rain's greatest effect on leaves?

6) Why are nutrients leached from leaves by acid rain lost to the forest ecosystem?

7) How is the process of leaf litter decomposition in a forest affected by acid rain and why may this be detrimental to the growth of trees in a forest?

8) What negative effects may result from the breakdown of the cutin (waxy) layer of leaves by acid rain?

9) How is seed germination affected by acid rain?

10) What are mycorrhizae? How are they important to trees? How are mycorrhizae affected by acid rain?

11) What is aluminum toxicity and how does it relate to acid rain in forests?