

**LESSON 5: APPALACHIAN STREAM CONSERVATION**

**MIDDLE SCHOOL STANDARDS ADDRESSED:**

Tennessee	<p><b>6.LS2: Ecosystems: Interactions, Energy, and Dynamics</b></p> <ol style="list-style-type: none"><li>1. Evaluate and communicate the impact of environmental variables on population size.</li><li>6. Research the ways in which an ecosystem has changed over time in response to changes in physical conditions, population balances, human interactions, and natural catastrophes.</li></ol> <p><b>6.LS4: Biological Change: Unity and Diversity</b></p> <ol style="list-style-type: none"><li>1. Explain how changes in biodiversity would impact ecosystem stability and natural resources.</li><li>2. Design a possible solution for maintaining biodiversity of ecosystems while still providing necessary human resources without disrupting environmental equilibrium.</li></ol>
-----------	--

**HIGH SCHOOL STANDARDS ADDRESSED:**

Tennessee	<p><b>BIO1.LS2: Ecosystems: Interactions, Energy, and Dynamics</b></p> <ul style="list-style-type: none"><li>• 4. Analyze data demonstrating the decrease in biomass observed in each successive trophic level. Construct an explanation considering the laws of conservation of energy and matter and represent this phenomenon in a mathematical model to describe the transfer of energy and matter between trophic levels.</li></ul>
-----------	--