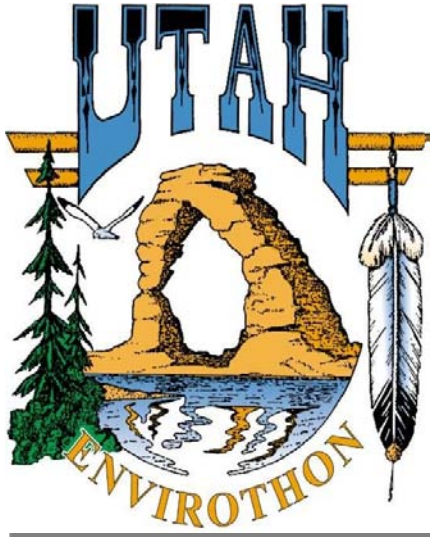


Utah Envirothon Forestry Study Correlations with
Utah State Science Core Curriculum



Forestry Learning Objectives & Activities

Identify common trees without a key and identify unusual species of trees or shrubs through the use of a key.	Understand forest ecology concepts, including the relationship between soil and forest types, tree communities, regeneration, competition, and succession.	Understand factors affecting tree growth and forest development (climate, insects, diseases, shade tolerance, topography, etc.).	Understand how wildlife habitat relates to forest communities, forest species, forest age structure, snags and den trees, availability of food, and riparian zones.	Understand the value of trees in urban and suburban settings and factors affecting their health and survival.	Understand how forest health and management affect the following issues: biological diversity, forest fragmentation, air quality, fire, and recreation.	Understand basic forest management concepts and tools such as: how various silvicultural practices are utilized, the use of tree measuring devices, and best management practices.	Identify complex factors which influence forest management decisions (economics, social, and ecological).	Apply silviculture concepts and methods to develop general management recommendations for a particular situation and management goals.
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ILOs of Science Core Curriculum for High School Students in the state of Utah

<i>Use Science Process & Thinking Skills</i>	x	x	x	x	x	x	x	x	x
<i>Manifest Scientific Attitudes and Interests</i>		x		x		x	x	x	x
<i>Demonstrate Understanding of Science Concepts, Principles and Systems</i>	x	x	x	x	x	x	x	x	x
<i>Communicate Effectively Using Science Language and Reasoning</i>	x		x			x	x	x	x
<i>Demonstrate Awareness of Social and Historical Aspects of Science</i>			x	x	x	x		x	x
<i>Demonstrate Understanding of the Nature of Science</i>	x	x	x	x	x	x	x	x	x

Earth Systems Science Core Curriculum Standards

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Standard 2: Students will understand that the features of Earth's evolving environment affect living systems, and that life on Earth is unique in the solar system.		X	X	X	X	X	X	X	X
Objective 2: Analyze how ecosystems differ from each other due to abiotic and biotic factors.		X	X		X	X			
Objective 3: Examine Earth's diversity of life as it changes over time.		X	X	X	X	X		X	
Standard 5: Students will understand that Earth's atmosphere interacts with and is altered by the lithosphere, hydrosphere, and biosphere.		X	X	X	X	X			
Objective 2: Trace ways in which the atmosphere has been altered by living systems and has itself strongly affected living systems over the course of Earth's history.		X			X	X		X	
Biology Science Core Curriculum Standards									
Standard 1: Students will understand that living organisms interact with one another and their environment.	X	X	X	X	X	X	X	X	X
Objective 2: Explain relationships between matter cycles and organisms.		X	X	X	X	X	X	X	X
Objective 3: Describe how interactions among organisms and their environment help shape ecosystems.		X	X	X	X	X	X	X	X
Standard 5: Students will understand that biological diversity is a result of evolutionary processes.	X	X	X	X	X	X	X	X	
Objective 1: Relate principles of evolution to biological diversity.	X	X	X	X	X	X		X	
Objective 3: Classify organisms into a hierarchy of groups based on similarities that reflect their evolutionary relationships.	X	X	X	X					