

Forestry – Explore the Deep Woods	
Level 3 – Grade 8 - 12	
Project 2061 Benchmarks (Grade 9 – 12)	
The Nature of Science	
Activity	Scientific Inquiry
1 – 15	Investigations are conducted for different reasons, including to explore new phenomena, to check on previous results, to test how well a theory predicts, and to compare different theories.
1 – 15	Sometimes scientists can control conditions in order to obtain evidence. When that is not possible for practical or ethical reasons, they try to observe as wide a range of natural occurrences as possible to be able discern patterns.
The Living Environment	
	Diversity of Life
1 – 3, 9	The variation of organisms within a species increases the likelihood that at least some members of the species will survive under changed environmental conditions, and a great diversity of species increases the chance that at least some living things will survive in the face of large changes in the environment.
	Heredity
9	Some new gene combinations make little difference, some can produce organisms with new and perhaps enhanced capabilities, and some can be deleterious.
	Interdependence of Life
5	Ecosystems can be reasonably stable over hundreds or thousands of years. As any population of organisms grows, it is held in check by one or more environmental factors: depletion of food or nesting sites, increased loss to increased numbers of predators, or parasites. If a disaster such as flood or fire occurs, the damaged ecosystem is likely to recover in stages that eventually result in a system similar to the original one.
5	Like many complex systems, ecosystems tend to have cyclic fluctuations around a state of rough equilibrium. In the long run, however, ecosystems always change when climate changes or when one or more new species appear as a result of migration or local evolution.
8, 10-15	Human beings are part of the earth’s ecosystems. Human activities can, deliberately or inadvertently, alter the equilibrium in ecosystems.

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NH Science Frameworks (Grade 7 - 10)	
Science as Inquiry	
Activity	1a. Students will demonstrate an increasing understanding of how the scientific enterprise operates
1 – 15	Formulate questions and use appropriate concepts to guide scientific investigations and to solve real world problems
Life Science	
	3a. Students will demonstrate an increasing ability to recognize patterns and products of evolution, including genetic variation, specialization, adaptation, and natural selection.
1 - 3	Identify and describe similarities and differences among organisms of different, but closely related taxa (groups), e.g. conifers, rodents, big cats, etc.
6	Develop appropriate food webs for the major biomes of the earth and accurately describe the major biogeochemical cycles which control the interactions between the biotic and physical worlds
5	Construct a "timeline" that depicts how life forms change over time as they interact in and with the environment
9	Explain how new genetic traits can arise and become established in a population, e.g. mutation of DNA, new gene linkages, crossing over, etc.

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NH Career Development Frameworks (Grade 11 - 12)	
Core Educational Learning	
	2. Students will demonstrate a firm grounding in essential computational skills as well as strong problem-solving and reasoning abilities.
8	Apply decision-making skills in a wide variety of situations.
8	Analyze the design and management of a system.
8	Develop a systemic plan and communicate the plan clearly.