

Pennsylvania Academic Standards for Science and Technology
Curriculum: *Wildlife is All Around Us - The Wildlife Detective*

Lesson	Academic Standards	Grade Level	Activities
The Wildlife Detective	3.2.4.B. Describe objects in the world using the five senses.	4	Learn that many animals are difficult to see because of their hidden habitats. Look for signs of wildlife such as tracks, scat, or feathers.
	3.3.4.A. Know the similarities and differences of living things.	4	
Learning Your Animal Groups	3.1.4.A. Know that natural and human-made objects are made up of parts.	4	Learn about vertebrates and invertebrates. Observe characteristics and habits of fish, amphibians, reptiles, birds, and mammals.
	3.2.4.B. Describe objects in the world using the five senses.	4	
	3.3.4.A. Know the similarities and differences of living things.	4	
	3.3.4.C. Know that characteristics are inherited and thus offspring closely resemble their parents.	4	
Habitat: What Animals Need to Live	3.3.4.A. Know the similarities and differences of living things.	4	Learn the differences between herbivores, carnivores, and omnivores. Understand why water, cover, space, and habitat are important to animals and that finding them depends on the time of year.
	3.5.4.C. Know basic weather elements.	4	
	3.5.4.D. Recognize the Earth's different water resources.	4	

Pennsylvania Academic Standards for Science and Technology
Curriculum: *Wildlife is All Around Us - Spring*

Introduction	3.1.4.A. Know that natural and human-made objects are made up of parts.	4	Learn about animals emerging from hibernation, or returning from migration. Observe which animals are first to appear, and learn about the emergence of their young.
	3.3.4.A. Know the similarities and differences of living things.	4	
	3.3.7.A. Describe the similarities and differences that characterize diverse living things.	7	
	3.3.4.C. Know that characteristics are inherited and thus offspring closely resemble their parents.	4	
	3.3.7.C. Know that every organism has a set of genetic instructions that determines its inherited traits.	7	
	3.3.7.D. Explain basic concepts of natural selection.	7	
Amphibians in the Night	3.2.4.B. Describe objects in the world using the five senses.	4	Take a field trip to observe amphibians in the wild and learn to identify them by sight or sound.

Building Your Own Birdhouse	3.7.4.B. Select appropriate instruments to study materials.	4	Learn how birds build nests, then construct a birdhouse from everyday household items.
Bird Song Field Trip	3.2.4.B. Describe objects in the world using the five senses.	4	Take a field trip and identify as many birds as possible by sight and sound.

Pennsylvania Academic Standards for Science and Technology
Curriculum: *Wildlife is All Around Us – Summer*

Introduction	3.1.4.C. Illustrate patterns that regularly occur and reoccur in nature.	4	Learn how animals grow and develop in summer. Identify ideal locations to find animals depending on the weather. Learn to identify poisonous from non-poisonous snakes.
	3.1.4.E. Recognize change in natural and physical systems.	4	
	3.2.4.B. Describe objects in the world using the five senses.	4	
	3.3.4.A. Know the similarities and differences of living things.	4	
	3.5.4.C. Know basic weather elements.	4	
Tracking in the Summer	3.7.4.B. Select appropriate instruments to study materials.	4	Identify animal tracks in the wilderness and make plaster casts of them.
Wildlife Food Quest	3.5.4.C. Know basic weather elements.	4	Create a display of various wildlife foods. Learn which animals are likely to consume which foods.

Pennsylvania Academic Standards for Science and Technology
Curriculum: *Wildlife is All Around Us – Fall*

<p>Introduction</p>	<p>3.1.4.C. Illustrate patterns that regularly occur and reoccur in nature.</p> <p>3.1.4.E. Recognize change in natural and physical systems.</p> <p>3.3.4.A. Know the similarities and differences of living things.</p> <p>3.3.4.C. Know that characteristics are inherited and thus offspring closely resemble their parents.</p> <p>3.5.4.C. Know basic weather elements.</p>	<p align="center">4</p> <p align="center">4</p> <p align="center">4</p> <p align="center">4</p> <p align="center">4</p>	<p>Understand that wildlife is preparing for winter by gaining weight, collecting food, or migrating. Learn that deer are preparing for breeding season by marking their territory.</p>
<p>Why Migrate?</p>	<p>3.1.4.E. Recognize change in natural and physical systems.</p> <p>3.2.4.C. Recognize and use the elements of scientific inquiry to solve problems.</p> <p>3.3.4.A. Know the similarities and differences of living things.</p>	<p align="center">4</p> <p align="center">4</p> <p align="center">4</p>	<p>Understand that the availability of food determines which birds must migrate. Observe and identify migrating birds.</p>

<p>Why Migrate? (continued)</p>	<p>3.3.7.A. Describe the similarities and differences that characterize diverse living things.</p> <p>3.5.4.C. Know the basic weather elements.</p>	<p>7</p> <p>4</p>	
<p>Providing Shelter for Wildlife</p>	<p>3.5.4.C. Know basic weather elements.</p>	<p>4</p>	<p>Determine which types of cover could provide shelter for wildlife. Build a brush pile to shelter wildlife and observe what types of animals use it.</p>
<p>Hawk and Owl Pellets</p>	<p>3.2.4.C. Recognize and use the elements of scientific inquiry to solve problems.</p> <p>3.3.4.A. Know the similarities and differences of living things.</p>	<p>4</p> <p>4</p>	<p>Learn that hawks and owls regurgitate material they cannot digest. Locate and dissect a pellet and try to determine what the bird ate.</p>

Pennsylvania Academic Standards for Science and Technology
Curriculum: *Wildlife is All Around Us – Winter*

Introduction	3.1.4.C. Illustrate patterns that regularly occur and reoccur in nature.	4	Learn that some mammals and birds are active in winter and others hibernate.
	3.1.4.E. Recognize change in natural and physical systems.	4	
	3.3.4.A. Know the similarities and differences of living things.	4	
	3.3.7.A. Describe the similarities and differences that characterize diverse living things.	7	
	3.5.4.C. Know basic weather elements.	4	
Animal Signs Scavenger Hunt	3.2.4.B. Describe objects in the world using the five senses.	4	Locate and observe tracks, feeding signs, and shelters of different animals and complete a data sheet.
Feeding Birds in Winter	3.5.4.C. Know basic weather elements.	4	Learn that providing a variety of food can attract several different birds in winter. Construct several types of homemade bird feeders.
	3.7.4.B. Select appropriate instruments to study materials.	4	

Pennsylvania Academic Standards for Environment and Ecology
Curriculum: *Wildlife is All Around Us – The Wildlife Detective*

Lesson	Academic Standards	Grade Level	Activities
The Wildlife Detective	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Learn that many animals are difficult to see because of their hidden habitats. Look for signs of wildlife such as tracks, scat, or feathers.
	4.6.7.A. Explain the flows of energy and matter from organism to organism within an ecosystem.	7	
	4.7.4.A. Identify differences in living things.	4	
Learning Your Animal Groups	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Learn about vertebrates and invertebrates. Observe characteristics and habits of fish, amphibians, reptiles, birds, and mammals.
	4.7.4.A. Identify differences in living things.	4	
Habitat: What Animals Need to Live	4.1.4.E. Recognize the impact of watersheds and wetlands on animals and plants.	4	Learn the differences between herbivores, carnivores, and omnivores. Understand why water, cover, space, and habitat are important to animals and that finding them depends on the time of year.
	4.3.4.A. Know that plants, animals, and humans are dependent on air and water.	4	

<p>Habitat: What Animals Need to Live (continued)</p>	<p>4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.</p>	4	
	<p>4.6.7.A. Explain the flows of energy and matter from organism to organism within an ecosystem.</p>	7	
	<p>4.7.4.A. Identify differences in living things.</p>	4	
	<p>4.7.4.B. Know that adaptations are important for survival.</p>	4	

Pennsylvania Academic Standards for Environment and Ecology
Curriculum: *Wildlife is All Around Us – Spring*

Introduction	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Learn about animals emerging from hibernation, or returning from migration. Observe which animals are first to appear, and learn about the emergence of their young.
	4.7.4.A. Identify differences in living things.	4	
	4.7.4.B. Know that adaptations are important for survival.	4	
	4.7.7.B. Explain how species of living things adapt to their environment.	7	
Amphibians in the Night	4.1.4.C. Identify living things found in water environments.	4	Take a field trip to observe amphibians in the wild and learn to identify them by sight or sound.
	4.1.4.E. Recognize the impact of watersheds and wetlands on animals and plants.	4	
	4.3.4.A. Know that plants, animals, and humans are dependent on air and water.	4	
Building Your Own Birdhouse	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Learn how birds build nests, then construct a birdhouse from everyday household items.

Pennsylvania Academic Standards for Environment and Ecology
Curriculum: *Wildlife is All Around Us – Summer*

Introduction	4.3.4.A. Know that plants, animals, and humans are dependent on air and water.	4	Learn how animals grow and develop in summer. Identify ideal locations to find animals depending on the weather. Learn to identify poisonous from non-poisonous snakes.
	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	
	4.6.4.C. Identify how ecosystems change over time.	4	
	4.7.4.A. Identify differences in living things.	4	
	4.7.4.B. Know that adaptations are important for survival.	4	
Collecting Your Own Nest Materials	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Identify what types of nests different birds construct and what their eggs look like.
Wildlife Food Quest	4.3.4.A. Know that plants, animals, and humans are dependent on air and water.	4	Create a display of various wildlife foods. Learn which animals are likely to consume which foods.
	4.7.4.B. Know that adaptations are important for survival.	4	

Hawk and Owl Pellets	4.3.4.C. Understand that the elements of natural systems are interdependent.	4	Learn that hawks and owls regurgitate material they cannot digest. Locate and dissect a pellet and try to determine what the bird ate.
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Pennsylvania Academic Standards for Environment and Ecology
Curriculum: *Wildlife is All Around Us – Winter*

Introduction	4.3.4.A. Know that plants, animals, and humans are dependent on air and water.	4	Learn that some mammals and birds are active in winter and others hibernate.
	4.7.4.A. Identify differences in living things.	4	
Tracking in the Snow	4.7.4.A. Identify differences in living things.	4	Find animals tracks in the snow. Follow them and learn where the animal habitats are.
	4.7.4.B. Know that adaptations are important for survival.	4	
Feeding Birds in Winter	4.6.4.A. Understand that living things are dependent on non-living things in the environment for survival.	4	Learn that providing a variety of food can attract several different birds in winter. Construct several types of homemade bird feeders.
	4.7.4.A. Identify differences in living things.	4	
	4.7.4.B. Know that adaptations are important for survival.	4	