



## Russell the Mussel

### Integrating NYS Learning Standards

\*For more information please visit [NYS P-12 Science Learning Standards](#) and [NYS Next Generation ELA Standards](#)

### Pre-Kindergarten Learning Standards

P. LIFE SCIENCES
<b>P-LS1-1</b> Observe familiar plants and animals (including humans) and describe what they need to survive. (Clarification Statement: Emphasis should be on determining what a variety of living organisms need to live and grow.)
<b>P-LS1-2</b> Plan and conduct an investigation to determine how familiar plants and/or animals use their external parts to help them survive in the environment. (Clarification Statement: Emphasis should be on the relationships between the physical and living environment. Examples of external parts could include roots, stems, leaves for plants and eyes, ears, mouth, arms, legs for animals.)

#### New York State Next Generation Learning Standards Connections: ELA/Literacy

- PKR4** Exhibit an interest in learning new vocabulary. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKW1** Use a combination of drawing, dictating, oral expression, and/or emergent writing to state an opinion about a familiar topic in child-centered, authentic, play-based learning. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKW2** Use a combination of drawing, dictating, oral expression, and/or emergent writing to name a familiar topic and supply information in child-centered, authentic, play-based learning. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKW3** Use a combination of drawing, dictating, oral expression, and/or emergent writing to narrate an event or events in a sequence. (P-PS1-1),(P-PS2-1),(PPS4-1)
- PKW7** Engage in a discussion using gathered information from experiences or provided resources. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKSL2** Interact with diverse formats and texts. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKSL3** Identify the speaker. (P-LS1-1),(P-LS1-2),(P-LS3-1)
- PKSL5c** Use words to identify and describe the world around them.

Save The River envisions a healthy Upper St. Lawrence River that provides safe drinking water, is home to a thriving range of indigenous species and supports sustainable economic activity.

Save The River and the standing heron are registered trademarks of Save The River, Inc. ♦ Riverkeeper is a registered trademark of the Waterkeeper® Alliance



---

## Kindergarten Learning Standards

<b>K. INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS, ANIMALS, PLANTS AND THEIR ENVIRONMENT</b>
---

<b>K-LS1-1</b> Use observations to describe patterns of what plants and animals (including humans) need to survive. (Clarification Statement: Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and that all living things need water and other materials to live, grow and thrive.)
---

<b>K-ESS3-1</b> Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live. (Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore they usually live in forest areas, and grasses need sunlight so they often grow in meadows.)
--

New York State Next Generation Learning Standards Connections: ELA/Literacy

- KW1** Use a combination of drawing, dictating, oral expression and/or emergent writing to state an opinion piece about a familiar topic, personal experience and state a reason to support that topic. (K-ESS2-2)
- KW2** Use a combination of drawing, dictating, oral expression, and/or emergent writing to name a familiar topic and supply information. (K-ESS2-2),(K-ESS2-3)
- KW7** Develop questions and participate in shared research and exploration to answer questions and to build and share knowledge. (K-LS1-1)
- KSL5c** Use words to identify and describe the world making connections between words and their use.



# Save The River® / Upper St. Lawrence RIVERKEEPER®

*Protecting the St. Lawrence River now, and for generations to come*

---

## First Grade Learning Standards

### 1. STRUCTURE, FUNCTION, AND INFORMATION PROCESSING

**1-LS1-2** Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. (Clarification Statement: Examples of patterns of behaviors could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).)

### New York State Next Generation Learning Standards Connections: ELA/Literacy

- 1R2** Identify a main topic or idea in a text and retell important details. (1-LS1-2)
- 1R3** Describe characters, settings, and major events in a story, or pieces of information in a text. (RI&RL)
- 1W4** Create a response to a text, author, theme or personal experience (e.g., poem, dramatization, artwork, or other).
- 1W6** Develop questions and participate in shared research and explorations to answer questions and to build knowledge. (1-PS4-1),(1-PS4-2),(1-PS4-3),(1-PS4-4)
- 1W7** Recall and represent information from experiences or gather information from provided sources to answer a question. (1-LS3-1)
- 1L5b** Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes).
- 1L5c** Use words for identification and description, making connections between words and their use (e.g., places at home that are cozy).

---

Save The River envisions a healthy Upper St. Lawrence River that provides safe drinking water, is home to a thriving range of indigenous species and supports sustainable economic activity.

Save The River and the standing heron are registered trademarks of Save The River, Inc. ♦ Riverkeeper is a registered trademark of the Waterkeeper® Alliance



# Save The River® / Upper St. Lawrence RIVERKEEPER®

*Protecting the St. Lawrence River now, and for generations to come*

## Second Grade Learning Standards

### INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS

**2-LS2-2** Develop a simple model that illustrates how plants and animals depend on each other for survival. [Clarification Statement: Examples could include animals dispersing seeds or pollinating plants, and plants providing food, shelter, and other materials for animals.]

**2-LS4-1** Make observations of plants and animals to compare the diversity of life in different habitats. [Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.] [Assessment Boundary: Assessment does not include specific animal and plant names in specific habitats.]

#### New York State Next Generation Learning Standards Connections: ELA/Literacy

- 2W4** Create a response to a text, author, theme or personal experience (e.g., poem, play, story, artwork, or other).
- 2W6** Develop questions and participate in shared research and explorations to answer questions and to build knowledge. (2-LS2-1),(2-LS4-1)
- 2W7** Recall and represent relevant information from experiences or gather information from provided sources to answer a question. (2-LS2-1),(2-LS4-1)
- 2SL5b** Use words for identification and description, making connections between words and their use.

---

Save The River envisions a healthy Upper St. Lawrence River that provides safe drinking water, is home to a thriving range of indigenous species and supports sustainable economic activity.

Save The River and the standing heron are registered trademarks of Save The River, Inc. ♦ Riverkeeper is a registered trademark of the Waterkeeper® Alliance



## Third Grade Learning Standards

### INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS

**3-LS2-1.** Construct an argument that some animals form groups that help members survive. [Clarification Statement: Examples of groups could include a herd of cattle, a swarm of bees, a flock of geese, a pod of whales, etc.]

**3-LS4-3.** Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all. [Clarification Statement: Examples of evidence could include needs and characteristics of the organisms and habitats involved. The organisms and their habitat make up a system in which the parts depend on each other.]

**3-LS4-4.** Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change.\* [Clarification Statement: Examples of environmental changes could include both natural and human-influenced changes in land characteristics, water distribution, temperature, food, and other organisms.]

### New York State Next Generation Learning Standards Connections: ELA/Literacy

- 3R3** In informational texts, describe the relationship among a series of events, ideas, concepts, or steps in a text, using language that pertains to time, sequence, and cause/effect. (3-LS2-1), (3-LS4-1), (3-LS4-3), (3-LS4-4)
- 3W1** Write an argument to support claim(s), using clear reasons and relevant evidence. (3-LS2-1),(3-LS4-1),(3-LS4-3),(3-LS4-4)
- 3SL4** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace. (3-LS4 3),(3-LS4-4)



# Save The River® / Upper St. Lawrence RIVERKEEPER®

*Protecting the St. Lawrence River now, and for generations to come*

---

## Fourth Grade Learning Standards

### STRUCTURE, FUNCTION, AND INFORMATION PROCESSING

**4-LS1-1.** Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. [Clarification Statement: Examples of structures could include thorns, stems, roots, colored petals, heart, stomach, lung, brain, and skin.] [Assessment Boundary: Assessment is limited to macroscopic structures within plant and animal systems.]

### New York State Next Generation Learning Standards Connections: ELA/Literacy

- 4W1** Write an argument to support claim(s), using clear reasons and relevant evidence. (4-LS1-1)
- 4SL5** Include digital media and/or visual displays in presentations to emphasize central ideas or themes. (4-PS4-2),(4-LS1-2)

---

Save The River envisions a healthy Upper St. Lawrence River that provides safe drinking water, is home to a thriving range of indigenous species and supports sustainable economic activity.

Save The River and the standing heron are registered trademarks of Save The River, Inc. ♦ Riverkeeper is a registered trademark of the Waterkeeper® Alliance