



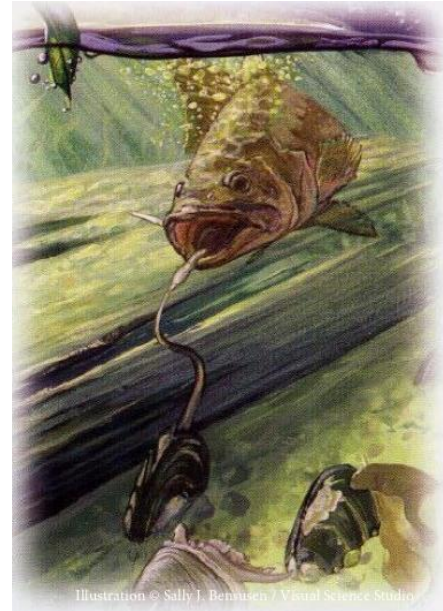
Russell the Mussel Story Time

A Distance Learning Guide for Educators and Guardians

Save The River is committed to providing quality educational programs and resources for formal and informal educators throughout our region. Save The River has developed Virtual Learning Guides and Resources for students, parents, and educators who are interested in learning more about the St. Lawrence River.

Russell the Mussel introduces students to aquatic life found in Crystal Creek, and leads the main character on a journey to understanding why underwater creatures need clean water. The story was published by Virginia Polytechnic Institute and State University, with funding provided by the US Fish and Wildlife Service.

In this reading, Janet Burrows introduces and reads the story of Russell. Mussels are not the most glamorous of water creatures, but they play a crucial role in water quality. In the 1800s, mussels were nearing extinction in the Great Lakes. In this story, students learn how mussel populations have started to repopulate (with the help of biologists) and how to protect aquatic life from pollution and habitat loss.



Russell the Mussel can be integrated into classroom curriculum and addresses New York State Science and(or) ELA Learning Standards spanning both elementary and middle school levels. There are many additional fun and educational activities you can use to engage your students with St. Lawrence River island habitats both in the classroom or during distance learning. Make sure to visit our website: www.savetheriver.org and follow our [Facebook Page](#) to learn more about what Save The River is doing to protect our waterways, and to stay up to date on upcoming adult and youth educational opportunities.

This storytime is part of our series focusing on native and invasive freshwater mussels in the St. Lawrence River and its tributaries. Save the River, Saint Regis Mohawk Tribe, New York State Museum, and the New York State Department of Environmental Conservation (DEC) have partnered for a multi-year project made possible by the DEC Invasive Species Grant Program.

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.

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CURRICULUM RESOURCES

Great Lakes Aquarium

Subjects: Food webs, invasive species, native mussel ecology, anatomy, life cycle, impacts to freshwater mussels

Website Link: [Next Generation of Scientists and Engineers: Cause and Effect Aquatic Invasive Species](#)

Illinois State Museum

Subjects: Anatomy

Website Link: [Mussel Anatomy Lesson Plan](#)

James River Association

Subjects: Anatomy

Website Link: Virtual Classroom: [Mussels of the James River](#)

Minnesota Zoo

Subjects: Food webs, water quality, symbiosis, mimicry, nutrient cycling, invasive species, human impacts

Website Link: [Freshwater Mussels Curriculum](#), [Show Us Your Mussels Digital Outreach Campaign](#), [Where are the Zebra Mussels](#), [Intro to Freshwater Mussels](#)

Missouri Department of Conservation

Subjects: Consumers, producers, and food chain.

Website Link: [Nature Unleashed \(Grades 3-5\)](#), [Nature Unhooked \(Grades 6-8\)](#)

Ohio River Foundation

Subjects: Mussels in the Classroom (Ohio Only), water quality, life cycle

Website Link: [Mussels in the Classroom](#)

PBS Learning Media for NY Educators

Subjects: Water quality, role of native freshwater mussels, threats to native mussels, how scientists work to protect native mussels, life cycle, native mussel restoration,

Website Link: [Why Should We Protect Freshwater Mussels](#)

VIDEO RESOURCES

[Grasse River Mussel Relocation Project](#)

Author: NYS Department of Conservation Duration: 4:23 minutes Date: 2018

[Mussels in the Wild](#)

Author: Fairmont Water Works Duration: 5:32 Date: 2017

[NYSDEC's Freshwater Mussel Caging Project on the Lower Grasse River](#)

Author: NY American Fisheries Society Duration: 14:37 minutes Date: 2018

[The First Two Years of the Lower Grasse River Freshwater Mussel Relocation Project](#)

Author: NY American Fisheries Society Duration: 17:05 minutes Date: 2018

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

[The Hidden World of River Mussels](#)

Author: Freshwater Illustrated

Duration: 7:00 minutes

Date: 2019

[Mussel Reproduction Process](#)

Author: Iowa Land and Sky

Duration: 3:50 minutes

Date: 2018

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