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Our mission is to increase awareness and understanding of agriculture among New Jersey educators and students. You can learn more on our website newjersey.agclassroom.org
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New Jersey Agriculture in the Classroom will be hosting a booth at the *New Jersey Science Convention* on October 15 and 16 at the Princeton Marriott at Forrestal. We will also be presenting a workshop on New Jersey farming and climate change. Stop by to see us!

Lesson of the Month

Grades PreK-5

Disappearing Pumpkins

When your grinning Jack O'Lantern has lost his holliday luster, don't throw him out! Leave a few pumpkin seeds inside and use him for an easy lesson on decomposition.



You can set your droopy pumpkin outside or inside in a sealed clear plastic container lined with soil. Then all you have to do is give your students a chance to observe the pumpkin every week and they will see nature's recycling at work. Click [here](#) for our lesson for students in grades PreK-2 and [here](#) for students in grades 3-5.

Lesson of the Month

Grades 6-12

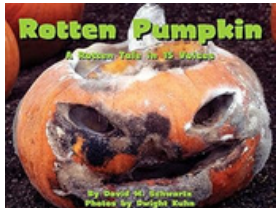
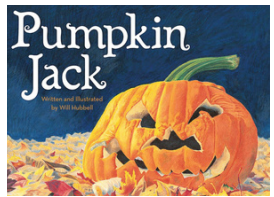
Apple Genetics



It's apple season in New Jersey and markets are filled with all the varieties grown here. It's a great time for your students to use what they know about genetics to examine how artificial selection is used to create new varieties of apples for color, taste, texture, and crispness. Click [here](#) to see our lesson for grades 6-8. Click [here](#) for our lesson for grades 9-12.

Library Corner

PUMPKIN JACK
By Will Hubbell



ROTTEN PUMPKIN
By David M. Schwartz

Our *Disappearing Pumpkin* lessons pair perfectly with two books for every elementary grade. For PreK-2 students, there's *Pumpkin Jack*, in which a young boy throws his spent Jack O'Lantern into the garden. He watches the decomposition process, until finally, he sees a new plant growing. For the 3-5 grades, there's *Rotten Pumpkin, A Rotten Tale in 15 Voices*, which describes all the many decomposers - those you can see and those you can't - that turn a rotting pumpkin into soil.

The Myth of Johnny Appleseed *Nobody ate his apples*

There are at least two dozen children's books about Johnny Appleseed, but most don't mention what settlers really did with his apples. Since Johnny grew all his apple trees from seeds, the resulting apples were so bitter they were called "spitters."



People on the frontier in Pennsylvania, Ohio, and Indiana used apples grown from Johnny Appleseed's seeds to make hard cider. On the frontier, water and milk were typically unsanitary. Cider, with its 8% alcohol content, was the most trusted beverage. Even children drank it.

Apples are heterozygous – they do not grow "true to seed." If you plant an apple seed, the resulting plant will not be a copy of its parent. Apple seedlings are genetically different and usually inferior to their parent trees.

The apples we eat are propagated by grafting. Only by grafting can growers produce trees that are genetically identical to one another.

To learn more, click [here](#) to see our powerpoint on Johnny Appleseed for grades 4 and up.

Meet a New Jersey Farmer

Tracy Duffield of Duffield's Farm and Market

Duffield's in Sewell, NJ is a family farm begun in 1930. Today the family grows 50 varieties of fruits and vegetables on 350 acres of land. The Duffields sell their produce in their own market, which includes a bakery and deli. The farm offers field trips.

Contact Tracy at: Farmfresh1@duffieldsfarm.com.

Tell us your farm story.

I grew up in the city and married a farmer. My husband loved to teach me about the farm and I was very interested in learning. Having been raised in the city makes me appreciate it even more and gives me the drive to want to share that with others, especially students.



What is the most important thing you want the students to know that you learned on the farm?

I want the students who visit our farm to see how hard farmers work to supply them with food, fiber and fuel. And to gain respect for the importance of keeping small family farms in business.

What is your favorite part of your job?

My favorite part of my job is the interaction I have with students and adults in the programs that we run. Whether it be a field trip, potting class or hosting a family party, I get the opportunity to share the legacy that our family business will leave to the next generation.

What is your biggest challenge on your family farm?

Our biggest challenge is finding people who want to work, and who have a good work ethic.