Shad in the Classroom – a Memorable Experience

North Carolina Museum of Natural Sciences
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Thanks to our supporters

• Albemarle-Pamlico National Estuary Program
• NC Wildlife Resources Commission
• US Fish & Wildlife Service
• National Fish & Wildlife Foundation
• Dominion Power
Program Growth

No. of classrooms

Year


4 13 19 20 20 23 27 27 33
Shad in the Classroom

Program Goals

• Teach North Carolina teachers and students about American shad natural history and ecology
• Connect teachers and students with their local river basin
• Provide the opportunity for students to participate in the American shad restoration effort
• Inspire a new generation of biologists and ecologists
Delivering Shad

Lifecycle of Shad

- Adult Shad
- Adolescent Shad
- Eggs
- Fry

- Can grow to over two feet
- Can produce up to 600,000 eggs
- Swimming to cheat from boys to feed them for the summer
- About the size of the candy nut
Student Involvement
“This year my students were actually able to see a heart beating in one of the eggs, right before it hatched before our eyes. It was remarkable!”
“The dissection really adds to the experience because kids get to see parts of the fish that they never really think about. Like the swim bladder – they never before wondered how a fish can go up and down and stay upright in the water. If they ever noticed that fish have different shapes of fins, they certainly never wondered why.”
Who’s Your Shaddy?
Further up the stream, they swim against the current to make life anew.
River Days - Geodome
Release Day

Release Day
“The students have been inspired by the classroom shad and seem to think more about how their actions impact the environment.”
“The learning experience cannot be replaced by any simulation or video.”
“Some of these students have never left their town before and many have never been to a river. The experience turned out to be very beneficial.”
Thanks Volunteers!
Teacher Led Extensions

NCWRC Biologists at Shad Release

Neuse River Clean-Up with Neuse Riverkeepers

NCSU Aquaculture Fish Barn Field Trip

Journaling and Nature Exploration at Release Site
Shad in the Classroom by the Numbers

- 33 Classrooms (29 Neuse, 4 Roanoke ~1,000 eggs each)
- 13 elementary, 14 middle, 6 high
- 48.3% shad survival (97% max)
- 100% positive evaluation of workshops and overall program
Dr. Nils Peterson, Dr. Kathryn Stevenson, and graduate student Kalysha Clark at the NCSU Human Dimensions of Conservation Biology Lab
Quote from a student’s journal: “I loved releasing the shad into the river. I know that I helped make a difference in their population and I am happy for them!”
“Because when we teach kids about their small part in the bigger world, they become better people. And when we trust them to take care of tiny live things, they become better people. And better people take care of our environment because they realize that their actions affect more than just what’s right in front of them. Thank you for providing such a great experience for my students! I have many who would never engage in real-world, hands-on science without opportunities such as these.”