Learning as Scientists
Students Monitoring Peregrine Falcons in Manchester

This five-part environmental education program is designed to engage, excite, and invite students into the diverse and fascinating world of wildlife biology through the lens of observing nesting behavior of Peregrine Falcons. From documenting observations and developing hypotheses, to engaging in hands-on learning activities, this place-based curriculum covers multiple common core standards well beyond those pertaining specifically to STEM.

Tracking the breeding season of local Peregrine Falcons in Manchester, this program begins in February and runs monthly through June. The program includes a kickoff introduction to bird biology and scientific observation, key life cycle and behavioral details of Peregrine Falcons and their recovery story here in NH, and monthly discussions with NH Audubon’s raptor biologist answering questions the students formulate about what they are seeing through a nest camera.

The focal age for this program is 5th-grade classes and is facilitated by NH Audubon naturalists and a senior biologist affiliate through a series of interactive lectures, webinars, activities, and assignments. This program directly involves young people in a local, longitudinal study of nesting Peregrine Falcons in Manchester.

With a place-based focus, this program also instills a sense of camaraderie between participating students and the environment around them. By sharing this experience with their peers and families through a series of collaborative assignments, students practice being contributing members of the Manchester and scientific community.

Who?

Senior Biologist Chris Martin talks to students about Peregrine Falcons on kick-off day for the program in 2020. Photo by Dyanna Smith.

How?
When students practice careful scientific observation and reflection, this can instill a lifelong curiosity and appreciation for wildlife in our natural world. By directly engaging in tasks like research methodology, written reports, and the development and delivery of a final presentation, numerous Common Core State Standards as well as Next Generation Science Standards are met within this program’s curriculum.

As a result of this program, participating 5th grade students have an increased awareness of how far reaching science and technology are within our society and are more confident in making scientific observations. This program helps to reframe how they view science from something happening in basement laboratories to something that happens all around them while exploring such topics as wildlife biology, robotic engineering, biotechnology, field botany, and conservation science. Students expressed that they were more aware of the importance of studying not only wildlife, but science as a whole after completing this program.

“Science is everything. We need it to learn and live. Science helps us do things and communicate, science is a big part of our world.”
– Student Scientist

“This project impacted me in a great way because I am way more observant than I used to be. I could just go on a run with my brother and I see almost every bird in the trees and try to identify them. I think this made me a better person overall and improved my science skills.”
– Student Scientist

“This might go down as one of the best teaching experiences I’ve ever done.”
– Collaborating Teacher

For Teachers:
Here are the Next Generation Science Standards used in this program:

5-PS3-1
5-LS1-1
5-LS2-1
5-ESS3-1
3-5-ETS1-2
3-5 ETS1-3

If you are interested in booking this effective longitudinal program with our experienced educators, please contact Kimmie Whiteman, our Education Coordinator at the Massabesic Center at kwhiteman@nhaudubon.org or call (603) 668-2045.

“View inside the Peregrine nest box during hatching. The nest box has three different webcams for multiple angle views.”

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