

# Teacher's Conservation Corner

John Marshall Soil and Water Conservation District

## Project FeederWatch

Project FeederWatch is an organized bird watching program run through the Cornell Lab of Ornithology. Individuals, families, and even classrooms can participate in this program which collects scientific data that is very useful to those who study birds, their habits, seasonal movements, and population trends.

The FeederWatch program runs from November to April. Participants count the number and kinds of birds they observe each week and send the information to Cornell.

Sign up for the program can be done online at <https://feederwatch.org/>.

A kit with all instructions, including an identification chart for common local birds will be sent to all participants upon signup. The cost for the kit is \$18.

Most groups set up bird feeders as the center of their observation site. There are full instructions on how to select a site and what to

feed the birds.

In the 30 years since Project FeederWatch began, scientists have used the data to see the expansion and contraction in the range of several birds including the Northern Cardinal, the Evening Grosbeak and the Cooper's Hawk.

In addition, the FeederWatch website has plenty of educational information that can be useful to teachers and students. There are also links to other great websites with a wealth of information on birds of all types.



*The chickadee is a familiar site at bird feeders in Virginia.*

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## Soil Tubes

The John Marshall Soil & Water Conservation District is once again offering soil lessons to students of all ages. The main program (Soil Tubes) is tailored for third grade students (SOL: 3.1, 3.7). The District also does soil programs for middle and high school classes (agriculture, ecology, environmental science, etc.) which go more in depth about soil processes.

In the past school year, the District conducted the soil tube program at eight elementary schools in the county, reaching over 550 students.



The Soil Tubes lesson for third grade students takes about 30 minutes per class. Each student gets to make a soil tube featuring topsoil, subsoil,

and bedrock. The District supplies all the necessary materials for the lesson. Programs for older students involve a field component (soil sampling, pH measurement, etc.) and can be adapted to the length of the class period.

The District also has equipment that teachers can borrow to enhance their lessons. These include soil sieves (for comparing particle sizes), moisture meters, and soil pH meters.

If you would like to schedule a lesson or borrow any equipment, please contact Michael Trop at the John Marshall Soil and Water Conservation District by phone at: 540-347-3120 x3 or email [michael.trop@fauquiercounty.gov](mailto:michael.trop@fauquiercounty.gov).

## Leaf Pack Project

This project is an experiment that students can conduct about life in local streams without ever having to leave the school. Falling leaves in October and November collect in streams and provide the energy that fuels the aquatic food chain.

The Leaf Pack project involves placing mesh bags that have been filled with leaves into a stream for 3-4 weeks. After that time period, the bags are brought back to the classroom and students examine the bags and pick out the critters that they find in the leaves.

Many types of macroinvertebrates (aquatic insects) feed on and in the packs of leaves. Macroinvertebrates

have varying tolerances to water pollution. Some of them are very sensitive to pollution, so their populations can be used to evaluate water quality. It's a great hands-on activity and the District has all of the necessary equipment to help your school make it happen.

This experiment can have many different variables including comparing two different streams, comparing types of leaves, and comparing different types of in-stream habitats. It can also be done any time of year. The project works with a wide range of grade levels, but fits well with 5th grade SOLs 5.1. The project also works well with after school ecology or environmental clubs.

The Teacher's Conservation Corner is a publication of the John Marshall Soil & Water Conservation District. If you have an idea for information you would like to see in this newsletter, please send an email to [michael.trop@fauquiercounty.gov](mailto:michael.trop@fauquiercounty.gov). All programs and services are offered on a nondiscriminatory basis without regard to race, color, religion, national origin, gender, age, disability, political beliefs, sexual orientation, marital or family status.