



# Blue Thumb—In Pictures

## October 2018



### Work hard, play harder

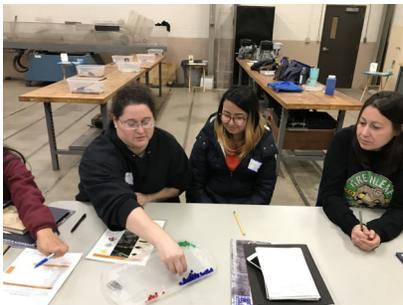
Blue Thumb is very proud to welcome so many new volunteers to the family! We had a training this month in Stillwater, and they braved the cold and rain to come out and learn all about Blue Thumb and be certified as an Education Volunteer. They participated in several Project WET activities and took a trip out to a local creek to do some bug kicking and fish seining, as well as learn more about the critters that they caught. At the end of the day, they received their Project WET certificates and a Blue Thumb T-shirt, ready to go out and teach the public about water conservation and non-point source pollution.



Participants get to know each other and learn how much water is on Earth by playing Blue Planet.



Even in the rain, everyone came out to the creek to look at bugs and fish.



“Water Quality? Ask the Bugs!” is a fun, hands on Project WET activity that demonstrates why water bugs are important.



It’s always fun when you find life in a creek! Just ask this new volunteer about what she seined up!

### Groundwater Screening!

Blue Thumb’s Quality Assurance Office Kim Shaw helped with a groundwater screening in Weatherford that was conducted by the Deer Creek Conservation District. Water Quality Finance Director Ed Crall helped with the testing. 38 local citizens brought water samples from their wells to be tested. 5 of them had high nitrate concentrations (15-30 mg/L N). Water that contains higher than 10 mg/L N could be potentially harmful to the elderly and young of the year by causing Blue Baby Syndrome, so it’s always a good idea to get your groundwater tested!



## Don't bug out, it's picking season!

Following bug collection season, volunteers are able to pick through the sample that they collected. Using a subsampling method, their sample is split down several times and then laid out in a tray with a grid. They then pick through randomly selected squares for 80-150 bugs. These bugs are then shipped off to a taxonomist, where they are identified. During this time, volunteers are also put through another Quality Assurance (QA), to continue to make sure they are performing their testing to the best possible standard.



Right: Volunteers perform a QA under the watchful eye of a Blue Thumb staff. This ensures that volunteers are performing to the best of their abilities, and that their data can continue to be used for reports.



Above: A volunteer carefully picks through their bug sample that they helped collect during the summer. This process can take anywhere between 2-4 hours; it all depends on how many bugs are present in the squares, and how much debris is in the sample.



Left: Cleaning the bug sample before picking is an important aspect of the picking process. This ensures no large debris, like leaves or twigs, are in the sample. We have to wash them in the sieve, to make sure any bugs clinging to them remain in the bug sample.

## Education, Education, Education

Do you know everything about water conservation? If not, you could ask the 5th graders from Drumright, Kellyville, and Oilton! They spent an entire day learning all about the different ways they can help out Oklahoma water at Lake Keystone. Oklahoma Conservation Commission had Soil Health and Water Quality personnel there, and several other state agencies attended. H2Oklahoma is a yearly celebration that rotates locations so that everyone is able to participate in this massive experience.



Students are "shrunk down" to the size of a water droplet as they experience the water cycle through An Incredible Journey. They get to make a bracelet that shows where they went through the cycle.



Students learned all about non-point source pollution from the Enviroscape. This watershed model is a great way to show how things we humans do everyday effect the water we need.



Healthy soil means healthy water! Students had the opportunity to learn about the different types of soil and how they effect water and groundwater through the Rainfall Simulator.