

Ecological Engineering at GCDS Upper School

GCDS students are removing invasive species that have invaded the local habitat. Tools provided by the school such as electric chain saws, pruners, loppers, and garden shears have aided the removal of Ailanthus, Mugwort, and English ivy, which have been the main goal of this removal project.



Students are also working on meadow development. To begin, students use loppers, pruners, and shears to clip the mugwort. They place the mugwort on the ground. They then cover the clipped mugwort with cardboard to smother it. This cardboard is sourced from the school recycling bins. To keep the cardboard stationary, and to further the impact, strategically placed rocks keep the cardboard secure on the ground. Coffee grounds were then thrown over the cardboard, which is heavy enough to hold down the cardboard and aid in decomposition and soil development. The last step is adding mulch. In spring, the students will add some soil to their pile and plant native wildflower seeds. So that in summer, they'll have a mini meadow!

Students are also working on improving the water quality of Greenwich Creek. They are collecting water samples at 4 places along a 2 ½ mile stretch of the creek, from Dingtowntown Road to Cardinal Road. They test for temperature, nitrate, phosphate, turbidity, pH, and dissolved oxygen. They will share this data with the town of Greenwich and CT DEEP.

To improve the water quality, students are working with Trout Unlimited to rebuild the riparian corridor with native trees. We have planted 100 trees of several species: black cherry, pin oak, box elder, alder, and sweet gum. The planting was done on three different days as a class, with the lower school faculty, and with GCDS families. The students are growing these trees in our own native nursery which will soon include white oak, black oak, red oak, chestnut, and milkweed for spring planting.



