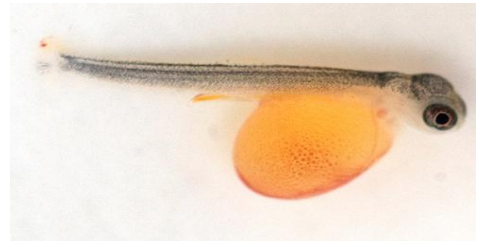


Middle School Science

Students in sixth and seventh grade classes have been eagerly awaiting the arrival of some very special visitors to their classroom; *Salvelinus fontinalis*. No, this is not a group of foreign exchange students. *Salvelinus fontinalis* is the scientific name of the **Eastern Brook Trout**.

Each fall here in Virginia, Eastern Brook Trout migrate to the headwaters of their native streams. The trout pair up and spawn in the cool, clear, well oxygenated waters of the Appalachians. Unfortunately, due to habitat degradation and over-fishing, Virginia's state fish has continuously declined in numbers for many years. Trout Unlimited (**TU**), the Virginia Department of Game and Inland Fisheries (**VDGIF**) and hundreds of students across the Commonwealth have teamed up to bring the Brook Trout back from its now threatened existence in Virginia streams.



About a decade ago, **TU**'s education arm developed a program known as Trout In the Classroom (**TIC**). Trout require very specific conditions including cold, well oxygenated pollution free water. To reproduce these conditions in the classroom, a special fish habitat (tank) is prepared and maintained by the teachers and students. The habitat has a chiller which keeps the temperature at approximately 45° F. The **TIC** program helps participating classrooms around the country to find the resources necessary to get these artificial trout habitats up and running.

On 13-October, the science teacher met with a state biologist to collect the QMHS trout embryos. Since that time QMHS students have been monitoring the fish and the water using chemical test kits, electronic probe ware, digital microscopes and trained eyes. The trout embryos and newly hatched Alevin (*see photo above) are enjoying the cool, clear water maintained by the budding Quantico Biologists. In April, students will release the surviving trout in the Rose River in the highlands of Madison County, Virginia. In the mean time, students will continue to monitor and record their trout habitat data daily as their little subjects grow and develop. Not only does this program integrate several of DODEA's science standards, it also allows students to participate in a national program which encourages the sharing of student data from many schools across the nation.

*photo courtesy of Gold 4 Science 7
Taken with digital microscope