## Conservation at Work: North Fork of Crabtree Creek

In the Spring of 2019, the Nemacolin Chapter of Trout Unlimited (TU) was awarded a grant through TU's national Embrace a Stream Grant Program to assist a conservation-minded family in restoring a section of the North Fork of Crabtree Creek, a tributary to the Savage River. Using the grant award and additional funds from a) The Maryland DNR Chesapeake and Atlantic Coastal Bays Trust Fund and b) donations from the Nemacolin and National Capital Chapters of TU, the chapter was able hire contractors to install about 500 feet of livestock exclusion fence and to construct a small, armored area where animals can access water without disturbing the stream. Following construction, members of the



Volunteers planting trees in the restoration area.

Nemacolin, Youghiogheny, P. Pendleton Kennedy, and both the Frostburg State and West Virginia



Pre-restoration, livestock were given total access to the stream. Photo by Shelby Willmon

University 5 Rivers student chapters of TU united to plant 155 large potted trees along the stream. TU members were joined by Maryland DNR Fishing and Boating Services staff and students from the Natural Resources and Wildlife Technology Program at Garrett College to get the job done. The work was completed in late summer and early fall of 2019 and was coordinated by a TU staff person working to implement a host of brook trout focused conservation projects in Western Maryland.

In addition to the restoration work itself, volunteers from the Nemacolin Chapter collected pre restoration water quality data during the Summer of 2019. The water quality data collected included basic pebble counts. By taking measurements of the average size of stream substrates, the particles making up the stream bottom, before and after restoration, volunteers hope to observe a positive change from the kinds of fine silts that can smother brook trout eggs to the smaller pebbles and gravels required for successful reproduction by brook trout. The data collection efforts represent a partner-ship between TU and the Maryland Department of Natural Resources Fishing



A tired crew at the end of a job well done!

and Boating Services to track changes in habitat before and



Completed livestock watering area.

after the project's completion. For example, in July of 2019, the Maryland Department of Natural Resources, alongside TU staff completed an electrofishing survey within the reach to quantify fish species diversity and eastern brook trout population densities. Biotic data alongside volunteer collected water quality data will help to link improvements in aquatic habitat to increases in fish species biodiversity and increases in the number and size of brook trout. The partnership will revisit the site this summer to collect the additional data necessary for comparison.