

# Volunteers work to restore forests

By JAMES G. BLAINE  
Guest Columnist

If, on certain mornings this fall you happened to fly over Creek Road near Marshalton and glance out the window, you might have seen what appeared to be a horde of locusts moving insistently across open ground. Flying lower, however, you would have seen that these were people, and that far from destroying everything in their path, they were planting new life and restoring the landscape.

Over the past couple of months, several hundred volunteers ... grandparents and grandchildren, Cub Scouts and trout fishermen, middle-school students and college professors ... planted 6,000 trees along Taylor and Mine Hill runs, two tributaries of East Brandywine Creek on the Stroud Preserve outside West Chester.

While all that exercise was undoubtedly good for the health of the participants, the result of their efforts will make a difference to the well-being of all of us for a long time to come.

As many of us learned in school, Pennsylvania was completely forested when the first Europeans arrived.

Two hundred years later virtually all of Penn's Woods had been cleared to create farmland, to furnish materials for houses and ships, to keep the settlers warm and well-fed, and to fuel the industrial age. That process has continued to this day ... in the last 15 years alone, southeastern Pennsylvania has lost 5 million trees, many of them second-growth forests that had reseeded themselves on abandoned land only to get whacked again.

It's now pretty obvious we overdid the destruction. Trees, it turns out, are at least as important just standing there growing as they are being turned into two by fours. Trees are not merely obstacles in the path of progress, they are organic machines that provide a host of services for humans and other living things. It is worth noting that they provide these services free of charge.

Perhaps nowhere is the role of trees more important than in their ability to protect our sources of fresh water. They reduce erosion, diminish the effects of flooding, and filter pol-

lutants. They cool water temperatures and enrich oxygen levels. They provide food and shelter for fish and other animals.

Scientists have known all that for some time, but what they have only recently discovered is that trees actually clean the water. In a study published last year, a team from the Stroud Water Research Center outside Avondale found that streams running through forested areas have a significantly greater ability to process organic matter and pollutants than do those in open meadows. Nature can do a lot for us, but it needs our help.

For years, we humans have dumped all sorts of poisons into our streams and rivers, overwhelming those bodies' natural capacity to restore themselves.

Two weeks ago in China, to take the latest example, an explosion in a chemical plant discharged more than 100 tons of benzene directly into the Songhua River, the primary source of fresh water for the city of Harbin. Because benzene is a carcinogen, government officials shut down the municipal water system for five days, leaving 4 million people without access to clean water.

More generally, China's response to the growing problems it faces over the quality and availability of fresh water is to build enormous engineering projects, such as the proposed Three Gorges Dam on the Yangtze River that will cost \$24 billion and displace 1.9 million people. In this, China is no different from virtually every other country, including the United States.

Planting 6,000 trees in the middle of Chester County will, in itself, do little to alleviate such mammoth dislocations. But it is a small, vital step in a new direction ... one that seeks not to subdue nature but to work with it, not to exploit the earth's resources but to tap into their benefits.

For most of modern history we have sought to build human prosperity by going to war with our environment. We can no longer afford to do that, and all those volunteers with their shovels are showing us a better way.

*The writer is director of education for the Stroud Water Research Center of West Marlborough.*