

## **Scientific Monitoring of Streamside Forest Buffers, MD**

For the last seven years the Maryland DNR Forest Service, in partnership with Ducks Unlimited, has been conducting long-term scientific monitoring of planted streamside forest buffers. The project is being carried out on former pasture lands in Carroll, Frederick and Washington Counties. A total of 34 sites that had been recently been planted in trees through the CREP or similar program have been visited at least 3 times each year to collect data on how well the planting is working to restore forest along these waterways and to protect water quality. Some of the attributes being measured include hourly measure of water temperature, water chemistry characteristics such as nitrogen, phosphorus, dissolved oxygen, turbidity and pH, stream channel characteristics such as the channel shape and condition of the stream banks and stream bottom, groundcover vegetation and the survival and growth of the planted trees. This data allows us to identify how well these tree planting projects are working, how they are developing and changing over time, and the opportunities for improvement. The data is being analyzed and a report on the results will be forthcoming. It is safe to say that the success of these projects is a mixed bag, with some sites turning out better than others, and some stream attributes being quicker to improve than others.