

## **Don't Blow Your Leaves into Our Lake**

Leaves should not be blown into Tellico Reservoir or its watershed streams from shoreline yards. Decomposition of leaf litter in the lake by aquatic bacteria requires oxygen. When oxygen is removed from lake water – especially from the bottom of the water column – the lake becomes less able to support gamefish in preference to catfish and carp that are more tolerant of low-oxygen conditions. Decomposition of leaf litter also releases phosphorus and nitrogen into lake water.

Phosphorus and nitrogen are nutrients required by algae, and they increase the growth of blue-green algae when the water warms up in the summer. Algal growth creates the potential for an unsightly algal “bloom” that is soon followed by oxygen depletion and the death of fish, as the algae themselves die and decompose. Thus, to reduce the potential for algal blooms in Tellico Reservoir, watershed residents are advised to reduce the use and runoff of lawn fertilizers into the lake, and the blowing or disposal of leaves from hard surfaces and lawns into the lake.

In natural settings, fallen leaves provide winter “cover” for insect eggs and larvae, caterpillars, and animals such as salamanders and box turtles. Leaf litter prevents soil from losing moisture and reduces rainwater runoff and soil erosion. The leaves themselves are readily broken down by many organisms including fungi, nematodes, bacteria, and insect larvae. Nutrients such as nitrogen and phosphorus in decomposed leaves are returned to the soil, taken up by plant roots, and used to make new leaves in the spring, to complete a natural cycle.

In more urban settings, removal of fallen leaves from hard surfaces and turfgrass lawns is a November ritual in Tennessee. Where should these leaves go to enable their nutrients to be recycled to next year's plant leaf growth? Best options include: 1) the yard compost bin, 2) under and around trees and shrubs in “informal” yard settings or woodlands, 3) shredded and used as mulch, and 4) streetside placement for collection by a POA or municipal authority that will compost the leaves.