

Technology has allowed us to manufacture high quality products out of many waste materials, while research has developed sound agronomic and horticultural end uses for these products. Only through usage of these newly created products can we close the loop of recycling.

The use of these products by the general public, by our business community and by government institutions is vital. Creativity will allow us to utilize these products for the betterment of all. A good example of this is the usage of waste derived compost for the improvement of athletic fields on which our

children play. It aids the environment, enhances athletic field safety and gives us peace of mind. That is what I call closing the loop of recycling.

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Compost Research at GTI

A two year (1990-1991) field study was conducted on established Kentucky bluegrass at the Cambridge Research Station. Composts prepared from leaves (LC), irradiated sewage sludge (ISSC) and animal manure (AMC) were applied at 0, 10, 20, 30, and 40 tonnes compost per hectare per year. Treatments received recommended amounts of N, P and K by supplementing the compost with chemical fertilizers. The 0 rate, a control, received chemical fertilizer only. The effects of the composts were evaluated by determination of clipping weights, visual ratings, depth of thatch and plant and soil macronutrients. Except for depth of thatch, which increased but requires further investigation, compost addition enhanced visual ratings of the bluegrass and supplied a portion of the plant N, P and K requirements.

Plant nitrate concentrations were highest in the ISSC treatments in 1990, but not in 1991, whereas plant phos-

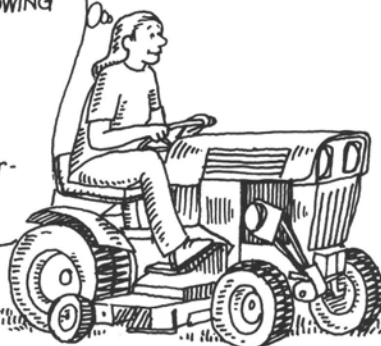
phorus concentrations were consistently highest with AMC in 1990 and 1991. Plant and soil K concentrations were consistently highest with AMC which contained high K concentrations. The high K may have interfered with Ca and Mg uptake as the plant concentrations of these two elements were lower with AMC. There were few differences in clipping weights in compost treatments compared to the control. Irradiation of sewage sludge prior to composting did not result in a compost that behaved differently from composts from unirradiated sources. Compost application can benefit established Kentucky bluegrass by enhancing visual quality and supplying a portion of N, P and K.

[Reproduced from P. van der Werf, T.E. Bates and R.P. Voroney, Evaluation of Compost on Established Kentucky Bluegrass. Annual Report, Dept. of Land Resource Science U. of G. 1991]

Thoughts on Mowing

If the height of cut is raised only 1/8 inch there will be an average increase in leaf surface of 300 sq. ft./1000 sq. ft. of lawn. This will allow more photosynthesis, more transpirational cooling, more roots, and a stronger turf.

40 HOURS OF MOWING
· WATERING
· FERTILIZING
· WEEDING
· SEEDING
· SODDING
The Good ol' summer-time ???



Good mowing practice calls for the removal of leaf tips when growth is about one third more than the cutting height. Therefore a lawn cut with a mower set at 1 1/2 inches should be mowed soon after the growth has reached two inches.

It is estimated that the average lawn requires 40 hours of mowing a year.

Every individual Kentucky bluegrass plant produces some three feet of leaf growth in an average season. This amounts to about five tons of clippings per acre each year. When clippings are left to decay in place, they are worth the equivalent of three applications of lawn fertilizer.