HOW TO ENHANCE SPRING GREEN-UP WITH MOWING David Gilstrap, Thom Nikolai, Keenan Amundsen, and Oliver Schabenberger Department of Crop and Soil Sciences Michigan State University

On the first day of spring of the last three years, we have mowed Kentucky bluegrass lawn plots at 3 different heights (1, 1.5, and 2 inches) with one cutting height (1.5 inch) testing clippings removed versus clippings retained. The unmown treatment was just taller than 3 inches, which was the normal cutting height. Mowing for the entire plot area resumed around the middle of May with clipping yields being measured on May, June, and July 15.

These early-spring mowings have revealed lawn turf that is much greener than those where the senesced tissue was not removed. The 1- and 1.5-inch cutting-height treatments continued to be usually greener than the other plots during periodic evaluations for the 3 months following treatments. There were no differences between where clippings had been removed or retained at the two 1.5-inch cutting heights.

Daily temperature measurements at both the surface and at 2-inch depths for two consecutive springs have shown that the plots that were mown the lowest were the warmest. Significant temperature differences existed among all treatments.

At the May 15 clipping collections, an inverse relationship existed between early-spring mowing heights and clipping yields. Six weeks after treatment, the plots that had been scalped at 1 and 1.5 inches had significantly higher visual quality ratings than the other plots.

For the last two years we have also observed similar responses with turf-type tall fescue. In none of the studies did we test the effects of traffic or any other stress.

Weed counts were taken periodically throughout the summer, and significantly more broadleaved annuals were observed in the Kentucky bluegrass plots that had been scalped down to 1 inch. There were not differences among the other bluegrass plots and none whatsoever with the tall fescue.

Therefore, we propose the practice of moderately scalping lawn turf at a height that is not lower than one-half of its normal cutting height, which we recommend being 3 to 4 inches. We believe that this will enhance spring green-up and reduce the number of spring mowings overall. Future research will test the effects of early-spring mowing on sports-turf-height Kentucky bluegrass followed by traffic simulation.