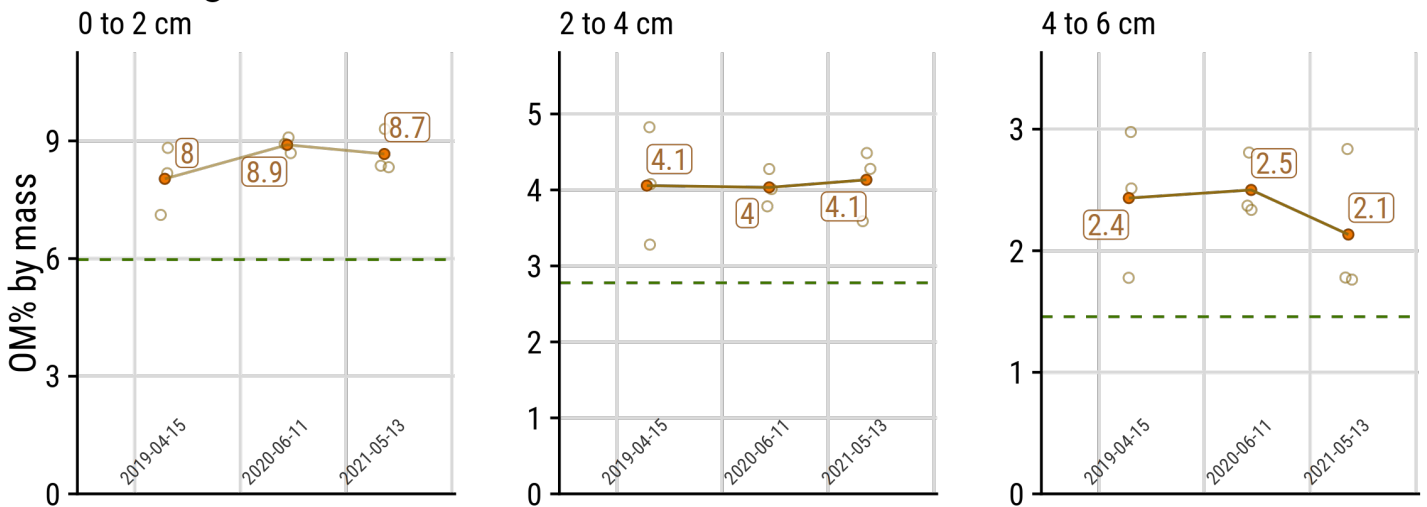


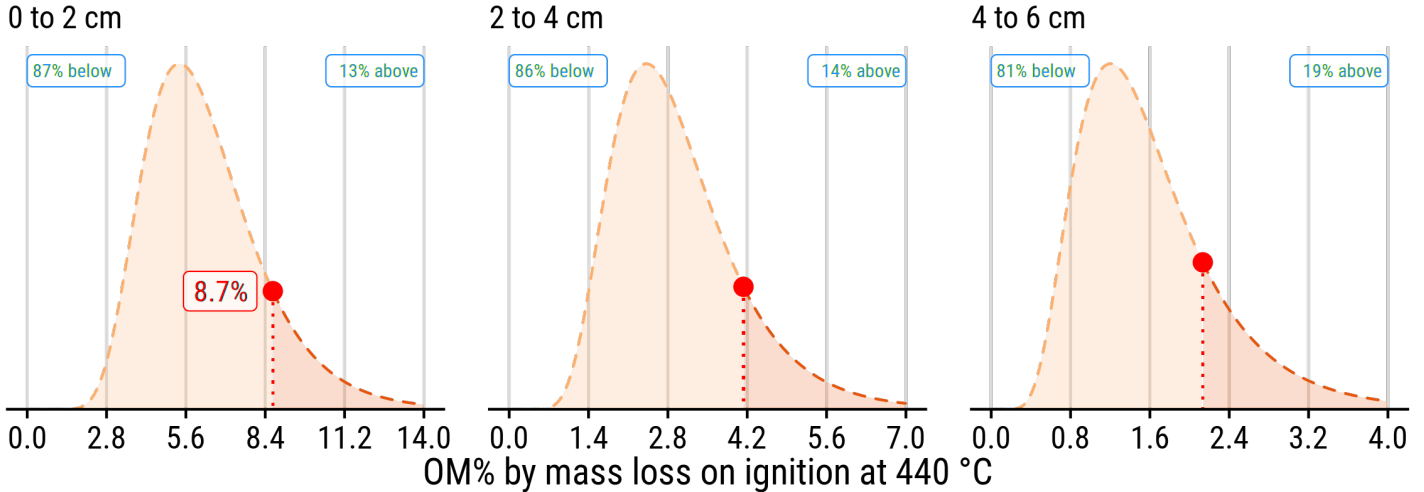
Total organic material time series



The horizontal dashed line marks the average value (50th percentile) of all bentgrass samples at that depth.

The first thing I suggest is looking at is the **total organic material time series**. This shows what is changing in the soil—and where it is changing. By comparing the change in the soil to the maintenance work done in the same time period, one can determine if the maintenance work has been sufficient to manage the organic material at the desired level.¹

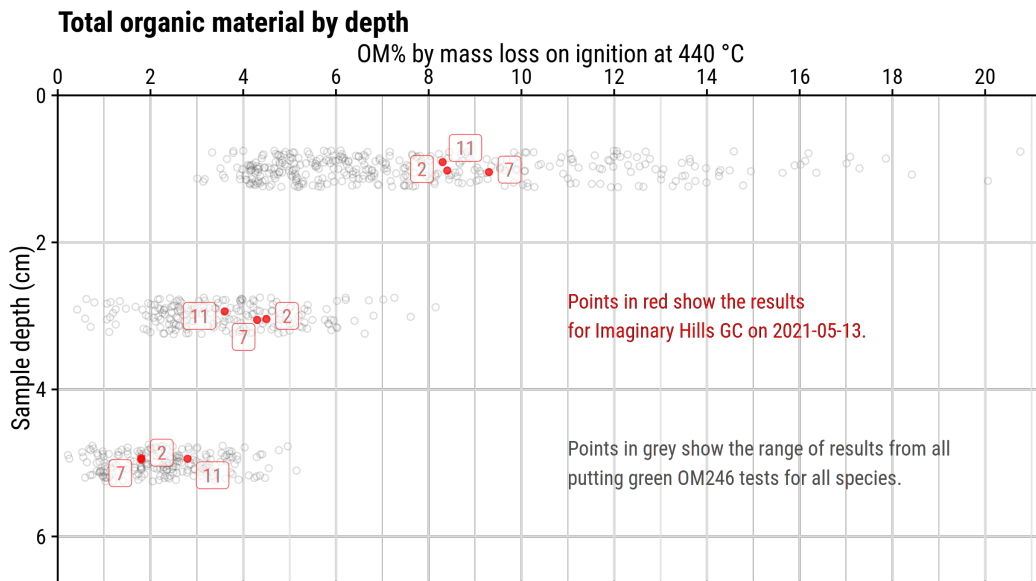
All bentgrass greens for comparison



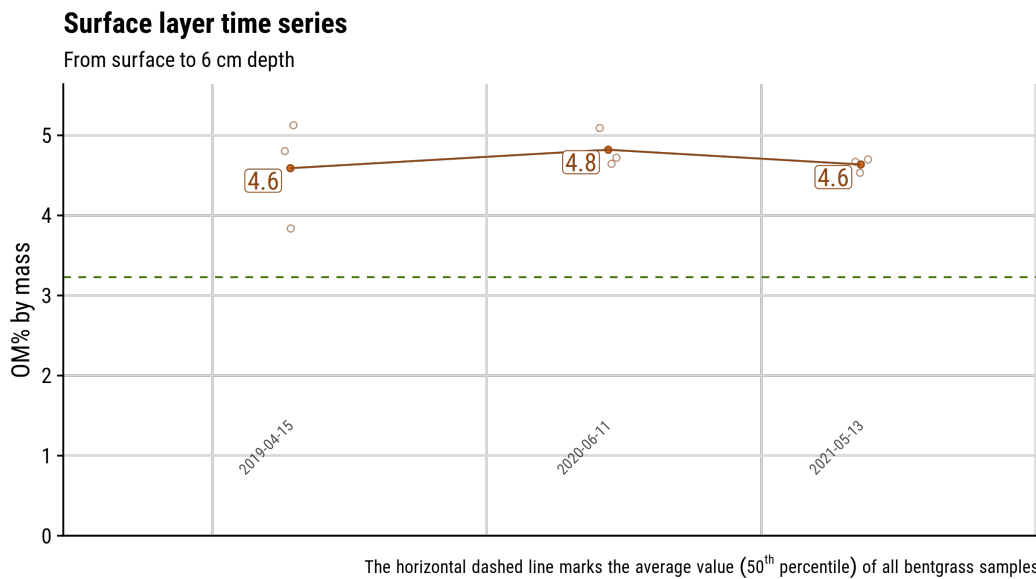
The area under the curve shows the % of bentgrass greens testing above or below the Imaginary Hills GC 2021-05-13 average results.

All bentgrass greens for comparison shows the average values from Imaginary Hills GC with background curves that show the distribution of test results from surfaces of bentgrass. The most important thing is surface performance; I don't recommend making changes just because of a difference between the current test results and the normal values for this species. This curve shows exactly what is normal for bentgrass.

¹These results should be used for site-specific decision making based on surface performance. For reference, general guidelines for turf in New Zealand and the UK use a maximum of 6% for the 0 to 2 cm depth, 4% for the 2 to 4 cm depth, and 3% for depths below 4 cm.



Another way to visualise these results is a scatterplot of **total organic material by depth**. The background points in grey are test results from other species. There is a wide range of total organic material by mass at the 0 to 2 cm depth; at present the measurements in the database range from a minimum of 3% to a maximum is 20.8%. There is more consistency at the deeper depths. Database values at the 2 to 4 cm depth range from 0.42% to 8.2%; the range at the 4 to 6 cm depth is 0.22% to 5.2%.



The total organic material has been measured at multiple depths. Combining those measurements and adjusting for soil bulk density differences gives the **surface layer time series** to a 6 cm depth.²

²These are shown to a 6 cm depth—that's 2.4 inches. You may be familiar with Dr. Carrow's recommendation (for southeastern USA growing conditions) that organic matter in the top 2 inches of the rootzone stay below 4%. Calculation of 2 inch organic matter on 2021-05-13 gives an average of 5.3% for that depth with a range from 5.1% to 5.5%.