

May 22, 2020  
Growing Point

“Dad, let’s play tag,” said my 6 year-old. It had been an eventful day since his newborn brother had just come home from the hospital a few hours earlier, so a run around the yard would be good. But it just so happens, it wasn’t. He ended up traveling to the same hospital that his brother just came from, but this time in an ambulance with a broken femur. Fast forward several years. The doctor that treated him said that the leg could grow longer than the other and it did. It was now time to do surgery to stop the growth of that leg, so the other one could catch up. To do this the surgeon needed to disrupt the growth plates in that leg.

Humans have a variety of growth points, most are near the ends of long bones. Plants have growth points also and there is a variation to where they are located. As I mow my lawn this spring, the growth point of the bluegrass is located low on the plant close to the root system. Mowing the grass does not affect it unless we are so low the soil is being mowed and the growth point removed. The growth point essentially pushes the grass blade higher and that is why we can see the cut tip push up.

As I am mowing around my sugar maple trees, it has become very apparent they did a good seeding job last year as tiny trees are abundant. The growing point on those plants is at the upper tip of the tree. After being mowed off a few times, they will eventually die. I do not need to apply herbicide as those little trees will eventually grow big enough that the mower blades will end their lives.

It becomes confusing as grass grows from the bottom up and trees grow from the tips out. If a tree forms a branch three feet out of the ground that branch will not move up. It will always be in that spot. It may die due to an eventual lack of sunlight as the tree pushes higher. But cutting into the tree we can still see the knots left from the earlier branches.

Does cutting the tree off, kill the plant? Now it is time for the famous weasel word, maybe. Depending on a variety of factors, including species, cut trees may send out buds around the trunk in an effort to stay alive. These are not the true growth points. But the branches they form will have growth points at their tips and a new long-life tree can emerge. Mulberry is a good example of a tree you can’t kill by just cutting it down.

Depending on the species of grass, the growth point can be found in various locations. Out in my hay field, where the orchardgrass grows, mowing it at the same height as my lawn will reduce the stand. The growing point for the bigger orchardgrass plant is slightly higher up so repetitive low mowing will cause the stand to thin.

Next to the orchardgrass is some alfalfa. The growing point for alfalfa is near the tip of the growing stem so it is easily removed by grazing. The growing point of red clover, a common pasture forage is lower on the plant and less susceptible to removal by grazing. Alfalfa and red clover, will quickly produce new, leafy regrowth from dormant crown buds and lower stem branches when the growing stems are grazed or cut. Sounds like the same as a tree but the difference is the tree is not made to have this done repetitively. Mowing alfalfa and red clover on a weekly basis would also soon end their lives. Alfalfa needs to go into bloom before being cut to maintain its life.

Another pasture plant, white clover has growing points at the soil surface on stolons and are virtually resistant to removal by grazing.

White clover is also a weed in our lawns. For those of you that like to mow your lawns very short, white clover can handle the short mowing better than the bluegrass. So, you end up with a lot of clover. Do not mow lawns shorter than 2.5 inches unless you are looking out for the pollinating bees feeding on the clover. In that case, they thank you.