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### ***To Till or Not To Till...***

A recent social media post jokingly pointed out the degree to which ‘recreational’ tillage occurs. Essentially, it was saying the quicker we finish harvest, the more tillage we’ll see, simply because we have time. So while there is truth to *some* tillage being recreational, there are times when it might be necessary.

One instance where tillage may become a necessity is for compaction issues. If you think that’s the case on your farm, now is a good time to do some monitoring. Start by digging down – to 18 inches if possible - and look for dense layers that can restrict roots. If roots have been able to penetrate the platy soil layer, it probably isn’t root-limiting. If you note horizontal roots or roots that are stubby and gnarled, lacking root hairs, tillage might be a consideration.

If you do decide to deep till there is only need to till about an inch below the dense zone. Doubling tillage depth quadruples the power requirement, so going too deep is a waste of time and energy. Deeper tillage may also destroy soil structure.

Bottom line: there’s only a benefit to deep tillage when compaction is root limiting. Tillage does temporarily loosen soils, but they tend to re-compact and become denser with time because soil structure is broken in to smaller pieces. That means deep tillage effects will only last for a short period unless traffic patterns are controlled, or tillage system is changed. Effects may be negative if soils are too wet and soil smearing instead of soil fracture is the result.

For additional information on determining if deep tillage is needed – or when it’s being effective, check out this KSU Agronomy eUpdate article, available upon request or online at: [https://webapp.agron.ksu.edu/agr\\_social/eu\\_article.throck?article\\_id=1184](https://webapp.agron.ksu.edu/agr_social/eu_article.throck?article_id=1184). NOTE: there may be other options to combat compaction as well. That’s another article for another day...

### ***Natural Needle Drop***

If you haven’t noticed the yellowing needles yet, take a second look. Natural fall needle drop on pines, arborvitae, and spruce has actually been in full swing for over a month now.

Every year, the natural phenomenon that is natural needle drop occurs on these evergreen species. In the process, older needles - generally those two to four years old - on the *interior* of the tree turn yellow, then brown, eventually dropping off. It might look rough, but the tree is not harmed. It is generally worse in stress years.

If *exterior* needles or tips are affected, something else may be at work. Fall needle drop occurs on needles closest to the trunk and isn’t typically associated with spotting or banding. Other diseases can affect evergreens and may require treatment. Fall needle drop does not.

Not sure what your tree might be exhibiting? Contact a District Office or e-mail me. We can discuss what you are seeing to determine if it’s of concern or not.