



## Fertilizing among the grasses and weeds

Posted by [Carol Gudz](#)

[Forum List](#) [Message List](#) [New Topic](#)

[Carol Gudz](#)

[Fertilizing among the grasses and weeds](#)

May 25, 2023 06:22AM

Registered: 1 year ago

Posts: 21

I am looking for suggestions on how to spread fertilizer and other soil amendments. My trees are mostly in the 5-10 year old range. All were planted in polypropylene plastic to keep grass down. I put fertilizer under the plastic mostly to ensure that it went to the tree roots and not other plants. In areas where the trees are more mature, I have removed the plastic. However, these trees are now surrounded by grass with some comfrey mixed in at the drip line. When I spread fertilizer, I try to place as much as possible over the areas where I spread wood mulch the previous Fall. However these areas are a small part of the tree diameter and is I spread fertilizer around the whole drip line it seems to me that I am just feeding the grass and weeds. Does anyone have any insights/suggestions?

[Reply Quote](#)

[Brittany Kordick](#)

[Re: Fertilizing among the grasses and weeds](#)

June 03, 2023 04:26AM

Registered: 4 years ago

Posts: 211

I think this is an excellent question. I pose it myself every time we talk about broadcasting some amendment, and I'm scratching my head going, "But if I'm wanting to apply a very specific rate of amendment to my apple trees, I don't care how much root network interplay there is going on whereby trees and understory plants are tapped into what all are bringing to the nutrient table, and how much will naturally migrate down to the tree roots, there needs to be some consideration of how much the understory plants will be using in order to apply optimally for the trees." But that said, I have no idea how one could conceivably account for this. So historically, we've relied on more foliar applications to the trees or, where we can, the passive amendment of hay mulch to the tree rows (but of course, this application smothers the understory, thus any, or much of, the competition).

We possess a root injector that can be hooked up to a sprayer and used to inject solubles deeper into the soil, but have never used it to apply fertilizers or nutrients, though that is certainly an option. Oesco Inc. manufactures these, what they call "root feeding needles," and we purchased one to inject beneficial microbes deep down.

It's interesting to see that some lawn/garden care guides referencing the issue of fertilizing trees amidst competing plant roots treat the notion of deep fertilizing as a myth. Apparently, it's been common for arborists to recommend deep fertilization, but the counter-argument is that trees possess lots of feeder roots in the 2-8 inch depth range that should take up nutrients just fine in lawns, etc. amidst competing plants. OK, but still, I come back to the rate question and how to account for the take-up of other plants.

I suspect rootstock should also come into play. If you're growing dwarf trees with shallower roots overall, the trickle-down effect would be markedly different than large semi-dwarf or standard trees (at least when they're mature and not in the first few years of leaf). We only grow MM111, and our thinking has generally been that, once the trees are mature, they don't need a whole lot in the ground nutrient department since their roots go so deep and are capable of pulling up all sorts of things at optimal rates that we could never hope to equal. That said, we are currently feeling like we would like to give our 14 year-old trees a solid dose of ground-applied nitrogen and have not settled on the most practical way to do this. It's a lot of money and like you, we feel like so much of anything we apply would be taken up first by the understory plants.

Timing is something to consider -- where, if possible, time applications when trees are most likely to be actively taking up nutrients and not when the understory plants are . . . but it would seem that much of our understory plants are on a similar needs schedule as the trees. And of course, what specifically, you're looking to apply. Apple trees have different needs than understory plants and I imagine that there are certain nutrients that I wouldn't worry about as much, as far as the understory siphoning stuff off (your trees may need boron, but your comfrey may not). But nitrogen . . .

Sorry I don't have an answer for you, but wanted to thank you for asking a question that's frequently been on my mind. It may be a relatively moot point and that fertilizing the orchard in toto is a perfectly fine bet, with not much in the way of rate adjustment . . . but instinctively, I can't quite wrap my mind around it.

[Kordick Family Farm](#)

Westfield, NC

Zone 7a

Edited 2 time(s). Last edit at 06/03/2023 04:30AM by Brittany Kordick.

[Reply Quote](#)

[Carol Gudz](#)

[Re: Fertilizing among the grasses and weeds](#)

June 12, 2023 04:52AM

Registered: 1 year ago

Posts: 21

Thanks Brittany for your reply. I should have mentioned that I too have really moved to a focus on foliar feeding and basically found a combo of water-soluble (organic-approved) amendments which I include in my sprays (subject to certain limitations in that some products can't be mixed with others etc). "On the ground" we will continue to apply racial wood, hay and end-season lime. We'll see how this works out for the current growing season!

[Reply Quote](#)

[Josh Willis](#)

[Re: Fertilizing among the grasses and weeds](#)

August 30, 2023 01:27AM

Registered: 6 years ago

Posts: 134

It's funny, I was just considering which cover crop seeds to order, and thinking about N scavengers in both a good and competitive way. And then I happen to see this post!

So I guess this is a quick note to say that I think, ideally, cover crops offer a way to regulate N availability (or other nutrient availability) throughout the season. i.e., ideally when those cover crops get dropped on the understory, they will offer an additional window of uptake timing. At least, that is my understanding. But I think there is a lot of nuance there, too, to make sure your cover crops are not soaking up the primary fertilizers and amendments meant for the fruit trees. Maybe it's a good idea to increase inputs by a certain % when you have a diverse understory that is scavenging inputs, too, though I have not seen any discussion of this idea.

Back to your original question, Carol, I don't know if anyone has a more specific answer. If not, maybe the best route is to keep an eye on shoot growth, as a good indicator of N uptake and presumably a placeholder for how much other amendments are taken up by the tree. You could then modify input levels, timing, and placement a bit each year, and see what results you get. Sorry, not a great answer either!

Earthworks

Zone 7a in West-Central MD

Non-commercial, ~100 fruit trees, dwarf to MM106

[Reply Quote](#)

[Mike Biltonen](#)

[Re: Fertilizing among the grasses and weeds](#)

August 31, 2023 04:16PM

Registered: 10 years ago

Posts: 298

I look at the understory as a reserve for nutrients. I don't apply too many nutrients to the ground and instead look at the understory as a scavenger for what's in the ground, and since we don't "really know" what plants really scavenge in comparison to others, a diverse mix can ensure a well rounded source for the following year once the plants are fully composted. I also am using primarily foliar nutrients in part because I don't want to over-encourage the understory, but also realize that, like Carol, my wood chips, composts, biochar etc are the fertilizer source for the ground but that that doesn't always equate to what's in the tree. The connection between what's in the tree and in the ground is all based on a healthy soil biology and healthy root system. So I like working both ends of the tree - building healthy soils and roots, but also making sure the tree canopy and fruit gets what it needs. Using a crop n drop approach to the understory ensures a continual release of whatever they contain to the soil and roots; while feeding the top part ensures the tree isn't deprived of necessary nutrients (particularly the immobile ones!). My feeling is that once the soil is fully "built" and the roots/mycorrhizae associations are fully developed that that pipeline should be perpetual - similar to what Elaine Ingham has been saying: "the soil has all the nutrients a crop needs, we just need to get it into the plant."

[Mike Biltonen, Know Your Roots](#)

Zone 5b in New York

[Reply Quote](#)

[Josh Willis](#)

[Re: Fertilizing among the grasses and weeds](#)

September 01, 2023 06:58PM

Registered: 6 years ago

Posts: 134

I realized another aspect of this question is methodology. What's the best method to incorporate fertilizer and soil amendments? Traditional agro recommends tilling in N especially to avoid N loss due to volatilization, and probably other minerals in order to make it incorporate faster into the soil chemistry and availability pool for the trees.

I am guessing most growers here do no such thing, between understories, cover crops, and respecting soil structure and health. The question remains, though, how to best incorporate N and other amendments? Or do we just accept that up to 50% of the fertilizer, as I've read, will not be used, and minerals like rock phosphate will be even slower to be of use?

I'm working towards a soil biology that uses all that N bound up in the soil, and that can be supported just with wood chips and compost. In the meantime, though, we need to apply some comprehensive organic fertilizers each year to see shoot growth at the level we want. Maybe we should follow up a manure broadcast with then spreading more compost, if there is nothing else to do in the spring (insert laughing emoji). More likely, a well timed early mow to drop some OM on broadcast fertilizer.

Earthworks

Zone 7a in West-Central MD

Non-commercial, ~100 fruit trees, dwarf to MM106

[Reply Quote](#)

[Charles DeVier](#)

[Re: Fertilizing among the grasses and weeds](#)

November 21, 2023 02:50AM

Registered: 1 year ago

Posts: 7

Mid-Missouri zone 6b (on the new USDA zone map) We have a small home orchard of 30 dwarf and semi-dwarf trees planted 20 feet apart. Between the trees are fruiting bushes; each bush or tree being a different variety of fruit. Since this is our back yard, the under-story is grass which I mow at 4 inches to allow the white clover to bloom. The clover collects nitrogen and our bees collect the nectar.

I had a soil sample tested five years ago and have added fertilizer and lime based on that. For the last few years, I check limb growth and add fertilizer as needed in the drip-line. This year, I used a 2 inch auger and my battery drill to make 4 holes around the drip-line into which I poured a pound of a mixture of half 13-13-13 and half urea. That was about 4 pounds per tree.

As for future soil analysis, I don't know a good way to test except for tree growth. There has been fertilizer put in spots on the drip-line, but not much in the alley ways.

I will add that apples and pears only produced about 1/2 crop due to the late frost on April 27, they were some of the best that we have raised in my life. The Arkansas Black and Winesap apples did great. The Granny Smith and McIntosh apples only produced about a dozen each.

[Reply Quote](#)

[Newer Topic](#) [Older Topic](#)

[Print View](#) [RSS](#)

Sorry, only registered users may post in this forum.

[Click here to login](#)

This [forum](#) is powered by [Phorum](#).