

Tarpping for Reduced-Tillage in Small Scale Vegetable Systems

Winter 2022 Reflections: Challenges and Insights

<p>A lot of labor went into securing tarps since we had them in a spot that was in a wind tunnel. We will definitely choose a better location for the next trial.</p>
<p>Tarps have changed our lives. We are no tillers, and they have made hand labor much easier. I am very grateful for them and only hope to find more ways to use them strategically and creatively. Thanks for your work on this!</p>
<p>I went for the ground cover tarps to let moisture into the soil and because they are lighter. We found that ditching and burying the tarp edges is the best way to keep them from blowing away. However, it was very time consuming to put back on. I got two more 15.5'x 300' to do more. It worked well to kill quack grass, but we had lots of weeds from the seed bank to weed as the crops grew.</p>
<p>We have not been able to certify our farm as "Organic" due to the interpretations of our certifier regarding the use of plastics in organic systems. Basically, they are treating silage tarps the same as disposable single use plastic mulch and we have been unable to convince them otherwise. While this is upsetting, we have opted not to change our system as it works so well in breaking down surface debris, maintains our no-till system, and keeps our fields dry and ready to work in early March.</p>
<p>We've started using cinderblocks this year to weigh down our tarps, and they're our favorite kind of tarp weight so far.</p>
<p>I want to use tarps less as soil coverage tool, so I can utilize cover crop more and have living roots rather than just a tarp.</p>
<p>I have silty loam, floodplain soils and I am concerned about compaction after tarping, which makes planting difficult without tillage. I'd like to hear more about the effects of tarping on compaction. I'm also trying winter tarping for the first time and am interested to learn about unseen impacts on microbes, etc. Thank you!</p>
<p>I bought 3 more tarps this year and plan on using them in areas where I am having annual weed issues. I like tarping better than bare fallow because I would prefer not to disturb the soil so much.</p>
<p>More automation of tarping processes remains the dream! They work best for us on prepared raised beds which is the only way we use them now.</p>
<p>We're a two-person microfarm with very limited labor. Tarping has been a significant labor saver. The greatest impact has been on allowing an earlier start on spring planting due to weed suppression.</p>
<p>We tried re-purposing a 6mil white-on-white ice rink plastic tarp to create a stale seed bed and it had the opposite effect (let enough light through for perennial weeds to thrive). Now I use that as an extra layer under the black-on-white silage tarp to prevent tears, etc. But the white tarp is probably most helpful to cover finished compost. Always looking for ways to re-use and recycle materials!</p>
<p>We would like to use tarps more in the future. I look forward to the long-term studies on soil infrastructure and health.</p>

We are excited to try more cover crop termination tarps. We are still struggling with keeping tarps in place due to wind.
I do not find that tarps hold up well, partly possibly because our farm dog can see rodents climbing around under the tarps and tries to kill them. I also find it difficult to keep them in place without tearing or blowing. But I love the weed-free conditions, so I guess it's worth it.
I will be trying landscape fabric with 8 gauge staples this year. There is a lot of labor involved with moving rocks, bagging rocks, folding tarps, and storing tarps. Staples can be reused and are a lot handier than rocks or sandbags and landscape fabric is a much easier material to handle. I also worry about choking out microorganisms with plastic tarps that do not allow airflow or allow moisture in. Tarps have helped a lot with weed control on our farm, but we still have not found perfect systems for their use. We are at over 1000' with A LOT of wind and it is a challenge to keep tarps in place, especially after leaves are off the trees.
I can't imagine not using tarps but can imagine that on larger farms tarps might not be feasible. I am interested in hearing about tarps and soil health. Also, I mostly use silage tarps but landscape fabric works if used at about half the rate if you're looking for weed suppression or cover crop breakdown. I am interested in hearing how soil health compares with long-term coverage of silage tarps compared to landscape fabric. Also, my technique for breaking down cover crops is to flair mow in soybean meal and then tarp. The soybean meal is definitely a microbial accelerator. A four ft crop of rye and vetch is a soupy mess in a week.
Mammals of all kinds are bad with tarps: voles love to live under them, foxes and farm dogs love to chew and dig holes in them while hunting the voles that are underneath, deer will make holes while walking on them.
They are expensive and tear. Difficult and stinky to store. Don't know how I'll dispose of them when they are too ripped to use.
A couple of years ago, I tarped an area over winter where I wanted to plant dry beans. I removed it mid-June, added compost to the bean rows, planted the beans and had almost no weeds in that section. I am hoping to replicate that on the whole market garden acre. I am the only one who works the market garden, so I need a non-chemical solution to weed control.
Our biggest pain point is managing the edges of tarps, especially if they're in place for over a month. That becomes the area where weeds are most likely to grow up and go to seed.
We have gotten better at managing our tarps. We now use tractor forks and pallets to move around tarps and sandbags. Our biggest problem is being in a windy spot, and trying to keep them weighed down is a major challenge. Also, finding time to apply or pick up tarps during the busy harvest season is difficult, and means we are timelier with tarps in the early and late seasons. Tarps are still just a small part of our weed management and bed prep, and we rely much more on tractor work than tarps. Since we can't get a tractor into our high tunnels, we use tarps proportionally much more in them than in the field.
I had high expectations of tarps and was disappointed by their general efficacy, dramatic increase in rodents, material fragility, difficulty in moving them (thus less timeliness in usage), and overall costs. We still use them but on a smaller scale than we originally intended. We also would like to be free of plastic entirely, but are not, anytime soon.
The major issue I have is how best to store tarps. Rodents love turning them into nests.

