

Tarping for Reduced Tillage in Small-Scale Vegetable Systems

Winter 2020 Reflections: Problems

What issues or problems came up for you?
Voles nesting under tarps
Tarps provide excellent vole habitat which are pest on our farm. And since there are voles living under our tarps our dog loves to crawl under the tarp and dislodge it and also tear the tarp.
Not all weeds were suppressed, so if I pulled up the tarp and let too much time go by lambsquarters or other amaranth plants would take over. I just had to keep timing tight. I don't use massive tarps for tarping, I use strips of landscape fabric, which I find superior to tarps. It's more durable, the pieces are smaller and easier to move, and the permeability is a huge plus, not having to irrigate before-hand, and also being able to irrigate before lifting up. I found it just as effective but easier for smaller scale.
There was some standing water when we needed to take up tarps, but my partner came up with a good way to use gravity to get the puddles off the tarps before picking them up.
Needed more weights, rock bags turned out to be my best solution
3 ft wide black plastic has to be doubled over to assure full coverage on a 42" bed. It helps to have plenty of scrap wood and rocks around to hold this stuff down on long runs.
Wind - I have invested in more sand bags.
This is our first year really employing tarping strategies so it's all an experiment. We did not have access to compost this year and in the future I would either like to tarp in conjunction with a compost application or tarp over a cover crop.
Takes a lot longer to kill things with tarps than with a rototiller! Tarps get so heavy when wet. Some rodents underneath when left down for a long time. Ugh, plastic- so hard to buy stuff I know is garbage.
Keeping them on in the wind, tearage on rocks, moving them efficiently, voles (but only when they were folded up, not when in the field), more wind issues and plant damage from flapping
Need more cinderblocks
Soil amendments (lime 2x a year) some ground tarped and could not spread. So many sand bags and cinder blocks and still edges blowing up on big wind events.
Wind, animal chews, moving wet/heavy tarps
I know moving the tarps was a challenge on both plots.
Honestly, I did not feel like tarping was worth it at all. It seemed that no matter how much weight we put on it, the wind tore it up too many times to count (even trying to seal all of the edges!) It helped reduce the crop residue, but not as much as I would have thought. I hope there is less weed pressure next season in that spot - we will see! Also - the ground was ROCK HARD when the wind took the tarp off for the final time this fall. There is no way we could possibly plant into this ground without tilling. The results of our experiment were costly, labor intensive (back-breaking, trying to pick up the mess of tangled tarps!), and disappointing.
Voles, cats destroying sections of tarp trying to destroy voles... soil compaction was an issue, and debris from the previous crop punctured the tarp in places, especially song where our was weighted down.
Timing

For some reason, in the spring, sedge grass STILL came up UNDER the tarps, which was very frustrating. I am thinking that maybe you need to let them germinate, pull up the tarp and burn the young shoots and then cover again. Only problem with that is time and space.

No problems but considerable pooling of water on tarp could be an insect breeding ground.

Wind, multiple re-installs.

Rips due to rye stems, rodents, lots of hand labor to apply & a hot unpleasant task, wind blew off once or twice and needed fixing