

## Tarping for Reduced Tillage in Small-Scale Vegetable Systems

### *Winter 2021 Farmer Reflections: Applications*

<b>How did you use tarps on your farm this year?</b>
We used tarps on our farm in beds that we'd be planting later in the spring to kill weeds before planting, sometimes sheet mulching with compost before tarping, sometimes sheet mulching with compost after tarping. In addition to the benefit we expected, giving direct-seeded crops a jump-start on the annual weeds, we also had the unexpected benefit of apparently killing almost all the dock in a field with tons of dock with two or three weeks of tarping during some extremely hot, sunny weather in May.
We used tarps during the summer to incorporate old crop residue and kill weeds between crops in double-cropped beds (for example, between a spring planting of arugula and the head lettuce we planted in August). We'd harrow the bed in the spring, apply compost and pelleted chicken manure, grow and harvest the crop, mow this first crop with the flail mower on our two-wheel tractor, then tarp for 2-3 weeks, then power harrow the bed and, if needed apply pelleted chicken manure, then plant the new crop.
Spring termination of cover crops, overwinter crop, keep earliest planted ground dry, wind erosion protection, germination of crops
Potato growing to kill rye cover, in over wintered hoophouse to smother chickweed, will try over wintered tarp on lush field of cover crop (early november to april coverage)
Prep and termination for salad greens succession, holding beds in ready state for planting, cover crop termination, long term prep for a perennial planting.
We were breaking new land this year, and we did so by tarping it. We do not have a tractor, nor could we find somebody willing to plow and till for us. So we tarped! We used the tarps for about 6 weeks in the spring to give us a clean surface to plant in. We then use the tarps for longer period of time on beds for next year, since we learned we have some pretty tenacious perennials there.
Stale seedbed management for storage carrots. This was huge success in combating orchard grass. Fall cover for early spring plantings.
Holding beds before planting (after primary plowing), combating weeds with long-term tarping (approx. 1 year)
We are no-till so this has allowed us to use a wider variety of cover crops, including winter rye and hairy vetch, which I believe are strong soil builders. It also allows us to be relaxed about grass coming into the vegetable fields at the close of the season for good winter cover. Knowing that we can tarp in the spring to clean the soil of perennial growing plants is a life saver. We also use tarps in season if we want to take out a crop and then plant again in 3-4 weeks, leaving a clean seed bed.
We placed two 50x100 tarps on a prepared area for July seeded carrots. We had the tarps on for 3 weeks, removed, seeded carrots and let them grow. We did one pass of hand weeding but it was not necessary until the carrots were around 12" tall. There were not many weeds -- just keeping them from going to seed.
Overwintered tarps with compost and no-till planted brussels sprouts and celeriac. The celeriac were mulched with hay and did great. The brussels sprouts were too wet and performed miserably as usual. We tarped before fall beets and carrots after mowing rye and vetch. We tarped before planting fall and winter crops some of which was in yellow clover before being mowed. We are getting ready to move one of our hoophouses and we will tarp inside over the winter.
We used tarps to prepare a stale seedbed for our fall brassica seedbed.

We used tarps for weed prevention mostly. I have four 50 X 100ft tarps. Our beds are 200 feet long, so the big ones work well because they cover a lot of ground, but they are definitely hard to move at times. I tried tarping as a "rain jacket" to keep some ground for early crops dry in the spring because I have wet soil that can be hard to get into early. We would usually have tarps in the field for 3-4 weeks and then plant directly into the ground afterwards. We still struggle with weeds.

We use tarps to terminate mowed crops and make beds clear for replanting. We also use them to kill our winter rye for use as grown-in-place mulch, and on bare beds over the winter to reduce erosion if we can't cover crop them.

Weed suppression in the aisles of high tunnels, also used clear plastic to pre-germinate weeds in the top layer of soil in a bush bean plot.

We overwintered some future onion beds under tarps from Nov 20 to late April 21. We used tarps to prepare beds for our successional salad plantings, and in preparation for storage carrot plantings.

We use tarps to manage about an acre of mostly salad greens production (plus a few other direct seeded crops, like carrots and radishes), plus we also used them to kill cover crops when the weather wasn't favorable for tractor prep.

We used tarps on prepped beds before almost all of the short season crops. We tarped for about 3 weeks minimum. We also prepped some fall beds and tarped them for over the winter. We also have a high tunnel with a really bad chickweed problem, and we have a tarp in there now for the winter.