

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

### *Comments Transcribed from Evaluation Forms*

#### Northport, ME

November 2<sup>nd</sup> – MOFGA Farmer to Farmer Pre-Conference

Please describe one or two interesting ideas you heard today.

- Covering for 10+ days
- Nitrogen bump after 10+ weeks
- Different tarping time period examples (photos + graphs)
- Really liked the mowing down (flattening) rye as mulch in place
- The use of cover crop (rye) as mulch after tarping
- Applying compost along with a tarp
- Using to terminate grown-in-place mulch
- Deep compost as mulch and weed suppressant
- Tarping over-wintered rye cover crop
- Tarping during bed flip w/ flail mower
- Combo tarp/mulch—Daniel Mays' mulch in place—Brilliant.
- Use of tarps to create fixed bed system
- Using tarping to create new beds in conjunction with compost, cover crop, and mulch.
- Using tarping to kill weeds—and most effective weeds it will kill
- Increased N! (?) Had no idea!
- Growing mulch in place
- Using compost as mulch
- Tarp kit pallets.
- Tarp folding for easy setup
- Combining tarps with other tools – tillage, border plants (can try)
- Turning rye into mulch with tarps
- Covercrop → in place mulch
- 1 ½" compost layer after tarp removal
- Cover crop/mulch in place
- Timing and rotations of crop blocks
- Using tarps overwinter increases available N in spring.
- Tarps do not increase weed control over deep tillage.
- Crimping cover crop
- Mulch and tarps
- Use of compost and tarp
- Retention of N (and other nutrients?)
- Winter hardy cover crop, crimped in spring, tarped, then planted into.
- Over winter rye/crimp/tarp/transplant
- Transporting tarps and blocks in a kit
- Covering rye for in-place straw mulch

- Tarping with cover crops.
- Shorter tarping times.
- How to use tarping in conjunction with cover crops.
- Tarping to kill mustard!!
- Nitrogen is kept from leaching through the soil with the use of tarps.
- Allowing rye to grow to full bloom, crimping, tarping, and voila in place mulch!
- How long to keep tarp down to be efficient.
- Tarping and mulching practices.

### How might you use these ideas in the coming year?

- Tarp during winter for early entry.
- Tarp for as little as three weeks.
- Trial of tarp as a cover crop.
- More mulch.
- In preparing newly established beds (sod).
- Cover crop as mulch after tarping!
- Will use to terminate grown-in-place mulch.
- Will deep compost as mulch and weed suppressant.
- Plan to tarp over wintered rye crop and tarp during bed flip w/ flail mower!
- Going to tarp an area that we will use for winter squash.
- Creating fixed bed system.
- New bed creation.
- Weed suppression.
- Reduce tillage and weed pressure by keeping the soil covered.
- Tarp strawberries before planting.
- Fall overwintered tarping.
- Tarping with landscape fabric.
- Plan for it as my main "tillage"/bed prep method.
- Stop buying in straw mulch.
- Start making way more compost!
- More efficiently laying out and cinder blocking
- Spring cover and summer crimp and tarp.
- Utilize after early summer cover crop for fall greens.
- Prep beds then cover immediately after spring tillage for summer greens. Possibly lay tarps pre-tillage for early greens seeding.
- Shorter durations of tarp application
- Rotating tarps over the same area in same year for shorter time.
- Move one field to no-till permanent beds using integrated compost + tarp + cover crop long establishment.
- Use tarps for quick flush-kill of weeds.
- Experiment with tarping in spring to terminate cover crops.
- Use for weed management.

- Will over winter rye/crimp/tarp/transplant next year.
- Will do a new bed technique in new area.
- Tarp cover crops.
- Tarp perennial grasses.
- Use tarps in shorter successions.
- Starting to no-till/tarp some flower beds.
- Is it too late to try planting winter rye for mulch next summer? I don't think so. Am going to plant some! For our full brassicas! Pre-tarping before direct seeding.
- Winter tarping.

## Canandaigua, NY

November 18<sup>th</sup> – Cornell Cooperative Extension - Ontario County

**Please describe one or two interesting ideas you heard today.**

- Tarping's minimal impact on soil temperature
- For annual weed suppression, no-till and tarp combination appears to be a good strategy.
- Interested in paper "tarp" roll as that is developed.
- Advanced soil preparation for perennial crops i.e. asparagus
- Early spring tarping and also the method of tilling, tarp then re-tilling and re-tarping.
- Till before tarp
- Reducing tilling
- "Smother" sleds that are easily transportable, contain all materials necessary to lay a mulch layer.
- Crimping at Firth Farm with Board and T post
- Importance of getting weeds under control before moving to cover crop and tarp no-till system.
- Utilizing tarping for different weed type issues.
- Nitrogen increases after tarping.
- Year tarping to break perennial weed cycles.
- NT w/ tarping
- Soil moisture = timing when tarp goes on. Prep as much as possible before tarp.
- Weeks needed to kill different weeds
- Where to get your tarps
- Till before tarping
- Rolling back sections in intervals in progressive planting
- The use of cover crops followed by tarping before planting your next crop.
- Using both winter cover crops and tarping.
- That silage tarp in long term cover does not create an anaerobic condition.
- Successful cover crop incorporation with tarping after.
- Tarping for one year with landscape fabric to kill perennial weeds.
- Ways to secure tarps with landscape staples.

- Using over cover crops like rye-crimping by “hand” then tarping.
- Liked seeing how Plowbreak was integrating them in tunnels and a bit more at scale.
- Really liked hearing research results and seeing the pictures of the impact
- Killing rye with tarps in the spring
- Rotation with tarps in tunnels at Plowbreak
- Minimum time for effective tarping
- Incorporating cover crops with tarping
- Homemade roller crimper- Frith Farm
- Different cover crop kill strategies
- Summer tarping for perennial weed control.
- That leaving the tarp on for 4 to 6 weeks didn’t differ in drastic results.
- That bed prepping before tarping is important
- Tarping around fruit trees—hopefully forthcoming
- Tarping over cover crops
- Tarping with mulch
- Helpful to meet others at my table

#### How might you use these ideas in the coming year?

- Till- Compost than tarp.
- Change tilling practices- move minimal/no-till.
- Experiment!
- In a couple of permanent beds that did not yet get cleared or cover cropped
- Getting a bed prepared for next year asparagus—unless I can set tarp on (or weed mat) next week then maybe I can set perennial set out this year.
- After building our new high tunnel, we will tarp for three weeks. Amend soil and prep beds after initial tarping, and tarp a second time for three weeks before transplanting.
- I plan on tarping after every spring/summer planting. Also would like to tarp all beds prior to fall/winter plantings.
- Would like to use tarping for cover crops
- Ideas for pinning down tarps better.
- Experiment next season with tarping, see how it can fit with my growing plan.
- Determining our timing
- Tarping flailed cover through summer.
- Remove tarp → prep bed/amendments → tarp cover again → remove & plant
- Around my berry planting
- Maybe future CCE workshop
- After removing my crop for the season, I will plant a cover crop and then tarp it the following spring before the next planting.
- After doing a soil test, I would apply the appropriate pelleted fertilizer.
- Tarping for full winter of new vegetable area with existing beds.
- Pre-prepared beds before tarping.
- Tarping to reduce weed pressure.

- Tarping crop residues over winter.
- Experiment on rye cover crop in 2020.
- Be more careful to prevent disease spread with tarp moving.
- Adding more tarps and doing better at integrating them into my crop/cover crop planning.
- I may experiment with killing rye with tarps in some plots this coming spring.
- Better tarping management
- Another soil amendment process
- Use tarping for longer periods for perennial weed suppression
- Use tarping for garlic!!
- Divide field in thirds and tarp it all; untarp 1 section per year.
- Will attempt tarping in a few different crops this coming year—winter squash. Carrots?
- Try to leave tarps on in one year areas to hit perennial weeds—thistle—queen anne's lace—quack grass!!!!
- Will try out tarping.

## Voorheesville, NY

November 19<sup>th</sup> – Cornell Cooperative Extension Albany County

**Please describe one or two interesting ideas you heard today.**

- Claiming hay fields for veg crops with tarp → broadcast radish seed to start.
- Timing chart info, killing rolled cover crop info. Photos A+.
- Helpful hearing such a diversity of uses and approaching down to and including single bed tarping.
- Using tarps right after harvest to break down weeds, crop residue
- Killing crimped rye with tarps.
- Rye-crimp-tarp-fall brassicas
- Prep and fertilize beds, then tarp then plant for decreased weed pressure.
- Midseason tarping
- Over winter tarping for earlier season planting.
- Cover crop clover in aisles early in season.
- Tarping mid-season to kill weeds after harvest
- Tarp, till, tarp, till, etc.
- Holding onto nutrients by tarping.
- Tarp management for perennial weeds (long term tarping strategy)
- Tarp rotation
- Using tilling in combination with tarping to control perennial weeds.
- Using the tractor to move tarps.
- Planning way ahead for cover cropping to use killed cover crop as mulch.
- Using both permeable and impermeable tarps.
- Four Winds Farm static aerated compost creation.

- Weed mapping
- Using cover crops as mulch to plant into in Spring.
- Using for cover crops.
- Tarping failures—very helpful.
- The data on mineral content in tarped soils.
- Weed suppression experiences with tarping.
- Mow crop residue at end of season and tarp over winter.
- Tarps laid on winter killed oats preserves nitrogen.
- How to set up composting on the farm.
- The whole concept of tarping –which is totally new to me.
- Questions about tarping as biofumigation
- Integration and coordination of tarps and hay mulch.
- Using tarps to help with weeds.
- How to use crops for residue.
- Compost system used by Jay.
- How to effectively use tarps for weed control.
- Different tarps (clear/plastic/fabric) for different outcomes.
- Tarping to increase nitrogen levels.
- Reducing galinsoga with a flash of light!
- Clear cycle for tarping rye.
- Different tarps—pros and cons.
- Undercover crops in beds.
- Tarping strategies for perennial versus annual weeds.
- Creating your own compost system.

#### How might you use these ideas in the coming year?

- I want to use both tarps and landscape fabric in different areas and see which actually does best for me at different times.
- Implement some tarping and cover crops into reduced till system.
- Build static compost aeration system.
- I have never used tarps but have 10 200' beds under tarps right now. I will try to use them all season long. So many ideas.
- Maybe tarp last year's w. squash for weed death/stale bed.
- Mid-season tarping for fall baby greens for reduced weed pressure.
- Try cover crop clover in aisles early in season.
- Try tarping mid-season to kill weeds after harvest
- We'll definitely use these ideas in our rotation planning.
- Over-winter tarping.
- Experiment with long term strategies for perennial weeds that are more difficult to get rid of. Most likely taking beds out of production and experiment with a till, tarp, till, tarp rotation.

- Collect data on the length of time tarps need to be used different times of year for different situations so I can develop a tarp rotation plan for future years to have a better idea of where and when each tarp will be used.
- Will attempt the till-tarp-till-tarp rotation in a field with heavy perennial weed pressure.
- Will try to use the tractor to help move tarps.
- Better crop planning
- Using impermeable tarps for Spring planting (creating dry ground).
- Would love to create and implement a compost technique
- Definitely hope to create a weed map and update regularly next season.
- Try to tarp cover crops in Spring instead of just tilling immediately.
- Going to experiment with the different materials people used.
- Add oats for winter kill to my crop plan.
- Try a small area for beets and carrots.
- Think about/plan for new ways of using tarps in a more holistic sequence.
- Think more about customized fabrication possibilities for small scale no-or-reduced till systems.
- Start new beds—expand veggie/flower production.
- Start using tarps to try and get into certain fields earlier.
- Help use for weed control.
- Will tarp now before next year to reclaim hayfield for hemp crop.
- Tarp over winter to restore some levels of N.
- Definitely try tarping after tillage to reduce galinsoga and no till tarping.
- Overwinter tarps.
- Try plastic instead of landscape fabric.
- Making compost to reduce weed pressure.
- Reclaiming pasture for crop growing.