

FIELD
TESTED



Using Silage Tarps for Weed Suppression and Soil Health

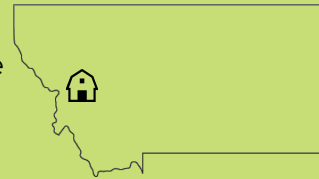


Field Tested is a series of reports about farm tools that have been tested by Montana farmers to enhance their specialty crop production. The reports describe these farmers' findings to help others make informed decisions about their specialty crop businesses. Visit FarmLinkMontana.org/fieldtested to read more Field Tested reports. This project is administered by the Community Food & Agriculture Coalition with funding from the Montana Department of Agriculture Specialty Crop Block Grant Program.

Southbound Flowers | Florence

Farm Snapshot

Location: Florence, MT
Operator: Bess Brownlee
Acres: 1/4 acre
Crops: Cut Flowers



Bess Brownlee
southboundflowers@gmail.com

INTRODUCTION

Flower farmers all over the US have been trying out no-till methods in the last decade, especially on smaller growing spaces, to great success. Bess's field is a former horse pasture so the grass and weed pressure is high. As part of her Field Tested Grant Bess was curious to see if using silage tarps and no-till methods can ease and expedite that conversion process from horse pasture to viable agricultural soil. Much of her season is spent weeding, weed-whacking, and attempting to suppress as many weeds and grasses as possible so that her flower crops can thrive and produce decent yields. By using tarps on sections of her field, she hopes to see some significant results.

FARM BIO

Southbound Flowers specializes in cut flowers for weddings, wholesale, and weekly bouquet CSA subscriptions. Headed by Bess, this micro-farm is woman-owned and grown. They practice sustainable, seasonal, and organic methods of production in Montana's Bitterroot Valley.

Equipment Purchased

- Silage Tarps
- Sand Bags

BENEFITS OF TARPS

As part of this project, Bess hoped to decrease weeds in both her field and hoop house, and therefore reduce time spent weeding throughout the growing season. At the start of her experiment Bess hoped the tarps would accomplish the following:

1. Smother and breakdown weeds more quickly and with less labor (saving time and money).
2. Create a dark moist environment which naturally increases the worm and micro-organism presence in soil, and therefore increases the fertility of the soil as well.
Covering the soil can also prevent rain, snow and moisture from leaching amendments away. This will hopefully lead to rich, fluffy soil that needs less amending before planting (saving time and money) .
3. After tarping the soil will be lighter, deeper, less compacted, and easier to plant seedlings into, therefore requiring little to no tilling. Thus Bess would be able to plant more quickly, spend less money on tractor fuel, and preserve the soil structure.
4. Bess's hoop house does not accommodate a tractor, so tarping the soil is an easy way to breakdown crops in between seasons and build lighter, more fertile and plantable soil for seasons to come. It will require less labor than maneuvering a push tiller, and result in less compaction over time.



Bess showing the difference in weed pressure with and without the tarp.

RESULTS

Overall, Bess feels like the tarps really improved her operation and helped it all the ways she thought they would. She tarped both her hoop house and field all winter, and kept them covered as long as possible. She found because of the tarps she could plant directly into the soil in the field in the spring, instead of having to till and manage a lot of weeds. She did have to broad fork and rake the greenhouse, but felt like the soil was much more manageable and workable. She noticed significantly more worm activity, and in her first year did not notice significant rodent activity. She did recognize that because she farms a small space, this made her practices more doable.

Bess learned a few key things throughout her first year. One is make sure you use more sandbags than you think you need. You do not want tarps flying around in strong winds! Additionally, she cut up her tarps so that they were a little more manageable to move with just one or two people. The disadvantages of this is that you have to put more sandbags on the sections.



Greenhouse rows after being tarped all winter and then planted into.

Additional Resources

Montana Department of Agriculture Specialty Crop Block Grant Program: The purpose of this program is solely to enhance the competitiveness of specialty crops in Montana. Visit their website to find funding opportunities and more information. Search [Montana SCBG](#).

Field Tested Reports, Podcasts, and Videos: Find more reports about other projects and see videos of tools in action at the [Field Tested webpage, under Resources on FarmLinkMontana.org](#)

Farm Link Montana: A project of the Community Food and Agriculture Coalition to connect Montana's beginning farmers and ranchers with the tools they need to succeed: farmlinkmontana.org