

Establishing New Lavender Field

CHUCK & CAROL STIFF



Bald Butte
Lavender Farm



BBLF, which is 6 miles south of Pullman in southeastern Washington, was established in 2020. Our 3.5-acre farm is located in USDA hardiness zone 6b on silt loam loess soil with pH 6.5. We currently grow 18 lavender cultivars with over 750 plants across our north, south, and west fields.

The following presentation describes how we established our new south field in June 2024. The process is based on our previous field experience, internet research, physical and financial constraints, and numerous conversations with other lavender growers in the Pacific Northwest. Field work was completed in 7 days utilizing 1-3 workers/day.

Layout and Rototill New Field



Rototilling in the south field



Removing grass and debris

On days 1-2 we laid out (12) 55-ft lavender beds on 10-ft centers for our 120x55 ft south field. The beds were oriented down slope for better drainage.

We planned for planting 3 cultivars: 6 beds of (12) “Super”/bed at 4-ft spacings, 3 beds of (16) “Folgate”/bed at 3-ft spacings, and 3 beds of (16) “Avice Hill”/bed at 3-ft spacings. A 5-ft grass strip would remain between beds.

Beds were rototilled using our 5-ft wide Frontier rotary tiller attached to the PTO of our 24-hp John Deere 3025E compact utility tractor. After tilling we removed grass clumps and other debris by hand.

Create Raised Lavender Beds



Titan Disc Bedder



Bedding the south field

On day 3 we threw raised beds using our Titan 3-point 60-inch adjustable disc bedder attached to our tractor. The bedder was setup to throw beds 18-inch in height. We created raised beds to enhance drainage.

Create Raised Lavender Beds



Newly formed raised beds



Raked raised beds

The newly formed raised beds were raked to remove any remaining grass clumps and other larger debris.

Cover Beds With Weed Fabric



Setup to install weed fabric



Secured weed fabric roll

On day 4 our next task was to cover the raised beds with weed fabric. Many people have expressed concern regarding the added cost of weed fabric. **WARNING:** If you don't use weed fabric your alternative choice is countless hours weeding within the rows and between the plants. We used Dewitt Sunbelt (3.2 oz) woven ground cover for it's weed free lasting quality.

The roll of weed fabric was mounted between two saw horses using a metal rod. This inexpensive setup greatly facilitated installing the weed fabric over the raised beds.

Cover Beds With Weed Fabric



Unrolled weed fabric



Installing weed fabric

We installed the weed fabric by pulling it by hand over the length of the bed. Care was taken to center the fabric over the raised bed.

Cover Beds With Weed Fabric



Center/stretch weed fabric



Securing weed fabric

The wind affected positioning the fabric over the center of the raised bed. Therefore, the fabric needed to be re-positioned and stretched before securing it to the ground with 1-ft landscape staples every 2 to 3-ft.

Beds Covered With Weed Fabric



Installed weed fabric



Installed weed fabric

The raised beds covered with weed fabric were now ready for planting the three lavender cultivars.

Preparing Planting Holes



Marked planting holes



Burning hole with template

On day 5 we measured and marked the locations for the planting the three lavender cultivars with white spray paint. Holes were then burned in the weed fabric using a 6-inch diameter hole in a wood template and a hand-held butane burner. The hole is burned rather than cut to prevent the woven fabric from fraying.

A butane burner is typically used in the kitchen when making crème brulee. We used butane rather than propane for burning the planting holes because the flame is affected less by the wind.

Preparing Planting Holes



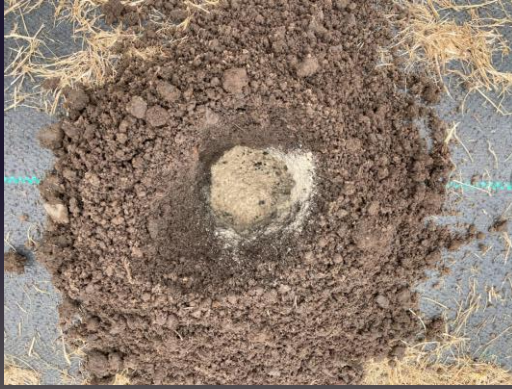
Burned planting hole



Augering planting hole

We drilled 18-inch deep planting holes using our DeWalt 20V cordless drill and a 3-inch by 24-inch auger bit.

Planting Lavender Cultivars



Added bone meal



Planting lavender cultivar

On days 6-7 we planted the 4-inch potted lavender cultivars shipped from Victor's Lavender in Sequim, WA, and installed the drip tape irrigation kit shipped from the Drip Depot in White City, OR.

Lavender should be planted with the top of the root ball even with the soil line. Before planting we first added a 6-inch layer of gravel to the planting hole for drainage. Next, we added soil mixed with $\frac{1}{4}$ cup of bone meal, and then the 4-inch plant with root ball. Bone meal, an organic fertilizer, has slow release phosphorus which will promote root development.

Plant Lavender Cultivars



Packing soil around plant



Adding gravel around plant

Additional soil should be back filled and firmly pressed around each plant, and then watered to compress the soil and remove air pockets. We then added a 2-3 inch layer of crushed rock to enhance drainage, insulate the soil during the winter, and provide weed control for the burned planting holes. Lastly, we pruned about 1-2 inches off the branch tips to remove apical dominance and promote additional branch growth, thus creating a more bushy plant.

Installing Drip Tape Irrigation



Installing main poly tubing



Rolled up 5/8-in drip tape

To install the drip tape irrigation we first dug a 6-inch deep trench between the beds on the uphill end of the raised beds. The $\frac{3}{4}$ -inch main-line water supply poly tubing was extended from last to the first bed. The tubing was attached to the weed fabric using 1-ft landscape staples. Between the beds the tubing was buried under 6-inches of soil to enable mowing between the beds during the summer and for protection during the winter months.

Installing Drip Tape Irrigation



Connected drip tape



Field with installed drip tape

For each raised bed a 5/8-inch diameter poly drip tape with 12-inch emitter spacings was connected to the supply poly tubing using takeoff adapter valves. Drip tape was rolled out for the full-length of each raised bed. We used 12-inch emitter spacings to provide moisture throughout the beds. Care was taken to insure the drip tape was installed with an emitter over each planting hole. The drip tape was secured with 1-ft landscape staples on both sides of the planting hole and one staple between planting holes. At the first bed a head assembly with hose adapter was attached to the main-line water supply tubing for connecting to a garden hose.

New South Lavender Field



Established lavender field

The new south lavender field was established in 7 days. On the first page of this presentation is a recent photo of the south field after the first year's growth.