

Wheat Straw Bale Gardening

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Wheat Straw Bale Selection

- Be sure to use wheat straw bales, not hay bales.
- Compact, long-straw bales are preferable if available. Short straw bales tend to fall apart easily so may require extra binding or other support.

Step 1—Set Up

- Pick a location in full sun near a water source.
- Orient the bales north to south, with cut straw sides facing upwards.

Step 2—Plant Supports and Irrigation

- Fashion sturdy, tall supports—before plants get large.
- Set up soaker hoses, or other irrigation systems, on the tops of bales.

Step 3—Condition Bales as Recommended

Use products with high Nitrogen rate. Inorganic e.g., 29-0-4 (N-P-K*), Urea 46-0-0. **DO NOT use a weed and feed type grass fertilizer that includes a herbicide, or a slow release product.** Organic e.g., blood meal 13-1-0.6, feather meal 12-0-0. (Extra amendments of compost tea, micro biotics can be added in addition.)

Day in Process	Traditional Fertilizer	Organic Fertilizer	Water
Day 1	½ cup	3 cups	Water to saturation**
Day 2	Skip	Skip	Water to saturation
Day 3	½ cup	3 cups	Water to saturation
Day 4	Skip	Skip	Water to wash in fertilizer
Day 5	½ cup	3 cups	Water, warm is best
Day 6	Skip	Skip	Water, warm is best
Day 7	¼ cup	1 ½ cups	Water, warm is best
Day 8	¼ cup	1 ½ cups	Water, warm is best
Day 9	¼ cup	1 ½ cups	Water, warm is best
Day 10	1 cup 10-10-10	3 cups with P and K	Water to wash in fertilizer
Day 12	Plant today	Wait 5 more days	Water any new plantings

*N =Nitrogen, P = Phosphorus, K = Potassium

**Day 1 use 4-5 Gal. water per bale until water runs out bottom. Days 2-10 use about 1 gallon per bale.

Step 4—Planting

- For seedlings, remove enough straw to make 4” diameter planter-pot sized holes in the tops of bales. Line holes with potting soil to protect bare roots.
- Stabilize seedlings with additional potting soil.
- DON’T overplant, only 2-3 seedlings per bale for tomatoes, peppers, etc.
- For seeds, spread a thin layer of potting soil on the tops of bales.
- Plant seeds at recommended depth on package instructions.
- Water thoroughly, keep moist until seeds sprout.

Step 5—In-season Monitoring

- Monitor often.
- Water frequently.
- Add more plant supports as needed.
- Top dress with a balanced nutrient fertilizer monthly or as needed.

Step 6—Recycle Old Straw

- Pile old straw and use as mulch/compost. If bales had tomatoes with diseases do not use that straw on susceptible plants.

References

- Karsten Joel. *Straw Bale Gardens –Complete*. Minneapolis, MN: Cool Springs Press, 2015.
- LeHoullier, Craig. *Growing Vegetables in Straw Bales*. North Adams, MA: Storey Publishing, 2015.
- Burgess, LayLa. “Straw Bale Gardening Factsheet- HGIC 1264.” Clemson University Cooperative Extension, 2017.
- Gardener Scott. “Start a Straw Bale Garden - A Complete How To” (based on Joel Karsten’s book and organic fertilizer)
<https://www.youtube.com/watch?v=tMw7-oZirjo>
- StrawBaleGardenClub.com with Joel Karsten. “Planting in Your Straw Bale Garden” <https://www.youtube.com/watch?v=Cam1m-pvA9c> (Tips on planting a variety of veggies from seed and plants)
- Midwest Gardener. “Conditioning, Planting and Growing a Straw Bale Garden From Day One.” <https://www.youtube.com/watch?v=tredysH3-ck>
- The 52 Week Gardener. “Bale Garden Cattle Panel Arched Trellis and Trellis Tunnels” https://www.youtube.com/watch?v=57vAB_3CSZk