# STRAW BALE GARDENING

Straw bale gardening is a technique that has been used for thousands of years around the world. (e.g.: Aztecs & Egyptians)
Straw bales are used as a replacement for garden soil
Joel Karsten, author of the book, *Straw Bale Gardens: The Breakthrough Method for Growing Vegetables Anywhere, Earlier and with No Weeding, 2013,* popularized the technique

## DIFFERENCE BETWEEN STRAW AND HAY:

- Straw is the stem of grain plants
- Hay is usually baled grass, including the seeds and weeds, and is not recommended for straw bale gardening

## ADVANTAGES OF STRAW BALE GARDENING:

- Raised bed gardening without the need to build and fill raised beds with soil
- Straw bales work where soil is poor, or even lacking (pavement)
- Straw bales are portable (when dry) and biodegradable
- Bales last one season, maybe two
- Spent straw bales make wonderful mulch and compost
- Straw bales make gardening more accessible for seniors and those with mobility challenges
- Pest and disease problems within bales are minimal
- Straw bales are relatively inexpensive (about $7 per bale this year)

## CONDITIONING:

- Before planting straw bales, they must be "conditioned". This is done by feeding the natural bacteria inside the bales with a nitrogen source so that they begin to break down the straw.
- Conditioning takes about two weeks

## BALE PLACEMENT:

It is preferable to place the cut side of the bale facing up. The open stem ends allow easier penetration of water and fertilizer.

## WATERING:

Dry bales will absorb a lot of water the first day but won't take more than a couple of gallons during later applications before you'll see water running out the bottom of the bale

- Use a hose-end sprayer to help water and push fertilizer granules into the bales during conditioning
- Soaker hoses can be used to water planted bales and should be installed before planting using heavy wire to 'peg' the hose into place

**APPLYING FERTILIZER:**

A high nitrogen fertilizer is used in the conditioning of the straw bales.
*Remember NPK - nitrogen (N) – phosphate (P) – potassium (K)*
If you prefer organic you can use bloodmeal or a commercial blend organic fertilizer but they are very expensive.
Since our bales were not sourced from organic farms we chose to use commercial lawn fertilizer, much cheaper. ***Caution. Do not use a "weed and feed" lawn fertilizer.**

**FINAL FERTILIZER APPLICATION:**

A final application of fertilizer is applied to the bales using a balanced 10-10-10 slow release fertilizer.
Before planting it is advised to take the internal temperature of bales – they should be approximately 94 degrees F, not to exceeding 102 F.

**PLANTING:**

Make a planting hole in the bale using a trowel. Put in a small amount of soil/compost before putting in the plant. Add a bit more after to ensure roots are covered. If planting seeds, add a layer of soil on the bale and more to cover the seeds. You can grow almost any plant although corn is not recommended as it grows too high. You need to construct a trellis system if you are planting climbing vegetables. We are planting against the deer fence.

**Resource Information:**
Straw Bale Gardens: The Breakthrough Method for Growing Vegetables Anywhere, Earlier and with no weeding. Joel Karsten 2013 Cool Springs Press
(Information originally researched and compiled by Kathleen Ott in 2015)

## Sample Conditioning Schedule

| | | | | | | |
|---|---|---|---|---|---|---|
| | 1<br>water | 2<br>water | 3<br>fertilize<br>½ cup lawn<br>fertilizer<br>& water | 4<br>water | 5<br>fertilize<br>½ cup lawn<br>fertilizer<br>& water | 6<br>water |
| 7<br>fertilize<br>½ cup lawn<br>fertilizer<br>& water | 8<br>water | 9<br>fertilize<br>¼ cup lawn<br>fertilizer<br>& water | 10<br>fertilize<br>¼ cup lawn<br>fertilizer<br>& water | 11<br>fertilize<br>¼ cup lawn<br>fertilizer<br>& water | 12<br>take temp &<br>water | 13<br>fertilize with 1<br>cup slow<br>release<br>10-10-10 &<br>water |

Measure of fertilizer is per bale