

## **STRAW BALE GARDEN DEVELOPMENT**

Please note that for this inaugural attempt at the garden, we used 13 bales of straw. The number of bales you have will alter the amounts of fertilizing and water you will need.

### **STEP ONE: BALE PLACEMENT**

It is preferable to have the cut side of the bale facing up. The open stem ends allow easier penetration of the granular fertilizer and the water is better able to carry the fertilizer into the bales that way.

### **STEP TWO: WATERING**

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

- Use a hose-end sprayer to help push the fertilizer into the bales.
- Soaker hoses should go on before planting
- Use heavy wire to 'peg' the hose into place; the pointed ends of wire coat hangers work well

### **STEP THREE: APPLYING BLOODMEAL FERTILIZER:**

Bloodmeal is the main fertilizer used in the conditioning of your straw bale garden. We have included a chart with a schedule for watering and fertilizing. More information on Bloodmeal is included with this information sheet.

### **STRAW BALE GARDEN DEVELOPMENT CALENDAR** **Centennial Botanical Conservatory 2015**

	MON	TUES	WED	THURS	FRI	SAT	SUN
Wk 1					22 water	23 water	24 BM 3 cups
Wk 2	25 water	26 BM 3 cups	27 water	28 BM cups	29 water	30 BM 1.5 cups	31 water
Wk 3	1 BM 1.5	2 BM 1.5	3 BM 1.5	4 water	5 FINAL FERT.	6 water	7 Rain/Water
Wk 4	8 Rain	9 water	10 Internal temp 90-92 F	11 water	12 water	13	14 PLANTING

### At-a-glance Conditioning summary chart

\*All volumes and quantities are per bale

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 wash in fertilizer
Day 4	Skip	Skip	Water to saturation
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

### STEP FOUR: FINAL FERTILIZER APPLICATION

A final application of fertilizer was applied to the bales – we used 15-15-15 slow release fertilizer – the book suggests 10-10-10. you can use 14-14-14 or any products where the numbers are equal value. Remember NPK – Nitrogen – phosphate - potassium (K). Watering continued when we didn't have rain.

Take internal temperature of bales – should be approx. 94 degrees F. not to exceeding 102 F.

### STEP FIVE: PLANTING

Make a planting hole using trowel. Put in a small amount of compost before putting in plant. Add a bit of compost to ensure roots are covered up. You can plant any vegetable you would like. ***Do not plant corn as will get too high. Make sure you will be able to construct trellis/pole/line system to bales where you have planted beans or peas. We will be putting cukes/zucchini/squash plants on the ends of the bales to allow them to tumble downward.***

### BLOODMEAL INFORMATION:

This fertilizer has a typical NPK analysis is 12-0-0.

This meal is a slaughterhouse by-product; it is high in nitrogen as well as many micronutrients. It is processed into a fine dry powder, making it easily water soluble and one of the fastest acting organic fertilizers available.

The powder form can be mixed with water to make a liquid fertilizer or used dry, and mixed into the soil, along with bone meal and other animal by-products. It is permitted in certified organic production as a soil amendment.

We use blood meal because it is a fast-acting source of nitrogen and will leach into the bales quickly. It will accelerate the decomposition of the bales and remain available to the plants as they grow in the bales. Nitrogen is one of the three macro-nutrients used by plants (nitrogen, phosphorus and potassium). Of the three nutrients, nitrogen is the one that growing plants need the most.

Care needs to be taken when applying blood meal as its high nitrogen content can burn young plants and seedlings. This is partly why we allow several weeks for the bales to condition.

Other Applications for Bloodmeal in your garden.....

- Blood meal is an excellent addition to the compost heap where there is a shortage of green matter to supply the nitrogen necessary for good decomposition.
- Because it is a quick release nutrient source, blood meal is not a good candidate for a long term fertilizer program in the fall; most of it would leach away before plants could access its nitrogen value in the spring.

Resource Information:

Straw Bale Gardens: The Breakthrough Method for Growing Vegetables Anywhere, Earlier and with no weeding. Joel Karsten 2013 Cool Springs Press (Joel lives in Minnesota so we can be quite confident these techniques work in the North)