Straw Bale Gardening
(and Rainwater)

Cado Daily, UA Cooperative Extension Water Wise Program

2012
The garden goes IN the bales, not AROUND them
Why?

Poor soil
Bermuda grass infestation
Higher beds
Creaky bones and squeaky joints!
Where?

Accessible
East-west axis
Visual
Integrated into yard
Rainwater use
Who?

Who will be doing the gardening?
Any special considerations?
Make sure to get the right materials

Bales of straw
Edging
(corrugated metal or other similar material)
Posts
Misc.
Bales – the most important part

Straw is yellow - YES
hay is green
Do not get Bermuda grass hay!!!

OH NO!!! Bermuda grass hay!!!
Straw Bales

(about $7.50/bale, weight about 80#)

Oat

Wheat

NOT BARLEY
Hay Bales

Alfalfa (about $25/bale)
Is it worth it for the nitrogen?

Nope!
Building the straw bale garden
Choose a site with 6 hours of sun
Place on East- West axis if possible (not as hot on east and west ends)
Size the garden

- “Three string” straw bales are approximately 4 feet long, 2 feet high and 18” wide
- The gardener wants the garden 12 feet long, 4 feet wide and 38” tall = 48 sqft
- Therefore the garden will be made of 2 layers of 6 bales.
Ideally, the cut part of the bale is facing up (this one is not)
Measure and mark the area
Prepare and level the site
Done! And there is the straw!
Plastic if Bermuda grass
Lay down the bales
Done!
Put on the sides (recycled roof metal)
A note about using metal roofing

- Use unrusted metal
- If must use metal with rust spots, paint with Rust-Oleum and then paint over with rubberized roof paint (Elastomeric is one trade name)
- Can paint inside of metal with the rubberized paint, rust or not, to help it last longer
Cutting metal

- Metal roofing can be cut with a power saw with a blade for cutting metal.
- Don’t forget tool and person safety when working with any kind of tools! (Glasses, gloves, keep tools out of working area, etc)
Stakes
Staking

- Use stakes that will penetrate ground deep enough to hold sides of garden (approx. 1 foot)
- Weight will push garden sides out as bales disintegrate
- 4 foot utility posts (just like short fence posts) with a metal plate at the bottom are good (approximately $3.50 Home Depot)
Lay out stakes and sides
Place stakes equidistant
Pound in stakes with a sledgehammer getting them as close to the sides as possible
Level sides

A line level

Dig out under the sides if need to lower them
Wire corner edges and stakes together
Use galvanized wire – not tie wire
Wire sides and stakes across bales
Close to done, the gardener is happy!
Add metal edging
Presto!
Complete garden

- Fill in spaces with loose straw
- If needed, get soil mix (3-way is nice: 62% “topsoil”, 30% compost and 8% manure. This mix is from Cochise Stone for $36/180 sqft)
- Bales can be planted in directly, or in soil placed on top.
- Leave 2-3 inches from the top of the garden to the top of the sides for mulch
- As the bales disintegrate, more soil should be added
Adding soil
Planting

• Follow instructions on handout
  • Wet bales for a few days
  • Sprinkle with ammonium phosphate to stimulate root growth
  • Cut a hole in the straw with a knife and plant, or plant in soil covering top of bales
One year after building a straw bale garden
First year tomatoes!
Soaker hose
Or just plant in one bale
You can put bales in a container. Make sure it can drain, and leave drain open. Add soil as bale disintegrates.
Rainwater for the garden

\( \frac{1}{2} \) gallon (or .60 gal)/sqft is needed to soak 1 foot deep

so,

60 gallons is needed for each 100 sqft of planted area each watering
Gravity fed garden
Watering trough (165 gal)
550 gallon tank
Corrugated Metal Pipe
Pumped for drip irrigation
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