Straw Bale Gardening

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Why garden in straw bales?

- Poor soil
- No space for a garden in full sun site
- No containers or soil to buy – just a cheap source of straw bales
- Accessible
  - No kneeling
  - Can work sitting down
University research-based...?

- Extension Resources
  - Washington State University
  - University of West Virginia

- “Straw Bale Gardening: A complete guide to growing in bales without soil or weeds” by Joel Karsten
Steps

- Laying out the bales
- Conditioning the bales
- Planting the bales
- Maintenance
- Harvesting
- End of Season
Tips for Laying out the Bales

• Mostly level
• Configuration
• Strings exposed
• Cut side up
• End posts
• Drip irrigation
Conditioning

- 11 days
  - 1, 2, 3 – water bales thoroughly
  - 4, 5, 6 – ½ cup urea per bale and water-in thoroughly
  - 7, 8, 9 – ¼ cup urea per bale and water-in thoroughly
  - 10, 11 – water thoroughly
  - Check soil temperature – it should be only slightly warm
  - Plant
Planting

• Seed
  • Large seeds and for individual plants (cucurbits, legumes, beets and chard, kale, kohlrabi, etc.)
    • Remove a chunk of straw and fill the hole with potting soil
  • Small seeds or to plant in rows
    • Put a couple inches of potting soil on top of the bale(s). Make sure it’s level
    • Water carefully so it doesn’t wash away
      • Or cut the bottom out of a plastic flat, pin it down onto top of bale, fill with soil and plant
Planting

- Transplants
  - Remove some straw to make a hole large enough for the root ball.
  - Plant seedlings as you would in a bed at the proper/final spacing.
Crops with Special Needs

- Root crops – carrots, beets, turnips, parsnips, onions
  - Fine from seed or sets
- Potatoes
  - Easier in second year bales.
- Corn
  - Top heavy
- Herbs and flowers
  - Plant into sides of bales where no crop will be hanging over
Maintenance

- Watering – drip/soaker hose
- Fertilizing – as for ground beds
- Support – end posts provide uprights to run wire or string to support vining crops or tomatoes (using the Florida weave).
Problems...?

• Pests
  • SLUGS!!! Use iron phosphate applied to all the bales before the slugs get bad.
  • Sanitation to minimize diseases.

• Minor irritations
  • Mushrooms – slimey, sporey, ukey! Just means breakdown is occurring.
  • Sprouting wheat, etc. – just weedy looking.
End of Season

- Sanitation – remove infected/ infested plant debris

- Reuse next year – or not

- Add to compost or use as mulch or as soil amendment