Gathering Summary: Container and Straw Bale Gardening by Mary & James Laud, March 20, 2013



Vegetables in Straw Bale Garden

Summary by Catherine Haug;

(Photo, left, from Wikipedia (1))

Just prior to our event, there was a HUGE rainstorm all across the valley. Our presenters braved the weather and gave a great presentation, with several examples of small, artistic container gardens that can sit on a table, bench or deck. Many were augmented with dried plant items to make them interesting.

They had intended to bring some strawbale garden examples, but were unable to do so because the bales

were too saturated from the storm. Instead, they set up a photo board with many photos of their strawbale garden through its various stages of progress, and also photos of their outdoor wood-fired pizza oven.

There were no handouts.

Bag Gardening

They demonstrated two different methods using two bags of Organic gardening mix, but you can make your own soil medium and reuse any bags such as pet food bags or used soil/ compost/manure bags. (Sketches, below right, by C. Haug)

- The first is a flat bag with an opening cut into the top to fill with soil medium and then to accommodate shallow-rooted greens.
- The second involves bending the bag in the middle so that it will stand up; an opening is cut at the bend for filling each half with soil medium, and for planting root veggies like carrots. The bag can stand as is or be placed in a larger decorative container.

Key points:

- A bag is good for 3 years. You can use commercial bags of Organic gardening mix, or make your own soil mix and put in used pet food bags, for example.
- Bag gardening is great if you have a slug problem, because they cannot crawl up the bag to get at your plants. Another slug deterrent is special copper tape made for slug deterrent; place around edge of garden bed.
- If bags are put on an outdoor table, cover the table first to protect it.

Comment: Sally J. mentioned there are seeds especially bred for container gardening.

Q: How often do you replant using the same bag, or stagger planting,?

A: For example: use half a bag for lettuce, then a few weeks later, seed the other half with lettuce.

Strawbale Gardening

This gardening method was originally used for perennials. It is a soil-less medium good for 2 - 3 years, and then you can use the composted straw to augment soil.

Comment: Linda C. mentioned that you should use straw that has been grown Organically, without herbicides. An increasingly common herbicide sprayed in fields contains aminopyralid. Manure from animals fed non-Organic feed, and non-Organic strawbales would likely be contaminated with this poison. It kills not only weeds but also some herbs and garden vegetables including (photo showing effect of aminopyralid on vegetables, by John Mason, right, from The Guardian (2)):

- legumes (pea, bean, etc.),
- nightshades (potato, tomato, peppers, etc.),
- *umbelliferae* (carrots, parsnips, celery, fennel, dill, cumin, cilantro/coriander, parsley, etc.),
- amaranthaceae (spinach, chard, beetroot, quinoa, amaranth, etc.)



The effect of aminopyralid on vegetables.

- *compositae* (dandelion, tarragon, chamomile, sunflower, lettuce, chicory, etc.); and
- ornamental flowers including chrysanthemum, dahlias and some roses.

This problem greatly affected Jean H.'s garden in 2009, when it was mistakenly mixed in with a common broadleaf weed spray applied to her lawn and garden. Reference the following EssentiaList articles about the aminopyralid problem. You may want to use the test in the second file to determine if your straw bales are contaminated with this poison. Thanks for Don Bates for the photos that illustrate the test.

- ▶ <u>Alert: Poisoned Soil, Compost, Manure</u> (6)
- ▶ Test for hidden poisons in compost, manure, wheat straw (7)

Method

You can start with an old bale that has been weathered, or start fresh. Leave the twine in place. NOTE: see comment above, about aminopyralid.

- 1. Sprinkle with water for 3 days to soak the bale
- 2.Fertilize. If organic, use fresh chicken poop, then manure followed by blood meal, then more chicken poop. If non-organic, use urea or an ammonia product used on lawns. When it gets hot (100° 110° F; go by feel), it is ready for planting.
- 3.To plant seed: add 2 4 " compost or soil, then put seeds on top.

 To plant starter plants, make a hole and fill with a handful compost, then add plant. Pull straw over to close it up.
- 4. Water as you would a regular garden. Use overhead sprinklers rather than drip-lines if you have slug problems.

Manure or compost teas

(See comment above, about aminopyralid-contaminated manure).

Recipes depend on what you water. [Cat's note: I'm not sure I got all this...] In their tomato house, the mix the tea in 55 gallon drum, using alfalfa meal or a big bag of horse pellets, about 3 pound. About 1 gallon compost and chicken manure (aged or fresh). Add 1 cup molasses (blackstrap is best; it helps plant absorb nutrients.

Also add about ½ cup humic acid; to help blooms. Add water and 1 - 2 cups epsom salts.

Q: Comfrey tea?

A: Mix in a 15 gallon container. Use 2 - 3 gallon comfrey leaves; they also add nettle and kelp. Let it sit 1 - 2 weeks, then dilute: ¹/₄ tea, ³/₄ water to use as a foliage spray.

Q: Any other teas?

A: Cat mentioned that Paul Renner uses bokashi tea in his large greenhouse. Shirleen W. noted it adds effective microorganisms. It is made from sawdust or bran, molasses and food waste. For more about this tea, see:

- Extreme Bokashi: Make your own inoculant (3)
- YouTube video (6 minutes): How to Make Bokashi (4)
- Wikipedia: Bokashi Composting (5)

See also Gathering Summary: Peaceful Gardens (8).

Advantages to strawbale

- Their soil is bad, and their strawbale garden is over their septic drain field; the bales raise the growing medium above the field.
- It is cheaper than building/maintaining a raised bed.
- When spent, the bales are excellent compost
- Can use on top of still frozen ground.

Growing root crops in strawbale

• Arrange bales in two rows about 12 - 18" apart, with a bale at each end. Put some loose straw or recycled paper between the rows, leaving room for 6 - 10" soil on top. Then sow the root crops such as beets, carrots, onions, garlic, turnips, and parsnips in the soil.

Q: Do you add worms?

A: No, strawbales are a worm magnate; they find their own way to the bales.

Q: Where do you get the bales?

A: Look in the Mountain Trader. They got their bales from mark Brewer. Be sure to ask the source if they have used herbicides containing aminopyralid on their fields, as it is a poison to many garden plants (see comment above).

Q: What do you do with all the produce?

A: The donate excess in the name of their deceased son.



Rooftop Garden

(Photo, left, of rooftop garden in Norway, by C. Haug)

They grow mostly flowers on a rooftop, but sedums also do well. Their soil is mostly pearlite with sand.

A garden on the roof mitigates inside temperatures (alternative to air conditioning).

Small Container Gardening

Each of Mary's small "pots" are closed-bottom containers (no drainage). They are lined with two ziplock bags, one inside the other. The inner bag has a hole cut in the bottom for drainage into the outer bag, and to draw moisture from the outer bag.

Outdoor Pizza Oven

In addition to photos of their gardening projects, James displayed photos of their outdoor pizza oven, and then told how they came to build one. They were invited to dinner with friends who had just build a pizza oven. When James and Mary got home, they built one for \$80.

How they made one

- 1. Use a big flat rock to use as a platform; or crushed recycled glass.
- 2. Then a layer of firebrick.
- 3. Build a dome shape with sand, the desired size of the oven interior.
- 4. Cover the dome with wet newspaper
- 5. Spread fire clay or cob, 1" thick, on top.
- 6. Then fire clay with straw on top of that.
- 7. Add insulating layer with perlite.
- 8. Finish with cement/lime mix.
- 9. When all is set, scoop out the sand to expose the interior of the dome.
- 10. Block opening with a block of wood.

How to use one

- 1. Place kindling under the dome to start the fire, then add wood. It takes about 1 ½ hours to heat up to 900° F. You don't need to use a thermometer; you'll know it has reached temperature when the black on top (inside) of the dome is gone.
- 2. Push the coals to the side and add your pizza, bread, or whatever you wish to bake. See also <u>The EssentiaList: Baking Bread with a Wood Stove</u> (9).
- 3. Cat noted that the next day the oven will be the right temperature for dehydrating food.

References

- 1. en.wikipedia.org/wiki/Straw_bale_gardening
- 2. www.greatstems.com/images/veggiefamilies.html
- 3. www.wildlifegardeners.org/forum/fertilizing-soil-amendments/1292-extreme-bokashi-make-your-own-innoculant.html
- 4. www.youtube.com/watch?v=96fSXccQx9Q
- 5. en.wikipedia.org/wiki/Bokashi_composting

On the EssentiaList

- 6. essentialstuff.org/index.php/2009/09/16/Cat/alert-poisoned-soil-compost-manure
- 7. <u>essentialstuff.org/index.php/2011/07/12/Cat/test-for-hidden-poisons-in-compost-manure-wheat-straw</u>
- 8. <u>essentialstuff.org/index.php/2010/03/27/Cat/gathering-summary-peaceful-gardens-march-24-2010</u>
- 9. essentialstuff.org/index.php/2011/02/22/Cat/baking-bread-with-a-wood-stove