

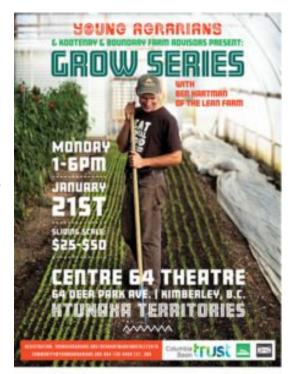
Ben Hartman: How to Earn a Comfortable Living with Less Waste and Work January 21, 2019, Kimberley, BC

Summary

Ben Hartman, author of *The Lean Farm* and *The Lean Farm Guide to Growing Vegetables*, a gave a compelling presentation on the Japanese Lean system as it applies to farming, to prevent burnout and increase profits with less waste and work.

The Lean system is well known in industries such as manufacturing and Ben explained how similar benefits can be applied to improving efficiency for farms of all sizes and types, and put to work right away. This included examples of lean farming techniques used at his own operation at Clay Bottom Farm, in northern Indiana, where he and his wife, Rachel Hershberger earn a comfortable living from half an acre of cultivated land and work less than 35 hours per week.

Clay Bottom Farm is more profitable than ever, but it's also smaller — just one acre – down from the 3 acres it started as. Thirty types of fruit and veggies are grown, the varieties CSA and restaurant customers like best, and planting and harvesting schedules are staggered to maximize crop yield.



Excess tools and equipment have been eliminated and wasted produce is only one fifth of what it was when the farm started.

"The Lean system is a coin with two sides. One is cutting waste out of the operation. The other is value — learning what your customers want and delivering on that," Ben says."

Key points

Waste is defined as anything that is not directly adding value (money) to your farm operation. This can include wasted time, wasted product or inefficiencies.

Ben stressed the importance of reorganizing and de-cluttering the farm work space. This includes getting rid of unnecessary tools and having mobile work stations for the tools that are used the most.

Six areas to minimize waste and gain efficiencies:

- 1. Production (aim for no surplus after sales and distribution. Sell your product before you grow it)
- Processing (find efficiencies such as your wash station)
- 3. Transportation (make sure every trip makes as much money as possible)
- Processing (how much processing and product preparation do you customers really require/demand?)
- 5. Inventory (do not stock pile food or farm products on your farm)
- 6. Motion waste (how many times do you need to rototill the plot? What's the most efficient way?)



Other key points about profitable farming included:

- Weed control: aim for your farm to be weed free by June 1 (see photo below)
- Customer defines value: listen to your customers and observe shoppers.
- Minimize product diversification: figure out what makes the most money and focus on those crops. For Ben, this includes cut greens, spinach and heirloom tomatoes.
- Farm design: all plots are created equal! Make all your plots and rows the same size so that all equipment and irrigation is interchangeable (for example: irrigation hoses, reemay cover, plastic tarps).

Resources:

- Clay Bottom Farm Website: www.claybottomfarm.com
- Online courses by Ben: www.theleanfarmschool.com

Books by Ben Hartman:

- The Lean Farm
- The Lean Farm Guide to Growing Vegetables

Farming magazines with articles written by Ben:

- Mother Earth News (motherearthnews.com)
- Hobby Farms (hobbyfarms.com)

Ben Hartman No Weed Farming Think of a carpenter with a grab bag of tools 1. STALE BEDS: Prepare beds (at least) 3 weeks ahead, then kill the first crop of weed Fallow cultivation with shallow tillers or harrows (most time efficient) black plastic tarps clear plastic tarps flame weeders 2. Transplant everything you can 3. Keep the farm at full capacity and CROWDED 4. Minimize deep tillage (brings weed up to surface) 5. The 2-month rule: if it's in the ground 2 months or more, it gets mulch plastic, straw, or landscaping fabric tomatoes, peppers, eggplant, full-size kale, zukes, cukes