Vertical Farming and Entrepreneurship in Food and Urban Agriculture

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1:10-2:10 PM
Social enterprise dedicated to increasing the capacity for food production in the city by giving residents access to the tools, education and resources needed to grow more efficiently, and spur a hyperlocal food economy.

School Garden Management and Classes, Community Garden and Urban Farm Site Management, CSA, Restaurant Sales and a Rooftop Retail Garden Center

By the numbers for 2017:

- 20+ Sites, 1+ Acre of total space, Grew and Distribute 11,200 lbs. of produce
- 25 Member CSA, and 4 restaurants
NWF EcoLeaders Grant -2013- 
JO Wilson Elementary School
International Projects

- Panchgini, India - 2 acre trial plot (2015)
  - Commercial Strawberry Farm
    - 96% reduced water use
    - Eliminated spraying of Copper Sulfate
    - 4X yield from same footprint, ½ labor

  - Vertical School Garden - Fundacion Marina Orth
  - Workshop Series for farmers, urban residents and students - Botanical Garden of Medellin
School and Non-Profit Farms
Rooftop Farming @ Nationals Park - Crate Farming

- Filled with blend of lightweight, rooftop growing media
- Irrigated by micro-drip system with water soluble nutrient supplement as needed
- Weight load is a primary concern
H St. Farms

- Garden Center in NE, DC
- Crop Production, Event Space, Garden Classes, Wholesale & Retail Sales, Showroom for Design/Build
- 3 Rooftop Greenhouses - 1 dedicated to various vertical growing methods
Crop Selection - Find your niche!

- Strawberries/ Pineberries
- Herbs: Speciality Mint/Basil, etc.
- Heirloom and specialty tomatoes
- Hot peppers
- Bell Peppers
- Ground Cherries
- Rosemary
- Lettuce
- Kale
- Coleus (Ornamental)

- Nasturtiums, marigolds and other edible flowers
- Green Onions/Chives
- Cilantro
- Thyme
- Sage
- Oregano
- Spinach
- Eggplant
- Collard
- Ethnic crops
- Cucumbers
Zip-grow Towers and Farm Walls

- Intended for controlled environment or wall-mounted use
- Recirculating hydroponic system
- Require wall or rack for mounting
- <1 sq ft. footprint/tower
- Great for herbs and leafy greens
- Growing media made from recycled plastic- reusable (still require plugs)
- Can be used for live-market sales
Tower Garden

- Suitable for indoor or outdoor use
- Recirculating, hydroponic growing system
- 5 sq ft. footprint of tower
- Up to 11 tiers high = 44 plants/tower
- Made from hardened polyurethane
- Requires rockwool for starter plants, but other media
- Water acts as ballast for system: free-standing
- Frequently used by restaurants for on-site gardens
Why Set Up Farms for Education?

- Interactive learning with futuristic technology
- Year-round laboratory
- Multi-level training (all ages/ community involvement)
- Therapeutic
- Foster environmental stewardship
- Agri-business training opportunity/ Fundraising
- Long term investment
CSA and Finished Food Products
Questions?

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