

# Extending the Urban Growing Season





# How did the Urban Agriculture Program Start?

- Americorp OSM/Vista position for 3 years was awarded to Jefferson Conservation District in a suburb of Denver, CO



# JCD aligned with Vista Position

- Americorp OSM/Vista mission is to reduce poverty through programs and strategies that reduce hunger, create jobs and increase access to fresh locally grown food.





# OSM/VISTA 1<sup>st</sup> Phase

## Accomplishments 2010-2011

- EBT machine-Snap benefits at Farmers Market
- Community needs assessment
- Changes to Zoning code to make urban agriculture easier for farmers





# OSM/VISTA 2<sup>nd</sup> Phase Joint Position with Harvest Mountain Farm (2012- 2013)

- Junior Master Gardener Program Summer Camp
- Harvest Mountain Farm Garden-Building Capacity



# OSM/VISTA 3<sup>rd</sup> Phase (2013-2014)

- Senior Classes at local community center
- Continued JMG program
- Meet with 10-15 local producers, conservation planning
- Trained new full time position for Urban Agriculture





# Urban Agriculture Program 2015

- Conservation Planning
- USDA NRCS EQIP Programs
- Junior Master Gardener Program
- Workshops, Classes, Presentations
- Website, Twitter, Facebook
- Land Link Options
- Networking, Events and Farmer to Farmer meetings
- Healthy Food for Healthy Kids
- Colorado Agriculture Leadership Program



## High Tunnels

Join us for a workshop on using high tunnels for season and profitability extension

Robert Rimol of Rimol Greenhouses will be on hand to discuss product selection, location, and uses of high tunnels

Jim and Christian Toohey will share some of their experiences with high tunnel farming

Thursday November 6<sup>th</sup>, 2014  
1 – 4 pm  
Toohey and Sons Organic Farm  
7849 Ute Hwy, Longmont, CO



RSVP: Joni Burr  
303-776-4034 x108  
[Joni.Burr@co.nacdnet.net](mailto:Joni.Burr@co.nacdnet.net)  
Sponsored by:

 Longmont & Boulder Valley Conservation Districts  
Maintaining Agriculture in a Growing Urban Environment

# High Tunnel Workshops



# Junior Master Gardener



- 3<sup>rd</sup>-5<sup>th</sup> Graders
- Hands on
- Receive Certificate
- On Farm site
- Working with interns from CU Denver
- Community garden, Goat farm, local farm stand

# Jefferson County Farm Tour

# Education: Farm Tour with Experts



This educational tour will visit two urban farms in Jefferson County. We will be outside, so please bring sun protection, appropriate clothing for the weather, and shoes for walking in farm and pasture fields. Lunch and transportation will be provided.

Questions about the tour?

Contact Jennifer Cook

303-659-7004 ext.3

Jennifer.cook@colostate.edu

## Agenda

8:00 - 8:30 am

8:30 - 9:00 am

9:00 - 9:30 am

9:30 - 10:00 am

10:00 - 10:30 am

10:30 - 11:30 pm

11:30 - 1:00 pm

1:00 - 1:30 pm

1:30 - 2:30 pm

2:30 - 3:00 pm

3:00 - 3:30 pm

Registration (coffee) and Introductions  
Travel to Go farm at Brunel property  
Overview of farm and property  
Considerations for Starting a New farm  
Grass ID and Dryland Pasture Management  
Soil Pit and Soils Discussion  
Lunch (provided) and Travel to Jefferson Farm  
Raising Alpacas  
Irrigated Pasture Management  
Manure Composting  
Wrap-up and Evaluations, Travel to Fairgrounds

**Saturday**

**Oct. 18, 2014**

8:00 AM to 3:30 PM

CSU Extension Meeting Rm ECMR  
Jefferson County Fairgrounds  
15200 W. 6<sup>th</sup> Avenue, Golden, CO 80401

For more info and to register go to  
[www.ext.colostate.edu/sam/farm-tour.html](http://www.ext.colostate.edu/sam/farm-tour.html)

\$15 per person, \$20 per couple  
Register by Oct. 10 (Max 40 people)



**JEFFERSON**  
CONSERVATION DISTRICT



Colorado State University Extension and USDA-NRCS cooperating. Programs are available to all without discrimination. If you need special accommodation(s) to participate in the event listed, please contact Jennifer Cook at 303-659-7004 ext.3 or Jennifer.cook@colostate.edu. Your request must be submitted at least 5 days in advance of event.



# What type of Urban Agriculture is in Jefferson County?

- 16 Community Supported Agriculture
- 3 Restaurant Supported Agriculture
- 3 Backyard Farm Model
- 2-3 Food Hub models being developed
- 3 Pumpkin Patch
- 1 Hops
- 5 Cattle, 1 Buffalo
- 2 Alpacas, 3 Goat, 1 Yak
- 2 Herbs, Microgreens
- 3 Aquaponics/hydroponics
- Chicken, Honey, Soil, Eggs
- 1 Organic Orchard
- Vineyards





# Aquaponics Year Round Harvest





# Cut Flower Production- Extend Season Plant Selection





# Dehydrator- Dried Flowers





# Popular Winter Plants

- Sorrel
- Corn salad
- Lettuce
- Spinach
- Parsley
- Winter Onions
- Kale
- Endive
- Chervil
- Leeks
- Swiss Chard/ Mustard G.
- Rosemary/Tarragon
- Scallions
- Cress
- Radish
- Arugula
- Tatsoi
- Raddichio
- Carrot
- Kohlrabi
- Chicory
- Broccoli raab
- Parsnip
- Celery

# Develop Charts for local climate

Plant Species	Soil Temp	Start Date	Days to Harvest	Notes
Beets	40-80		60	Gets Woody quickly
Broccoli	40-80		65	Second Harvest
Cabbage	40-80		85	Single Harvest
Carrots	40-90		70	Bi Annual
Cauliflower	40-90		65	Blanch
Kohlrabi	40-90		50	Single Harvest
Lettuce	35-70		60	Watch bolting



# Succession Planting





# Companion Chart

## Companion Planting

OneCreativeMommy.com

This is just a concept,  
not set in stone

These associations  
have just been  
observed by gardeners

Don't let it overwhelm  
you, but use as a  
helpful guide

	Basil	Beans	Broccoli	Carrots	Cauliflower	Chives	Cilantro	Corn	Cucumbers	Dill	Garlic	Leeks	Lettuce	Marigold	Melon	Nasturtium	Onion	Oregano	Parsley	Peas	Peppers	Rosemary	Sage	Spinach	Squash	Strawberries	Sunflowers	Swiss Chard	Thyme	Tomatoes
Basil																														
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Nasturtium																														
Onion																														
Oregano																														
Parsley																														
Peas																														
Peppers																														
Rosemary																														
Sage																														
Spinach																														
Squash																														
Strawberry																														
Sunflower																														
Swiss Chard																														
Thyme																														
Tomatoes																														



Plants grow well together



Don't plant together!



Beneficial to garden in general



Combination helps bug control



Carrots will have good flavor, but stunted roots



# Value Added Products

- Heirlooms
- Storage Life
- Canning
- Certified Kitchen requirements
- Cottage Food Laws
- Depends on state and local rules
- Food Safety Concerns







# High Tunnel Harvesting in Nov



# Double Blanketing





# Use Straw on outside in Winter





# High Tunnel Compost Geo Thermal





# Small Hoop House or Low Tunnel





# Keeps plants 20 F warmer





# Recycled Materials



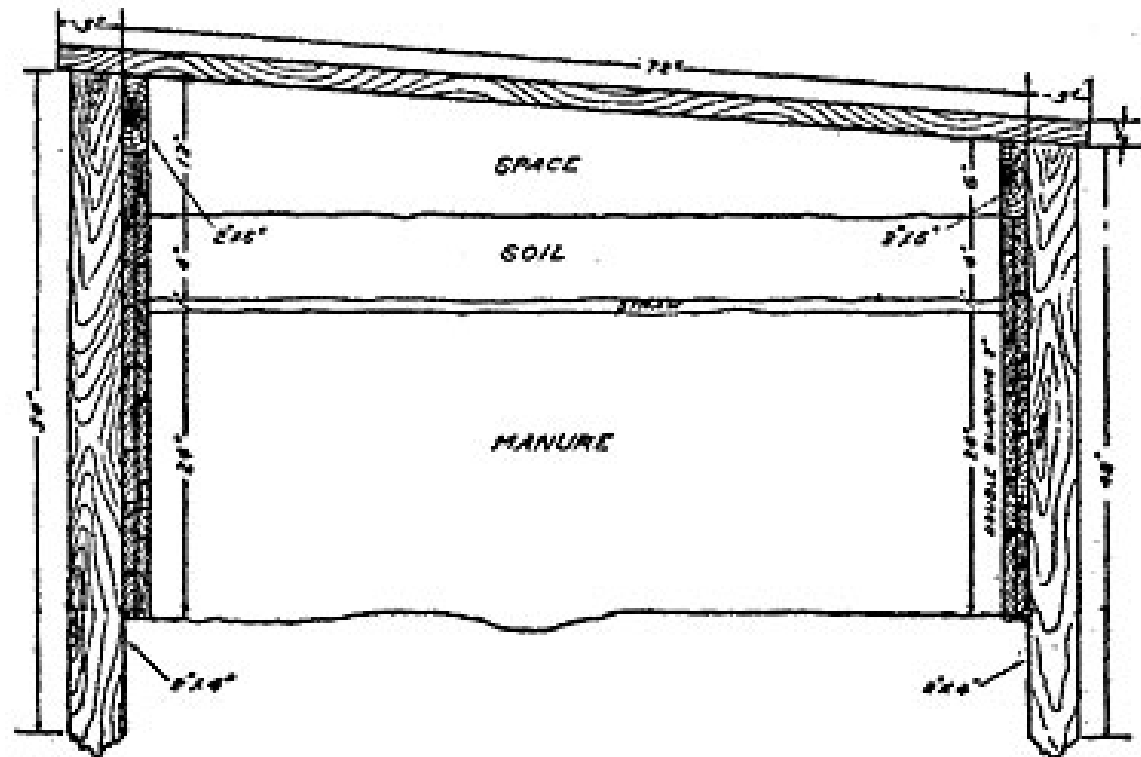
# Hardening Off with Cold Frame

- Protects vegetables from unexpected frost, wind, snow
- Hardens off so less plant shock in spring
- Can protect plants in fall too!



# Hot Beds

- Use Manure below frost level
- Add soil on top
- Space for plants to grow
- Cold frame structure



Section of a hotbed frame with details of measurements. Reproduced from a Cornell bulletin



# Wall o' Water





# Milk Jug Wall O' Water









# Frost Cloth



05/02/2014



# Row Cover



# Old Techniques





# New Techniques



- Old Suitcase
- Cold Frame
- Seed Starter





# Diversify Markets





# Meat CSA Shares





Get  
creative  
with new  
markets....

Alpacas  
vicunas in  
City Limits



04/29/2014



# Contact Information

- Maria Bumgarner
  - Jefferson Conservation District
  - Email: [Maria.Bumgarner@co.nacdnet.net](mailto:Maria.Bumgarner@co.nacdnet.net)
  - Phone number 720-544-2869
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- Thank you!!!