

# Innovative Small Farmers Outreach Program

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Un-Learn  
Learn  
Re-Learn

In other words:  
Lower Your Small Farm Inputs by  
using Holistic Farm Planning

# Definition:

Holistic Management is a whole farm planning system that helps farmers, ranchers and land stewards better manage agricultural resources in order to reap sustainable environmental, economic , and social benefits.


# 4 Principles of Holistic Farming

1. Nature is itself holistic.

It gives us a mutualistic relationship between people, animals and the land.

Example: the circle of life, each depending upon the other



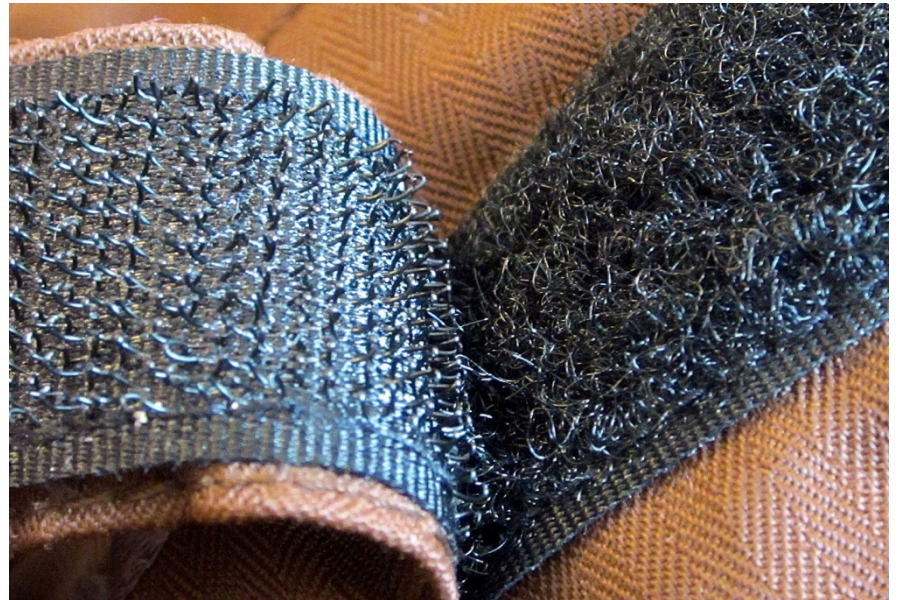
A flock of approximately ten geese is shown in flight against a clear, light blue sky. The geese are arranged in a loose V-formation, with some leading and others following. Their wings are spread, and they appear to be in the middle of a long flight. The geese have greyish-brown feathers on their wings and bodies, with lighter feathers on their necks and heads.

2. Our agricultural planning must be flexible enough to adapt to nature's complexity.

Geese know when to migrate

### 3. We must manage the land in a way that mimics nature.

Humans use biomimicry to solve problems.  
Burdock burrs = velcro



Example: hibernation-  
birth of young  
coordinates with times  
of plentiful food



# 4. Time & timing are important in the use of land and the resting of the land, as nature would.

Seeds sprout only when certain conditions happen. We know now that seeds can detect or “see” light even if they are two inches deep in the soil.



**“We should move from efficiency , where there is no room left, to redundancy, where we are ready for anything and can bounce back!”**

**Laura Lengnick,**

**Resilient Agriculture**



# How can we use the holistic principles to make our farms and ranches better?

What are we doing now? We buy expensive feed to make our cattle grow, while they stand in their own manure at a bunk, pushing and shoving to get the feed.



How could we change? We could learn about adaptive grazing and allow the cattle to harvest their own food, have fewer flies and better manure distribution.

**ARE YOU USING:**  
**Adaptive Management**  
**Diversity**  
**Robust Solutions**  
**Place-based resources**

How mentally **FLEXIBLE** are you  
in your management practices?

**UnLearn, Learn, ReLearn**

Are you spending  
at least  
**4 hours per week,**  
in your office,  
thinking about  
your business?

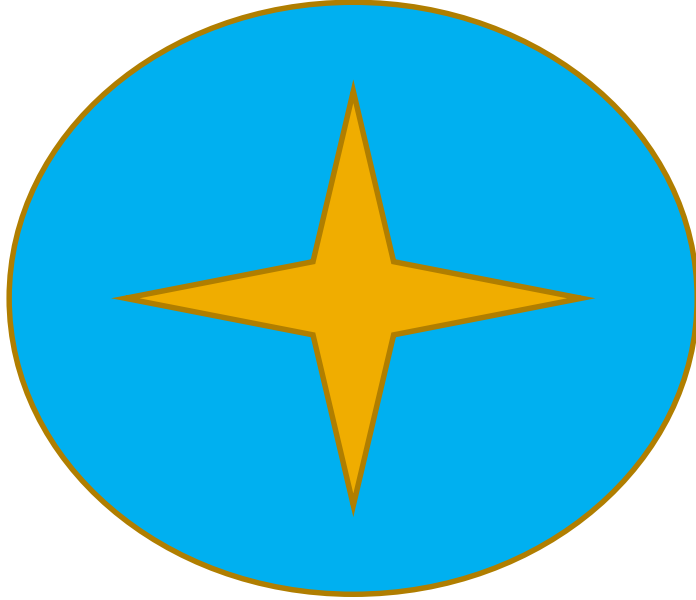
Dave Pratt-Ranching for  
Profit



It is worth \$100/hour to your  
business if you improve your  
**business plan, marketing plan**  
and **production plan.**

**MANAGE**

**MEASURE**



**MONITOR**

**MARKET**

# SELECTING VARIETIES

- **Performance Based**
  - **Native or Landrace**-adapted to the region
  - **Robust**-tolerate wide range of extremes
  - **Require low to no inputs to thrive and grow**
  - **USE IPM, reduce pesticides**-for every “bad bug” there are 17 good bugs: predators and pollinators
  - **Diversity cultivates resilience**-farmscaping gives good bugs a place to live, use cover crop cocktails for continuous living covers
  - **Place-based resources**



# Place-based Resources

**\*improve water management with healthy soil**

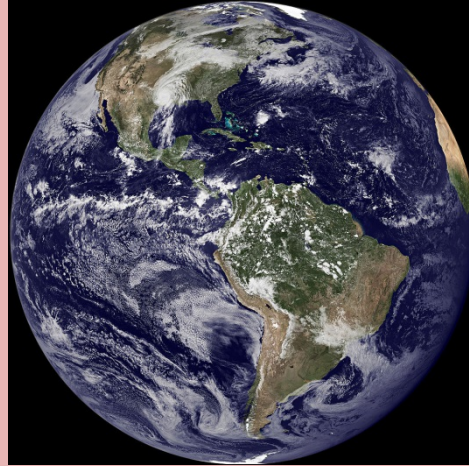
**\*native pastures are naturally heat tolerant**

**\*Use plants with disease resistance, climate tolerance**

**\*planned/adaptive grazing on high quality soil creates robust grassland, animals are healthy**

Example : blueberries need a soil pH of 4.5 to 5.5, if your soil averages 7.2 pH....many inputs will be required for the survival of the plants EVERY YEAR!! Couldn't you find another small fruit which will thrive in your soil? Lower input costs = more profit!

If what you are doing is good for:



**You have: Sustainability!**  
**Holistic planning**  
**creates sustainability!**

# Holistic Planning



Will lower input costs on your farm!



Its time to set goals!

Where are the bottlenecks on your farm?

Where are costs of inputs highest?

Do you have a business plan, production plan, marketing plan?

Who is on your executive team?

Do you know how to build resilience?

Are you sustainable?

## RESOURCES

- Savory Institute [www.savory.global](http://www.savory.global)
- How to fight desertification and reverse climate change-Allan Savory
- Laura Lengneck-Resilient Agriculture
- Biomimicry in Action-Janine Benyus on Ted Talks
- Managing Cover Crops Profitably- SARE handbook #9
- Ray Archuleta-NRCS
- <https://extension.usu.edu/behavior/htm/learning-tools> Dr. Fred Provenza
- Ranching for Profit, Dave Pratt, Ranch Management Consultants



QUESTIONS?

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# Profit from Protein

National AgrAbility Training Workshop

March 21, 2018

Portland ME

David Middleton

Lincoln University of Missouri

Innovative Small Farmers Outreach Program

**Middletons**

All Natural Meats



# Are You A Price Taker?

- Do you sell your livestock at an auction or buying station and hope for the best?



# Are You A Price Maker?

Are you setting the price to insure your costs are covered and a profit is made?



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# Direct Marketing May Be Your Answer to Sustainability





## Where to direct market

- Farmers Markets
- One on One
- Craigs list
- Local newspapers
- Regional shoppers
- Road side Signs
- Feed Stores
- Church
- Neighbors



# CASH FLOW

# BEEF

## Beef

500 lb. calf @\$1.40/lb	\$ 700
Pasture Usage	\$ 198
Processing	\$ 425
<b>Total Cost</b>	<b>\$1323</b>
540 lb. carcass @ \$4.59	\$ 2478
Profit per head	\$ 1155

# CASH FLOW

# PORK

Pork

70lb pig @ \$1.00

\$ 70

Feed .15/lb 3.5 FE

\$ 94.50

Processing

\$ 150

Total Cost

\$ 314.50

175 lb carcass @ \$3.49

\$ 610.75

Profit per head

\$ 296.25

# CASH FLOW CHICKEN

## Chicken

•	Chicks \$1.20/1.49	\$ 1.20
•	Death loss	\$ .12
•	Feed	\$ 2.50
•	Processing	\$ 3.50
•	Heat and bedding	\$ .15
•	Total cost	\$ 7.47
•	3.5 lb carcass @ \$3.75/lb	\$ 13.12
•	Profit per bird	\$ 5.65

## QUESTIONS

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# Fruit and Vegetable Production



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COOPERATIVE EXTENSION

Diversification is always something that should be on our mind!



# Change is Inevitable

- Markets Change
- Lifestyles Change
- Tastes Change
- However, people will continue to eat!





# A Growing Economy?

- Roughly 2% of U.S. population is directly involved in food production ( 2.2 Million vs. 326 Million)
- In 2012, local food sales (DTC) accounted for just 7.8% of total food sales in U.S.
- 2008 - \$4.8 Billion/ 2012 - \$6.1 Billion
- Consumers do prefer “local product”



# Vegetables

- Many veggies are growing annually- quick turn around times
- Low start up cost
- High return per square foot (depending on market)



# Vegetables

- Technology currently exists to make growing on a year-round basis “easier”.
- Both fruits and vegetables can be value added to meet market demand i.e. Salsa



# Vegetables

- Vegetables can be used to fill labor or production gaps throughout the growing season.
- Important for whole farm planning
- Important when perennial fruit production enters the business equation.



# Cropping Cycles

Crop	A	M	J	J	A	S	O
Tomato			█	█	█	█	█
Cucumbers		█	█	█	█		
Greens/Salad	█	█	█			█	█

Crop	A	M	J	J	A	S	O
Peaches				█	█		
Blueberries			█	█			
Strawberries		█	█				

# Fruit

- Higher initial up-front cost
- More valuable
- Organic Vs. Conventional
- Labor
- Population Density
- AgroTourism



# Fruit

- New hybrids available make production easier
- Season Extension Technology
- Fruit can be a great way to build clientele
- Weather is a concern



# Season Extension





# Season Extension

- As a vegetable grower:
  - We can produce healthy and tasteful fruits and vegetables throughout the growing season
  - Our purpose today, is discuss simple, low costs external inputs that will allow us to achieve the same results “on the back side of the calendar”



# Season Extension

- Having the correct mindset is essential when using season extension as part of your business plan
- Cold Hardy Cultivars
- Staggered Plantings
- Protected Growing Areas



# Season Extension

- Planting dates are extremely important in the fall
- 10 Hours of sunlight
- November 5- February 5
- SW Missouri- November 20 – January 20
- Many resources are available

# Popular Vegetables that are Cold Tolerant

## • **Leafy Greens:**

- Arugula
- Chard
- Cilantro
- Collards
- Cornsalad
- Cress
- Dandelion
- Endive
- Escarole
- Lettuce
- Mizuna
- Mustard
- Purslane
- Spinach

## **Vegetables:**

- Beet
- Bok Choi
- Broccoli
- Cabbage
- Carrot
- Kale
- Leek
- Onion
- Pak choi
- Pea

## **Flowers:**

- Calendula
- Linaria
- Pansy
- Johnny jump-up

# Popular Vegetables that are Cold Tolerant

- Carrots
  - Carrots actually taste “sweet” when harvested in the winter time
  - Sugars are actually released within the plant to avoid cellular destruction in cold weather



# Popular Vegetables that are Cold Tolerant

- Spinach
  - Wonderful to enjoy on its own, or in a salad mix
  - This crop is a cut-and-come-again plant
  - Will survive a big portion of the winter months (if not all winter)!



# Popular Vegetables that are Cold Tolerant

- Leeks
  - A wonderful crop to spice up the mid-winter blues
  - You can either hill-up dirt on either side of the leek or bury the plant (if transplanted) deeper into the soil



# Popular Vegetables that are Cold Tolerant

- Radish
  - Something crisp to add to the salad
  - Will not put on new growth in freezing temperatures







# Marketing

- Many Avenues are the same as animal proteins:
- Family/Friends
- Farmers Market
- CSA
- Wholesale



# Marketing

- Regardless of your feelings, social media is an important part of your business plan



# Marketing

- Applicable Demographics
  - Ages 18-35
  - 47.5% Household income level less than \$20K
  - 49.5% Some College
    - 22.5% College Graduate
  - Higher % of regular attendees at farmers' market are female

# Marketing

- Family/Friends
  - Everyone Eats
  - What are you currently involved in?
  - Check local grocery stores and markets for pricing
  - Verbal agreements are good but not legally binding



# Marketing

- Farmers' Markets
  - A great way to build your business
  - Does take time and effort
  - It helps to be a people person
  - Do not take your phone!
  - Arrangement
  - Pile it high Theory
  - Branding



# Marketing

- Community Supported Agriculture (CSA)
- This model allows the consumer to “subscribe” to the expected harvest of a farm(s).
- Weekly/Bi-Weekly deliveries



# Marketing

- Wholesale
  - Restaurants
  - Schools
  - Hospitals
  - Grocery Stores





# Marketing

- Wholesale will be lower price per unit
- Food Safety Concerns
- Appropriate scale on farm
- Year Round Production
- Guaranteed sale

# Record Keeping

- <http://www.uky.edu/ccd/tools/budgets/ukcsa/economicanalysis>

# Contact Info

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