

- JANUARY 12, 2021 -

Pasture Management for Limited Resource Farmers



ShireFolk Farm

- PRESENTED BY -

Felicia Bell

NCAT/ATTRA

- HOSTED BY -

FACT

Food Animal Concerns Trust

Introductions



Food Animal Concerns Trust (FACT) is a national nonprofit organization that works to ensure that all food-producing animals are raised in a humane and healthy manner.



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Website: foodanimalconcernstrust.org/farmer

FACT's services to support livestock and poultry farmers include:

- **Conference scholarships - ongoing**
- **Free webinars**
- **Fund-a-Farmer Grants**
- **Humane Farming Mentorship Program**

Our Presenter



Felicia Bell

Agriculture Specialist, NCAT



PASTURE MANAGEMENT FOR LIMITED RESOURCE FARMER

Felicia Bell, Ag Specialist NCAT Gulf States Regional Office



TOPIC FOCUS

- We will be focusing on the lack of knowledge and lack of training of small limited resource farmers on proper management styles for their particular farm. We will discuss that these management decisions not only affect their farm but their community as well as the Earth's sustainability for years to come.



LONG AGO LIVESTOCK TRADITIONS

- Open Continuous grazing utilizing silvopasture
- Statistically U.S. Farmers age is 65
- Farmers were taught open continuous grazing because their land was pristine many years ago. Grass growth was phenomenal with so many varieties so cattle got there nutrients strictly from the land, water, and mineral blocks.



LACK OF EDUCATION

- Most livestock methods and practices are taught privately with astronomical fees for a small producer.
- Most of these classes are not local so travel is a must.
- Some of the land grant institutions have not started their research on these methods even though these practices were utilized at the inception of land grant institutions.
- Some ag professionals have not had enough experience with these methods to share the benefits.
- If so, they usually decide that the farmer cannot afford the upfront cost of starting these methods so they don't share.

LACK OF UNDERSTANDING OF BENEFITS

- Why should I plant pasture mixes and spend that money if I have bahia and bermuda grasses?
- What's the importance of paddocks and the funds to put up more fencing?
- What is the purpose of silvopasture in my pasture management?
- Why do I have to move my animals so often?
- Do I have to limit the use of my pond for watering and put troughs throughout?
- I was told that I have to take my animals off the land if I seed?

CREATING MORE MARKETS

- The mentality is “one size fits all”
- Most farmers sell at their local sale barn as if they are getting the same prices and benefits from 30 years ago.
- Most farmers do not have transportation to haul animals to and fro
- Most farmers are not physically fit to work/handle their own animals
- The key is to create your own markets from the need of your community.
- Example: A farmer could create a local meat market
 - A farmer could open a local café featuring local products
 - Farmers market
 - Farm Stand



BUSINESS VS HOMESTEAD

- Most farmers provide for their family even extending family and community for generations
- So the knowledge of now creating a business out of a necessity is somewhat far fetch.
- Ag professionals cannot ask these farmers to relinquish their homestead activities to become only a commercial farmer.
- The key is to work with farmers where they are in knowledge, resources, and land. Always build from what they have and own!
- It becomes easier to educate a farmer if you are working with their desires versus changing their narrative.



SOLUTIONS

- TO BE GOOD STEWARDS OF THE LAND ALL FARMERS HAVE TO BE GOOD STEWARDS VIA EDUCATION AND IMPLEMENTATION.
- LISTEN TO THE FARMER
- OFFER SOLUTIONS CONDUCIVE FOR THEIR RESOURCES
- INVITATION TO LOCAL GROUPS AND SEMINARS
- SHARE OUR KNOWLEDGE WITH OUR NEIGHBOR
- MORE PEER TO PEER TRAINING FOR AG PROFESSIONALS
- IMPLEMENT THESE PRACTICES
- RESEARCH, RESEARCH, RESEARCH



QUESTIONS FROM YOU!

- I would like to learn about options for marketing pastured meat products if USDA slaughterhouses are not accessible in my region.
1. State inspected slaughterhouses for in-state sales only (state specific)
 2. Sell your animals as breeding stock
 3. Travel to a USDA inspected slaughterhouse but with the added cost see if they could sell your meat under their label.
 4. Farm online sales page of animals
 5. Create a value-added product and/or meat market in your area
 6. Lastly, build your own slaughterhouse

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 Saturday, November 7, 2020
 3:00 PM CST | Springfield Livestock Market | Springfield, MO

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10 Ruby MTF Up the Ante




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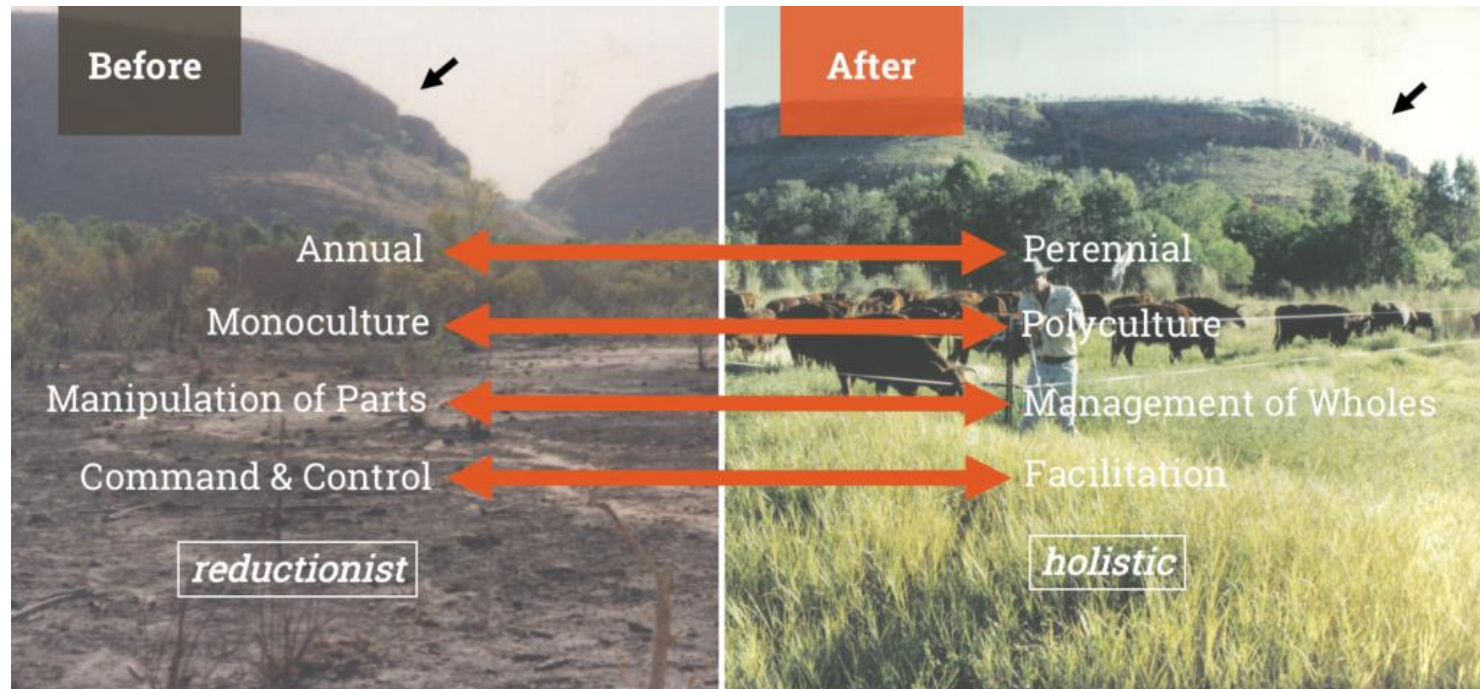
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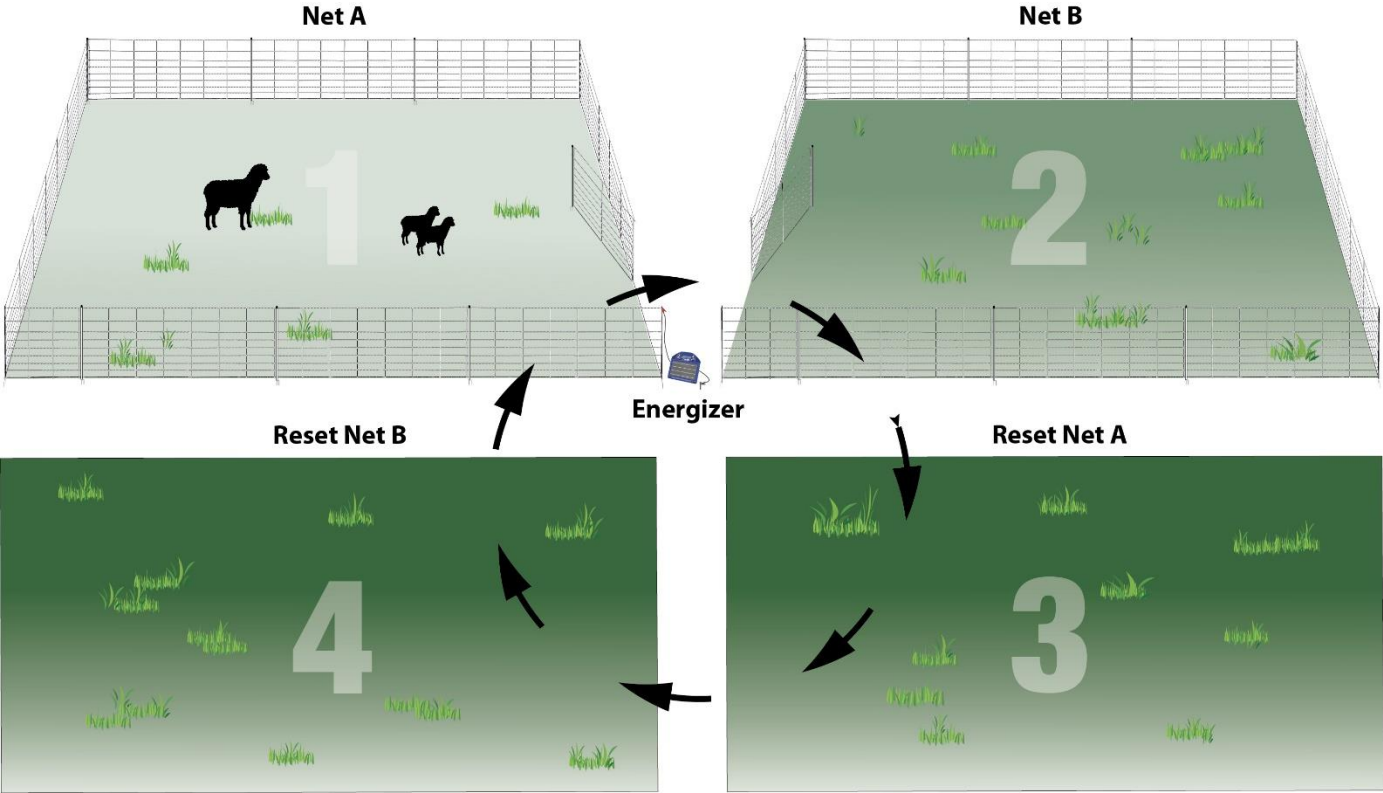


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- Regenerative pasture management on limited land incorporating different species.
 1. Many farmers are very successful at this endeavor
 2. Farm management is the key
 3. Stocking density is a big factor
 4. Soil health is crucial
 5. All third party contractors are in place (i.e. transportation and harvesting)
 6. On farm harvesting (i.e. poultry, mobile unit) labor is needed
 7. Marketing and sales is a must

SAVORY INSTITUTE

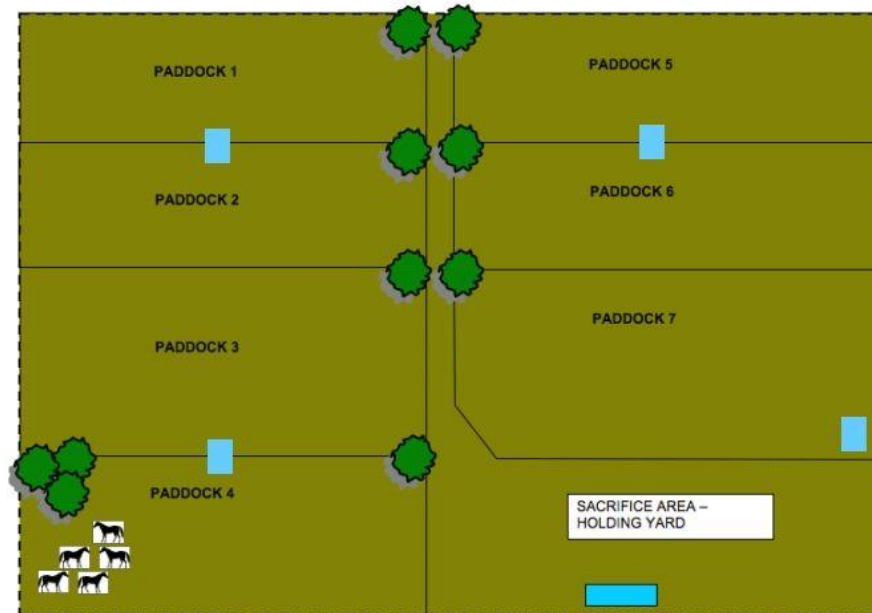


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- Suggestions for how to start rotational grazing (especially with small ruminants) on limited acreage.
 1. Research your land, climate, and breed of animal FIRST
 2. Research how to maintain this breed of animal (i.e. nutrients)
 3. Start growing forage that answers the last question to begin
 4. Once forage is established, purchase your first stock of animals (i.e. 5-10), if you don't have any experience raising animals
 5. Utilize temporary fencing for your cross fencing to move them from paddock to paddock learning the various benefit of forages you have planted on their body.
 6. OBSERVE, OBSERVE, OBSERVE
 7. Change as needed, refocus, financially stable to pivot



POSSIBLE PORTABLE FENCING FOR INTERNAL FENCING. CAN BE MOVED AS REQUIRED

ALLEY FOR EASY ACCESS TO ALL PADDOCKS



ROTATIONAL GRAZING

NOT TO SCALE

EACH Paddock GRAZED FOR 3 DAYS.
HORSES THEN MOVED ON TO NEXT Paddock.
THIS GIVES EACH Paddock 21 DAYS TO RECOVER.

THE HOLDING YARD/SACRIFICE AREA CAN BE USED IN
WET WEATHER TO PROTECT PASTURE OR USED TO
HAND FEED IF PASTURES BECOME OVERGRAZED.




- 
- How to afford fence?

Two ways to afford fence is based upon your need.

1. Perimeter fencing is within the practices of NRCS so you possibly could get assistance if you are sure on raising animals
2. Cross fencing is also a practice of NRCS (state specific)
3. Purchase your own

*NOTE: If you have a specific type of fence different than the requirement of NRCS. You would have to purchase and possibly installation would be cost shared.



- I'm pasturing chickens and would like to hear about methodology for that but I also plan to incorporate ruminants down the road and would love insights on any best practices as I transition to a mixed flock/herd.


1. ATTRA publication on multi-species grazing
2. Chicken tractors with multi-species grazing
3. Free range operation
4. On-farm chicken processing (state specific)
5. Breeding stock sales from the farm
6. Lastly, USDA or state inspected slaughterhouses

*NOTE: MULTI-SPECIES GRAZING ASSIST WITH DEALING WITH INVASIVE SPECIES IN PASTURES

WHITE OAK PASTURES, BLUFFTON, GA





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- Suggestion on grasses that grow well with limited rainfall?
 1. Irrigated pastures – NRCS program but state specific
 2. Research what can grow in your area that is conducive for high nutrients for your breed of animal
 3. Implement some of these grass varieties on a small area to see if it matures
 4. Observe and incorporate
 5. Seasonally tested and implemented



Irrigated Pastures: Setting Up an Intensive Grazing System that Works

NCAT Pasture Tip Sheet



Photo: Robert Crow

Introduction

A successful multi-paddock, intensive grazing system must provide least-cost nutrition for sustained animal production. Secondly, it must optimize not only forage quantity, but also the quality, diversity, and longevity of the forage stand. Ranches that successfully attain these goals will profit immensely from the sustainability that will inherently follow.

The very first steps in designing a successful intensive grazing system are to determine:

1. Paddock grazing period
2. Pasture-recovery period, or rest period

Paddock Grazing Period Considerations

- The shorter your grazing period, the more forage the pasture will produce—to a point. With the possible exception of mob grazing, periods of less than 12 hours produce no noticeable benefits. Mob grazing, with ultra-high stocking densities, takes intensive grazing to an extreme and requires additional grazing skill.
- To minimize the potential for selective grazing on different pasture species, such as legumes, the grazing period should be no more than two days. The use of legumes and associated mycorrhizal symbiosis with grasses offer new potential for high forage production without large inputs of commercial fertilizers.
- To limit infective parasite ingestion, grazing period should be no more than three days. Brown Stomach Worm



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(Parent organization to the ATTRA Project, www.attra.ncat.org)



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- We need inexpensive system to map and record use of temp paddocks.


1. ATTRA Grazing Planning Manual and Workbook

<https://attra.ncat.org/product/attra-grazing-planning-manual-and-workbook/>

1. Using the Grazing Records Spreadsheet for Documentation and Planning

<https://beef.unl.edu/cattleproduction/grazing-records-spreadsheet-documentation-planning>

3. Creating your own Excel system


- 
- Best way to improve pasture while still having to use them.
 1. Implement your selected forage on designated areas
 2. Implement your selected forage seasonally
 3. Full pasture implementation
 4. Selection to assist in long term stands – perennial pasture mixes and native grasses

WARM SEASON LEGUMES



ORCHARDGRASS




- 
- Interested in planting proper food for pasture grazing poultry.
 1. Researching for your particular breeds
 2. Planting the proper forage for poultry
 3. While establishing, implementing nutritional dense grains (i.e. barley, millet, bulgur wheat, buckwheat)



KENTUCKY BLUEGRASS

PERENNIAL RYEGRASS

WHITE CLOVER

- 
- Frost seeding or other ways to reseed organic pastures without tillage or availability of no till planter.
 1. Hand seeder
 2. Deer feeder on a four wheeler

HAND SEEDERS



DEER FEEDER MOUNTED ON 4-WHEELER



WORKSHEET

Estimating Forage Dry Matter Intake (DMI):

Average body weight _____ (Line 1)
 Estimated DMI (as % of Body Weight) _____ (Line 2)
 Daily DMI required for single animal (Line 1 x Line 2) _____ (Line 3)
 Daily DMI required for herd (Line 3 times number of animals) _____ (Line 4)

Estimating Pasture Mass (forage dry matter):

Height	Average Density*	Low Density	High Density
	Pasture lbs. DM/acre	Pasture lbs. DM/acre	Pasture lbs. DM/acre
8"	2600	2200	2800
6"	2400	2100	2600
4"	1800	1500	2100
2"	1200	1000	1400
1"	900	600	1000

*Lbs. of dry matter per acre at each height varies widely with plant density and species -
 Attending pasture walks or discussion groups are a great way to learn how to make these estimates
 more accurately!

Calculating Available Dry Matter:

Available Forage Dry Matter = Pre Grazing Mass - Post Grazing Mass
 Example: Pre Grazing 6" 2400
 Post Grazing 2" 1200
 = 1200lbs DM/acre

Your Farm: Pre Grazing Mass _____ (Line 5)
 Post Grazing Mass _____ (Line 6)
 = _____ (Line 7) available dry matter/acre

Calculating Paddock Size:

Paddock size (in acres per day) = Daily DM Required / Available dry matter

Daily DM required (Line 4)
 ----- = _____ Paddock size in acres/day (Line 8)
 Available DM/acre. (Line 7)
 (There are 43560 square feet in an acre, which is a square that is about 210 feet on a side)

Calculating Rest Period:

Maximum Possible Rest Period = Your total pasture acres / Paddock size

pasture acres available
 ----- = _____ maximum rest period
 paddock size in acres per day (Line 8)

RECOMMENDED
 STOCKING RATE FOR
 DIFFERENT LIVESTOCK

SARAH FLACK

- Amount of pasture required per ruminant – 3.0 - 3.5% per body weight
- Example: Dairy Sheep – 3.5% x 100 = 3.5 lbs. of DMI per day
150 = 5.25 lbs. of DMI per day
200 = 7 lbs. of DMI per day
- SWATH GRAZING - is a management practice that can be used to extend the **grazing** season and to reduce feed, labor and manure handling costs for cattle producers in western Canada. ... The **swaths** are left in the field for the cattle to **graze** during the winter.
- Midwest? – Yes I witnessed it in Kentucky



SUMMARY

- Pasture management is not a “one size fit all”
- RESEARCH
- IMPLEMENT
- OBSERVE
- Utilize the assistance of ag professionals in your area
- Seasoned/Experienced farmer as a mentor
- Recordkeeping
- Readjust, as needed

CONTACT INFORMATION

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Questions?

Please type into the chat bar

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Upcoming webinars

- 🐔 **January 21:** Pasture Biodiversity for Animal Health
- 🐔 **January 26:** Grazing to Avoid Trouble
- 🐔 **February 11:** Solar Grazing for Sheep
- 🐔 **February 25:** Pasture-Based Livestock: Advancing Ecological, Economic, and Emotional Resilience

Grants, Scholarships, Mentorship & More!

- 🐔 **Handouts on nutritional benefits of pasture-raised animals**
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