











Brief introduction

- Stephen King & family: Rachel, Reuben, Micaiah, Aletha
- Aspiring regenerative farmer
- Laying hens and broilers
- A few head of cattle
- Integrated rotational grazing system

Why pasture-raised? Why rotational grazing?

Overgrazing

 Frequently grazed short grass means short roots, slow regrowth & low production

Confined poultry

- Higher pathogen loads in the confined area
- More cleaning needed
- Potentially more medical inputs

No integration benefits



Photo credit Ed Rayburn, onpasture.com: https://onpasture.com/2021/02/08/collect-more-sunshine-to-grow-more-grass/



Rotational grazing

Interval grazing (~28 days)
 means faster regrowth &
 higher production per acre.

Pastured poultry

- Lower pathogen loads in areas
- Less cleaning needed
- Chicken manure fertilizes grass
- Usually, fewer medical inputs

Integrated benefits w/ cattle

- Cow manure spread by chickens
- Fly population better controlled *(with 3- or 4-day rotations)

Bonus: Nicer scenes and environment to experience



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Paddock 1

Has rested
6-8 days

Paddock 2

Has rested 3-4 days

Paddock 3



Paddock 6

Has rested 18-24 days Paddock 5

Has rested 21-28 days

Paddock 4



Paddock 7

Has rested 15-20 days Paddock 8

Has rested 12-16 days

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Paddock 9

Has rested 9-12 days



Pasture rotation schedule with cattle and chickens

- Example paddock rotation with 9 paddocks and 3 or 4 day moves
- Paddock sizes will depend on your land, how many animals you have, and how often you're willing to move them.
- Ideal re-growth time is 28 days for best production
- Moving every 3-4 days with chickens following behind has the benefit of interrupting the fly egg-larvae-adult life cycle
- A well-planned system is key to saving time and effort, but it takes time to get there. Portable fencing is the most flexible while you're learning.

Pasture Calendar for Whatcom County

- On season: Mid-April to Mid-October (~6 months)
 - (growing, warmer, drier)
- Off season: Mid-October to Mid-April (~6 months)
 - (dormant, colder, wetter)

Credit: Western Oregon and Washington Pasture Calendar (OSU PNW699)

https://catalog.extension.oregonstate.edu/pnw699



Pasture Calendar—Western Washington

rasture Calendar—Western Washington							
					Foothills and Coast		
	Vancouver and				Range	Coastal	
	Cowlitz Basins		Puget Lowlands		Lowlands	Lowlands	Your Farm
	Droughty		Droughty				
Soil moisture status	to		to				
during growing season:	adequate	Optimal	adequate	Optimal	All	All	
					1.1, 1.2,		
					1.3,		
		2.1, 2.2,			1.5, 2.5, 4a.3,		
MLRA or CRA:*	2.3, 2.4	2.3, 2.9	2.6-2.8, 2.10-2.13		4a.5, 3.1	4a.1, 4a.2	
Forage management zone (Figure 4):	2V	2V	2N, 2S	2N, 2S	1F, 2F, 3F, 4AF, 1Y	4AC	
Month	Growth period (see descriptions on page 8)						
September (1st half)**	1	1	1	2a	2a	2a	
September (2nd half)**	1	1	1 2a	2a	2a	2a	
October (1st half)	2a	2a	2a	2a	2b	2a	
October (2nd half)	2b	2b	2b	2b	2b	2b	
November (1st half)	2b	2b	2b	2b	3	2b	
November (2nd half)	3	3	3	3	3	2b	
December (1st half)	3	3	3	3	4	3	
December (2nd half)	4	4	4	4	4	3	
January (1st half)	4	4	4	4	4	4	
January (2nd half)	4	4	4	4	4	5	
February (1st half)	5	5	4	4	4	5	
February (2nd half)	5	5	5	5	4	5	
March (1st half)	6a	5	5	5	. 5	6a	
March (2nd half)	6a	6a	6a	6a	5	6a	
April (1st half)	6a	6a	6a	6a	6a	6a	
April (2nd half)	6b	6b	6b	6b	6a	6b	
May (1st half)	6b	6b	6b	6b	6b	6b	
May (2nd half)	6b	6b	6b	6b	6b	6b	
June (1st half)	7	7	. 7	7	6b	6b	
June (2nd half)	7 8	7 8	7	7	7	7	
July (1st half)	9	9	8	8	7	7	
July (2nd half)**	10	9	9	8	8	8	
August (1st half)**	10	10	10	9	8	8	
August (2nd half)**	10	10	10	9	9	8	

Shelter basics



On pasture season:

- Portable electric fencing with step-in posts, battery powered energizer in a rain proof box
- Following the cows reduces the amount of fence line mowing you'll need to do in preparation.
- Coops on wheels pulled by a tractor, ATV or UTV are the most convenient.

Off season:

- Covered area, such as a coop, barn or hoop house
- Litter/bedding such as wood chips, shavings or hay, with layers added as needed to cover the build-up of manure. Bedding can be removed for composting during the on season.



Feeding and nutrition

- Chicks: Starter feed & grit, free choice
- Pullets: Grower feed & grit, free choice
- Hens (once laying eggs or 20 weeks+):
 - 1/4 lb. of feed per hen, per day
 - Grit about 0.5% of feed ration (or free choice)
 - Vitamins, minerals & supplements:
 - Optional with "complete" feeds, but recommended
 - Fertrell Nutri-Balancer or similar, 1% of feed ration
 - Feed-grade calcium, 1% of feed ration
 - Diatomaceous earth (DE) dusted on ration
 - TIP: Sprinkle water to moisten so fines stick to pellets

Doesn't raising on pasture reduce feed intake?

 It might by about 10-15%, so feed is still necessary!





What about mixing your own feed?

Commercial feeds

- Commercial "complete" feeds are a **balanced diet** for the age and type of bird specified.
- Efficient industrial processes and competition have made for very low prices you can hardly beat when purchasing your own ingredients
- There are organic / local options to support if that's important to you

Mixing your own

- Create a balanced mix (carbs, protein, fats, minerals, etc.)
- Need to crack/grind or ferment most whole grains to be edible
- Potential feed waste/loss through fines (too small) or uncracked grains
- Inability to use many gravity feeders (clogging)
- Benefit: You know what's in it



Flock health basics

- Keep them dry
- Keep them out of the wind
 - (but don't seal it up tight! Ventilation = good)
- Keep them out of muck and mud
 - (move to new grass, or add more bedding, or clean their space out)
- Fresh water
 - (some people add a splash of raw apple cider vinegar for gut health)
- Fresh feed
 - (scraps are okay, but don't feed spoiled/rotten food)
- Don't overfeed them
- Provide grit, vitamins and mineral supplements
- Remove wounded/sick birds until well
 - (use wound care sprays on injuries to reduce chance of infections)



Warning signs of illness

- Coughing/sneezing
- Difficulty breathing
- Abnormal manure/diarrhea
- Lethargic or "sleepy"
- Stays away from flock
- Losing weight
- Consistently thin eggshells (low calcium)



"Curly toe" – a Riboflavin deficiency













Pastured Poultry Resources

- American Pastured Poultry Producers Association (APPPA) Resources page
 - https://apppa.org/Learn
- Environment stresses article by APPPA
 - https://apppa.org/page-18102
- Common causes of Pastured Poultry Mortality and Illness by APPPA
 - https://apppa.org/Common-Causes-to-Pastured-Poultry-Mortality-and-Illness
- Poultry shelters page APPPA
 - https://apppa.org/shelters
- Care and Feeding Guide by Northern Territory Government
 - http://whatcom.wsu.edu/ag/documents/poultry/Part3 CareFeeding.pdf
- Chickens 101 by WSDA Avian Health Program
 - https://s3.wp.wsu.edu/uploads/sites/2050/2020/01/Poultry101.pdf
- WSU Whatcom Poultry page
 - https://extension.wsu.edu/whatcom/poultry/
- Western Oregon and Washington Pasture Calendar (OSU PNW699)
 - https://catalog.extension.oregonstate.edu/pnw699