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Pig and Poultry Pasture Management

– Presented by –

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NCAT/ATTRA

– Hosted by –



ATTRA
SUSTAINABLE AGRICULTURE



Introductions

- **Food Animal Concerns Trust (FACT)** is a national nonprofit organization that advocates for the safe and humane production of meat, milk, and eggs.
- **Larissa McKenna**
Humane Farming Program Director
Email: lmckenna@foodanimalconcerns.org
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- **FACT's services** for livestock and poultry farmers include:
 - Fund-a-Farmer Grants
 - Conference scholarships
 - Free webinars
 - Humane Farming Mentorship Program



Introductions

- **National Center for Appropriate Technology (NCAT)** is a national nonprofit organization that advocates for small-scale, local, and sustainable solutions to reduce poverty, promote healthy communities, and protect natural resources.
- **Lee Rinehart**
Agriculture Specialist
Email: lee@ncat.org
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- **NCAT manages** the ATTRA information service for farmers:
 - Free technical advice: 800-346-9140
 - Conference scholarships
 - Tutorials, videos, webinars, podcasts, online courses
 - Farmer-friendly publications



Enterprise diversity
Excellent for smaller
acreages



Concentrate feeds
Distribution of manure
Rooting and vegetation loss



Not as easy as running poultry with cattle or small ruminants

- Lengthens the rotation
- Sheep or cows first, gets grass down for poultry houses/trailers, then pigs
- Pigs → poultry rotation, occasional mowing
- If run together, pigs can depredate poultry, but this is uncommon, and issue of separate feeds
- Movable shade for pigs, movable water and feeders



Characteristics of pastured hog operations, GrassWorks Grazing Guide (2010)

- Lower feed costs (if the pasture is well managed and diverse)
- Weight gain and feed efficiency similar to confined operations
- Lower costs for capital improvements, can be offset by higher labor costs



Characteristics of pastured hog operations

- Reduced animal health problems, especially respiratory diseases and greater leg soundness
- Potential for parasite problems
- Increasing demand for organic, humanely raised, pastured pork



Breed Selection



Gloucestershire Old Spot



Large Black



Tamworth



Rhode Island Red



New Hampshire Red



White Wyandotte

Photo credits: Pigs – Livestock Conservancy; Poultry – McMurray Hatchery



Space Requirements and Stocking

- Poultry 2-3 ft sq per bird indoor if allowed outdoor access (APPPA)
- 50-100 hens/acre for least impact on pasture (manure and nitrogen, trampling, matting), frequent moves
- 500 birds rotated around 4 acres throughout the year (Tim Mueller, CA)



Space Requirements and Stocking

- 15 wean to finish pigs per acre or 4 sows per acre on annual forages
- 15 to 30 wean to finish pigs and 6 sows per acre for perennial pastures
- This is a good starting point, you can develop a paddock system of smaller paddocks and move frequently, observe and adapt



Fencing

- Fencing depends on if you want to keep poultry in or predators out or both
- Poultry netting, Premier, can work for both poultry and pigs



Moving Pigs

- Use pig boards, lures
- Noise should be kept to a minimum because animals have sensitive hearing.
- Pigs are herd animals and isolation of a single individual should be avoided.
- An animal's previous experience with handling will affect its reaction to handling in the future.
- Animals which have had frequent gentle contact with people will be less stressed during handling.
- Feed rewards will facilitate training.



Pasture Restoration

- Maintaining adequate ground cover is a challenge
- Rotational stocking - based on stocking density and forage condition
 - Daily rotations for 20 or so growing pigs per acre or several days for less intensive grazing
 - Time on paddock is not dependent on forage consumed as with ruminants, but on impact pigs have on the pasture
- Crop rotations

Webinar





Poultry Pasture

- Domesticated from wild seed eating fowl
- Young vegetative forage
- Forage height < 4 inches
- Crop rotation for parasite control, nutrient capture
- Biosecurity and other birds, disease
- Daily or 2X day moves for meat birds in chicken tractors
- Daily to weekly moves for mobile egg houses



Poisonous Plants

- **Pigs:** Pigweed, pokeweed, iris, bracken fern, cocklebur, jimsonweed, azalea, castor bean, flax, foxglove, poison hemlock, nightshade
- **Poultry:** Castor bean, corn cockle, death camas, milkweed, nightshade, oleander, poke berry, vetch



Nightshade

- Learn to identify poisonous plants
- Avoid turning hungry animals into new pastures
- Rotate pastures to prevent overgrazing
- Adequate clean, fresh water
- Nutritional wisdom

Feeding Pigs on Pasture

- Sows up to 50% pasture
- Growing finishing up to 20% pasture
- Free choice salt and mineral
- 2 lb grain/day sows,
3 lb/day for gilts
- Lactation 2-3 lb/
day 15% protein
per 100 lb BW



Pig Feed Formulation

- Ration for forage fed sows and gilts, high quality pasture or legume silage (*Kephart, et al. 2010. Forages for Swine. US Pork Center of Excellence.*)
 - 82% corn
 - 15% soybean meal (44% crude protein)
 - 2% monosodium phosphate
 - 0.6% salt
 - 0.3% vitamin premix
 - 0.3% trace mineral premix



Reducing Concentrated Feeds

- Offering new paddocks
- Pastures diverse in various forages
 - Energy-dense
 - Alfalfa, ladino, sweet clover, red clover, and lespedeza
 - Sorghum-sudan, small grains, ryegrass, turnips, rape, kale, and beets



Silvopasture

- Pigs originally were forest dwellers
- Mast crops, roots, slash and leaves from trimmed and downed trees
- Bigger trees more suitable, smaller ones can be damaged
- Manage for 70 to 75% crown cover
- Paddock rests of about a year
- 2 strands wire, 6 and 20 inches



**Forks Farm, PA
(John and Todd Hopkins)**



Rooting activity







Gardens and Crops

- Gardens... integrate vegetable plots every few years in the rotation for weed control, nutrient capture
- Contamination or nutrient overload of veggies not a problem after this amount of time
- Garden prep: pig rooting (weed and brush control, primary tillage)



Produce and Zoonotic Disease

- Often part of an animal's natural flora but cause disease in humans
 - Pathogenic bacteria (Salmonella, Escherichia coli, Campylobacter, Listeria, Shigella, Yersinia), parasites (Cryptosporidium, Cyclospora, helminths), and viruses (hepatitis A, noroviruses)
- Herd health, vaccinations, nutrition, fresh water, low stress environment
- Diverse, quality forages
- Long crop rotations (one year)
- Worker, equipment sanitation



8 Steps to Profitable Pastured Pig and Poultry Production

1. Choose your pastures well
2. Manage stocking rates
3. Rotate pastures
4. Provide space for natural behavior
5. Calculate your pasture in cost of production
6. Bigger pigs can utilize more roughage
7. Provide lysine, vitamin, and mineral to pigs
8. Energy needs cannot be met with pasture alone

Adapted from Tom Frantzen



Questions & Answers

Please type your Q's
into the chat bar 😊



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 - March 25: Trees for Livestock Food and Medicine
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