



Poultry Industry Overview

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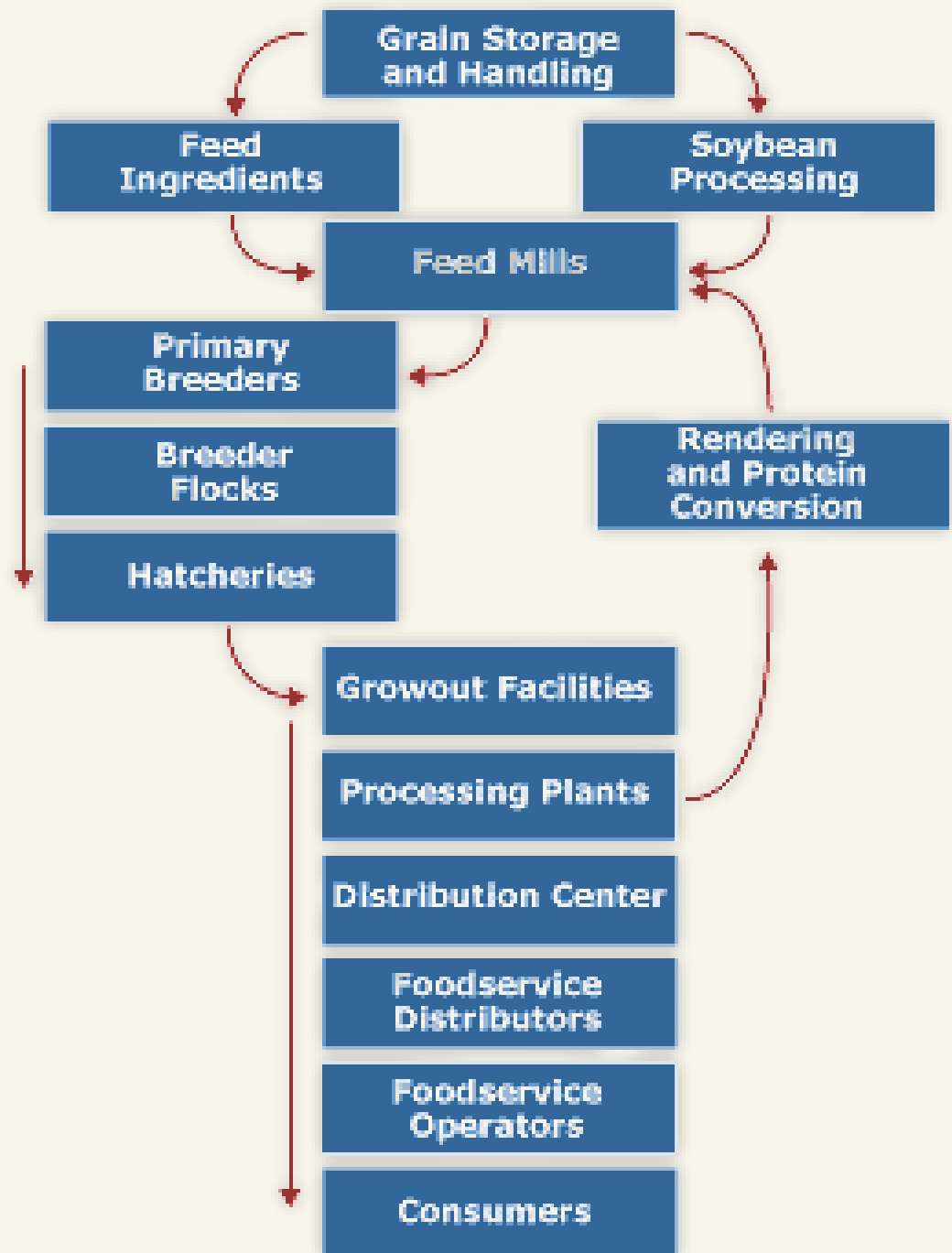
Overview

- Potomac Valley Agriculture Overview
- Vertical Integration
- Explanation of each sector of a vertical integrated poultry producer
- Statistics
- Steroids and Hormones
- Antibiotics
- Roxersone
- Nutrient Management
- Questions



Vertical Integration

A single entity owns and controls all aspects of an operation.



Primary Breeders

- Develop and reproduce strains of chickens that meet the requirements of the chicken producer/processing companies. Primary Breeders are the Great-Grandparents and Grandparents of the broilers we consume.



Feed Mill



- Convert raw materials such as corn, soybeans, vitamins and minerals into finished feed. Feed formulations are often proprietary.
- Feed is approximately 70% of the cost of raising broilers.

Breeder Farm

- Operated by contract growers. Parents of the traditional broilers we consume.
- Eggs are laid on the farm and transported to the hatchery.
- ~ 1.2 million breeders in West Virginia.



Hatchery

- This is where the breeder eggs are taken and are incubated for 21 days and then the chicks are taken to the broiler farms the day they hatch.



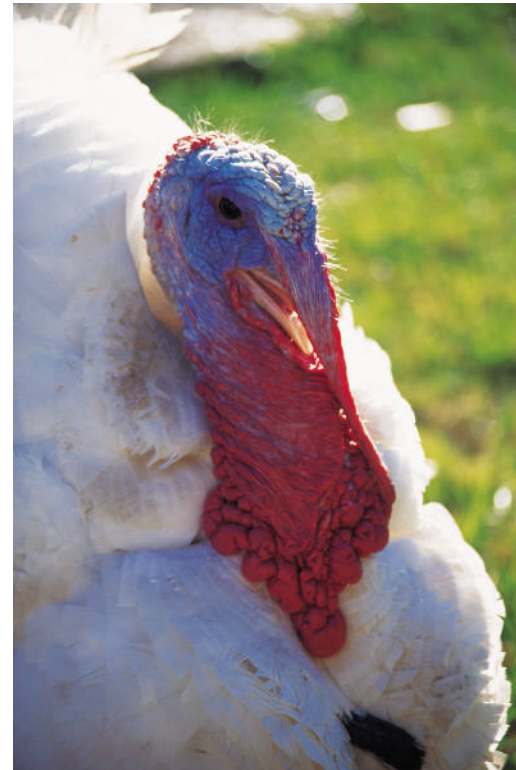
Growout farm

- Contract growers raise the broiler chicks to an average of 38-42 days.
- Today, over 90% of all chickens raised for human consumption in this country are raised by contract growers.
- ~88-90 million birds in West Virginia yearly.



Growout Turkeys

- The hen usually takes 14 weeks and weighs 15.3 pounds when processed.
- This compares to the tom, which takes 18 weeks to reach a market weight of 33 pounds.
- ~ 4 million Turkeys in West Virginia.



Broiler Production Cash Flow



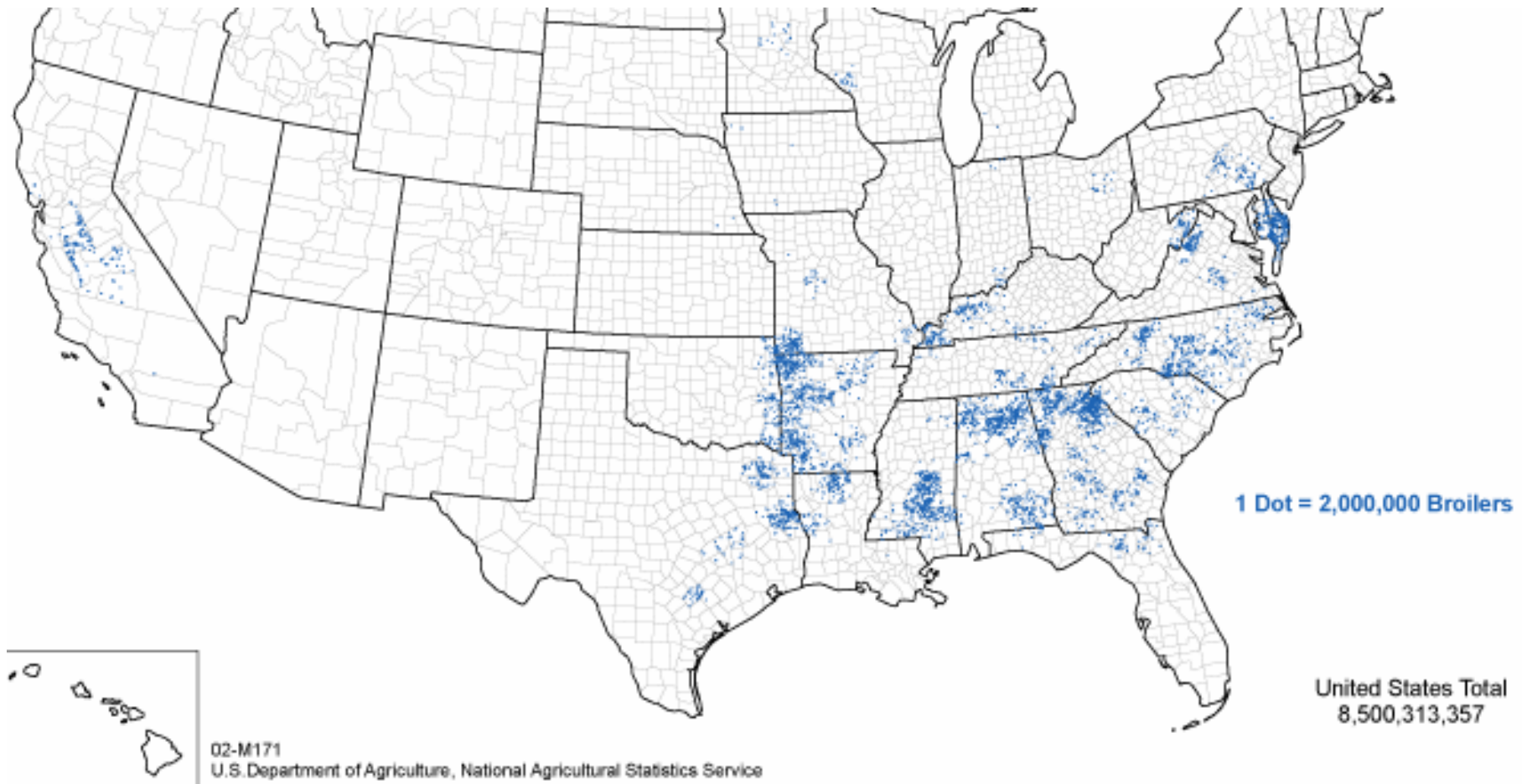
- The average cash flow on a two-house broiler is about \$10,000.00/year under average conditions.
- When the mortgage is paid off, cash flow rises to \$34,000/year under average conditions.



Top 10 Broiler Producing States

State	Number of Broilers (million)	Pounds Liveweight (million)
Georgia	1298.9	6494.5
Arkansas	1241.5	6207.5
Alabama	1052.0	5470.4
North Carolina	720.2	4537.3
Mississippi	827.8	4387.3
Texas	620.7	3165.6
Delaware	240.7	1492.3
Kentucky	290.8	1570.3
Maryland	284.6	1366.1
Virginia	263.0	1341.3

Number of Broilers Sold By County





Top 10 Broiler Producing Counties

County, State	No. of Farms	No. of Broilers Produced
Sussex, DE	696	223,678,004
Cullman, AL	411	151,906,576
Benton, AR	308	128,066,609
Washington, AR	263	109,890,530
Rockingham, VA	305	104,985,748
DeKalb, AL	271	102,526,734
Shelby, TX	187	99,023,665
Nacogdoches, TX	152	97,960,347
Scott, MS	182	93,686,885
Wilkes, NC	273	92,483,866

Top Turkey Producing States for 2005*



1.	Minnesota	44.5
2.	North Carolina	36
3.	Arkansas	29
4.	Virginia	21
5.	Missouri	20.5
6.	California	14.9
7.	Indiana	13.4
8.	Pennsylvania	11.5
9.	Iowa	9.6
10.	South Carolina	8
	Total	256.27*
	(Preliminary) In millions of turkeys.	

Top Turkey Producing Counties

1. Duplin, NC
2. Rockingham, VA
3. Sampson, NC
4. Kandiyohi, MN
5. Wayne, NC
6. Augusta, VA
7. Swift, MN
8. Carroll, AR
9. Stearns, MN
10. Benton, AR



Layer Operations

- Commercial Table Egg Operations
- Generally very large
- Generally in Mid-West





Feed

- Feed Mills are regulated by the FDA
- Feed is generally made of corn, soybeans, fatty proteins, meat and feather meals, and trace ingredients.
- Generally there is only 2-10% meat and/or feather meal in poultry feed formulations.



Improvements in Broiler Performance

Year	Weight	Age	FCR	Mortality
1925	2.2 lb	16 weeks	4.7	18%
1945	3.1 lb	12 weeks	4.0	10%
1965	3.5 lb	9 weeks	2.4	6%
1985	4.2 lb	7 weeks	2.0	5%
2005	5.3 lb	6 weeks	1.7	4%

Steroids and Hormones

- Hormones were banned from poultry feed in 1959 by the FDA.
- Steroids were banned from poultry feed shortly after hormones.





Repeat after me:

There are no hormones or
steroids in poultry feed; they
have been banned for almost
50 years.



Antibiotics

- Antibiotics are only administered by a Board Certified Veterinarian. Antibiotics given to a single flock are treated using water.
- Very few flocks
 - Cost
 - Withdrawal Periods
 - Overall Flock Health
- Growth Promoting Antibiotics are not being used in West Virginia.



Roxarsone

- Organic Arsenic compound used extensively in the broiler poultry industry to promote growth by controlling coccidia intestinal parasites.
- Generally used at 22.7g/ton – 45.4g/ton
- Broilers generally eat around 108 tons of feed a house per flock.
- Roxarsone is not being used in West Virginia Poultry.

How Much Manure is There?

- 1,000 chickens in a 7 week life cycle will produce about 1 ton of excreta
- 25,000 bird house will produce 25 tons
- Extended time between cleanouts means less litter volume is removed annually



Litter Properties

- Shavings or wood chips
- Manure from birds
- West Virginia Litter Average Analysis
 - N – 46 lbs/ton
 - P – 53 lbs/ton
 - K – 48 lbs/ton
 - Moisture Content – 35%



Cleanouts



- Generally once a year cleanouts – All Commercial Poultry
- Between flocks – Crust out or removal of wet litter in house. This is usually only along the water lines.
- Houses are disinfected with Quaternary Ammonia, bleach and usually treated with Tempo or another bug killer.

Land Application of Litter

- WV does not have a surplus of poultry litter
- Most litter applied in the Spring and Fall
- Transport program removed 7,000 tons last year



Best Management Practices



- Litter Sheds
- Nutrient Management Planning
- Voluntary Setbacks

Nutrient Testing and Nutrient Management Planning

- West Virginia Department of Agriculture Certified laboratory
- Free Manure Testing for Farmers
- 85-90% of poultry farms have a nutrient management plan



Questions?

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