Pastured Poultry Budgets: Slow-Growing ATTRA Broiler and Organic Comparisons

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By Betsy Conner NCAT Research Specialist © 2010 NCAT Pastured poultry producers are becoming more interested in raising slow-growing meat chickens and using organic production practices. Slow-growing meat chickens are an appropriate choice for pastured systems, and transition to organic is an option since the birds have outdoor access. Pastured systems that use slower-growing breeds and are certified organic are more expensive than the typical system raising fast-growing Cornish-Cross breeds under traditional practices, so it is important to analyze and compare the costs and potential profits in each approach. This publication offers comparison budgets for raising both fast-growing and slow-growing birds on pasture, under both organic and non-organic systems.

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Slow-growing broilers on pasture. Photo by Katie Short.

Introduction

Fast-growing Cornish- and White Rock-Cross broilers are the most popular birds among pastured poultry producers, but Americans are developing a taste for slowergrowing meat chickens and organically raised poultry. Slower-growing birds are better suited to pastured systems, and pastured systems also easily make the transition to organic production. Raising a slowergrowing meat bird organically will increase the costs of production, but the products demand a higher price at the marketplace. The following budgets compare pastured systems that employ on-farm processing using fast-growing broilers, fast-growing organic broilers, slow-growing broilers and slow-growing organic broilers. The budgets give an idea of the differences in cost among the systems.

Slow-growing birds

A slow-growing meat bird is defined in this budget as one that requires 12 weeks to reach live harvest weight of 6.5 pounds. The fast-growing birds take only eight weeks to reach the same weight. There are several slow-growing as well as medium-growing birds available that will reach the desired harvest weight in from nine to 12 weeks. The hatchery should be able to tell you the number of weeks it takes the birds to reach harvest weight, and this will help you adapt the budget to your production system.

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more information on our sustainable agriculture projects.



The longer period needed for grow-out reduces the turnover rate per pen and can decrease the number of birds that can be raised in a fixed number of pens in a season. The budget is based on the sale of 999 birds divided into four batches of fast-growing birds and using four pens, and these 999 birds are divided into three larger batches using five pens for the slow-growing birds. The length of the grow-out period will depend on the local climate.

A longer grow-out period increases the amount of both feed and labor required.

Yield may differ between fast- and slowgrowing birds. Typically, slow-growing birds will have smaller breast yield and larger wing and leg yield than fast-growing birds. Dressed-weight to live-weight yield may also be smaller in slower-growing varieties.

Slow-growing birds are better suited to pastured systems and have greater vigor, resulting in a lower mortality rate.

Slow-growing broilers do not require a diet as high in protein as do fast-growing meat birds. Feeding a lower-protein diet could save on feed costs.

For information on suppliers of slow-growing broiler chicks, see ATTRA's publication *Meat Chicken Breeds for Pastured Production,* available on request by contacting ATTRA at 1-800-346-9140.

Organic

Pastured systems adapt well to organic production since they already provide outdoor access, and the few cost differences are in feed and certification fees. The Organic Livestock Feed Database, ATTRA's online searchable database, can help in finding local sources of organic feed and feed ingredients. The Organic Livestock Feed Database can be found at *www.attra.ncat.org/attra-pub/ livestock_feed*.

Organic certification fees vary widely. The National Organic Certification Cost Share Program was developed to provide financial help to farmers seeking certification. For more information, contact your state certifying agency or search online at *http://newfarm.rodaleinstitute.org/embedocdbt/ displayCert_choose.php.*

For more information on organic poultry production, see ATTRA's publication *Organic Poultry Production in the United States.* The publication can be found online at *www.attra.ncat.org/attra-pub/summaries/ organicpoultry.html* and is available on request by contacting ATTRA at 1-800-346-9140.

Budgets

The financial projections used in these documents, and the assumptions on which they are based, should be used only as guidelines and estimates. In each budget example, the business is operating at full production capacity. Most businesses require up to five years to achieve profitability and good market exposure. It is vitally important that each potential business develop its own set of financial statements before starting an enterprise. The economic and business environment varies tremendously from region to region, and what works in one area may not work in another. Extension specialists, bankers and accountants can all help in developing the necessary financial statements.

Remember, the sustainability of any enterprise is based on its consistent ability to produce and sell a product at a profit.

Related ATTRA publications

Label Rouge: Pasture-Based Poultry Production in France (IP202)

Poultry Genetics for Pastured Production (IP256)

Organic Farm Certification and the National Organic Program (IP222)

Organic Poultry Production in the United States (IP331)

Enterprise Budget		# of birds	lbs. per bird	
		999	4.5	
	Fast	Organic	Slow	Org. & Slow
Price per pound	3.25	3.75	3.5	4.25
Income				
Sell 999 birds	14,610.38	16,858.13	15,734.25	19,105.88
Expenses				
Fixed				
Brooder house	320	320	320	320
Processing building	320	320	320	320
Processing equipment	157.86	157.86	157.86	157.86
Pens	160	160	200	200
Composter	50	50	50	50
Waterers	100	100	120	120
Brooder	17.86	17.86	17.86	17.86
Dolly (to move pens)	20	20	20	20
Certification		500		500
Total fixed expenses	1,145.72	1,645.72	1,205.72	1,705.72
Variable				
Chicks	1,350	1,350	1,185	1,185
Bags and staples	177.82	177.82	177.82	177.82
Wood chips	150	150	150	150
Utilities	20	20	20	20
Feed	4,406	7,734	4,826	8,471
Marketing	400	400	400	400
Labor (production)	2,639	2,639	3,959	3,959
Labor (processing)	1,392	1,392	1,566	1,566
Liability insurance (rider on Farm Policy)	250	250	250	250
Pasture rent per acre	30	30	30	30
Miscellaneous	400	400	400	400
Total variable expenses	11,215.07	14,543.2	12,963.32	16,608.32
Total expenses	12,360.79	16,188.92	14,169.04	18,314.04
Net income	2,249.59	669.21	1,565.21	791.84
Cost per bird (breakeven)	12.37	16.21	14.18	18.33
Net income per bird	2.25	0.67	1.57	0.79

All figures in dollars.

Basic assumptions	Organic	Slow
Seasonal production (only in spring, summer, and fall)		
4 batches a year	4 batches a year	3 batches a year
Each batch is 313 birds in 4 pens	Each batch is 313 birds in 4 pens	Each batch is 370 birds in 5 pens
Birds placed each year: 1,250	1,250	1,110
Grow out period of 8 weeks	8 weeks	12 weeks
Birds eat 15 lbs. of feed each	15 lbs. of feed each	18.5 lbs. of feed/bird
Feed costs \$470 per ton	\$825 per ton	\$470 per ton
No bulk feed storage		
15% death loss	15% death loss	5% death loss
5.08% processing loss (including home birds)	5.08% processing loss	5.08% processing loss
Dressed weight of 4.5 pounds a bird, without giblets	4.5 pounds	4.5 pounds
Price is \$3.25/lb	\$3.75	\$3.50
Birds for sale each year: 999	999	999
Birds are direct marketed to customers; no labels		
Offal and feathers are composted in a covered 3-bin system		
Labor is based on pens and servicing them but also includes pen construc- tion, brooding, feed-mixing, etc.). Labor valued at min. wage (\$7.25 per hour).	\$7.25 per hour	\$7.25 per hour
All assets fully depreciated over life span with no residual value		
	\$500 Organic certification cost	

Budget details

Brooder house: \$5,000 - 2 percent salvage value = \$4,900 ÷ 20 year life = \$245 a year

Interest = $$5,000 \div 2 \ge 3 = $75 a \text{ year}$

Depreciation + interest = \$320 a year

Processing building: \$5,000 - 2 percent salvage value = \$4,900 ÷ 20 year life = \$245 a year

Interest = $$5,000 \div 2 \ge 3 = $75 a \text{ year}$

Depreciation + interest = \$320 a year

Processing equipment: \$1,000 ÷ 7-year life = \$142.86

Interest = $$1,000 \div 2 \ge 3$ percent = \$15

Depreciation + interest = \$157.86

Pens: FAST: \$200 a pen, 5-year life, 4 pens; \$200 x 4 pens ÷ 5 years = \$160

SLOW: \$200 a pen, 5-year life, 5 pens; \$200 x 5 pens ÷ 5years = \$200

Composter: \$500, includes labor and materials, 10-year life; \$500 ÷ 10 = \$50 a year

Waterers/feeders: FAST: \$60 a pen/brooder x 4 pens + 1 brooder, 3-year life; \$300 ÷ 3 = \$100 a year

SLOW: \$60 a pen/brooder x 5 pens + 1 brooder, 3 year life; $360 \div 3 = 120$ a year

Brooder: \$125 for gas brooder, 7-year life; $125 \div 7 = 17.86$ a year

Dolly to move pens: \$20

Organic certification (estimated cost): \$500

Chicks: FAST: \$1 a chick x 1,250 chicks needed, \$25 per shipment/batch x 4 shipments; \$1,250 + \$100 = \$1,350

SLOW: \$1 a chick x 1,110 chicks needed, \$25 per shipment/batch x 3 shipments; \$1,110 + \$75 = \$1,185

Bags and Staples: \$0.018 a staple, \$0.16 a bag; \$0.178 x 999 saleable birds = \$177.82

Wood chips (for brooder and composter): \$150 a year

Utilities (estimated cost): \$20 a year

Feed: FAST: \$470 a ton, 1,250 birds x 15 lbs. ÷ 2,000 lb. x \$470 per ton = \$4,406.25

SLOW: \$470 a ton, 1,110 birds x 18.5 lbs. ÷ 2,000 lb. x \$470 a ton =\$4,825.73

ORGANIC: \$825 a ton, 1,250 birds x 15 lbs. ÷ 2,000 lb. x \$825 a ton = \$7,734.38

Marketing (printing, postage, advertising, phone, travel, fees, etc.) = \$400 a year

Labor (production): FAST: 0.5 hour a day in brooder x 14 days = 7 hours brooder labor; 0.5 hour a pen a day in field, 4 pens x 42 days in field = 84 hours field labor. 91 total labor hours x 4 batches = 364 x \$7.25 an hour = \$2,639

SLOW: 0.5 hour a day in brooder x 14 days = 7 hours brooder labor; 0.5 hour a pen a day in field x 5 pens x 70 days in field = 175 hours. 182 hours total x 3 batches = 546 hours x 7.25 an hour = 3.958.50

Labor (processing): FAST: 12 hours x 4 people x 4 batches/year x \$7.25/hour = \$1,152 a year

SLOW: 12 hours x 6 people x 3 batches/year x \$7.25/hour = \$1,566

Liability Insurance: \$500,000 coverage = \$250 a year

Pasture rent for one acre: \$30

Miscellaneous (cleaning supplies, LP, repairs, ice): \$400 a year

Large-scale production

Large-scale production is usually by contract growers raising flocks of Cornish-Cross for large poultry companies. For information on contract production and a sample contractgrower budget, see Oklahoma Cooperative Extension Service's publication *Broiler Production: Considerations for Potential Growers.* The publication can be found online at *http://pods.dasnr.okstate.edu/docushare/dsweb/ Get/Document-3099/AGEC-202web.pdf* or can be requested by calling the Oklahoma Cooperative Extension Service at

(405) 744-5398. Demand for and production of slow-growing birds in the United States is not nearly as large as in France, where 33 percent of the poultry market is served by slow-growing varieties under the Label Rouge program. For information on the Label Rouge program, see ATTRA's publication *Label Rouge: Pasture-Based Poultry Production in France.* The publication can be found online at *http://attra.ncat.org/attra-pub/PDF/label-*

at *http://attra.ncat.org/attra-pub/PDF/label-rouge.pdf* or requested by calling ATTRA at 1-800-346-9140. Joyce Foods, Inc., in North Carolina, is the

only U.S. producer of birds from the same slow-growing genetics as those in the Label Rouge program, and the birds are raised following similar standards. Joyce Foods raises Naked Neck chickens developed by the Hubbard breeding company. The birds are raised by contract growers in older, curtain-sided poultry houses. The houses measure about 12,000 square feet, roughly half the size of modern grower houses, and hold flocks of 6,500 to 6,800. These smaller houses equate well with the Label Rouge standard of small flocks. The growers have been in contracts with larger conventional poultry companies in the past, and the houses are already paid off. Joyce Foods does not require tunnel ventilation, and the natural ventilation and sunlight provide an appropriate environment for the hardy birds. Mortality is about 1.5 percent. Outdoor access is added to the houses by fencing in an area. Because of the longer grow-out period, only 3.25 flocks can be raised in a house yearly, compared to the industry standard of 5.5 flocks for Cornish-Cross. The birds are raised for 77 to 80 days to a dressed weight of 3.5 pounds. Payments to growers are calculated per bird, as opposed to per pound, and translate into double the typical payments seen in the U.S. poultry industry. Joyce Foods, Inc. is also a producer of guinea fowl, pheasants, ducks, and rabbits.

Joyce Foods, Inc. 4787 Kinnamon Road Winston-Salem, North Carolina 27103

(336) 766-9900 (336) 766-9009 FAX info@joycefoods.com www.joycefoods.com



Fast-growing Cornish-Cross broilers. Photo by Betsy Conner.



Fast-growing Cornish-Cross broilers in pastured pen. Photo by Betsy Conner.

Notes

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Paul Williams, Editor Robyn Metzger, Production

This publication is available on the Web at: www.attra.ncat.org/attra-pub/pasturedpoultrybudgets.html or

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