# Research Brief #63

## Large-scale pastured poultry farming in the U.S.

Can you make a living raising pastured poultry on a large scale? "Yes, but talk to farmers who'll give you their whole story, including their failures, before you begin," one producer participating in a 2000 Center for Integrated Agricultural Systems (CIAS) survey advises.

Steve Stevenson and Don Schuster of CIAS identified 12 producers raising at least 4,000 pastured chickens per year across the U.S. Nine of these farmers agreed to take part in the 2000 survey.

"Even at this larger scale, for all of the producers except one, pastured poultry was one enterprise of many," says Schuster. "Farms raising 4,000 to 10,000 chickens relied primarily on family labor, and pastured poultry represented a smaller portion of their income than producers at over 10,000 chickens with more hired labor."

A 1997-98 CIAS study of farmers growing pastured poultry in Wisconsin and Minnesota found that while most farms raise 2,000 or fewer birds, a much larger operation is required to generate at least \$18,000 annually in returns to family labor and management (see CIAS *Research Brief 57*).

### Who are the large-scale producers?

These farmers have a variety of backgrounds. They have been raising pastured poultry for 7.5 years on average, with two producers raising chickens for over 14 years and the remaining seven for six years or less. Five do not have prior farming experience, and three have some offfarm income. Their operations range in size from 4,000 to 50,000 chickens sold per year, with an average of 14,500 chickens.

## How do they raise their chickens?

All of the producers in this study at one point raised their chickens in 10' by 12' pens, moving them at least once a day. Five of the producers switched to a day range system to reduce labor. These producers move greenhouse-type buildings that house the chickens about once a week and move electrified netting daily around the greenhouse to rotate pastures.

## What kind of labor is required?

Labor requirements are one signifcant limitation

of large scale-pastured poultry operations. Many of the tasks, such as watering, feeding, and cleaning out brooder houses, are done by hand. And labor is not simply a matter of hours: eight of the nine producers said that attention to detail is essential to success. One producer states, "You need to stay close to home if the birds are outside. Rain and heat are big killers." Another producer warned, "I got out of dairy because I was sick of milking twice a day—and this is worse." Despite the workload, none of the producers plan to shrink their pastured poultry operations, and five plan to expand.

Only three of these producers raise pastured poultry year round. The others start from February to May and finish in October and November.

## Who provides the labor?

Producers in this study used both family labor, including husband and wife, children, nieces, and nephews, and hired labor. On six of the farms, husbands and wives both work on pastured poultry production.

Table 1 on the back of this *Brief* shows that, on the farms raising 4,000 to 10,000 chickens, families provide most of the labor. During the pastured poultry season, they work about 2.6 hours per day on chickens, not including processing. Farms raising over 10,000 to 25,000 chickens depend more on hired labor. These farmers work slightly fewer minutes per bird than the farmers raising 10,000 or fewer chickens. They also work almost seven hours a day on pastured chickens through their slightly longer growing season. The



Family members provide most of the labor on farms raising under 10,000 chickens

# Chickens sold (thousands)	Average # hours per year	Average # days per year	Avg #hrs per day over season	Avg #min per chicken in production	Average # family members	Average # hired workers	Avg % of labor contributed by family
4-10	656	254	2.6	7.4	2	0.4	83%
Over 10-25	1,814	264	6.9	6.0	3.75	1	64%

#### Table 1. Labor requirement averages for pastured chicken production at two farm sizes

largest farm, at 50,000 chickens, was not included in this analysis. The labor requirements on that farm were much greater than on the other farms, with much more hired labor.

Whether to process chickens on or off farm is an important decision for producers. State regulations, labor and locker plant availability, and cost all influence the decision. In this study, number of chickens sold did not influence the choice.

Five farms processed chickens on farm. An average of 2.4 family members processed birds on these farms with 2 to 7 employees also working on processing. The average cost to process a chicken on farm was \$1.17. Off-farm processing costs ranged from \$1 to \$4 per bird. If the unusually high \$4 charge is excluded, the average cost to process a bird off farm was \$1.41. Because of differences in income and other costs, producers processing on farm were not necessarily more profitable than those doing so off farm.

#### How do they market the birds?

"While smaller producers report ample marketing opportunities, those at over 10,000 chickens have to work much harder at building their markets," Schuster said. Smaller producers sold 45% of their chickens directly from their farm, while those selling over 10,000 chickens averaged only 14% on-farm sales. The larger producers sold a greater proportion of their chickens to restaurants and retail outlets, both of which require more work than on-farm sales.

The producers receive an overall average of \$2.08/pound for their chickens, with a range depending on where and how the birds are sold. Producers receive their highest prices at farmers markets, followed by restaurants. Retail and other sales return the lowest prices. Chickens sell at an average weight of 3.9 pounds.

Pastured poultry is used on several of these diversified farms to bring in customers for other farm products. "It's easier to sell chicken than beef," says one producer. "Chicken brings in a bigger customer base and allows you to make more money per acre." Chickens can help build a loyal customer base that may buy other farm products, like beef, that are harder to market.

#### How much money do they make?

Although the larger farms (over 10,000 chickens) brought in more income per bird, their expenses per bird—which include hired but not family labor—were also higher than the smaller farms. Producers at both levels showed similar net returns when researchers deducted costs of feed, chicks, buildings and hired labor. They did not deduct costs of family labor/management, capital, and land. Since land and interest costs vary tremendously, what ends up in the producers' pockets varies from farm to farm.

#### Table 2. Gross and net income from pastured poultry

# of chickens sold	4,000-10,000	Over 10,000
Gross income from pastured poultry	\$39,000	\$155,863*
Gross income per bird sold	\$7.30	\$8.61
Net income per bird (not including family labor, capital, and land)	\$2.24**	\$2.19

\* Does not include the much larger farm at 50,000 chickens; that farm(s information is included in the per bird statistics

\*\* Only two farms at 4,000-10,000 chickens provided expense data

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The Center for Integrated Agricultural Systems (CLAS) brings together university faculty, farmers, policy makers, and others to study relationships between farming practices, farm profitability, the environment, and rural vitality. Located in the College of Agricultural and Life Sciences at the UW-Madison, it fosters multidisciplinary inquiry and supports a range of research, curriculum development, and program development projects. For more information on the Center or on the research in this Brief, contact: CIAS, 1450 Linden Drive, UW-Madison, Madison, WI 53706 Phone: (608) 262-5200 Fax: (608) 265-3020 E-mail: ramcnair@facstaff.wisc.edu, www.wisc.edu/cias This Research Brief is part of a series. Contact CIAS for other titles. CIAS staff members are grateful for the reviews of this research update by UW-Madison and UW-Extension faculty and CIAS Citizens Advisory Council members. Printed on recycled paper. January, 2003.