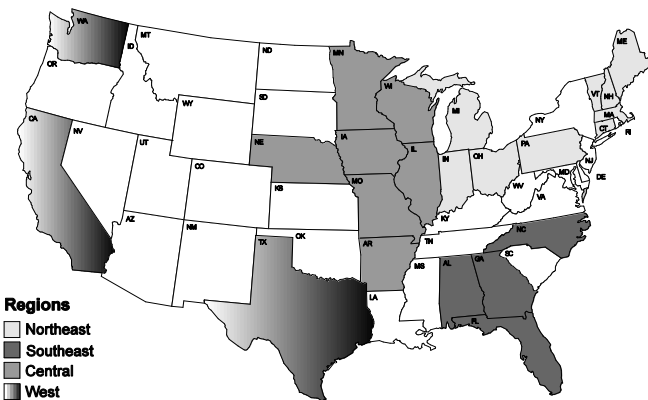


Management Practices on Certified Organic Table-Egg Farms in the United States

In 2010, the U.S. Food and Drug Administration (FDA) implemented an egg safety rule to control *S. Enteritidis* on U.S. farms that produce eggs for human consumption.¹ While assessing the need for and economic impact of the egg safety rule, the FDA used information from the USDA's National Animal Health Monitoring System (NAHMS) Layers '99 study. As practices on table-egg farms have changed substantially since 1999, it was determined that updated information would be useful to the poultry industry and to related government agencies. As a result, in 2013 NAHMS conducted the Layers 2013 study to describe current management practices on U.S. table-egg farms, including those used on certified organic farms.

For the Layers 2013 study, a sample of farms with 3,000 or more laying hens from 19 States was selected from the FDA list of registered egg producers. A total of 85 certified organic operations participated in the study. Note that this study included only farms with 3,000 or more birds. The number of certified organic farms with fewer than 3,000 birds and their management practices were not included in the study.

Layers 2013 study States*



*New England States (CT, MA, ME, NH, VT) were considered one State for study analyses.

¹ Code of Federal Regulations, Title 21, Volume 2, Part 118 Production, storage, and transportation of shell eggs.

Organic egg production

Organic farming, which includes organic egg production, is a growing trend in U.S. agriculture. The requirements for certified organic egg production include using only certified organic feed, no antibiotic use, cage-free housing, and outside access for birds.

Overall, 27.6 percent of all layer farms were certified organic operations. In the Southeast region (see map), 20.1 percent of layer farms were certified organic operations compared with 37.0 percent of layer farms in the Central region (figure 1). The percentage of all farms certified as organic operations decreased as farm size increased; 61.0 percent of small farms were certified organic operations compared with less than 2 percent of large farms (figure 2). Similarly, among certified organic farms, the majority of farms (85.4 percent) were small operations; only 2.7 percent had a maximum capacity of 100,000 or more birds.

Figure 1. Percentage of layer farms certified as organic operations, by region

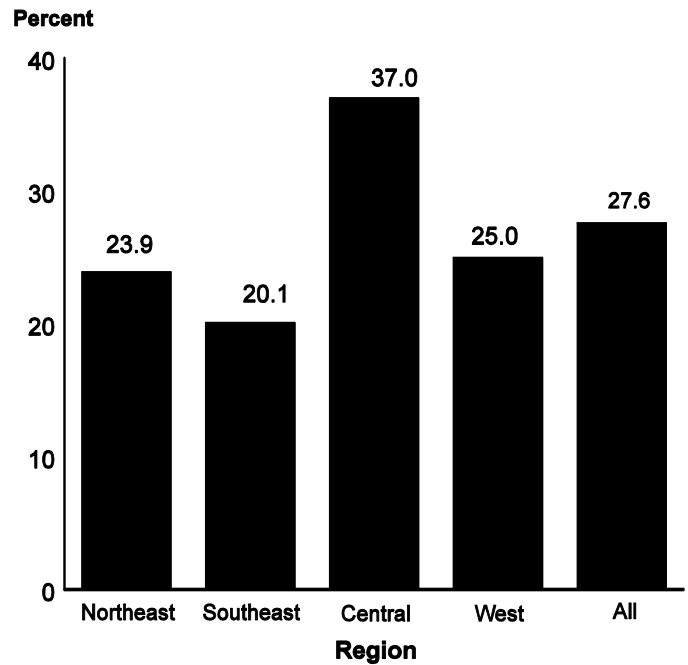
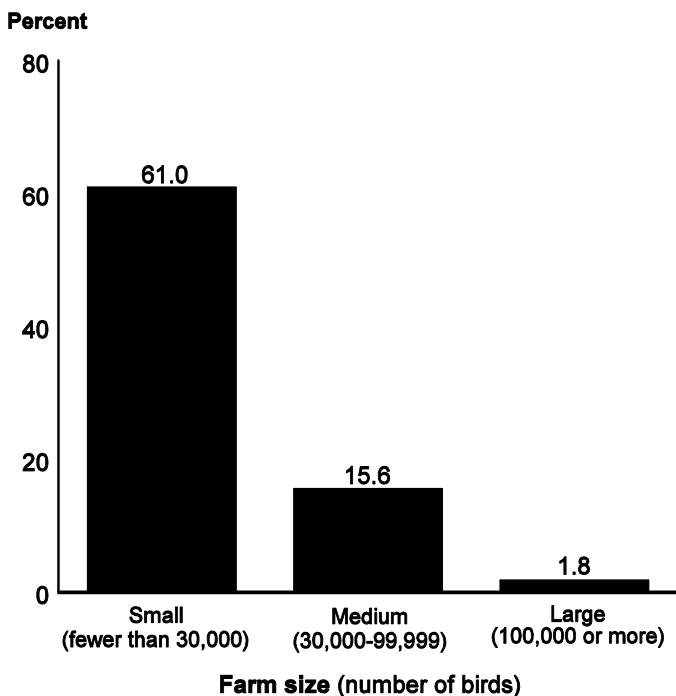


Figure 2. Percentage of layer farms certified as organic operations, by farm size



Management practices

Nearly all certified organic farms provided an uncovered outdoor area for birds. Outside areas on about half of certified organic farms provided 2.0 to 4.9 square feet of space per bird when houses were at maximum capacity. On 38.0 percent of certified organic farms, the outside area provided less than 2 square feet of space per bird, while 12.6 percent of farms provided 5 or more square feet of space per bird.

Predators accounted for just 0.2 percent of layers lost in the last flock that completed its laying cycle. For predator control, the highest percentages of certified organic farms used electric fencing (20.4 percent), traps (19.4 percent), and shooting (15.7 percent).

Only 3.6 percent of certified organic farms molted their flocks. Molting is allowed for organic table-egg flocks; however, the methods used to molt must comply with organic production rules.

Less than 1 percent of certified organic farms gave an antibiotic at any time to the last completed flock. Any birds treated with antibiotics must be removed from the organic market and sold via other channels.

About one of five certified organic farms (21.8 percent) gathered eggs by hand, accounting for 4.7 percent of eggs produced in May 2013. Nearly all farms (97.7 percent) processed eggs

off-farm. For certified organic farms that processed eggs off-farm, about 3 of 10 transported eggs 100 or more miles. Nearly all certified organic farms (99.6 percent) used reusable plastic flats which were cleaned and disinfected before reuse. The majority of certified organic farms (70.2 percent) cleaned and disinfected racks and pallets before reusing them.

Broilers, other poultry, and other domestic birds were rarely raised on certified organic farms (4.6, 0.6, and 0.0 percent of farms, respectively). Nearly half of certified organic farms (44.9 percent) had cattle on-site, and more than half (54.2 percent) had dogs. Although less than 1 percent of certified organic farms observed wild waterfowl in the layers' outdoor area, nearly two-thirds (64.6 percent) observed other wild birds in the outside area.

Mice were the ongoing rodent problem on the highest percentage of certified organic farms, both inside the layer house (60.3 percent) and in the layers' outdoor area (50.5 percent). However, certified organic farms with rodent problems usually ranked the problems as low (minor impact on building or feed efficiency). About 9 of 10 certified organic farms monitored rodent index² as part of their rodent control program inside the layer house, and 1 of 3 did so in the layers' outdoor area. Nearly all certified organic farms (97.2 percent) had a typical rodent index of 0 to 10 (low) during the previous 12 months. No farms reported a typical rodent index of 26 or more (high). The majority of certified organic farms (96.4 percent) used traps or sticky tape/glue traps to control rodents during the previous 12 months; 10.0 percent used cats.

All certified organic farms obtained pullets from flocks monitored for *S. Enteritidis* through the National Poultry Improvement Plan. About one-third of farms had been inspected by the FDA.

Layers on almost all certified organic farms (98.9 percent) were vaccinated against *Salmonella* as pullets, and layers on an additional 0.5 percent of farms were vaccinated both as pullets and as layers. Less than 1 percent of certified organic farms did not vaccinate either pullets or layers against *Salmonella*. Nearly all farms (95.6 percent) tested for *S. Enteritidis* in the layer flock environment at some time from June 2012 to May 2013. None of these tests was positive for *S. Enteritidis*.

² A measurement standardized to the number of mice caught per 12 traps per 7 days.

Certified organic farms versus nonorganic farms

Certified organic farms were smaller than nonorganic farms. A higher percentage of certified organic farms than nonorganic farms gathered eggs by hand and a lower percentage processed eggs on-farm. Only 3.6 percent of organic farms routinely molted their flocks compared with 50.0 percent of nonorganic farms. Organic and nonorganic farms reported similar levels of rodent problems inside the layer houses. Compared with nonorganic farms, a higher percentage of certified organic farms used traps or sticky tape/glue traps to control rodents and a lower percentage used chemicals or baits.

Table 1. Percentage of certified organic farms and percentage of nonorganic farms, by farm characteristics

Characteristic	Percent Farms	
	Organic	Nonorganic
Farm size (number birds)		
Fewer than 30,000	85.4	20.8
30,000–99,999	11.9	24.4
100,000 or more	2.7	54.8
Molting		
Routinely molt	3.6	50.0
Egg handling		
Any eggs hand gathered	21.8	6.6
Eggs primarily processed on-farm	2.3	34.4
Rodent control method		
Chemicals or bait	48.6	93.5
Traps or sticky tape	96.4	87.0
Cats	10.0	11.2
Professional pest control operator	3.5	24.3
Other	6.4	1.8

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