Alaska Livestock Series

COOPERATIVE EXTENSION SERVICE

UNIVERSITY OF ALASKA FAIRBANKS

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Home Laying Flock

Many Alaskans have a small laying flock for various reasons, including fresh eggs, 4-H or FFA projects, or they just like to have farm animals around. It is important to remember, however, that most home-produced eggs are much more expensive than those purchased from the local grocery. If you decide to produce your own eggs at home, the following information will help reduce your egg production costs.

What Kind of Chicks to Buy

The many different breeds of chickens are usually divided into three types: meat, egg and novelty. Any of the egg-producing breeds should be satisfactory for a home laying flock. The Chanticleer, Ameraucana, Plymouth Rock, Wyandotte, Rhode Island Red and New Hampshire are all good egg-type birds. In addition, there are several cross breeds, and hybrids that have been developed especially for egg production, but they do not lay well in cold climates. The Leghorn and Leghorn crosses are not appropriate for Alaska's cold climate because of their relatively low body mass.

Most people prefer to buy young chicks in the early spring when starting a laying flock. These birds should start to lay in approximately 20 weeks.

Be sure to order sexed pullet chicks when purchasing egg-laying breeds.

Brooding Chicks

Chicks may be brooded (artificially heated and cared for) by a variety of methods. A simple box brooder using a regular light bulb works well for 12 to 25 chicks. Plans for various brooders are available at your local Extension office.

Points to consider when brooding chicks:

1. The brooder is best located outside of the house due to odor and dust.
2. Brooder area should be cleaned and disinfected.
3. Ventilate freely but avoid drafts.
4. Shavings, chopped straw and peat moss (dried) make good litter. Newspaper can be used only if it is shredded. Using unshredded paper can cause the chicks to develop crippling leg deformities. Sawdust can be eaten by small chicks and is not recommended as a litter source.
5. Start chicks at 95°F. (temperature at 2 inches off the floor). Drop the temperature 5 to 7 degrees each week. Discontinue heat at the end of the fifth week.

Photo by Stephen Ausmus, USDA Agricultureal Research Service

You don't really need a thermometer to check the temperature. If the chicks walk around freely, peep and seem contented, they are warm enough. If they huddle together, they are probably cold. If they are too warm they will pant and get as far away from the light as possible.

6. Chicks will need 10 square inches each under the brooder cover, and 1½ square feet of floor space for the last eight weeks of age. From 8 to 20 weeks allow 2½ square feet per bird.

Feeding

During the first two weeks, place feed in a shallow pan or on paper. Put in handful amounts as needed. At two weeks, switch to a hanging tube-type feeder. Hang feeder level with the birds' backs and adjust feeder upward as chicks grow. Allow enough room so all birds can eat at once. For new chicks, feed a supplement that contains vitamins and minerals.

Calcium or grit need not be fed with a complete laying mash ration. Other feeds should have grit sprinkled over mash at least once a week; calcium should be available. Sources of calcium include oyster shells and limestone.

Housing and Equipment — Points to Consider

1. A well constructed poultry house that is insulated, has a vapor barrier, is ventilated and has a good roof and framing structure should last 20 years.
2. Waterer and feeder should last 10 years.
3. House should be wired for electricity to provide light and supplemental heat for brooding.
4. Protect birds against weather extremes; 70° to 71°F is ideal. Birds can tolerate much colder temperatures if they are kept dry and protected from wind.
5. Provide plenty of fresh litter and replace as needed.
6. Provide 2 to 2½ square feet floor space per bird. A 5-foot-by-6-foot building is needed for 12 birds.
7. Provide 3 to 4 inches of feeding space per laying hen. A tube-type feeder 12 inches in diameter is adequate for 12 birds. Hanging the feeder from the ceiling and placing it about breast high will reduce feed waste.
8. Layers should have about 8 inches of roost space per bird. Two-inch boards set 12 to 15 inches apart work well. Place 2 to 3 feet above floor. For unheated coops that will experience sub-freezing temperatures, use 2 foot-by-6-foot boards to reduce frostbite in toes.
9. Provide layers with 15-17 hours of light. This will mean artificial light through much of the winter. A 10-watt LED bulb or 20-watt compact fluorescent bulb will provide sufficient light.
10. An electrically heated dog watering bowl turned upside down works well for keeping a 5-gallon self-waterer thawed in the winter.

*Growth and Feed Consumption for White Leghorn Pullets**

Age (in weeks)	Weight (in pounds)	Feed to Date (in pounds)	Kind of Feed
4	.6	1.1	Starter
8	1.4	3.6	Starter
12	2.1	7.1	Grower
16	2.7	11.0	Grower
20	3.1	15.1	Laying Mash
22	3.3	17.2	Laying Mash

*White Leghorn pullets are used for comparison purposes but are not recommended for Alaska

University of Washington. Cooperative Extension Service Fact Sheet

11. The UAF Cooperative Extension Service has an excellent publication, *Poultry Equipment Plans,* FSG-00540. The handbook includes plans for chickens, turkeys, pigeons and rabbits.

Other Considerations

1. Commercial egg breeds should lay 200 to 240 eggs per year. Some breeds developed for commercial growers lay up to 300 eggs per year.
2. Don't purchase birds that have been in production longer than 14 months or that have molted because of reduced production.
3. Molting may be used to indicate a bird's laying ability. Both the time and duration of molts should be considered. The early molter is usually a poor layer. The normal molt usually occurs during the summer and fall of each laying year. Molting is influenced by inheritance and environment. To prevent premature molting growers should:
   - Protect birds from extreme cold weather
   - Provide adequate feed and water
   - Provide adequate light
   - Eliminate disease problems

The Small Laying Flock—Does It Pay?

Using the figures above, your total cost for the first year of production would be $1,681.96. If the 12 layers produce 220 eggs each for 12 months, the total production will be 2,640 eggs. Using the $1,681.96 figure in the example, production cost is $7.64 per dozen.

These figures do not include costs for supplemental heat, labor, risk, return to management or loss of birds/eggs due to freezing. While home-produced eggs can be significantly more expensive than store-bought eggs, many believe home produced eggs are significantly better in taste and quality.

Possible ways to reduce cost would be to choose breeds of birds that would produce more than 220 eggs per year. Another obvious way to reduce cost would be to cut feed costs by mixing your own. However, you must be careful in choosing this option. Poultry feeds mixed/blended at home are often deficient in protein, vitamins, energy or minerals.

There is a small value in the manure produced by twelve birds. The average value of chicken manure produced would be $.25 per pound when compared to the value of commercial fertilizer.

Item	Average Cost	Your Cost
12 chicks@ $3.50 each	$42.00	_____
Feed for pullets (to 20 weeks @ 3.3 pounds) 15.1 x 12 x .80/lb	$144.96	_____
Feed for layers for 12 months 12 birds x 100 pounds feed x $.75/lb	$900.00	_____
Medication (for Coccidiosis), vitamins and minerals	$25.00	_____
Electricity	$20.00	_____
Waterers and feeders	$50.00	_____
Coop	$300.00	_____
Litter	$200.00	_____
Total cost	**$1681.96**	_____

www.uaf.edu/ces or 1-877-520-5211

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