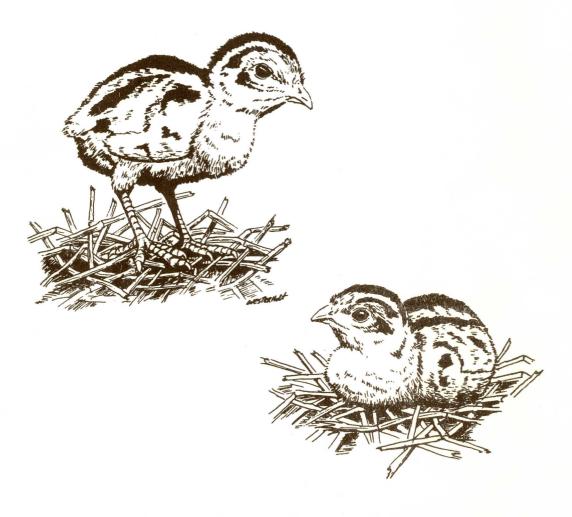
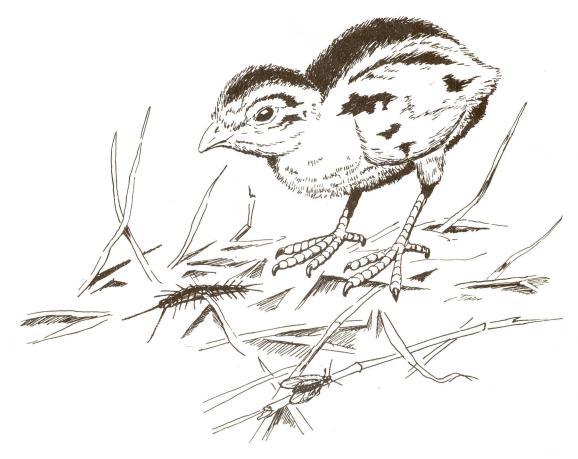
HOW TO RAISE PHEASANTS



Nebraska Game and Parks Commission



To raise pheasants, you will need about five square feet per bird in a covered pen. A 25-foot square will handle 125 chicks. However, the bigger the yard, the better, since these are wild birds and nervous. Overcrowding leads to feather-picking and cannibalism. It is important that the ground be clean to cut down disease and that there have been no chickens on it for at least two years.

Pheasant chicks need fresh air, sunshine, and lots of exercise to grow rapidly and develop into strong, vigorous birds that can survive in the wild. Remember, you will be turning them out to scratch for themselves at the tender age of seven or eight weeks.

WHEN CHICKS ARRIVE

Turn heat source on at least 48 hours before chicks are scheduled to arrive and regulate to 95° at chick height. Make sure they have water when placed under the heat source, and dip their beaks in the water as they are put down. It is important that they locate water before feed. Put feed out 1 to 2 hours after chicks are set out.

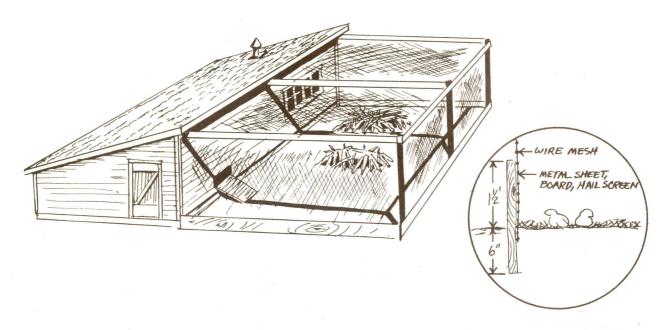
For the first week, confine the chicks in circular areas about 6 feet in diameter with 12 to 18-inch-high corrugated chick guards.

HOLDING LOSSES TO A MINIMUM

The first week is critical. Avoid too much heat or letting chicks get chilled or wet. They may also need to be taught to eat and drink.

Cannibalism can be one of the worst problems and can destroy the flock. There is little to be done other than to avoid letting it get started. Anything you can do to keep them busy is the best prevention. Try placing some perches several inches from the ground. Turn chicks into the yard where there are insects to chase and places to scratch. Small brush piles with some weeds on them will divert their attention, as will scattered alfalfa hay. Another diversion is succulent green vegetation to feed on, such as lambs quarters, pigweed, dandelions, wild lettuce, etc.

Piling up and smothering is another problem that results from electrical storms, being frightened by predators, etc. A round pen will help alleviate this, since there would be no corners to congregate in.



THE PEN

Make the sides and ends of the pen from fine poultry mesh (chicks can squeeze through 1-inch mesh until about 10 days old). The lower 1½ to 2 feet should be tighter. This can be done by putting in a layer of hail screen, old sheet metal, boards, etc. Bury the wire or reinforcing material at least six inches deep around all edges to keep the birds from digging out and cats, dogs, skunks, coons, and foxes from digging in. A solid material at the bottom helps prevent predators from frightening the chicks.

A brooder house for pheasant chicks should be relatively weather-tight, free from direct drafts on the chicks, and rodent-proof. Any building is suitable, as long as a portion can be penned off. However, it must be clean and disinfected. (Note: Lye is dangerous for use by children. Use a detergent and a cheap commercial disinfectant.) Don't forget to disinfect feeders and waterers. Do not put feed in wet feeders, since it will cake and sour. Make sure to clean the waterers and put out fresh water daily.

Expanded vermiculite is one of the better litters, because it is fireproof. Ground corncobs, shavings, or commercial-processed flax straw are excellent. Peat moss can be used if not too fine. Plain straw is good, but should be at least two inches deep.

While most persons undertaking this pheasant raising project will convert existing facilities, certain minimum requirements are necessary. A pen for 100 pheasant chicks should allow five-square feet per bird or a pen 21 by 24 by 7 feet. Even so, debeaking may be required to prevent cannibalism. Total estimated cost to build such a pen from new materials would be \$140. A materials list includes:

ITEM	QUANTITY	COST
Poultry netting 1"x48"x50" @ \$14.39	2	\$ 28.78
Poultry netting 2"x48"x50" @ \$8.19	. 5	40.95
Fir posts 4 x 4 @ \$4.70	. 10	47.00
Dimension lumber 2 x 4 @ .15 ft	. 135′	20.25
Steel hinges \$3.80 @ pair	. 1	3.80
Hog rings	. 200	1.50
		\$142.28
RECOMMENDED EQUIPMENT (Minimum)		
2 electric infrared brooders	.\$18.00	
3 waterers (plastic)		
2 feeders	7.49	
	\$32.73	

Preferred or recommended pen requirements for 100 chicks would allow about 24 square feet of space per bird or a pen of 49 by 49 by 7 feet. With this space allowance, disease problems would be minimal and feather development and vigor would be maximized. Estimated cost to build such a pen from new materials would be \$360. A list of materials includes:

	QUANTITY	COST
Poultry netting 1"x48"x150"	1	\$ 35.98
Poultry netting 1"x48"x50"	1	14.39
Poultry netting 2"x48"x150"	5	94.90
Poultry netting 2"x48"x50"		8.19
Fir posts 4x4 @ \$4.70		122.20
Dimension lumber 2x4 @ .15 ft.		73.50
Steel hinges 1 pr. @ 3.80		3.80
Hog rings	900	6.75
		\$359.71
RECOMMENDED EQUIPMENT (Preferred)		
1 gas brooder	\$59.95	
3 waterers	7.24	
4 feeders		
	\$82.17	

Don't overlook the importance of vegetative cover in your growing pens. Abundant cover is critical, when birds are first put outside, for protection against the weather. Heavy weed growth helps prevent crowding as well as feather-picking.

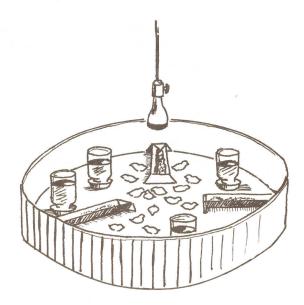
The kind of cover is also important. Many small grains, hay crops, and various grasses and weeds make excellent cover. However, they last for only a few weeks. Unless the cover is stiff-stemmed, the birds will trample it and reduce its effectiveness to zero. Oats, clover, and smart-weed are just a few of the cover crops which do not support high populations of game birds. Weeds such as lambsquarter and pigweed often grow naturally in pens and will provide outstanding cover for long periods. If you are not satisfied with your natural cover, consider broadcasting grain sorghum seed.

BROODING

The easiest and simplest way to brood 50 pheasant chicks is with a 250-watt infrared heat lamp. A red end will help reduce cannibalism. A Pyrex globe gives an added safety factor, since it won't shatter if splattered.

A brooder hover or an electric heat lamp can be hung 15 to 18 inches from the floor. Hang either unit so it can be adjusted to height. A bathtub chain makes a handy way to adjust lamp height. This type does not need a hover cover but a reflector might be used to direct the heat down. Adjust the unit so the chicks huddle in a small circle, with a vacant spot directly beneath the bulb. If they bunch up directly beneath the unit, it is hung too high. If the circle of chicks is a large one, it is too low and they are too hot. Be certain to hang units securely. The lamp hold should have a guard so that if it does fall, the hot bulb cannot touch litter.

The temperature should be about 95°F. for the first week and then reduced 5° each week until no longer needed. It should be at least 80°F. around the feeders and waterers, or the chicks won't leave the heat lamps to eat and drink. Don't let the bulb get closer than 15 inches to the litter. Brooding results will be better if chicks have a choice of temperatures. They will move from hot (95°) to warm (85°) if they want to cool off during their first week. Place feeders and waterers around the light in a spoke-like fashion with the light as the hub. This allows chicks to move freely from heat to feed and water.



Ordinary No. 18 gauge lamp wire is not heavy enough. Type HSJ No. 14 is sufficient if one to four 250-W lamps are to be used. For four to seven 250-W lamps, No. 12 wire is needed.

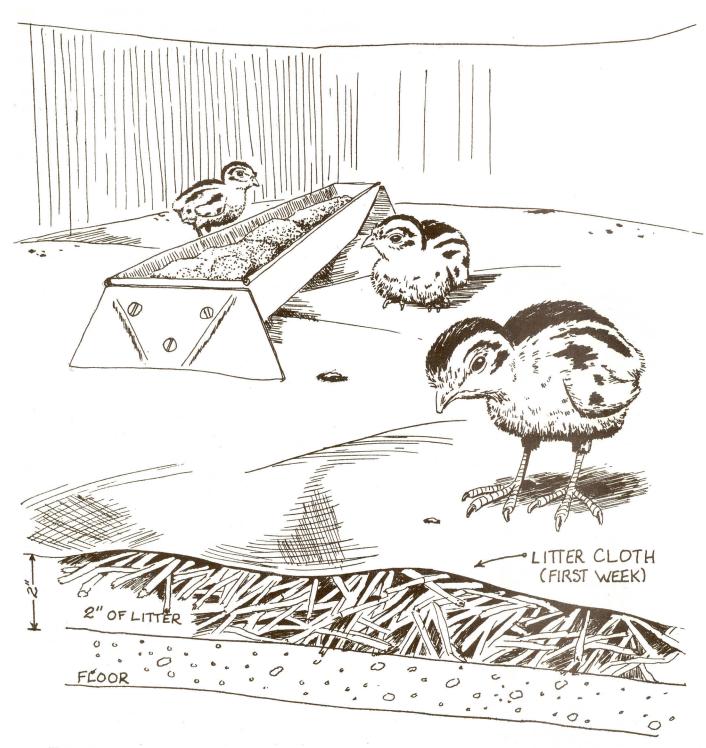
In late spring (May 15 on) broods, one 250-W lamp should be adequate for 125 chicks or less. After the first week, reduce the temperature each week by raising the light two or three inches. Let the chick circle under the light be your guide.

At the end of the third week, discontinue the heat during the day, weather permitting, and turn heat on again at night. By the end of the fourth week, if the weather is nice, it should be possible to discontinue the heat entirely.

A cardboard guard (12 inches high) should be placed in a circle around the feeders and waterers, to prevent pile-up that can smother the chicks. It should be five to six feet in diameter and left in place until chicks are 7 to 10 days old. At that time, the guard can be removed and the chicks can have the run of the brooder house.

Allow some ventilation in the brooder house, but be sure there are no drafts blowing directly on the young pheasants. During cold weather, a well-insulated house (batts or rigid foam) will help retain brooder heat and still permit adequate ventilation. Window or exhaust fans give sufficient ventilation when properly adjusted.

Watch your birds closely during all periods of brooding. When they are restless and chirping excessively, they may be too hot, too cold, catching cold, out of feed, or out of water. The best indicator that all is well is good distribution of the birds over the floor, with some sleeping on the litter.



LITTER

A good litter must be laid down on the ground or floor in the brooder house.

Special paper (made for starting chicks), white muslin, or old bed sheets should be placed over the regular litter, under the chick guard, for the first week. This will keep the chicks from eating the litter. If permitted to eat their litter, they will starve to death, since they will not learn to eat their food.

Good litter materials include ground corncobs, expanded vermiculite, processed flax straw, coarse peat moss, or plain clean straw. Litter should be laid at least two inches deep.

Wood shavings do not make good litter, since they tend to absorb too much moisture and remain damp. Sand should also be avoided, since it can blind the chicks.

FEED

Estimated cost for commercial feed to raise 100 chicks to eight weeks of age would be about \$60. This cost will vary, depending on the amount of natural food in the pens and the amount of non-commercial feed used in the last weeks before release.

Pheasant chicks do best on a game bird pre-starter. Chick starter is too low in protein, but turkey starter will do the job if no other food is available. The most important thing to consider is that the feed should be grain rather than mash. The birds should be kept on solids, since it will be easier to switch them to other types of feed prior to release.

For the first five days, scattering some crushed starter pellets on paper plates or clean egg flats in addition to the hoppers will help the chicks learn to eat. Green-colored paper plates will help attract chicks to the feed. For the first few days when using paper plates, it's good to cut some half-inch squares of hardware cloth to cover them, since chicks tend to scratch the feed and waste a great deal. Bright-colored marbles in the feeders often help attract the chicks to feed. Ditto for waterers.

When the chicks are quite young, lettuce makes a good forage. As they grow older, throw in some scratch feeds, such as feed wheat, cracked corn, and screenings. Weed seeds are one of the young birds' natural foods.

A good scratch grain is screenings from your own cleaning operations. Run these through a fanning mill twice with high wind to get rid of the chaff. Screenings should contain broken kernels of grain, as well as wild millets, buckwheat, and pigeon grass seeds.

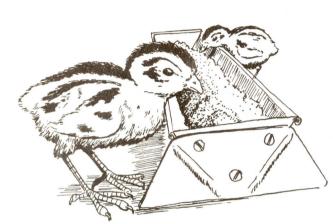
Start the scratch grain at the end of the third week by sprinkling a small amount of it on the feed. After a week, feed the grain or screenings in a separate feeder. The chicks need hard grit (not oyster shell). Four pounds of chick-size grit should be enough for 50 birds through 7-weeks. Scatter a little chick-size grit over the feed the first day and every day thereafter. Don't use too much or they'll go on a grit binge and won't get enough feed.

Raise feeders and waterers after the first week. Bricks or 2x4 boards work well. The top edge of the feeder should be level with or slightly higher than the bird's back.

WATER

Put five or six one-quart waterers around. These should be scalded every day and the water changed twice a day. Never let them run out of clean fresh water, warm to the touch during the first three days. Small stones or marbles in the water founts the first few days will keep the chicks from falling in and drowning. GREEN plastic mason jar waterers will attract the chicks and help them learn to drink.

A wire-screened water stand (not more than 2 inches high) will keep the birds out of damp litter usually present around the fountain.





DISEASE DETECTION AND CONTROL

If disease does strike your birds, it is important to take the following steps: (1) Recognize symptoms early; (2) check suggestion below; (3) consult your veterinarian, who may refer you to a poultry pathologist; (4) follow recommendations exactly. This procedure can mean the difference between success or failure, since it can save time and reduce cost.

Game birds are susceptible to most of the common diseases of poultry. Materials used to treat poultry diseases are usually successful on game birds. Dosage may need to be varied due to the sizes of some of the birds.

COMMON PHEASANT REARING PROBLEMS

Early Brood Problems

- 1. Birds are bunched together under the brooder. Temperature is too low. It should be 95° on the floor under the brooder.
- 2. Birds are piling outside of the brooder. The temperature is too high.
- 3. Birds seem listless and dull; the smallest ones are dying. Check the waterers and feeders. Are they low enough for the birds to reach? Use paper plates or egg flats the first week. Make sure there are enough waterers and feeders.
- 4. Birds are dying for no apparent reason. What litter is used? Is it covered? ALL OVER? Open crop and gizzard of bird and look for litter in both places. Birds are small at this stage, and just a few strands of thread-like material or kernels of litter can block the passages. Cover the litter completely for two weeks.
- 5. Everything checks out to this point and birds are still dying. Check the size of the feed. Is it too large? Take the bag to a local feed mill and run it through the roller mill to crush it smaller.
- 6. Still no good? Call either your local veterinarian or the Game and Parks Commission's Lincoln office (402) 464-0641.

Second Week and Later

- 1. If birds are dying, apparently attacking each other and feather-picking, with bare back showing above the vent, check the following:
 - a. Temperature-too high?
 - b. Light in house-too bright?
 - c. Space per bird-too crowded?
- 2. Birds are standing around listless, with droopy wings and mussed feathers; some dying. Check the following:
 - a. When you opened the brooder house, did you get a slight odor of ammonia?
 - b. Feel the litter (away from the feeders and waterers). Is it damp?
 - c. Check the droppings. Are they white, soft, and chalky?
 - d. Open bird up and look at the blood vessels along the intestine. Are they red and inflamed? Any one or combinations of the above indicate that the birds may have coccidiosis. To treat, place the drug sulfaquinoxaline in the drinking water for 2 to 3 days and withdraw. Repeat treatment in a week, if needed. The drug is available at feed mills. Ask for their treatment for coccidiosis in chickens or turkeys. There are many brand names that incorporate this drug, but it is not indicated in the name. It comes in various strengths, so check the label and treat the same as indicated for chickens.
- 3. Birds are listless, droopy, sneezing, and dying.
 - a. Frighten them a bit, so they exercise. Did this increase the sneezing and shaking of heads?
 - b. Pick up a bird. Is it light in weight, with a sharp breastbone?
 - c. Open the windpipe of a bird and look for a little red worm shaped like a "Y" that measures 1/8 to 3/4-inch long.
 - Any one or combination of the above indicates gapeworm. This is a rough one. To date, no feed additives have been approved. Use one gram of Tramisol to one gallon of water for 2 to 3 days. It's expensive.
- 4. Birds are in good shape, but they seem to have trouble walking and some seem to sit on their hocks a lot. Some may be dying.
 - a. Pick up an affected bird. Look at the knee joints. Are they misformed, knobby, or large looking?

This is probably perosis (slipped tendon). It is not curable, but you can halt it. Get a small bottle of potassium permanganate crystals from a drug store. Dosage is ¼-teaspoon per gallon of water for 2 to 3 days. Withdraw and repeat in one week, if necessary.

These are the most common problems that develop when raising pheasants. If other problems occur, call your local Game and Parks Commission office.

PHEASANT RAISING CHART

	First Week							2nd	3rd	4th	5th	6th	7th
	1	2	3	4	5	6	7	wk.	wk.	wk.			wk.
BROODING	-												
Keep guard around brooder	X	X	X	_									
Remove guard in day, replace at night				x	x								
Remove guard entirely						X							
Use litter cloth	X	X	X	X	X								
Keep brooder lamp at proper height to insure proper brooding temperatures												0,	
Brooder left on day and night	X	×	X	x	X	x	x	X	X				
Brooder off in day, on at night										X			
FEEDING - Have proper feed in hoppers						l ean	and	refil	l hopp	ers d	aily.		
Put feed on rough paper plates or egg case cup flats inside guard	x	x	x	×	x								
Add chick grain to starter										x			
Have grain and starter separate											X	X	X
Have feed hoppers in house and yard								x	x	x	x	X	x
•													
WATERING – Clean and refill water foun Give chicks warm water	ts d	lail '	y										
(cold water all right after third day)	X	X	X										
Have small stones or large marbles in base of founts	x	x	x	×	x	x	x						
Have founts in house and yard								X	X	x	X	X	X
RANGING Keep chicks in brooder house	x	x	×	x	x	x	x						
Let chicks into yard if weather warm and dry								x					
Drive chicks into house at night, let out in day								x	x	×	x		
Give chicks free run of house and yard, both day and night												x	x

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KEEP THEM WILD

Keep birds as wild as you can. DO NOT make them personal pets. Anticipate a release site or sites, so that you will have a place to release them when they are seven to eight weeks old. Unmowed weed patches can make excellent areas. Grassy roosting sites and overhead woody cover (plum thickets) may be necessary under some situations. You might be able to create some habitat by planting sunflowers or sweet clover. Remember the cover can be thick at the top but the birds need short stuff or bare ground to move about under the canopy. That will help the birds survive the shock of release.

But, for year-round survival, habitat must provide grassy nesting sites, food, roosting and loafing sites, and weedy or brushy escape cover. These elements will determine the success of your efforts. The more times you can duplicate these year-around needs the greater the population will become. Remember, too, that the selection of the release site and the actual release will have to be coordinated with the conservation officer.

Good luck.

