



Texas Agricultural Extension Service

THE TEXAS A&M UNIVERSITY SYSTEM

How to Produce Broilers for Show

Fred D. Thornberry*



A successful broiler exhibitor must:

1. *Observe all show rules and regulations governing the purchasing and showing of broilers.*
2. *Purchase Pullorum-Typhoid clean broiler chicks.*
3. *Use top-quality feeds.*
4. *Follow recommended management practices during the entire brooding and growing period.*
5. *Keep careful records of all expenses and receipts.*
6. *Cull birds closely and select the show entry properly.*

Broiler projects are popular with 4-H and FFA members and are an integral part of most youth livestock shows. Broiler projects are especially suitable for youngsters with limited space.

When planning to start a broiler project, contact the county Extension office, a 4-H leader or an agricultural science instructor. Birds not shown can be slaughtered for home use or sold locally to special markets.

Housing

Expensive housing and equipment are not necessary. However, a clean, dry structure that can be well ventilated, a brooder or heat lamps to warm the chicks, and feeding and watering equipment are needed. Provide at least 2 square feet of floor space per broiler. Openings on three sides of the building provide plenty of fresh air for the birds. Plastic sheeting can be used to close

sides during brooding and in cold weather. Make certain the concrete or dirt floor is at least 6 inches above ground level to prevent flooding. The roof overhang should be sufficient to effectively protect against blowing rain.



A typical building used for growing broilers for a youth project.

*Professor and Extension Poultry Specialist, The Texas A&M University System.

Purchasing Chicks

At least 50 broiler type pullet chicks should be purchased. Pullets carry more flesh over the back and have a more rounded appearance to the breast, thighs and legs. With 50 or more broilers to choose from, it is easier to select good, uniform show entries.

Preparation and Brooding

Clean and disinfect the broiler house, feeders and waterers at least two weeks before the chicks arrive. Wash the house down with soap and water. Then spray a commercial disinfectant labeled for use in poultry houses.

Be prepared for the chicks two days in advance. Put at least 4 inches of litter on the floor of the cleaned, disinfected house. Wood shavings, cane fiber, coarse dry sawdust, peanut hulls or rice hulls make good litter. Hay makes very poor litter. Keep all sticks, boards and sharp objects away from the broiler house.

Construct a cardboard brooder guard (brooder circle) to keep chicks near heat, water and feed. The brooder guard should be 18 inches high and must be a minimum of 5 feet in diameter for 50 chicks. When chicks are seven days old, remove the guard and allow them full freedom of the pen.

Electric heat lamps (infrared bulbs) are good heat sources for brooding chicks. Two 125-watt bulbs per 50 chicks are recommended. Make certain lamps are secured so they cannot fall to the litter and create a fire hazard. The lamps should hang so that the bottoms are 18 to 24 inches from the litter. Lamps can be raised or lowered depending on temperature conditions. Place waterers a good distance from the lamps to prevent splashing water from cracking the hot bulbs.

If a gas or an electric hover-type brooder is used, it should operate at a temperature of approximately 92 degrees to 95 degrees F. Gradually reduce the temperature 5 degrees each week until the broilers are three to four weeks old or until the house temperature reaches 70 degrees F.

When chicks are comfortable, they will bed down in a semicircle around the perimeter of the heat zone. If cold, chicks will crowd under the heat source. If too warm, they will move to the outer limits of the brooder guard.

Chilling can stunt chicks. In cold weather the heat source should be turned on 48 hours before chicks arrive to adequately heat the litter.

After the broilers are four weeks old and fully feathered, heat is seldom required. Some exhibitors tend to keep their birds much too warm. This will affect feathering, flock uniformity, fleshing and finish.



Water, feed and a heat source are all essential in getting broiler chicks off to a good start.

Lighting

Provide all-night light for broilers. Twenty-four hour lighting (natural and artificial) improves feathering and increases weight, especially during the summer months. Hang a 40-watt bulb at least 6 feet above broilers after removing heat lamps.

Feeding

Optimum performance of broilers is dependent on proper nutrition. The feed dealer should be informed of the type of feed required at least two weeks before chicks arrive so that fresh feed can be ordered. It is absolutely essential that broilers receive a quality feed containing at least 20 percent protein. Lower protein feeds will not do the job.

If broilers are to be shown in a show without a maximum weight limit, chicks can be started on a high protein (26 to 30 percent) turkey or game bird starter to stimulate additional growth. Feed the higher protein feed for two weeks. Switch to a broiler feed for the remaining feeding period.



Stir the litter daily to prevent packing. Damp or caked litter will cause health problems and affect broiler performance.

Small amounts of broiler feed lightly moistened with cooking oil and fed several times during the day will stimulate older birds to eat more and increase growth. This supplemental feeding practice can be particularly helpful in hot weather with broilers over four weeks of age. Caution: Do not put out more moistened feed than the broilers can eat in 10 to 15 minutes. Do not moisten the feed until feeding time. Be certain all birds can eat at the same time. Feed any leftover moist feed to the culled birds.

An adequate level of vitamins in the diet is required to prevent leg weakness. Adequate vitamin intake can be ensured and leg problems minimized by adding water soluble poultry vitamins and electrolytes to drinking water at the manufacturer's recommended level for the first seven days. Do not add vitamins and electrolytes past this period. Continued high levels can create health problems.

All broilers should be able to eat at once. One pie or cookie pan for feed and one chick waterer per 25 chicks are needed the first seven days. From one through four weeks, one tube-type feeder per 25 broilers is required. After four weeks, one tube-type feeder is needed for every 15 broilers. Broilers must have access to clean fresh water at all times. One 2-gallon waterer per 50 chicks is required from one through four

weeks. One 2-gallon waterer per pen is required after broilers are culled at the end of the fourth week. Waterers should be rinsed daily and scrubbed twice weekly.

Feed must be kept before broilers at all times if maximum growth is to be attained. Tube feeders are recommended because they hold an ample supply of feed, can be adjusted easily as broilers grow and are less likely to cause bruises than horizontal trough feeders. Feeders and waterers should be kept adjusted so that the trough portion is level with the back height of the broilers.

Broilers respond to attention. Walk among broilers and stir feed three to five times per day. This will provide exercise and increase feed consumption and growth.



Handle broilers carefully. Keep feeders and waterers level with the back height of the broilers.

Ventilation

If broilers become too hot or cold, growth will be retarded. When the broilers are well-feathered, open the house and allow plenty of fresh air to circulate. The ideal growing temperature is 60 degrees to 75 degrees F after the broilers pass four weeks of age.

During the winter months, keep the south side of the house open during the day after the broilers reach four weeks of age unless the temperature falls below 40 degrees F.

Supplemental heat may be needed in cold weather. In hot weather, use fans to move air across the broilers.

Feather Picking and Cannibalism

Snub the top beaks of broilers if feather picking or cannibalism starts. Trim one-third of the upper beak with an electric beak snubber. Vicks® salve or an anti-peck compound applied to the bloody spots will usually stop cannibalism if snubbing is not feasible.

Broiler Health

Keep all other poultry away from your broilers. Medication should not be given unless broilers are sick or stressed.

Broiler chicks purchased from late August to early November should be vaccinated for fowl pox by fourteen days of age.

Parasites are seldom a problem where broilers are properly managed and sanitary conditions maintained.

Culling

Broilers should be culled continually. Cockerels and small, sick, stunted, deformed or crippled birds should be removed when detected. Reduce flock size at four weeks of age by removing the smaller and poorer fleshed birds. Keep two or three broilers for each one to be shown. Fleshing, uniformity and finish will be improved by the increase in floor and feeder space and the reduction in social pressure. Trim nails to help prevent carcass damage. Leg band the birds kept for easy identification when selecting the show pen.

Selection

Just prior to the show, catch the remaining broilers and select a well-fleshed uniform pen along with at least one alternate.

Examine broilers carefully for physical defects that would cause them to be sifted or downgraded.

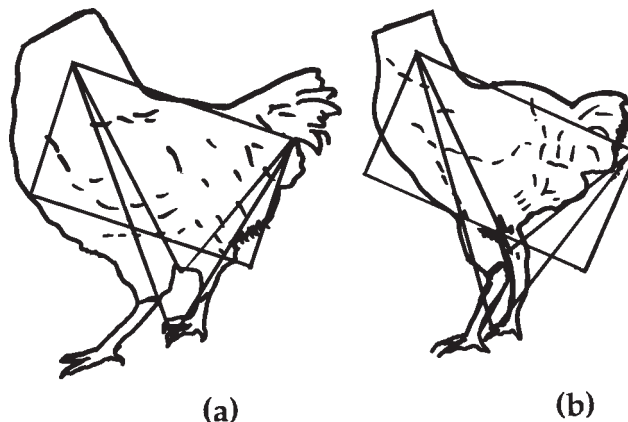
These include:

A. General Defects

- Cuts and tears
- Broken and disjointed bones
- Skin or flesh bruises anywhere other than on the wing tip
- Breast blisters
- Insect bites

- External parasites (lice, mites or fleas)
- Extremely dirty birds
- Discoloration

Poultry with black and green shanks sometimes have extensions of these pigments into the skin of the drumsticks and abdominal membranes. These birds should not be shown if better quality broilers are available.



A bird of normal development (a) will more nearly fill a rectangle than will a bird of low vitality or (b) one whose body more closely approaches the shape of a triangle.

B. Feathering Defects

- An abundance of pin feathers, particularly those just coming through the skin
- Areas of skin which may be discolored because of broken quills or sunburn resulting from inadequate feathers—"barebacks"
- A lack of feather covering over the keel area of well-fleshed birds is not a defect and must not be considered as such.

C. Carcass Defects

- Breasts which have dented, crooked or knobby breastbones, or are abnormally shaped
- Backs which are narrow, crooked, humped or hunched
- Lack of body depth
- Legs and wings that are deformed
- Defects such as crooked toes or beak are not important and should be disregarded.

Selecting the Exhibition Pen

The following facts must be carefully considered when selecting the exhibition pen.

A. Conformation (*describes the skeletal system or shape of the bird*)-25 percent

This term is often mistakenly used to describe the amount and distribution of flesh on the broiler.

The ideal shape of a meat bird is rectangular.

Length-the breastbone should be long, straight, free from defects such as dents or knobs and carry well forward and back between the legs. The breastbone should be parallel to the backbone.

Width-the back should be long and wide with a broad spring of ribs.

Depth-the body should be full and deep. Body depth must be consistent with breast width. Length, width and depth should be well balanced.

B. Fleshing (*the amount and distribution of muscle or flesh on the broiler*)-30 percent

The breast, thighs and drumsticks carry the bulk of the meat and should be examined closely.

The breast meat is the most valued part of the broiler and should be given maximum consideration. The breast muscle should be wide throughout the length of the keel bone. The muscle should carry well up to the crest of the bone. A dimpled breast is desirable.

The thighs and drumsticks should be heavily muscled.

C. Uniformity-30 percent

Each bird in the entry should be as near a carbon copy of its pen mates as possible in

size, shape, fleshing and finish. If one bird has a defect, it will affect the rating of the entire pen.

D. Finish (*amount of fat in and immediately under the skin*)-10 percent

Without an adequate finish, a well-fleshed broiler will lose a great deal of eye appeal. The fat deposition between feather tracts on the side of the breast is the best indication of finish. Do not confuse finish and pigmentation (skin color).

E. Skin Pigmentation-5 percent

Skin pigmentation results from the deposition of yellow or yellow-orange pigments in the outer skin layer. It is not an indication of finish. Only minor emphasis should be placed on pigmentation.

Handling and Transportation

Place leg bands on broilers selected for show. Put selected broilers back in the pen with the remaining birds until movement to the show.

Properly reared broilers usually are reasonably clean. Washing is not recommended.

Large cardboard boxes are ideal carriers. Never place more than five broilers in a box when transporting them to show. Each broiler should have 1 square foot of space. Put 4 inches of litter in the container so breasts will not bruise or become reddened. If a box is used, cut air holes in the sides. Avoid bruising broilers by not hitting them against the container while putting them in or taking them out. Above all, do not drop the container.

Important: Check broilers carefully for bruises one final time before presenting them to the sifter.

Precautions

1. Feed quality feed.
2. Cull closely and provide adequate floor and feeder space.
3. Maintain a comfortable temperature range.
4. Never allow birds to be without feed and water.
5. Do not exceed vitamin recommendations.
6. Keep litter in good condition.
7. Provide supplemental feed in the correct manner.
8. Obtain prompt assistance if health problems occur.
9. Ventilate properly.
10. Review this publication weekly and closely follow suggestions.

Family Safety

Public health agency investigations have implicated improper handling of poultry with occasional outbreaks of disease in humans. Protect your family from bird-transmitted diseases by following these guidelines:

1. Do not bring live poultry of any age into the home.
2. Always wash your hands thoroughly with soap and water after contact with poultry.
3. Do not allow toddlers to handle poultry.
4. Avoid contact with poultry feces.
5. Wash your hands, counter tops and utensils with hot, soapy water after handling raw poultry. (You may also wish to obtain Extension publication L-5088, "Enjoy Poultry Meat Safely," from the county Extension office. It is also available on the Web at <http://agpublications.tamu.edu/catalog/topics/Poultry.html>.)

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