





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

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 14 to 18 inches high and must be a minimum of 5 feet in diameter for 50 chicks. When chicks are 7 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 birds are 3 to 4 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 near 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.

## Rearing

After birds reach 4 weeks of age, the ideal temperature range is 60 to 75 degrees F.

When winter temperatures permit, the house should be partially opened to improve airflow and remove moisture. Supplemental heat may be needed when the outside temperature is low.

In hot weather, fans or evaporative coolers are used to cool birds more than 4 weeks old.

## Lighting

Provide all-night light for broilers and roasters. 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 birds after removing heat lamps.

## Feeding

Optimum performance is dependent on proper nutrition. The feed dealer should be informed of the type of feed required at least 2 weeks before chicks arrive so that fresh feed can be ordered. It is absolutely essential that birds receive a high-quality poultry



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

feed containing at least 20 percent protein. Lower protein feeds will not do the job. Some exhibitors start chicks on a high-protein (26 to 30 percent) turkey or game bird starter to stimulate additional growth. Feed the higher protein feed for 2 weeks. Switch to a broiler feed for the remaining feeding period.

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 birds more than 4 weeks of age. Caution: Do not put out more moistened feed than the birds 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.

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 to drinking water at the manufacturer's recommended level for the first 7 days. Do not add vitamins past this period. Continued high levels can create health problems.

All birds 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 7 days. For the first 4 weeks, one tube-type feeder per 25 birds is required. After 4 weeks, one tube-type feeder is needed for every 15 birds. Clean, fresh water must be available at all times. One 2-gallon waterer per 50 chicks is required for the first 4 weeks. One 2-gallon waterer per pen is required after birds are culled at the end of the fourth week. Waterers should be rinsed daily and scrubbed twice weekly.

Feed must be kept before birds 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 birds 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 birds.

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

## Feather Picking and Cannibalism

Snub the top beaks of birds 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 pecked



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

spots will usually stop cannibalism if snubbing is not feasible.

## Bird Health

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

Chicks purchased from late August to early November should be vaccinated for fowl pox by 14 days of age.

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

## Culling

Birds should be rigidly culled to optimize performance. Small, sick, stunted or deformed birds should be removed when detected. Reduce flock size at 4 weeks of age by removing the smaller and poorer fleshed birds. Keep two or three birds 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.

## Selecting the Exhibition Entry

At show time examine birds carefully for physical defects that would cause them to be sifted. These include:

- Cuts and tears
- Broken and disjunct 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

The following factors must be carefully considered when selecting the show entry.

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

**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 bird)

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 a bird 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**

Each broiler 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.

Uniformity is not a factor with roaster entries unless pens of two or three birds are shown.

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

Finish is usually adequate on well-fleshed birds. 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**

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.

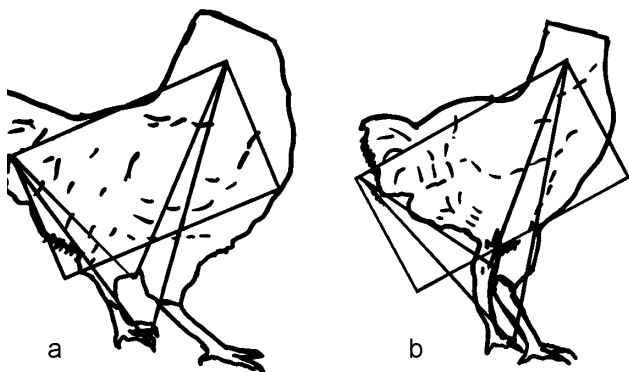
## Handling and Transportation

Record leg bands of birds selected for show. Put selected birds back in the pen with the remaining birds until you transport them to the show.

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

Large cardboard boxes are ideal carriers. Never place more than four broilers or two roasters in a box when transporting them to a show. Do not crowd. Put 4 inches of litter in the container so breasts will not bruise or become reddened. Be certain to cut adequate air holes in the sides. Avoid bruising birds while putting them in or taking them out of the container. Above all, do not drop the container.

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



A bird of normal development (a) has a more rectangular shape than a bird of low vitality. A bird whose body is more triangular (b) is less desirable.

## 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://tcebookstore.org>)

