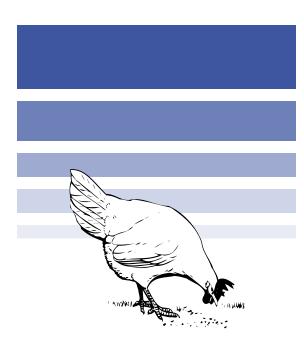


Processing Farm-Raised Poultry

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Kansas State University Agricultural Experiment Station and Cooperative Extension Service Home processing of poultry is not difficult and requires a minimum of equipment. Much of the smaller equipment can be obtained from mail order supply houses or local Coops and other stores. Raising a small flock of Cornish Cross meat-type broilers is easy and only requires 6 to 8 weeks to complete.

Birds should be processed and stored at the proper temperatures to ensure that risk of foodborne illness is minimized. After processing, a carcass should be chilled to below 40°F or frozen for later use.

The birds should be taken off feed 8 to 10 hours prior to slaughter to reduce the amount of material in the digestive tract.

Some birds in the flock may show symptoms that raise questions about their health at time of slaughter. Do not use birds that have any of the following:

- lumps or spots of any size on the surface of the liver;
- any measurable quantity of fluid in the body cavity;
- fat in poorly fleshed bird which is orange rather than yellow or white;
- any internal organs that are abnormally large;
- breast meat with the same coloration as meat of the thighs and legs;
- meat showing white streaks or an area of abnormal enlargement.

Birds with defects such as bruises, blisters, and skin tears can be processed into wholesome carcasses by removing the damaged tissue.

Step 1:

 Hang the bird by using a rope and block or a butchering cone. Take the head of the bird in one hand with the comb in the palm, and cut the jugular veins down each side of the neck. Hold the bird's head firmly. Alternatively, birds may be stunned prior to processing; the instructions supplied with the equipment should be followed.

- 2. After the bird stops movement, immerse it in hot water (140°F) for 30 to 40 seconds. Move the bird up and down in the water to obtain good penetration. Adding detergent to the water improves penetration.
- 3. Hang the bird by the rope after scalding. Remove the feathers by rubbing the carcass or with an automatic picking machine. the skin will be slightly cooked and tear easily if the water is too hot. Mature chickens and turkeys may have a few hairs or feathers—use an open flame to burn these off. Most meat-type breeds should have very few hairs
- 4. Place the carcass in cool water (an icy slush) until all birds are processed. This reduces the multiplication rate of any bacteria present on the carcass. Keeping the carcasses wet also prevents browning of the skin from dehydration.

Step 2: Eviscerating and Washing

1. When eviscerating the carcass, take it out of the cool water and lay on a flat, solid surface. Cut off the feet at the hock joint and remove the head.

- 2. Eviscerate the carcass:
- a. Slit the skin on the bottom of the neck from the head to the body and remove the windpipe and crop.
- b. Cut off the legs at the hock joint and the oil gland at the base of tail.
- c. Carefully make an incision in the body cavity and gently pull the viscera (intestines, gizzard, heart) toward you. Remove the lungs (imbedded in the ribs).
- d. Clean and rinse the gizzard, liver, and heart. Rinse the carcass with clean, cold water.

Step 3: Chilling, Packaging and Storing

- 1. Place the carcasses in ice water, lowering the temperature of the carcasses to 40°F.
- 2. Remove the chilled carcasses from the ice water; allow carcasses to drain before further processing and packaging.

- 3. Cut up according to preference (split for barbecuing, pieces for frying).
- 4. Place in freezer bags for long-term storage or the refrigerator for short-term storage (less than 4 days).

Selling Dressed Poultry

The processing of most poultry in Kansas for sale comes under the Kansas Meat and Poultry Inspection Act, administered by the Meat and Poultry Inspection Division, Kansas Department of Agriculture. However, there are exemptions to the Act for home slaughter of poultry. These exemptions are:

1. The slaughtering by a person of poultry raised by that person and used exclusively by that person and members of their household and their nonpaying guests and employees; 2. Poultry producers with respect to poultry they have raised on their own farms may slaughter and sell not more than 1,000 birds per year if they do not engage in buying and selling poultry products other than those they raised and such poultry is not sold other than directly to household consumers.

Dressed poultry destined for interstate commerce must meet federal inspection requirements.

Additional information about state inspection and the names of approved custom poultry processors in Kansas may be obtained by contacting the Division of Inspections-Meat and Poultry, State Department of Agriculture, 109 W. 9th Street, Room 102, Topeka, KS 66512 (785-296-3511).

Some Causes and Cures For Downgraded Poultry Carcasses			
Species Broiler	Defect Small hock bruises	Cause Improper hanging of live birds	Cure Counsel receiving crew to handle feet only
broner	Siliali nock bruises	improper nanging of five birds	Counsel receiving crew to nanche reet only
Broiler	Large fresh thigh bruise (red in color)	Improper hanging of live birds	Counsel receiving crew to use caution when taking birds out of the cages; do not grab/pull/jerk; use two hands
Broiler	Large thigh bruise (black in color)	Improper handling by catching crew	Counsel catching crew to use caution; instruct crew to carry fewer at a time
Broiler	Loose skin at base of tail	Harsh plucking	Adjust picker
Broiler	Dislocated wing (bruise present)	Improper handling	Counsel catching and receiving crews to use more caution when loading/unloading cages
Broiler	Dislocated wing (no bruise present)	Harsh plucking	Adjust picker
Broiler	Undesired white skin	Scalder too hot	Decrease scalder temperature
Broiler	Undesired yellow skin	Scaler too cold	Increase scalder temperature
Broiler	Blotchy yellow and white skin	Scalder too cold/too hot	Adjust scalder temperature
Broiler	Long or short hocks	Hock cutter	Adjust hock cutter in to adjust to average bird size
Broiler	Internal bile stains	Rupture of gall bladder near liver	Handle carefully
Broiler	Red wing tips, wing hemorrhage, shoulder hemorrhage	 Excessive flapping Stun @ 110-150 mA Poor bleedout, caused by cardiac arrest Harsh plucking 	1. More complete stun 2. Stun @ 200-350 HZ 3. More complete stun 4. Adjust pickers in/out
Broiler	Breast muscle hemorrhage, esp. pectoralis minor	1. High stunning @ 130-190 mA 2. Heart defects?	1. Use correct stunning amperage 2. Unknown
Broiler	1. Broken wishbone	1. High stunning amps	1. Use correct stunning amperage
	(Bruise present) 2. Broken wishbone (Bruise not present)	2. Harsh plucking	2. Unknown
Broiler	Broken collar bones	Stunning	Adjust stunner (1500 HZ)
Broiler	Broken ribs and/or ischium and/or pubis	Harsh plucking	Adjust pickers in/out
Turkey	Broken coracoid	Stunner electronic frequency too low	Increase stunner electronic frequency
Turkey	Wing vein hemorrhage	Only one side of neck cut	Use a bilateral cut
Turkey	Red wing tips	Excessive flapping	use correct stunning amperage/frequency
Turkey	Red breast skin at neck	Rough handling	Counsel catching crew
Duck	Red wings	Stunner current too high	Use correct stunning amperage/frequency
Duck/Turkey	Back scratches	Crowding during catching	Counsel catching crew to proper procedure

Some Causes and Cures For Downgraded Poultry Carcasses

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