

Care and Handling of Game Birds from Field to Table

Shoot for the Sky

Game birds offer a challenge to hunters and the reward of a delicious meal at the table if they are handled properly at each step. Game birds have various distinctive flavors and are excellent sources of protein, similar in these respects to domestic birds. The fat and calorie contents vary according to the age and species of the birds. A 3½-ounce portion (before cooking) of game bird meat has about 150 calories and provides half the average daily adult protein requirement.

Wild game birds may become contaminated with bacteria or gastric juices if they are improperly handled. Off flavors and odors may develop in the meat, and your risk of foodborne illness may increase. For optimum eating quality, remember the following handling tips during hunting, storage, and food preparation.

New Considerations with Wild Game Birds

Some hunters are questioning the safety of wild game because of the possible presence of West Nile virus (WNV). According to the Centers for Disease Control and Prevention (CDC), there is little evidence of the public getting WNV from handling or consuming infected birds. However, consider using the following common sense precautions:

- Wear latex/rubber gloves when field dressing and cleaning birds.
- Do NOT harvest and eat sick or abnormal acting birds.
- Fully cook game birds to an internal temperature of at least 165° F.

Hunters exposed to mosquitoes should apply insect repellents according to label instructions to clothing and skin.

Care in the Field and in Transport

Be prepared for the hunt. Remember to bring a sharp hunting knife, a whetstone or steel, light rope or nylon cord, plastic bags, clean cloths or paper towels, and a cooler filled with ice. Abide by game regulations for hunting, transporting, and storage of wild game.

Field dress the bird promptly. Remove the entrails and crop as soon as possible because the grain in the crop may ferment if not removed. The heart and liver may be saved for giblets. Store in a plastic bag on ice to keep them clean and cold.

Leave an identification mark on the bird. The birds may be plucked or skinned in the field. If you pluck the birds, bring a plastic bag for storing the feathers.

Nutritive Value — Fowl (flesh only)

	Preparation	Portion	Calories	Protein (g.)	Total Fat (g.)	Saturated Fat (g.)	Cholesterol (mg.)	Iron (mg.)	Sodium (mg.)	Zinc (mg.)
Duck										
Domestic	Roasted	3½ oz.	201	23.5	11.2	4.2	89	2.7	65	2.6
Wild	Raw†	Breast, 3½ oz.	123	19.5	4.3	1.3	77	4.5	57	0.7
Goose, Domestic	Roasted	3½ oz.	238	29.0	12.7	4.6	96	2.9	76	3.2
Pheasant	Raw†	Breast, 3½ oz.	133	24.4	3.3	1.1	58	0.8	33	0.6
	Raw†	Leg, 3½ oz.	134	22.2	4.3	1.7	80	1.8	45	1.5

† Values for cooked not available.

Source: USDA Composition of Foods

Cool the carcass quickly to retain flavor and maintain the quality of the bird. A temperature above 40° F is meat's worst enemy. Wipe out the cavity with a clean cloth or paper towel. Do not use grass or snow as this may contaminate the carcass. Allow air to circulate in the carcass by hanging or laying the bird in a well-ventilated place. In hot weather, place the birds individually in plastic bags and put on ice. Do not pile warm birds in a mass. Store the birds in a cooler or ice chest out of the sun.

Keep birds cool during transport. The best way to store them is in a cooler on ice. If this is not possible, keep the car well-ventilated and put the birds on the back seat or floor. Do not transport them in the trunk because the enclosed space does not allow heat to escape from the birds.

Care in Processing and Storage

Don't cross-contaminate during processing. Wash your hands, knife, and cutting board with hot soapy water and rinse thoroughly.

When preparing ducks, remove the wings by cutting them off at the joints, remove the head, and pluck the pin feathers. Feathers may be removed by scalding the birds in hot water (145° F). Pin feathers and down may be removed by dipping the feathered bird in a paraffin wax/hot water mixture. After the wax hardens, the feathers may be scraped off. When preparing upland birds, such as grouse, pheasant, quail, and partridge, skin the bird and soak in cold water for one to two hours to remove the excess blood. Birds generally do not require aging. If you wish to age the birds, holding them at just above freezing temperatures for two to three days may increase the tenderness of the meat.

For immediate use, birds should be stored in the refrigerator at 40° F or less and used within three days. For long-term storage, the whole cleaned carcass or individual parts may be frozen at 0° F or lower. Freeze the meat while it is fresh and in top condition.

The advantage of packaging parts instead of the whole bird is that bloody spots can be eliminated by cutting out or rinsing out with cold water. Parts also fit conveniently in your freezer. Parts may be boned, and the carcass and neck may be used as a soup base. Use moisture/vapor-proof wrap such as heavily waxed freezer wrap, laminated freezer wrap, heavy duty aluminum foil, or freezer-weight polyethylene bags. Wrap tightly, pressing out as much air as possible. Label the packages with the content and date. Use the frozen packages within a year.

Care in Preparation

Thaw the birds in the refrigerator or microwave. Food thawed in the microwave should be cooked immediately. Other thawed meat should be used within one to two days. Keep raw food and cooked food separate.

The age of the bird determines the cooking method. Wild game always should be cooked thoroughly to an internal temperature of 165° F. At this temperature the juices run clear and no pinkness remains in the meat. Young birds have lighter legs, soft breastbones, and flexible beaks. Old birds have darker, hard skinned legs, brittle breastbones, and inflexible beaks.

Game birds may be prepared like chicken. Dry cookery methods, such as frying, are appropriate for young birds. Moist cookery methods, such as stewing or braising, are appropriate for older birds. To decrease the distinctive taste of some wild game, trim off as much of the fat as possible. Older or skinned birds may become dry during baking. You may want to wrap the birds with bacon to prevent them from drying out.

Remove stuffing from the bird before storing, because stuffing is a good growth medium for microorganisms. Use leftovers within one or two days, or freeze for later use.

Revised by Karen Blakeslee, M.S., Extension Associate, Food Science

Adapted from From Field to Table: A Pocket Guide to Care and Handling of Game Birds by Julie Garden-Robinson, Food and Nutrition Specialist, North Dakota State University Extension Service, and Martin Marchello, Professor, Department of Animal and Range Sciences, North Dakota State University, October 2003. Revised with permission by Karen Blakeslee, Extension Associate, Food Science, Kansas State University, November 2010.

Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned.

Publications from Kansas State University are available on the World Wide Web at: www.ksre.ksu.edu

Publications are reviewed or revised annually by appropriate faculty to reflect current research and practice. Date shown is that of publication or last revision. Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. In each case, credit Karen Blakeslee, *Care and Handling of Game Birds from Field to Table*, Kansas State University, November 2010.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service

MF-2177

November 2010

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Gary Pierzynski, Interim Director.