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For more information about food safety,
or the publications listed below, visit the
NDSU Extension Service Web site:
www.ag.ndsu.nodak.edu/food.htm

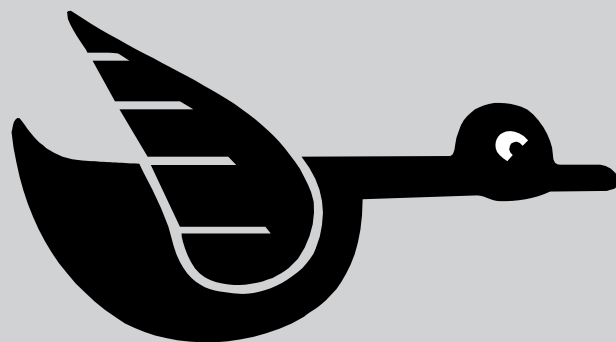
For further information, request the
following from your county office of the NDSU
Extension Service or write the Distribution
Center, Morrill Hall, Box 5655, Fargo, North
Dakota 58105.

- A Pocket Guide to Care and Handling of Deer and Elk from Field to Table (FN-536)
- A Pocket Guide to Care and Handling of Fish from Stream to Table (FN-535)
- Wild Side of the Menu No. 1 - Care and Cookery (FN-124)
- Wild Side of the Menu No. 2 - Field to Freezer (FN-125)
- Wild Side of the Menu No. 3 - Preservation of Game Meats and Fish (FN-155)
- Sausage Production in the Home - An Art (HE-176)
- Food Freezing Guide (HE-403)

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FN-537 (Revised)

A Pocket Guide to Care and Handling of



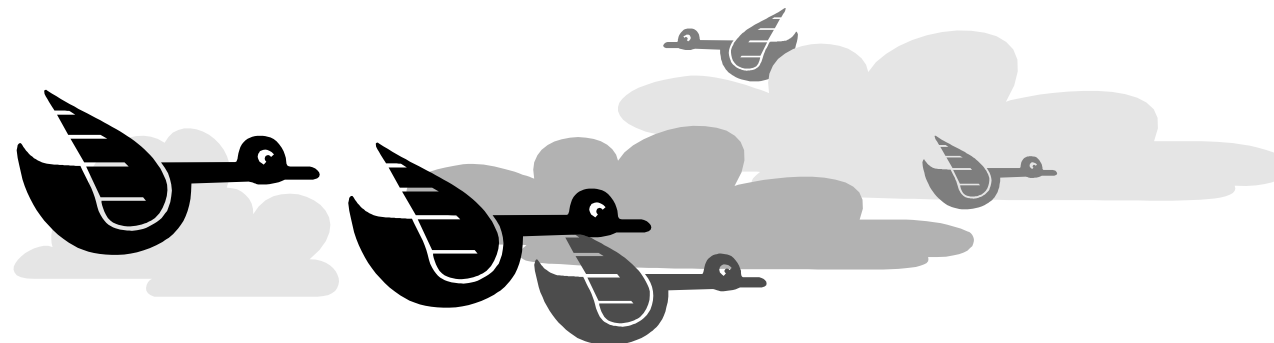
GAME BIRDS

from Field to Table



North Dakota State University
Fargo, North Dakota 58105

OCTOBER 2003



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.

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.



A 3½-ounce portion
(before cooking) of game
bird meat has about 150
calories and provides half the average
daily adult protein requirement.

NEW CONSIDERATIONS WITH WILD GAME BIRDS

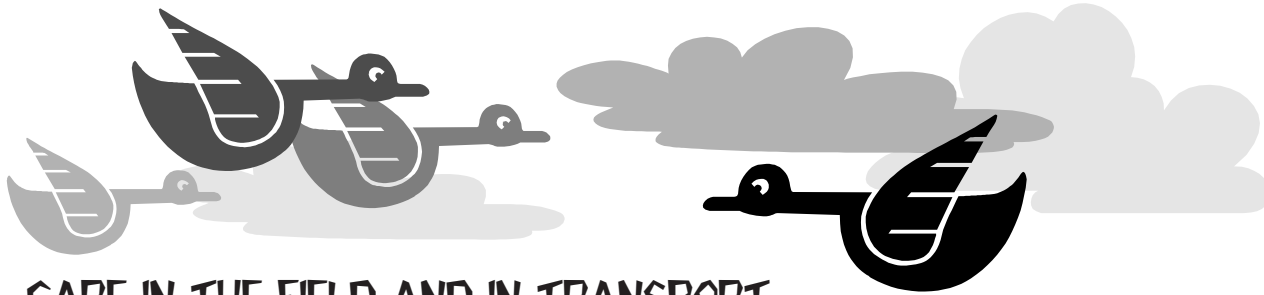
Some hunters are questioning the safety of wild game because of the possible presence of West Nile virus (WNV). According to the Centers for Disease Control and Prevention (CDC), there is little evidence of the public getting WNV from handling or consuming infected birds. However, consider using the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

For more information on West Nile virus, visit this Web Site: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>





CARE IN THE FIELD AND IN TRANSPORT

■ Be prepared for the hunt.

- Remember to bring a sharp hunting knife, a steel or whetstone, 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.

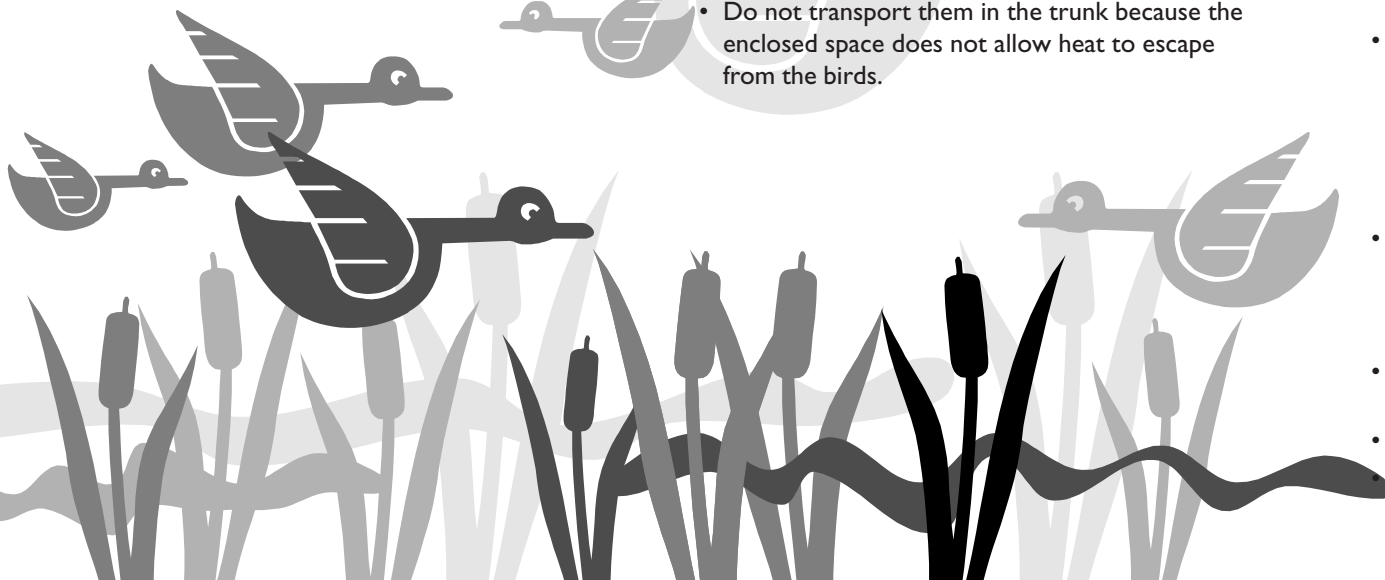
- Remove the entrails and crop as soon as possible, because the grain in the crop may ferment if not removed.
- The heart and liver may be saved for giblets. Store in a plastic bag on ice to keep them clean and cold.
- Leave an identification mark on the bird as required by state game regulations.
- The birds may be plucked or skinned in the field. If you pluck the birds, bring a plastic bag for storing the feathers.

■ Cool the carcass quickly to retain flavor and maintain the quality of the bird. A temperature above 40 degrees Fahrenheit is meat's worst enemy.

- Wipe out the cavity with a clean cloth or paper towel. Do not use grass or snow as this will 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 the birds cool during transport.

- The best way to store birds 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 the 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 out 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 or pluck the bird and soak in cold water for one to two hours to remove excess blood.

■ Birds generally do not require aging.

- If you wish to age 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 lower 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 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 frozen packages within a year.

CARE IN PREPARATION

■ Thaw birds in the refrigerator or microwave.

- Microwave-thawed food 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 at least 165 F. The juices should run clear and no pinkness should remain.

- 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 prior to refrigerating, because stuffing is a good growth medium for microorganisms.
- Use leftovers within one or two days, or freeze for later use.

