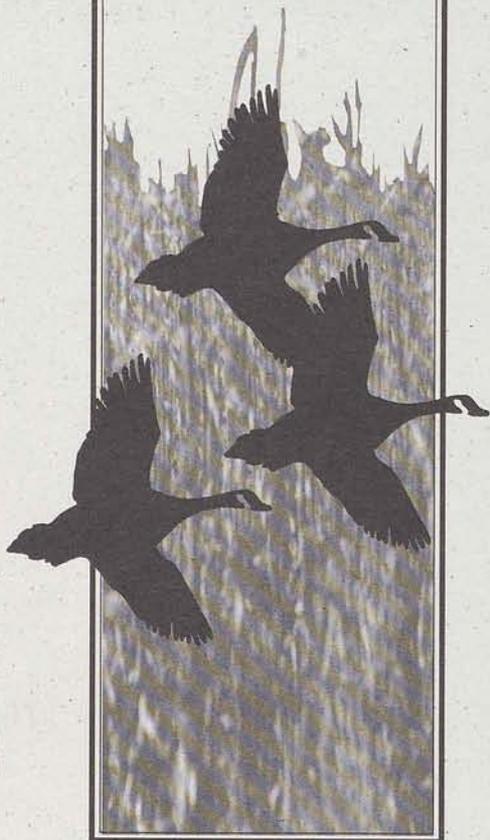


Grower's
Guide to
Goose
Problems



GROWERS' GUIDE TO GOOSE PROBLEMS

A northward flight of Canada geese or goose broods swimming on a pond are signs of spring. Minnesotans welcome. However, the welcome quickly wears thin when geese begin feeding on crops. This guide describes how growers can reduce or eliminate these problems. A combination of the methods, customized for a grower's particular situation, will provide the best results.

FLIGHTLESS GEESE

Soybeans, sunflowers and small grains planted near wetlands and lakes are attractive to flightless Canada geese. Flightless geese may be goslings which are too young to fly, or molting adults. Newly hatched goslings eat primarily aquatic insects. However, after 3 weeks, goslings become grazers and can move into adjoining crop fields. Action taken before goose damage begins is the most effective. Scout wetlands and lakes adjacent to crop fields for goose broods in late April and May to identify potential problems.

Bird Scare Tape

Bird scare tape or bird flash tape is a short-term or emergency measure to discourage geese from walking into and grazing on crops. Bird scare tape is most effective when goose numbers are low and where geese have alternative feeding areas available.

Bird scare tape is a thin shiny mylar ribbon. It is silver on one side, usually red on the other. When properly used, the tape flashes in the sun and rattles in the breeze, frightening geese.

Use bird scare tape as illustrated in figures 1 and 2. **Inspect bird scare tape daily and repair as needed.** Animals, people, equipment and wind can break the tape. A broken bird scare tape "fence" is not effective. Position the tape where it is visible to the geese and long enough so geese do not walk around it (figure 2).

Bird scare tape is available from:

Mail Order

MDT and Associates
612-529-4355

Gurney's Seed Co.
605-665-1930

Indiana Berry and Plant
800-295-2226

Twin Cities Retailers

Wild Bird Store

Lyndale Garden Centers

(See Yellow Pages)

Energized Fencing

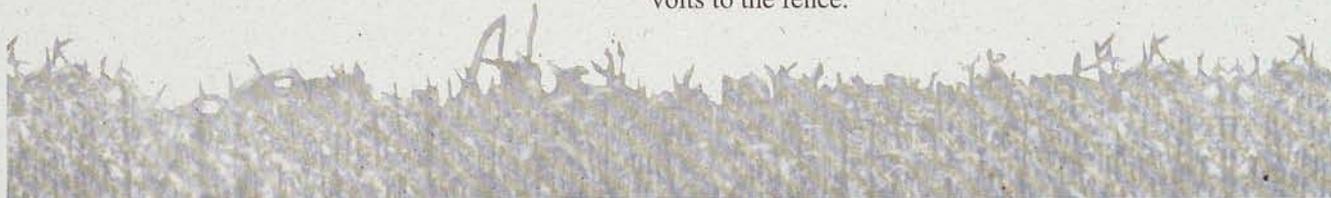
Energized fencing is an effective and practical method to reduce goose damage in your fields. It is more durable and performs better than bird scare tape. Most growers prefer portable energized fencing which can be set up in a few hours and quickly taken down for storage when not in use. When properly maintained, energized fencing materials may last 10 or more years.

When a goose touches the energized fence, the electric pulse passes from the energizer through the fence wire, through the goose into the earth, to the grounding system and back to the energizer (figure 3). The result is an uncomfortable, but harmless "shock" that geese learn to avoid.

Energized fencing must be properly constructed and maintained to be effective. Make the fence long enough so geese do not walk around it (figure 2). Measure voltage weekly and keep fence wires clear of vegetation using mowing or herbicides. Install energized fence warning signs every 60 feet. If you are interested in using energized fencing for geese, contact your DNR Area Wildlife Office for additional information and assistance.

Key components of an energized fence for geese:

(1) Energizer - The energizer is the power source for the fence. Energizers can be battery powered or 120 volt. Low impedance energizers, which deliver a short electrical pulse, are safe and effective. The energizer should provide at least 4,000 volts to the fence.



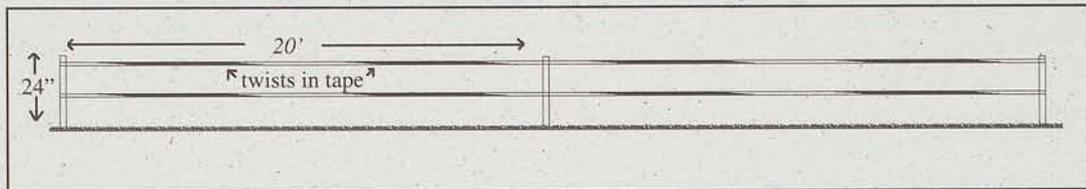


Figure 1- Bird scare tape is a visible barrier installed using lath boards for support. Secure bird scare tape to stakes using duct tape or electrician's tape (do not tie bird scare tape).

(2) Fence wires - Most growers prefer the ease of using polytape. Polytape is 1/2-inch-wide material consisting of polyethylene fibers interwoven with conductive wires (5 or more strands of stainless steel) to carry the electrical charge. Stretch two strands 8 inches and 18 inches above the ground (figure 3). Tighten wire to remove visible sag. Connect fence wires to the fence terminal on the energizer.

(3) Grounding system - The grounding system is a series of at least three 6-foot galvanized steel rods driven into the earth at 12-foot intervals. Leave 4-5 inches of the ground rod above ground to make connections. Connect the rods in sequence using steel wire and connect the series to the ground terminal on the energizer.

(4) Voltmeter - A voltmeter is a device used to measure voltage on an energized fence. A voltmeter is essential to ensure the system is working properly and to pinpoint problems when they occur.

Barrier Fencing

Barrier fencing effectively prevents geese from walking into your field. The method consists of placing a physical barrier that geese cannot pass through between the water and the field you wish to protect (figure 2).

A barrier for walking Canada geese can be made from fence materials at least 30 inches high with openings no larger than 3 inches by 3 inches. Barrier fences may be constructed from woven wire, chicken wire, welded wire, plastic snow fencing, or rolled corn cribbing. Used fence materials are an inexpensive source of barrier fencing.

Shoreline Vegetation Management

Managing shoreline vegetation is an effective and permanent method of reducing goose damage to crops. Canada geese avoid using areas where plants block their view and restrict access to the field. Avoid tillage to the wetland or lake edge. Establish grasses that stand 36 inches or taller on a

50-100 foot strip along the shoreline. Suggested grasses include big bluestem, Indiangrass, prairie cordgrass or switchgrass. These grasses generally remain standing after the snow has flattened other grasses. You may also establish a shrub belt and leave an unmown grass strip between the water and your crops. Contact your local Soil and Water Conservation District or the Natural Resources Conservation Service for details on establishing grasses and shrubs along shorelines. Temporary measures such as fences may be necessary to keep geese from your fields until the vegetation is established.

Some growers may want to consider establishing pasture or hay crops adjacent to lakes or ponds. Although geese may still use these crops, they have a greater ability to recover from goose grazing than other crops. Livestock fencing on pastures can be modified to also exclude geese.

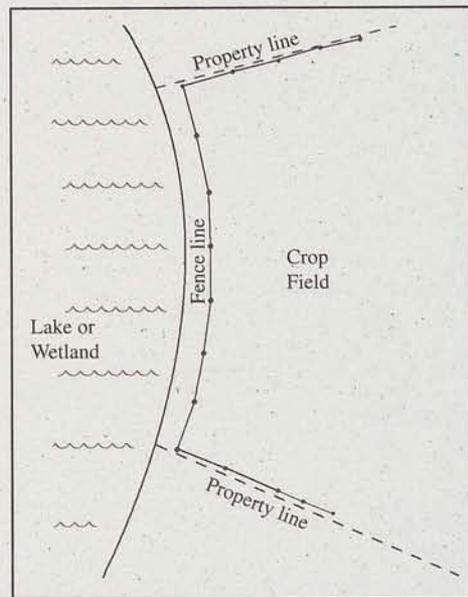


Figure 2- Suggested layout for Bird Scare Tape, energized or barrier fencing. It may be necessary to extend fence line along property line as shown to prevent geese from walking around the fence.

Alternative Feeding Sites

Alternative feeding or grazing areas can be effective at reducing goose damage **when used in conjunction with fencing to keep geese out of target crop areas.** Areas planted to small grain or a freshly mown area of grass less than 6 inches can provide geese an alternative grazing site. Contact your DNR Area Wildlife Office for further information on developing alternative goose feeding sites.

FLYING GEESE

Swathed grain left on the ground for more than a few days is vulnerable to Canada geese. Occasionally, this is unavoidable due to weather conditions. Flocks of non-breeding or migrating geese are also attracted to newly sprouted grain crops in early spring. Most of the methods discussed here are designed to give the grower short-term protection until the grain may be combined, or to discourage flying geese from feeding on young grain crops until they become established.

Hazing

The simplest method involves frightening or *hazing* geese. In some cases, repeatedly chasing geese from the field on a vehicle or with a dog may cause geese to relocate. However, the field you wish to protect must be constantly watched for hazing to be effective.

Noise making scare devices known as pyrotechnics may be used to haze geese from your fields. Pyrotechnics include "bangers" and "screamers" fired from a special launcher or "cracker shells" used in a 12-gauge shotgun. Use pyrotechnics consistent with manufacturer's instructions and safety precautions:

Pyrotechnics are available from:

Reed-Joseph International 800-647-5554	Margo Supplies, Ltd. 403-285-9731
Sutton AG Enterprises, Inc. 408-422-9693	Stoneco, Inc. 800-833-2264

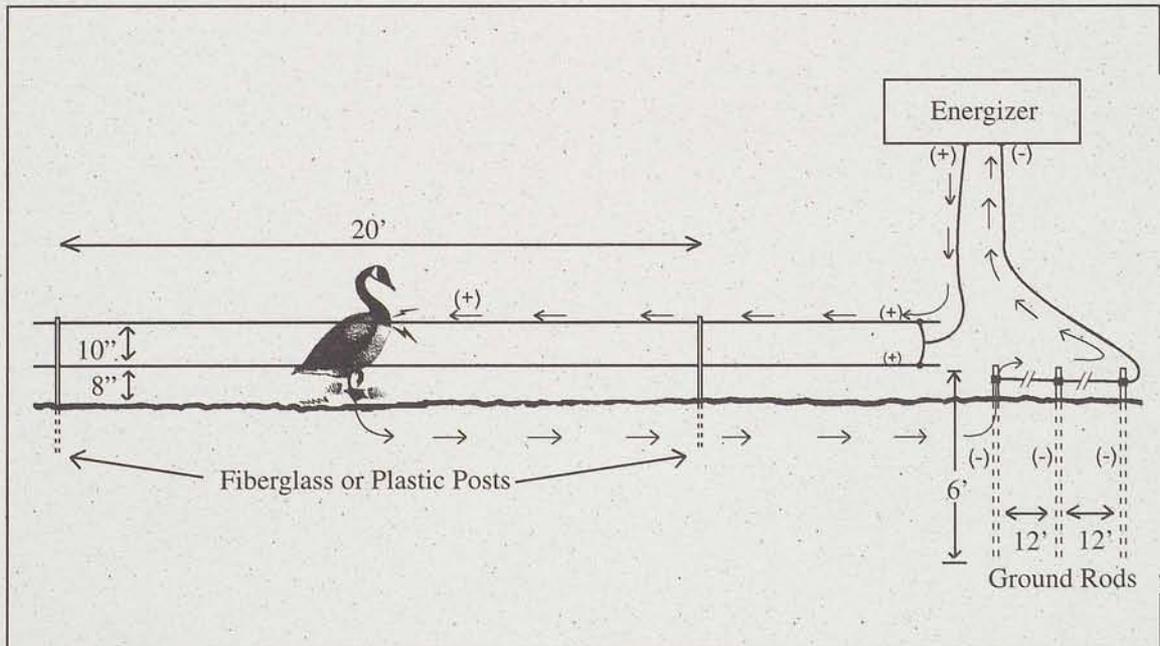


Figure 3- A two strand energized goose fence is easy to install, safe, and effective at deterring geese from entering your crops.

Flagging/Balloons

Flags made from 3-mil orange plastic, red and silver mylar sheeting (figure 4), or black poly sheeting (figure 5) can be effective at reducing goose damage in swathed grain or young grain crops. The flags flap and rattle in the breeze and frighten geese.

Helium filled balloons with a large contrasting eye spot or "scare eyes" may be staked in a field. Tether balloons with 75-pound test monofilament line and allow them to rise 10 feet above ground.

You will need at least 1 flag or balloon per acre of field. Use flags or balloons in conjunction with automatic propane exploders.

Scare Eye Balloons are available from:

Bird-x, Inc.
800-662-5021

Reed-Joseph International Co.
800-647-5554

Bird Scare Predator Eye, Inc.
800-252-0933

Margo Supplies, Ltd
403-285-9731

Wildlife Control Technology, Inc.
800-235-0262

Propane Exploders

Automatic propane exploders work best when used in conjunction with other techniques such as flagging or balloons. Propane exploders make a loud sound that frightens geese. Exploders may be disturbing to human neighbors. Use exploders

only when damage is occurring. Use one exploder per 10 acres. Move the exploder to a different location in the field daily. If the exploder has an adjustable timer, change the duration between explosions daily.

Propane Exploders are available from:

Reed-Joseph International
800-647-5554

H.C. Shaw Co.
ZON Mark II Scare Gun
800-647-5554

Crop Management Practices

Minimizing the amount of time grain remains on the ground will lower the risk of geese locating the crop. Straight combining and mechanical drying reduces the risks associated with swathing.

POPULATION MANAGEMENT

The major drawback of the methods discussed in this brochure is that they may cause geese to move to other crop fields. Consequently, goose population control is essential.

Hunting is the most effective method of controlling goose populations. Methods described in this brochure are designed to supplement, not replace, hunting. In response to expanding goose populations, the DNR has created and expanded Special Goose Seasons in recent years in addition to the regular waterfowl season to, in part, provide the opportunity to take Canada geese causing problems (See the current issue of Minnesota Hunting and Trapping Regulations for details on seasons and bag limits).

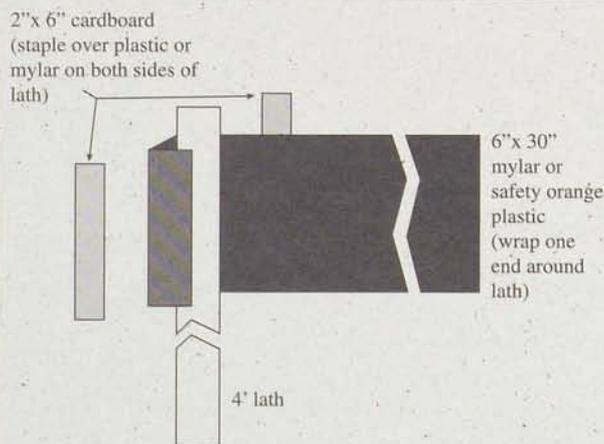


Figure 4- Design and construction of plastic or mylar flags used to repel waterfowl from agricultural fields.

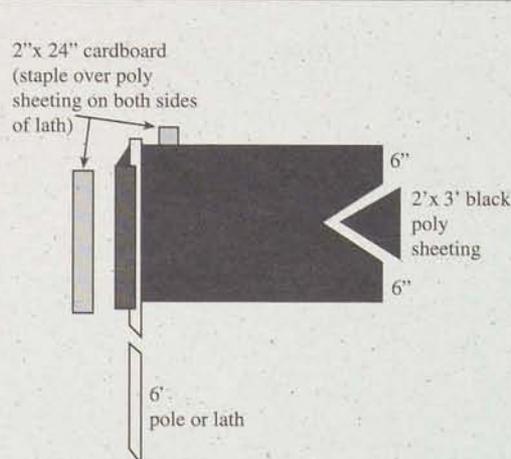


Figure 5- Design and construction of black poly sheeting used to repel geese from agricultural fields.

Growers and their neighbors control the access for hunters to take geese. Growers who experience goose damage are encouraged to provide hunters access, and work with their neighbors to do the same. This does not imply that you or your neighbors allow every goose hunter on your property. The landowner reserves the right to decide who will be allowed to hunt. Hunters who do not cooperate or follow your instructions should not be allowed to hunt.

EMERGENCY MATERIALS ASSISTANCE

The DNR can loan emergency equipment, such as the energized fence materials described in this brochure, to growers experiencing goose damage problems. These materials are available to growers on a short-term loan through a Cooperative Damage Management Agreement (CDMA). A CDMA is an agreement between the DNR and the grower to establish a long-term plan to reduce goose damage problems. The CDMA outlines what each party will contribute. Because each grower's situation is different, CDMA's are customized to provide effective solutions to reduce goose damage

problems. If you are interested in emergency materials assistance, please contact your local DNR Area Wildlife Office for details. ☐

Listings of company names and products are for the reader's convenience and are not comprehensive. The state of Minnesota neither recommends nor endorses specific products or companies.

For more information, contact:
Department of Natural Resources
500 Lafayette Road
St. Paul, MN 55155-4040
296-6157 (Metro Area)
1-800-766-6000 (MN Toll Free)
Telecommunication Device for the Deaf
296-5484 (Metro Area)
1-800-657-3929 (MN Toll Free)



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