

Controlling Wildlife Damage in Corn

Bird Damage Control - Corn (feed, sweet, pop) can be protected from blackbird damage by a variety of methods:

- 1) Methiocarb carbamate (Mesurol 50 HBT) can be used on all corn seed (feed, sweet, pop) to repel birds from pulling sprouting corn or digging up and eating newly planted corn. Mesurol 50 HBT is applied as a dry seed dressing in the hopper box at the rate of 8-14 oz/10 lbs. Material costs will be about \$6/acre. Note that Mesurol may reduce Terminations somewhat, especially in cold, wet weather. Also note the excessive use may cause illegal residues. Use in conjunction with frightening devices.
- 2) Avitrol treated grain bait - When applied to the corn field, Avitrol will kill a small number of crows or blackbirds in such a way as to frighten the rest of the flock from the field. Avitrol treated grain bait may be applied from aircraft or from high clearance ground equipment. Apply at the recommended rate, but for best results, apply in 3 separate swaths that cover 1/3 of the field. If another treatment is necessary within 5-7 days, reapply in 3 separate swaths to another 1/3 of the field. Make certain, however, that the area of the field being most heavily damaged at the time of treatment also receives an application of bait. Control is less effective in fields where there is extensive weed growth under the corn and where damage has been on-going long before treatment begins. Avitrol is a restricted use pesticide. Frightening devices can enhance the effect of Avitrol.
- 3) Frightening devices - When applied properly and in combination, frightening devices can be the most cost-effective way to protect corn from crows and blackbirds. Use at least 2 of the following techniques and apply them so as to frighten the birds before they enter the field instead of after they enter the field.
 - a) Automatic bird scaring propane exploder cannons - Use at least 1 per 5 acres. Place on a platform higher than corn height. Move every 3 days. Vary interval between explosions. Consider using multi-bang versions of the exploder and attachments that rotate the exploder with each explosion. Do not use before sunrise or after sunset.

- b) Broadcast of recorded bird alarm and distress cries - Use 2 speakers per 5-10 acres or use mobile speakers. Broadcast alarm and distress cries are more effective if used only when birds are in the corn and if broadcast from mobile speakers. Alternate the broadcast of alarm and distress cries with the broadcast of the sound of static, steam locomotives, urban traffic, etc.
- c) Motion detector accessories - Cannons and alarm and distress broadcast systems are available with motion detectors that trigger the devices when birds enter the field. Because the frightening devices are not operating continually, the birds are more likely to be frightened away and the devices should be more effective for longer periods of time.
- d) Electronic noise systems (e.g. Av-Alarm) - Use 2 speakers per 5-10 acres. Alternate the broadcasting of the Av-Alarm produced sound with the sounds of static, steam locomotives, urban traffic, ocean surf, hard rock music etc. Broadcast throughout the daytime.
- e) Exploding 12 gauge shotgun shells - Fire shells to produce aerial explosions over the corn whenever birds are in the field. If possible, fire from concealment so that birds do not associate explosions with a vehicle, person, etc.
- f) Bird scare balloon - Suspend special bird scaring balloons at least 3 feet above the corn from poles or from lines between posts. Use tethers at least 2 feet long and place at least one balloon every 3-5 acres. Add more balloons if necessary. Vary height and location of balloons every 35 days.
- g) Bird scare tape - Attach special red and silver bird scare aluminum-Mylar tape to posts and stretch across field at least 18 inches above the corn. Twist tape several times before attaching to posts so that the visible interval of red/silver is 16 inches. The space between tapes may have to be no more than 5 feet to 10 feet to be effective, but the spacing can be much wider and still be effective. In some cases, 1-2 tapes stretched across 1 acre are effective. Start with 1 strip of tape per acre and add tape as necessary.

4) Blackbirds that damage sweet corn in summer often consume livestock feed in feedlots in late winter. Both problems can often be greatly reduced by poisoning the blackbirds in the feedlots in winter with Starlicide. The use of Starlicide requires a DNR permit. Contact your county MSU Extension Office or USDA Wildlife Services (517)-244-9517 for details. The chemical in Starlicide, chloro-p-toluidine or "I339" can also be used to kill birds in crop areas. This use, however, is restricted and must be conducted under the supervision of the USDA Wildlife Services Control Office.

- 5) Assistance from the USDA-Wildlife Services. Wildlife services can help landowner, or groups of growers, with recommendations, sources of supply, trap designs, permit application, etc. especially on a large scale (i.e. a township). Wildlife Services can also help groups of growers conduct a damage control program (e.g. equipment loan, placement and operation, monitoring, etc, except for chemical application) provided additional funding is available for these services. For details contact USDA Wildlife Services, 2043 W. Maple Rapids, St. Johns, MI 48879 (517) 224-9517.

Raccoon Damage Control

- 1) Exclusion - An electric fence provides close to 100% protection at a cost of approximately .25/foot. Stretch 2 wires, 2 inches and 5 inches above the ground, from fiberglass or plastic posts all the way around the cornfield. Spacing must be exact; 1 or 2 additional wires spaced 3 inches apart may be necessary. Charge the wires with at least 1000 volts. Keep the fence clear of vegetation with a herbicide.
- 2) Trapping - If the sweet corn field has a history of damage, start trapping at least a week before the corn kernels enter the milk stage. No permit is required to trap raccoons on your own land, but notify your county DNR Conservation Officers of your trapping plans.
 - a) Box traps - Place several 40" x 12" x 12" wire box traps (live traps) along the edge of the field where raccoons are most likely to enter the field before corn kernels begin to form. Bait with sardines or dry or canned cat foot. Trapping after damage has begun, especially on a small field, will probably be ineffective. Humanely destroy all raccoons captured, or transport at least 25 miles and release only where you have the landowner's permission.
 - b) Body gripping killer traps - If raccoons enter the corn field through an opening in a fence, place a 220 conibear trap over the opening. Check daily. Caution: this trap set will kill any animal that tries to pass through the trap. Conibear 220's can also be placed over the opening of a box 8" x 8" x 36". Mount the box with the trap side down on trees on the edge of the corn field. Check daily.
 - c) Egg traps - These commercial traps are composed of a foot snare placed inside a plastic shell shaped like half of an egg. When baited, the snare catches a raccoon by the front paw. It is specific for raccoons. Hang egg traps 36 inches high on tree trunks on the edge of the sweet corn field.

Deer Damage Control

- 1) Exclusion - Property designed, erected, maintained, and adequately charged,

electric fences will effectively exclude deer at a reasonable cost. Otherwise, the cost is excessive and the effectiveness is limited.

a) Temporary electric fences - Suspend one woven plastic tape containing electric wires 2.5 feet above the ground from fiberglass or plastic fence posts. Spacing must be exact. Charge with at least 4,000 volts. Eliminate vegetation under the tape with a herbicide. After 3 to 6 weeks, deer will learn to go over or under the fence. At that time, attach aluminum foil - peanut butter sandwiches to the fence every 5-10 feet. Smear one side of a 6" x 12" piece of foil with a 1:1 mixture of peanut butter and peanut oil. Fold the foil over the electric tape and fasten the ends together with sticky tape. Erect the fence before the corn sprouts and remove it when the corn is no longer vulnerable to deer. If fawns become a problem, add an additional wire 18" above the ground. Costs range from \$.25 to \$.50 per foot.

b) Permanent electric fences - Vertical 7-wire and electric fences will effectively exclude deer. Placement, construction, spacing, maintenance and weed control are critical. Wires must be constantly charged with at least 4000 volts. Material costs range from \$1 /foot to \$3/foot. The high cost may be justifiable for sweet corn only.

2) Repellents

a) Specially trained dogs such as border collies, German shepherds, or retrievers will keep deer out of fields when the dogs are contained in the fields by electronic pet barriers. Dogs must be males of the right breed that are properly trained and housed inside the electronic barriers. Two dogs per field are best.

b) The chemical repellent hinder will repel deer from corn fields for 1 to 2 weeks after application. Reapplication renews effectiveness; re-apply after every rain. Apply at recommended strength to the corn and to a strip around the corn field.

c) Human hair when spread lightly in and around a small sweet corn field may repel deer.

3) Permit Shooting - Deer may be shot under a special crop depredation control permit when they damage corn. Shooting is most effective when done in conjunction with one of the above control techniques. Contact your local DNR Conservation Officer for details and permits.

4) Legal Hunting - Farmers with deer damage are eligible for special block permits to shoot antlerless deer during the hunting season. Contact your local DNR Wildlife Biologist for details.

Sources of Materials - examples

Frightening Devices - Reed-Joseph, Int., Greenville, MI 1-800-647-5554

- Marco Supplies LTD, Site 20, Box 11, R. R. #6, Calgary, Alberta, T2M 4L5 403-285-9731

Electronic noise and sound systems - Av-Alarm Corp., Eugene, OR 503-342-1271
- Signal Broadcasting Corp., Denver, CO 303-295-0179
- Bird-X, Chicago, IL, 312-226-2473

Repellents

Hinder - Leffingwell Div., Brea, CA 714-529-3973

Mesurol - Gowan Co., P. O. Box 5569, Yuma, AZ 85366=5564, 800-883-1844,
ext. 1653

Toxicants

Starlicide - local Purina dealers

Avitrol - Avitrol Corp., Tulsa, OK 918-582-3359
- Bird-X, Chicago, IL 312-226-2473
- T.M. Agric. Chem. Co., Plainfield, WI 715-335-6543

Traps box - Wildlife Management Supplies, 640 Starkweather, Plymouth, MI
48170, 800-451-6544

Egg - Kenneth R. Jones Fur Co., Rt. 3, Box 95, Brighton, TN 38011
901-476-5953

Electric Fences

Reed City Power Line Supply Co.
420 Roth Street
Reed city, MI 49677-0205

Techfence

Advanced Farm Systems, Inc.
Rd. 1 Box 364
Bradford, MA 04410

The Wright Place
5051 Fowler Road
Reading, MI 49274
(517) 283-2645

“MSU
and materials
regard to race,
gender,
disability,
orientation,
family status.”



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color, national origin,
religion, age,
political beliefs, sexual
marital status, or

