

Shift in tactics improves odds in war against blackbirds

NEWARK, Del. — The blackbird has a long record as a troublemaker by farmers. Even the Indians had problems with this hungry marauder.

In the prolonged war between man and this particular feathered beast, man has often been the loser. But a shift in battle tactics today has increased the odds in the farmer's favor, says Jack Linehan, a biologist with the U.S. Fish and Wildlife Service stationed at the University of Delaware's Agricultural Experiment Station in Newark.

A specialist of blackbird behavior as it relates to damage on field corn, he is quite familiar with the problem.

There are two basic kinds of bird predation on corn — sprout pulling (seed eating) and ear damage. Each affects the farmer differently. With seed loss you often have an opportunity to replant — at additional cost, of course. But once the ripening ears are damaged, the farmer has lost at least a part of his crop.

Over the years, any number of farmers with land near the marshes that flank the Delaware River have gone out of business because of repeated blackbird damage. Others have managed to stay in operation by changing the way they farm.

Linehan says damage-avoidance methods are by far the most realistic approach in areas with heavy blackbird pressure. Such methods are much more likely to be successful in producing a harvestable crop than an all-out effort at bird control.

Seed eating or sprout pulling, for instance, can be avoided by improving cultural practices. Farmers are most apt to get bird damage to newly planted seed under the following conditions: shallow planting, rather loose soil, rain or moisture at the time of emergence, delayed germination and delayed sprouting due to poor germination and cold soil.

Seed eating can also be discouraged by use of a repellent such as methiocarb.

Unfortunately, some of the best seed treatments can reduce germination. So make sure your corn seed

has good viability. Otherwise — especially if the ground is cold when you plant — you're likely to suffer some losses even after treatment. The decision to use a repellent should be based on the anticipated level of bird damage, as well as the cost of seeding.

"If you won't have a chance to replant, you'd be smart to treat," says the biologist.

There are also a number of ways to reduce losses from ear damage on ripening corn.

First, plant a variety that's resistant to damage. If you farm where blackbirds are likely to be a problem, it pays to choose a hybrid with a heavy husk and good tip coverage.

Then grow your crop so that this husk growth is encouraged. This means cutting down the plant population and increasing fertility to get bigger ears, since these tend to be more resistant to damage. Do this in fields with a history of bird damage.

Timing is also critical for damage avoidance. Linehan says vulnerable fields should be planted so that corn goes through the milk and dough stages in mid-August. At this time it's least likely to be attacked. Corn which enters these stages earlier or later in the season is very vulnerable.

For the most part, resistant varieties tend to be long-season hybrids. Plantings should go in around the first week of May in Delaware.

For the past six years Linehan has been studying field corn varieties to determine their resistance to bird damage from ear feeding. So far he's rated a total of 265 commercial hybrids grown in plots in Delaware and southern New Jersey.

Results range from nearly zero to six percent injury among the most resistant varieties, to 40 or 50 times that much among the most susceptible.

Among those varieties which performed best were: Taylor Evans Silagemaster, Agway 840X, PAG SX39, Gutwein 92, Todd M90, Agway 834X, Midstates 747A, McNair X212, Midstates 900, Midstates 869, Taylor Evans E20YA, Todd M88, Doeblner 70X, Northrup

King PX77, Hardy 600X, Pioneer 3369A, Midstates 879, USS 1010, and Midstates 816.

Of course, bird resistance is only one of many factors to be considered in the selection of a corn hybrid. But it's one to think about if bird damage is a problem on your farm.

Besides altering cultural practices and selecting resistant hybrids, there are other ways to protect a maturing corn crop. One of these is through scare devices. The most commonly used are exploders that work off carbide or bottled gas. These are rather expensive to use, require considerable maintenance and can damage the operator's hearing if they go off while he is up close without ear protection.

Their effect also diminishes with distance. But in spite of these drawbacks, they do minimize damage.

"There are many, many corn crops in the Delaware Valley which wouldn't have been worth harvesting at all if it weren't for such devices," says the biologist.

Another way to protect your maturing crop is through chemical behavior control, using a material called Avitrol. This is applied to cracked corn and then scattered by air as a bait in ripening corn.

Its effectiveness as a repellent is based on the social nature of blackbirds. When one eats a piece of the treated corn his erratic behavior and distress calls tend to frighten away other members of the flock.

Linehan was one of the scientists involved in research which led to extending clearance of this material for use on sweet corn a few years ago.

He says in some cases Avitrol has proven quite effective, but it's not guaranteed to work. It's also toxic and should be considered as a poison. Directions for its use are very specific and must be followed to the letter, as it is capable of killing other wildlife.

Incidentally, the biologist says there used to be a lot of sweet corn grown in Delaware for processing. Heavy bird damage is one reason this crop has gone out. In fact, U.S. 13 used to be the dividing line when processors were awarding contracts to sweet corn growers, because the closer you get to the river, the

greater the bird pressure.

Soybeans aren't nearly as vulnerable to bird predation as sweet or field corn, so to avoid loss a number of farmers have switched to this crop in recent years.

This is one way around the problem, but it does mean the birds have deprived the grower of one of his options as a farmer. This loss of options can cost dearly in a year when corn brings a better return than beans.

Linehan said he feels that bird pressure has remained fairly constant in Delaware over the years he's been here. But the amount of damage is down — primarily because growers in the "bird

belt" along the river have switched to other crops.

Redwing blackbirds are the main cause of damage to maturing corn in this region. Grackles (or "crow blackbirds") do the most damage to seed. Cowbirds tend to associate with the other two species but damage sorghum, not corn. Most people lump all three under the category of "blackbirds."

Population estimates are often based on the highest number present in a single day. The peak usually occurs during either the fall or spring migration. Nearly all the East Coast blackbird

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APRIL 17, 18, 19, 1980

THURSDAY: DINNER AT 6:00 P.M.
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SPEAKER: MR. RICHARD JAMES, DIRECTOR
OF SCHUYLKILL VALLEY NATURE CENTER,
"ENERGY: MYTHS AND REALITIES"
7:00 P.M.

FRIDAY: APRIL 18,
10:00 A.M. - 10:00 P.M.

- 10:00 a.m. Dennis Baylor, Engineer, Mehrkam Engineering - "Wind Power"
- 1:00 p.m. Richard James, Director Schuylkill Valley Nature Center - "Economic-Environmental Balance"
- 3:30 p.m. Newton Bair, Lebanon County Agent, "Methane Production"
- 6:00 p.m. Morton Fry, Nurseryman, "Hybrid Poplar"
- 8:00 p.m. Jim Lowry, Woodburning Stove Installation, "Woodburning Safety"

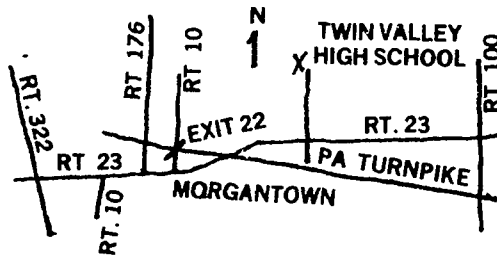
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- 10:00 a.m. Bill Gross, Metropolitan Edison, TMI Observation Center Director, "Nuclear Energy"
- 12:00 noon Newton Bair, Lebanon County Agent, "Methane Production"
- 1:00 p.m. John Garner, Insulation contractor, Elliott Insulation, "Insulation in Homes"
- 2:00 p.m. Floyd Horst, Lebanon County Dairy Farmer "Alcohol Production"
- 4:00 p.m. John Kephart Engineer, Du Pont Corp. "Industrial Energy Conservation"
- 6:00 p.m. Bob Patterson, Refining & Marketing Manager, Gulf Oil, "Petroleum Refining and the Consumer Interest"
- 8:00 p.m. Will Hartzell, The Stoveman, Eagle, PA "Solar Energy"



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