



Last season, a North Dakota farmer kept blackbirds off a 160-acre sunflower field with four of these hawk kites.

“BYE BYE BLACKBIRDS”

New Weapon For Battling Pest Birds

Kites that look like soaring hawks with 4-ft. wingspans kept blackbirds from damaging sunflower fields in North Dakota during the past growing season. It's believed that the device will also work to keep blackbirds, starlings and other problem birds away from livestock feedlots.

The hawk kite idea, invented in Washington state and used extensively to keep birds out of grape vineyards in California, is a hawk imprinted onto clear plastic and suspended from a higher-flying, helium-filled weather balloon. The balloon keeps the kite suspended and soaring in wind currents high above the ground.

“All birds are naturally afraid of hawks,” explains E. B. Aicher of AAA Industries, Oregon City, Ore. The company sells the kite and balloon units. “A hawk will attack almost any bird, and birds will make a wide flight around a hawk — or a hawk kite!”

Inventor of the idea is Bob Fay, Washington State University horticulturist. He reports that a real hawk once attacked a hawk kite at the WSU Research Center. “Birds are kings of their territories and apparently the kite had invaded a local hawk's realm,” says Fay.

Last year, Chuck Ballantyne, of Westhope, N. Dak., used hawk kites to keep blackbirds from damaging a 160 acre field of sunflowers. The field, located close to a wildlife refuge, has always had problems with blackbirds. Ballantyne has tried other methods of bird control, including several types of scare guns, but wasn't satisfied with results.

He flew four kites over the 160 acre field. The kites were 50 to 75 ft. high with helium-filled weather balloons another 25 ft. above the kites to hold them up. The kites were used for two weeks. “The secret is getting them up early and keeping them up long

enough,” Ballantyne told FARM SHOW.

He reports that each hawk kite effectively controlled blackbirds in an area similar to the area controlled by a scare gun.

“The only problem was that the balloons would lose helium, making it necessary to pump them up every two or three days. I carried a helium bottle to the field in my pickup. Also, the large balloons, 6 ft. or so in diameter, are hard to handle in a strong wind,” says Ballantyne.

He's in the process of developing a balloon which is shaped like a hawk and has a hawk imprinted right on the balloon. He hopes to have his hawk balloons in production and on the market early this year.

Aicher of AAA Industries feels the “hawk balloon” idea won't work as well as kites because “it probably wouldn't fly level like a hawk, and wouldn't look realistic.”

He notes that his company's hawk kites are imprinted above and below to look like the top and bottom of a hawk. A problem in the past has been that the helium would eat through and destroy the balloons. Now, a new polyurethane balloon is being used, preventing the problem. It can be patched and lasts for more than one season.

Cost of the hawk kite, including kite, balloon, instructions, and a harness to attach the kite to the balloon cord, is \$59.95, including shipping costs to anywhere in the U.S. or Canada.

For more information on the hawk kites, contact: FARM SHOW Followup, AAA Industries, Inc., P.O. Box 785, Oregon City, Ore. 97045 (ph 3 659-2363).

For more information on the hawk balloons, contact: FARM SHOW Followup, Chuck Ballantyne, 807 20th St., N.W., Minot, N. Dak. 58701 (ph 701 838-5321).



Hopper bottoms are especially popular with farmers who already own a number of bins and want to convert one, according to Metals Industries.

“CONE” CONVERTS YOUR OLD GRAIN BIN

Hopper Bottoms For Grain Bins

If you already own a 12 to 14 ft. dia. grain bin, you can convert it into a labor saving hopper-bottom bin — for about half the cost of a new unit.

“We've had a lot of farmer interest,” says Jeff Coombs, sales manager for Bocats, of Martin, N. Dak., one of the first U.S. companies to offer hopper bottoms for grain bins. “We build a 6-leg cone to fit under 12 ft. dia. bins, and an 8-leg cone for larger bins up to 14.5 ft. in dia.”

The Bocat cones hold right at 250 bu., measure 8 ft. from ground level to the top of the cone, and are made of 13 ga. steel. The bottom end of the cone is 20 in. above ground level.

Cost of the larger cone is \$1,495. Its 8-legs are made of 5 by 5 by 3/8 in. angle iron. The small cone sells for \$100 less. Bocats will set the farmer's existing bin on top of the cone, or he can rent a “boom truck” and install it himself, explains Coombs. “The cones are relatively easy to ship on a flatbed. We've considered introducing a larger cone for 18 ft. dia. bins in the near future but haven't finalized those plans as yet,” Coombs points out.

In Canada, Metals Industries Ltd., of Brandon, Man., has introduced a 45° hopper bottom cone for 14 ft. dia. grain bins. “They have been especially popular with farmers who already own a number of grain bins and like the idea of being able to convert one of them into a hopper bottom bin without having to pay out a lot of money,” says George Guggenberger, sales manager.

Cost of the Metals Industries hopper for 14 ft. dia. grain bins is \$1,325 (Canadian dollars) FOB. It holds 225 bu., stands 8 ft. 2 in. from ground level to the top of the cone, and is made of 13 ga. steel. Eight support legs are 6 ft., 4 in. long and are made of 5 by 5 in. angle iron.

“Customers can purchase our hopper bottoms and install existing or new bins, utilizing their own erection



Bocat's hopper bottom cones hold right at 250 bu. Bottom end of the cone is 20 in. off the ground.

equipment. Or, we will deliver the cone and install the grain bin on it,” explains Guggenberger. “If the bottom flange on the existing grain bin is encased in a concrete base, it will be necessary to torch cut the bin just above the concrete, and install a new bottom angle. If a new bin is being ordered for installation on a hopper bottom, it can be ordered less door, chute and bin boards, and with 2 extra short wall sheets.”

For more information, contact: FARM SHOW Followup, Bocats, P.O. Box 326, Martin, N. Dak. 58758 (ph 701 693-2255).

FARM SHOW Followup, Metals Industries Ltd., P.O. Box 790, Brandon, Man., Canada (ph 402 727-1401).