



## EUROPEAN STARLING and HOUSE SPARROW CONTROL *Fact Sheet*

European Starlings and House Sparrows are exotic pest bird species. Introduced into North America from Europe in the 1800s, both species are secondary cavity nesters. They not only usurp nesting sites that rightfully belong to bluebirds, swallows and other native cavity nesters, they often kill them, too. This Fact Sheet outlines some practical ways to deal with these problem birds.

### European Starling Control

**Control on the Nestbox Trail:** Fortunately for our small cavity-nesting species, starlings can be excluded from all nestboxes that have entrance holes of 40 mm (1 9/16 in.) or smaller. They can enter through entrance holes that are 44 mm (1 5/8 in.) or larger, which makes them a problem at Purple Martin colonies, and in duck, owl and kestrel nestboxes.

One way to reduce starling usurpation of duck, kestrel and owl boxes is to cover the entrance holes for the winter, then monitor diligently in the early spring after opening up the box. Another option is to pair the boxes, placing one above the other on a tree trunk. A pair of starlings will claim one box but will not compete for the other one. The starlings can be destroyed once the young have hatched. For more information on this topic, contact Jim Potter ([James.Potter@ab-conservation.com](mailto:James.Potter@ab-conservation.com)).



Starlings can also be trapped effectively using multi-bird traps. We have had great success with the Webb trap, left (see plans) developed by Tom Webb of Turner Valley.



Controlling starlings at Purple Martin colonies is essential; martins will rarely, if ever, colonize a new site if it is occupied by starlings or sparrows. For information on how to trap starlings in martin houses, contact the Purple Martin Conservancy at Pigeon Lake (780-389-2220) or do an online search.

**Control at Feeders:** Starlings like to eat suet, white millet, peanut hearts and, to a lesser extent, sunflower seeds. They are very aggressive at feeders, and will chase other birds away. To keep them away from seed feeders, encircle your feeder with 25- mm. (1-in.) chicken wire. This will keep the starlings out but will allow chickadees, redpolls, siskins and nut-hatches in to feed.

To keep starlings away from suet feeders, use an exclusion feeder with 38- mm (1 1/2-in.) wire. Starlings can get through 50- mm (2-in.) wire. Make sure the wire is placed far enough away from the suet so the starlings can't stretch in to access it.



Another type of starling-proof feeder is one that dispenses suet from the bottom of the feeder. Since starlings have weak feet, they are unable to hang and feed upside down. Woodpeckers, chickadees and nuthatches have no problem feeding this way.



*European Starling on a nest*

# House Sparrow Control

## Control on the Nestbox Trail

While a sparrow-proof bluebird box design has yet to be developed, there have been attempts at designing boxes that are less attractive to them. Some of these designs have not been field-tested sufficiently, while others seem to work in one area and not in another.

House Sparrows can enter any entrance hole that accommodates bluebirds or swallows. In urban areas or around farm sites where sparrows are abundant, nestboxes for chickadees or wrens can be set out, since the small 28-mm (1<sup>1</sup>/<sub>8</sub>- in.) entrance hole will prevent sparrows from entering the boxes. Some sparrows can enter a 32-mm (1<sup>1</sup>/<sub>4</sub>- in.) entrance hole.

Since sparrows tend to concentrate around buildings and areas where livestock are fed, they are least likely to use boxes placed at least one kilometer (0.6 mi.) away from feedlots, farm building sites or urban areas. In some areas, sparrow dispersal seems to be widening. In these cases, boxes may have to be moved further into undisturbed habitats.

Boxes should be sparrow-proofed during the winter to prevent the birds from claiming them as their own in early spring. This can be done by putting a plug in (or over) the entrance hole, or by attaching a block of wood—into the which has been drilled a 25 mm (1 in.) hole—over the entrance hole. The block should be painted the same color as the nestbox. House Sparrows will inspect the box, but upon finding it too small, will probably not bother it again. The block can then be removed when the bluebirds return.

In top-opening boxes with removable or hinged floors, the floors can be removed or tipped up against the back of the box. This practice will keep mice out of the box and will transform the box into a non-cavity. Sparrows may inspect the box at some point during the winter or spring, but will conclude that it is worthless and so will probably not return to check it again, even after the floor is set back into place. Removing the lids will also render them non-cavities (although lidless boxes are prone to deterioration since rain and snow can get in).

If sparrows take up residence in boxes, active control measures can be used. Trail operators who find humane disposal methods offensive sometimes transport sparrows and release them in another area. This is not recommended because it only moves the problem, it does not eliminate it.

Because a male House Sparrow becomes attached to a nest site, rather than to a mate, it may be difficult to discourage him from a nestbox once he has claimed it. If the female is removed, he will immediately find a replacement mate. If she is frightened off the nest and the nest and/or eggs removed, she will usually aban-

don for another mate and site. Continual cleaning of the nest material does not usually discourage a determined male. The most effective way to solve the problem is to either remove the male sparrow or move the box into more suitable habitat.

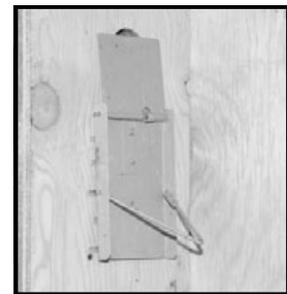
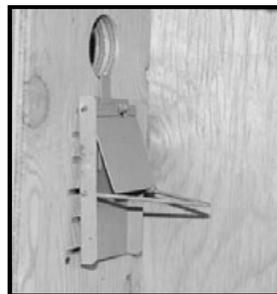
Some trail operators have found that boiling the eggs or dipping them in oil will keep a female occupied for most of the breeding season.

If it is not possible to move a sparrow-plagued box, plug the entrance hole or, if the box has a removable floor, remove the floor for a few days. This will usually encourage the male to move on.

Care should be exercised if a box is occupied by sparrows in close proximity to one or more occupied by bluebirds or swallows; if a nest is destroyed, a male may move to other boxes and kill the occupants. For this reason, it is especially important to remove the male sparrow in boxes located near bluebirds or swallows.

**In-Box Traps:** The chances of trapping a male sparrow in the nestbox increases as the nesting cycle progresses. Once the eggs have been laid, the female can usually be caught on the nest at night. On rainy days, the male can often be caught in the box as well.

In-box spring traps are easy to install and very effective. In Alberta, traps are available commercially from Stauffer-Henley Inc., Olds, AB [www.bandingpliers.com](http://www.bandingpliers.com). Ellis Bird Farm carries a full range of these traps during the summer, available by pick-up only.



Home-made traps can also be fashioned: Lorne Scott of Saskatchewan attaches a small piece of car window frost shield with a thumb tack inside the box so that it covers the top half of the entrance hole. The House Sparrow can then enter, but not exit, the box.

To remove the sparrow, hold a clear plastic bag against the entrance hole. Tap on the box to encourage the bird to fly into the bag. If the bird isn't willing to fly out, open the box and reach your hand in to retrieve it. Be very careful, because they will immediately bolt into the direction of any light source. In-box traps should never be left unattended for more than one hour. As mentioned above, the intent of traps is to capture House Sparrows, not to cause them suffering.

## Problems Around Building Sites

**Eliminate Nesting Sites:** The best way to eliminate nesting sites is to seal up buildings and other areas (such as old, unused machinery) to prevent sparrows from finding a crack or hole in which to build a nest.

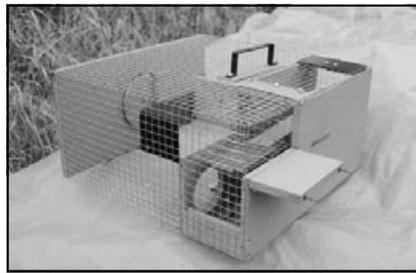
**Eliminate Roosting Sites:** During the winter, sparrows are largely dependant on human-made structures for overnight shelter. Sealing up all buildings during the winter will encourage them to seek shelter elsewhere. If exclusion is not an option, it is usually quite easy to catch them while they sleep. They also roost in brush piles or in the dense branching of coniferous trees.

**Shooting:** This control method can be employed year round, but is best carried out during the fall and winter, when it can decrease the stock of breeding birds in a given area before the arrival of spring migrants. *Obviously, this method should only be carried out when safe to do so.*

**Trapping:** Trapping should be employed on a year-round basis. Multi-bird traps are often effective in trapping large numbers of sparrows, especially in mid-summer when the juveniles are abundant. Approximately 10 birds should be kept in the cage trap at all times to act as decoys. These decoys can be attracted into the trap by putting white feathers, grain, bread scraps, white proso millet,

mixed birdseed or cracked corn in it. Food, water and shelter must be provided at all times, and the trap should be checked regularly in case a native bird happens to get in it. Since sparrows are gregarious, the success of cage traps depends on the birds being attracted to the food and to each other. For this reason, the trap works most effectively in areas with a high initial population. It can be used continuously once the population is under control, although its effectiveness will vary throughout the year. Note: the intent is to capture and dispose of these birds, not to cause them suffering. Be sure to provide adequate food, water and shelter inside the cage.

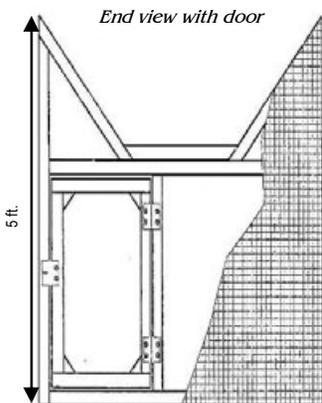
The multi-bird trap, shown here and illustrated on page 2, is a smaller version of a larger trap used successfully by Charlie Ellis for many years. Its small size makes it useful for urban or smaller backyards.



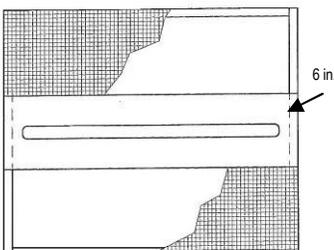
Multiple-bird bait traps are also available commercially. Some of these have to be reset, while others automatically reset, or are funnel-shaped and do not require resetting. Ellis Bird Farm carries repeating traps, available by pick up during the summer season. Two Alberta manufacturers/ suppliers of repeating sparrow traps are Stauffer-Henley

Inc. [www.bandingpliers.com](http://www.bandingpliers.com) and Northern Sky's Purple Martin Colony [www.wtc.ab.ca/northernskys](http://www.wtc.ab.ca/northernskys)

## Multi-bird Trap



36 in. x 36 in.



Top plate showing slot



- the slot should be exactly 1 in. wide for sparrows and 1<sup>3/4</sup> in. for starlings. To prevent the birds from climbing out, sand the underside or hang a strip of thin aluminium along the inside of the slot
- a floor is optional (the trap can be set directly on the ground)
- always ensure that the birds have adequate food, water and shelter (provide a small box inside the trap so the birds can roost and be protected from the elements)



*Female House Sparrow at nestbox. Unlike native cavity-nesters, sparrows build bulky nests, often with some of the nesting material extending out of the entrance hole.*

## House Sparrow Control cont.

**Control at Feeders:** There was a time when House Sparrows would shun sunflower seeds in favor of smaller seeds, cracked corn and bread crumbs. They have since acquired an appetite for these larger seeds, however, so they will likely take over urban or farmyard feeders that offer them. Since they find cereal grains, cracked corn and pastry crumbs very much to their liking, these foods should be avoided. Most commercial bird blends contain high amounts of red milo and cereal grains, both of which are shunned by most native feeder birds but devoured by sparrows. Avoid commercial bird mixes unless you have control over the ingredients.

If sparrows dominate winter feeders, the menu should be switched to canola, nyger seed and suet (although there have been recent reports of sparrows eating suet). Canola can be dispensed in a tray feeder, but the more expensive nyger seed should be offered in a tube feeder which has tiny portals. This will reduce wastage. Yet another option is to serve sparrows the cheap, "junk" commercial mixtures in a far corner of your yard. Offer the better food in better feeders closer to your viewing areas and as far away as possible from the sparrow feeders.

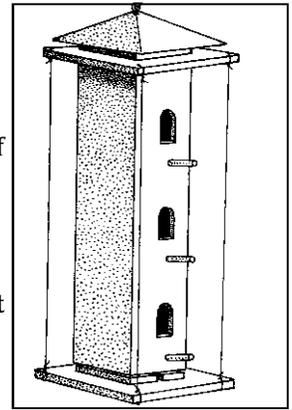
Elmer Gross of Stettler, AB, has developed a sparrow-proof chickadee feeder. The feeder, shown here, is encircled with 28-mm. (1 1/8 - in.) holes. The holes are too small for the sparrows to enter, but the smaller chickadees and nuthatches quickly learn to grab seeds by entering the box through one of the holes.



Victor Hafichuk of Lethbridge has also developed a sparrow-resistant feeder by simply inverting a pail over a tube feeder (below). He has found that the only time sparrows will venture 'up' into the feeder is when other feeders are empty and the weather is cold.



Another surprising but effective method to reduce sparrow use at feeding stations is to hang 9-kg (20-lb.) monofilament (fishing) line from each corner of the feeder. This method is easiest to employ on hopper feeders, but with a little ingenuity, can be applied to almost any feeder. The idea is to have a taut stretch of line placed at intervals around the feeder. They can be as close as about 15 cm (6 in.) or as far apart as about 60 cm



(2 ft.). To retrofit a feeder, attach the line directly to the feeder, or use pieces of aluminum strapping attached to the roof. To attach directly to the feeder, simply pound small nails in each corner and tie the line around them. Make sure the line is well secured to prevent birds from getting tangled up in it. If brackets are used, extend the line right to the ground.

Another way to reduce sparrow problems is to cut the perches on tube sunflower feeders to less than 1.2 cm (.5 in.). These perches will prevent sparrows (but also House Finches and grosbeaks) from getting a toehold.

Seeds can also be dispensed from an "upside down" feeder, which is a commercial feeder that has been designed so the portals are below the perches. The acrobatic finches have no trouble figuring out how to access the holes, while most sparrows are not adept at feeding upside down.



Multi-bird traps, described above, are effective at reducing sparrow numbers around bird feeding stations.



Male House Sparrow. Note thick beak and black bib

Photo of European Starling and doubled boxes by Jim Potter • Photos of Hafischuk feeder courtesy of Victor and Marilyn Hafischuk • Other photos by Myrna Pearman • Text reviewed by Jim Potter and Dorothy Dickson • Revised 2009 © Ellis Bird Farm Ltd.

We are grateful to the Red Deer and District Community Foundation for supporting the production of this Fact Sheet through the Conservation of Bluebirds, Swallows and other Native Cavity-nesting Birds Field of Interest Fund. [www.rddcf.ca](http://www.rddcf.ca)

Ellis Bird Farm Ltd., Box 5090, Lacombe, AB T4L 1W7

Phone/fax: (403) 346-2211; Summer (403) 885-4477 [www.ellisbirdfarm.ab.ca](http://www.ellisbirdfarm.ab.ca)