

# ***Making Nest Boxes Sparrow Resistant***

By Lee Pauser

lee@birdsfly.info  
San Jose, CA 95120  
September 17, 2014

## **Introduction**

After discovering a pair of House Sparrows nesting in one of my bluebird nest boxes some years ago, I searched the Internet for information on how to make a nest box House Sparrow proof. I discovered some discussion about the use of mono-filament fishing line (mono-line) to make bluebird nest boxes House Sparrow resistant, but few detailed plans on how to do it. I looked at these few plans, and improvised my own methods with I will refer to as 'treatments'. I don't believe that one can make a nest box sparrow proof without restricting access to the desirable species.

I tried several different treatments over several seasons driven largely by caution--will the treatment also keep out the desired species? My conclusion is 'no, the treatment did not inhibit the use of a treated box by desirable species'. The goal here is to eliminate the nesting of and losses due to House Sparrows by keeping them out of the nest boxes to begin with.

My treatments differs in detail from any other that I've seen, but not in concept--the mono-line is positioned so as to make contact with an approaching House Sparrow. I've not witnessed this, but supposedly the sparrow becomes befuddled after contacting the lines, hovers a bit, may try again, and eventually flies off. Other plans that I've seen involve as many as six vertical lines, while some even position lines on the top of the box. The exact placement of the lines also varies among the plans.

## **Current Methods of Treatments**

How to treat a box depends upon the type of box you have. If your nest boxes are front-opening with doors that are top-hinged refer to the section titled Method One, otherwise refer to the section titled Method Two.

Both methods utilize:

- 16 gauge anchor wire to form standoffs. The wire is stiff yet easily formed.
- Mono-line (fishing line) rated at 12 pounds test. The line should be as invisible as possible—clear or light blue in color. The line should be replaced yearly during your pre-season check as it loses its resiliency due to exposure.

## Method One

This method of treatment absolutely applies to a nest box that is front-opening having a door that is top-hinged, however it can be used with other box styles. The reason that this type of box is singled out is because the wire standoffs as used in Method Two will contact the box's roof restricting the opening of the door.

The photo on the right shows a typical front opening nest box. The L-screw is turned to unlatch the door which opens upwards.

To treat such a box, two small holes are drilled through the roof at exact positions. A single piece of wire is used to form two loops for screws and two standoffs which is attached to the bottom of the door using two deck screws. The ends of the wire form loops through which the mono-line is passed. The loops are large, and the ends of the wire are positioned such that if contact by a bird is made with the loops, it should not be injured.

Both the drilled holes and standoffs positions will place the mono-line about one inch from the face of the box, and 1/8 inch inside each side of the box's entrance hole.

A piece of mono-line is woven through the two holes and two standoffs, the line is tensioned with application of a half-knot, the standoffs are adjusted, and the line tied off. Without having proof, I feel that the line's distance from the face of the portal is more important than the line's spacing.

When the door is opened, the lines will become slack, and may require re-tensioning when the door is again latched closed.



## Method Two

Although this section documents method two (which I prefer), you may want to consider method one as it can be used for with a variety of box styles.

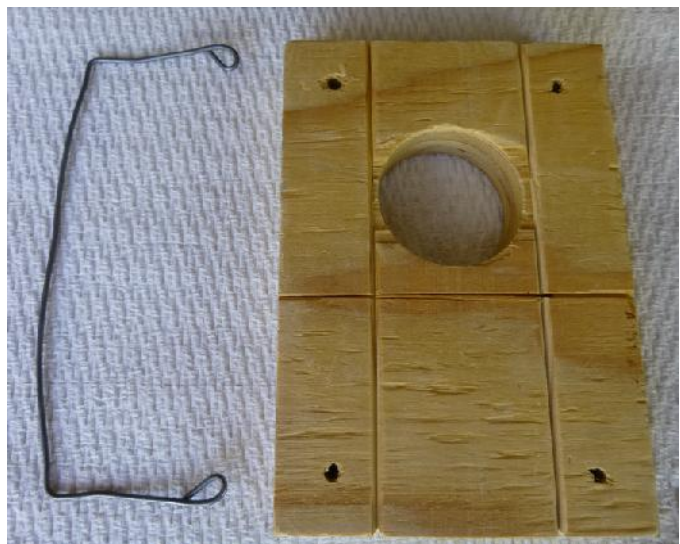
A photo of a method two treated box is to the right. This method places the entire treatment on the box's portal allowing the treatment to be easily installed or removed.



## Making a Mono-line Treated Portal

Pictured to the right is a one of two wires that will provide a total four standoffs, and a portal which is ready for treatment. The portal measures 5" x 3-1/2" x 3/4", and has a 1-1/2" entrance hole. In this case the portal is made of exterior rated (CDX) plywood.

Two grooves are cut vertically across the portal's back and both ends to a depth slightly less than the thickness of the 16 gauge wire.



The standoffs are formed from two pieces of 16 gauge anchor wire. The length of each of the two wires is long enough to be fitted into the groove, form a loop on each end, and have the loop's center be placed one inch from the face of the portal. The loops are large, and the ends of the wire are positioned such that if contact by a bird is made with the loops, it should not be injured.

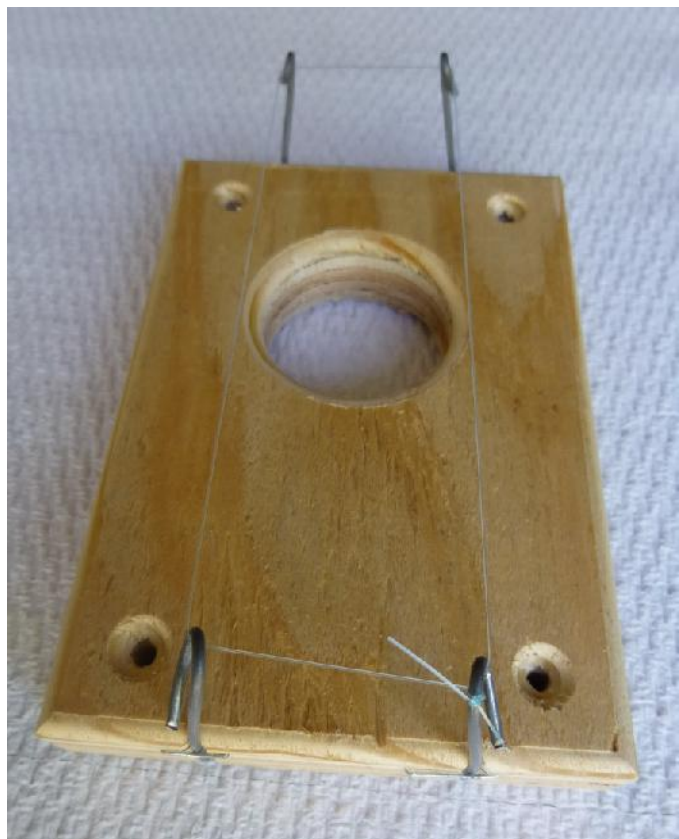
Both wires are then stapled to the back and edges of the grooved portal.



Although not necessary, this would now be the best time to attach the portal to the nest box being treated.

A piece of mono-line is woven through the four standoffs, the line is tensioned with application of a half-knot, the standoffs are adjusted, and the line tied off. When tensioned, the vertical mono-lines should run about 1/8" inside both sides of the entrance hole. Without having proof, I feel that the line's distance from the face of the portal is more important than the lines spacing.

Since the depth of the grooves is slightly less than the thickness of the wire, securing the portal to the box pinches the wire holding the standoffs in place. Similarly, the grooves on the ends of the portal prevent the stapled standoffs from turning when tension is applied.



## But Does It Work?

Note in the photo below a nest box hanging in the tree on the left, and arches with tiled roofs. Several House Sparrows can be seen perching on the top of the tiles.



To be brief, a pair of Western Bluebirds fledged their nestlings for two consecutive seasons from the nest box which had the mono-line treated portal installed despite the presence of multiple pairs of nesting House Sparrows.

I'm convinced that if properly applied and maintained the treatment can make a nest box sparrow resistant. I've had several monitors share their experience with me, and some said it does work, but a few also said it didn't work—a House Sparrow still entered the nest box. I ask the latter two questions:

1. Was the treatment properly applied, and maintained? This means that the mono-line was properly spaced, and tensioned. The line should be replaced yearly during your pre-season check as it loses its resiliency due to exposure.
2. Had the House Sparrow been in the box before? I believe that if it had been, it will be imprinted on the box, and be more determined to enter the box than those not familiar with the box or similar boxes.

-oOo-