

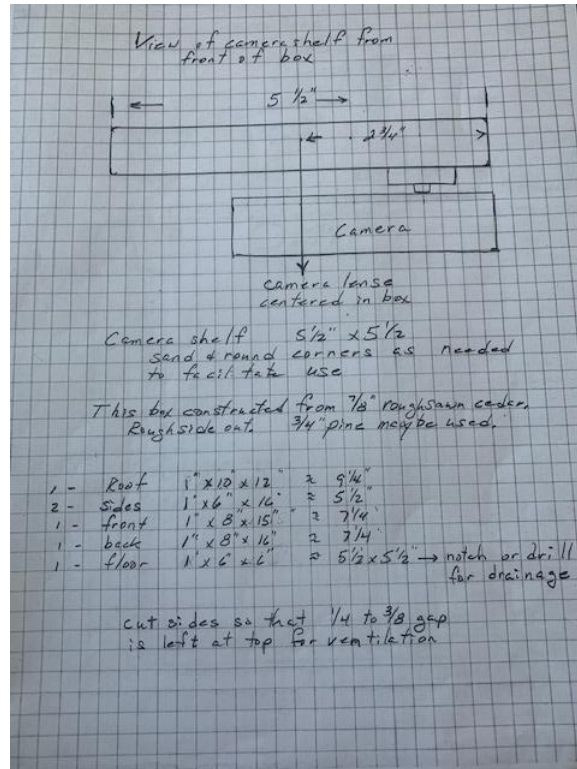
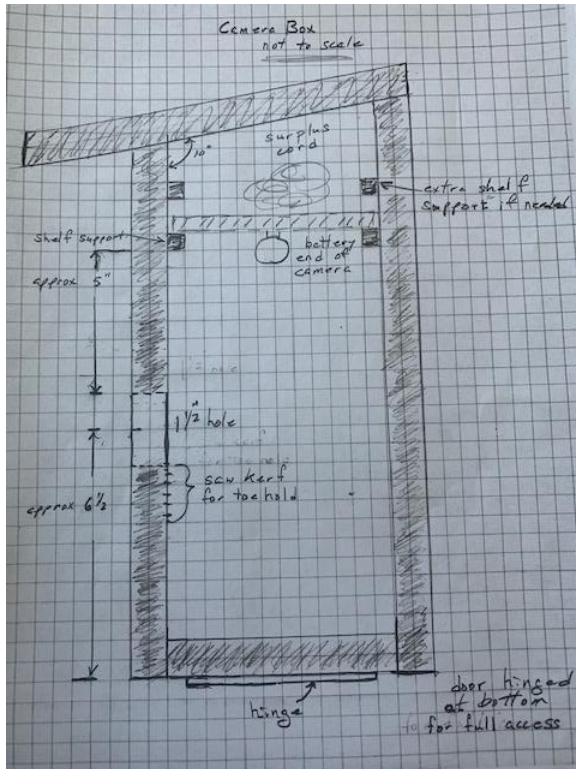
Ring Nestbox Camera- A New Way of Looking at Nesting

By Penny Brandau

For several years I have been fascinated with the idea of monitoring the activity inside a nestbox with an in-box video camera but the complexity of the set ups and the cost of maintenance seemed more than I could justify. However, after reading an article, "Nestbox Mysteries", in the North American Bluebird Society's Winter 2019-20 journal, **Bluebird**, I changed my mind and took the plunge! Authors Nancy Fraim and Marilyn Michalski wrote about their experiences with a RING camera system, it's relatively simple set up and reasonable price. Their descriptions of several instances when the camera video helped them understand nesting outcomes that would have been a mystery otherwise was fascinating. When my youngest daughter heard of my interest, she bought a Ring stick up cam and accompanying solar panel for me for Christmas for around \$150. It is all weather, HD 1080 video, has a 2-way audio and night vision. We have chosen to cover the blue light of the cam to reduce interior night lighting with a small piece of tape but otherwise have made no changes to the camera itself. It has been one of the best gifts I have ever received!

A RING stick up camera is small (roughly the size of an empty toilet paper roll) and is installed in the "attic" area of a modified nestbox. The video is activated by motion and sent by WIFI to an iPhone app or computer for viewing. The RING stick up cam I received had a rechargeable battery included but the addition of a RING solar panel for energy has provided enough energy to keep the cam working well without the need to remove the battery for charging. Any events which trigger a motion alert on the phone Ring app or computer can be viewed immediately by clicking on the RING app. It is possible to also choose to look inside the nestbox for a "Live" view whenever you just want to check in real-time what is happening in the box. By paying a nominal fee of \$3 month or \$30 year the video clips can be viewed anytime for a rolling 60 day period and even downloaded from the Ring cloud storage. The cam automatically records up to 30 seconds of activity video at a time then pauses for a minute before starting to record another clip if motion continues. The clarity of the video and the sound quality is much better than I could have imagined.

In January my husband designed a modified bluebird nestbox and installed the Ring webcam. Advice and suggestions from the NABS co-author Nancy Fraim were very helpful to him as he built our nestbox. She willingly answered many of my emailed questions. Some new modifications which my husband added to his plan though included placing the solar panel on a separate mounting pole instead of on the nestbox roof (we use sparrow spookers on the roof of our nestbox when there is an active bluebird nesting and thought the panel might be in the way of a spooker). Having the solar panel nearby but on a separate pole actually has given the bluebirds another place to perch near the box to guard it. Even the solar cord has been used for perching. The solar panel can also now be pivoted if needed to face the sun more directly. Another idea was to attach the RING cam to a sliding board which could be adjusted to two different heights inside the nestbox for different viewing depths. We know that some bluebird females like taller nests than others and wanted the option of moving the camera a little higher if needed for better viewing. The nestbox was mounted on a 1-inch EMT pole and an eight-inch diameter Kingston stovepipe predator guard was installed under the box to help protect against ground predators like raccoons, snakes or chipmunks.



Since the new nestbox was installed in our back yard we have seen several different birds enter it. Eastern Bluebirds checked it out early in January along with a pair of curious black capped chickadees. Our overwintering pair of Carolina wrens were seen inspecting the interior, and downy woodpeckers entertained us several nights in March and April as they individually roosted in the box (minimal remodeling by the male downy). More recently house sparrows tried to claim the box but having the Ring camera alerted us to their activity and made it easier to trap and dispatch the male house sparrow before they actually nested. We were actually checking a bluebird trail about 8 miles from our home last week when the Ring motion alert activated on my phone. When I checked, I was appalled to see a house sparrow entering the Ring box at our home several miles away and feared that he might catch and kill one of our bluebirds who had been building a nest that very morning in the box. It suddenly occurred to

me that I could possibly use another feature of the camera which I had been careful to avoid up to that point. The webcam has a microphone feature which is defaulted to be off but can be turned on in order to speak through the webcam inside the nestbox. When the motion alert sounded the second time a few minutes later I opened the Ring app, activated live feed and I saw the unwanted house sparrow in the box again! I turned on the speaker and loudly ordered him to leave! He scrambled quickly out of the house and probably wondered what in the world had happened! I actually laughed out loud! 😊 At least the bluebirds were safe temporarily until we could return home and set the Van ert trap. (We did catch the HOSP the next day when he returned once more).

Having a Ring nestbox camera can enrich our knowledge of what happens inside a nestbox exponentially. I have been able to share clips of downloaded video to my Facebook page and have made some of them public when requested. Others are finding it as interesting as I am. It is fascinating to see the activity of different bird species inside a nestbox and I'm hopeful that we will have a bluebird nesting soon to share with others. The opportunities for education are limited only by our imaginations.

More experienced Ring cam users like Nancy Fraim have installed Ring cameras inside bluebird nestboxes located on school grounds in order to introduce students to views of nest building, egg-laying, and nestling feeding, as viewed from their Smartboard, iPad or computer. Retirement communities are another group who would probably love the responsible viewing of bluebirds or other native cavity nesters in action. It could be a tool to increase private bluebird landlord nestbox monitor's early awareness of problems inside a nestbox. Most of us have wished we knew why certain nests failed or perhaps what we could have done better or differently to improve the nesting success of our beloved bluebirds. Use of a Ring cam with Wifi video can be one potentially useful tool. I'm definitely loving the things I am learning. It has opened up a whole new way of viewing a nestbox!



For more information about Ring webcam equipment check the website www.ring.com.