

Black Fly Not a Major Concern in Wisconsin

By Kent Hall, Data Collection Officer, BRAW

In this publication the topic of black flies gets considerable ink. One could interpret these articles as something that should be of major concern to bluebird monitors across WI. I do not agree. I think the problem is minor and should be of little concern for Wisconsin monitors in general. That does not mean, however, that when it happens to a monitor it is of minimal consequence. On the contrary, someone who experiences black fly deaths of bluebird chicks goes through considerable trauma and should be prepared for the psychological consequences if it happens to them. But it is going to happen to very few WI bluebird monitors.

This conclusion is based on two observations: 1) In the 8 years I have coordinated the Audubon Bluebird Trail for central WI (4,124 nest box years), we had trouble with black flies in only one location in one year: 121 boxes at Ft. McCoy in 2008. 2) I have completed 4 years as data collection coordinator for BRAW. In that time,

I have had data from 29,968 nest box years sent to me. Only in one year, 2008, was there a problem with black flies and it affected only about 300 nest boxes reported to me. My experience tells me that black flies are a problem in only very wet years and only if nest boxes are close enough to the hatching sites in slowly moving rivers.

In 2008, we collected “freshly killed” chicks of the Eastern Bluebird and personnel at the Wildlife Health Laboratory (WHL) in Madison found black fly specimens in the ear canals of these birds. They concluded that black flies had killed our chicks at Ft. McCoy (we lost nearly 100). These chicks were collected less than 24 hours after being killed. Our first specimens were collected more than 24 hours after death and had deteriorated so badly that they could not be used for analysis. To my knowledge, only one other specimen has been sent to the WHL and it was found to be “black fly negative”. It was a fresh-collected specimen, but a single specimen can not be used to conclude that a trail is not being affected by black flies.

The infestations by black flies in the boxes at Ft. McCoy occurred in un-vented nest boxes. It has been argued that if there are other “leaky” areas in

an un-vented nest box, it can produce enough CO₂ flow from the chicks to attract black flies. I won't argue that point. What I will argue, however, is that it is typical for wooden nest boxes to shrink and to cause “leak sources” within one year of their construction. Few people go to the trouble of caulking their boxes around the tops and sides away from the opening. Even if they do, however, the front/side door is still a problem. I know of no way that doors (front or side) can be caulked and still open the door. Air leaks that allow a flow of air into the box are inevitable.

In summary, I contend that: 1) there is little or no problem with bluebird mortality from black flies in WI bluebird chicks and 2) it is essentially impossible to prevent air flow through wooden boxes because they shrink after being put up outdoors. I conclude that we will have to put up with black fly mortality in the few years and locations that they occur.

Finally, it is still appropriate to minimize ventilation in nest boxes to prevent wind chill for chicks raised in April & May in WI. Also, caulking aging boxes to prevent this wind chill is encouraged. But don't expect your efforts will eliminate the threat of black flies.