

The Weather Reigned Supreme this Season and Our Bluebird Numbers Dropped: Annual Report I

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This is my 6th year as Coordinator of Data Collection for BRAW and 2nd as Data Analyzer. This year was about as different from last season as one can get. Last season we set a record for bluebirds produced, 30,716 (Table 1), but the dual problems of early, cold weather statewide, and black fly problems in the western part of the state, caused a decline of bluebird production by 24.8%, to 23,137 (Table 1 & Figure 2).

The Audubon Bluebird Trail that I coordinate in Central Wisconsin (1,266 nest boxes/4,836 bluebirds fledged) had a drop in production by only 14.5%, but the 3.82 birds fledged per box was the lowest for our trail in the past 8 years.

So what factors combined to drop bluebird production by one quarter compared to last season? Our Audubon Trail records indicate that spring nesting started at least two weeks later than normal. Statewide data that I received indicated the same trend was happening throughout the state. So cold spring weather was an important factor contributing to the drop of production.

The results of later nesting had these effects: 1) less bluebird production from double and triple nests (stats in Annual Report II); 2) Tree Swallows (especially) and Black-capped Chickadees occupied boxes that normally would have been occupied by bluebirds. Surprisingly, total Tree Swallow production also declined



Figure 1. Joe Schultz, Kent Hall and Bing Fleming celebrate the construction of 500 nest boxes for Operation Top State.

to 11,838 (1.2 per box) but bluebird production declined proportionately more, so the ratio of bluebirds to swallows produced declined to 1.95: 1, the worst in my six years of data collection. Tree Swallows did not fledge more individuals because of a relatively high mortality. The factors most influencing this drop in numbers fledged included loss of chicks due to starvation and black flies.

In addition to cold weather, a massive outbreak of black flies occurred in Western Wisconsin. LaCrosse and Monroe Counties were hardest hit, but Crawford, Eau Claire, Iowa, Jackson,

Pepin, Trempealeau & Vernon Counties also reported black fly losses. The Brice Prairie Conservation Association Trail dropped from a production of 4,900 last season to 3,300 this season, mainly due to black fly infestations. In Monroe County, the Audubon Trail has 248 nest boxes at Ft. McCoy.

In 2009, 171 boxes there set a state record with a production of 6.85 bluebirds produced per box. This season, as a result of black flies, the number dropped to 2.48/box, a 64% decline. I will be writing a separate paper on black fly management in the spring

Table 1. Comparison of Eastern Bluebird & Tree Swallow fledgling success, BRAW Reports & BRAW Monitors in 2006-2011. Fledglings per box is based on the total number of monitored boxes. Box occupancy is the number of boxes with at least one egg divided by total boxes monitored times 100.

Year	Bluebirds fledged	Bluebirds Fledged per box	Swallows fledged	Swallows fledged per box	Ratio of Bluebirds to swallows	Total Boxes Monitored	% Bluebird Box occupancy (+1 Eggs laid)	Total BRAW Reports	Total BRAW Monitors
2011	23,137	2.4	11,838	1.2	1.95: 1	9,548	60.1	431	NA
2010	30,716	3.2	12,267	1.3	2.50: 1	9,632	60.2	466	748
2009	28,814	3.3	11,054	1.3	2.61: 1	8,699	58	405	640
2008	21,379	2.9	9,864	1.3	2.17: 1	7,387	56	323	499
2007	28,244	3.6	10,051	1.3	2.81: 1	7,861	50	267	409
2006	21,047	3.5	6,574	1.1	3.20: 1	6,021	44	195	245

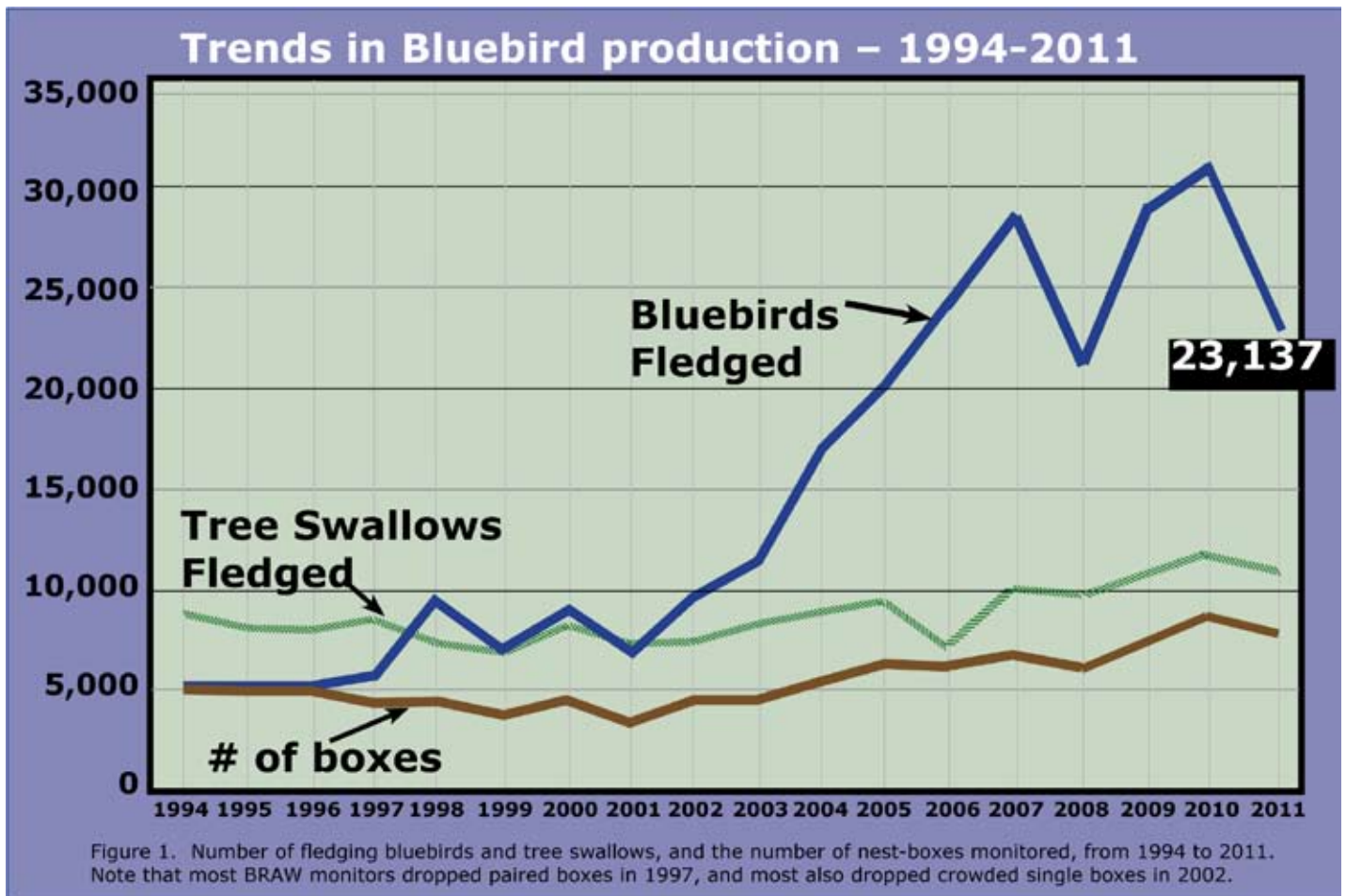


Figure 2. Trends in Bluebird Production for BRAW (1994-2011)

edition of the WB.

Our number of boxes monitored stayed steady with 9,548 being reported this season (84 fewer than last season). A total of 431 reports were received and they averaged 22 nest boxes per report, an improvement of 1 ½ nest boxes per report from last season. The production per nest box in the state dropped to 2.4, the lowest in the 6 years I have been collecting data. This represents almost 1 bird per box less than last season (0.8), a decline of 25%.

The most pleasant surprise of our data reports was the occupancy. I fully expected occupancy of nest boxes to decline due to exclusion of bluebirds by TRES's and BCCH's. But it was almost identical to that of last season: 60.1 to 60.2. My hypothesis is that our 933 "2nd year boxes" were able to attract a higher percentage of bluebirds than last season, in essence a "box location" effect. If that hypothesis is true, with good weather we should see a return to much better bluebird production.

Form 21 data submissions:

I was able to mail most of you a tutorial sheet to help with completion of the Form 21 and as a result, we dropped the errors on submitted forms by 2/3. Mainly, I am very pleased with the data I am receiving. We have eliminated 90% of the errors I received in my first four years of data collection for BRAW and I can now identify nearly all of the remaining 10% and contact persons to correct them.

I expect next year's data reports will be the most error free in my association with BRAW. Thanks to all data reporters for their splendid cooperation with me and effort on behalf of bluebirds.

Annual Report II:

In the Spring Issue of the Wisconsin Bluebird, I will publish Annual Report II. It will summarize information about bluebird and swallow production and egg and chick mortalities in different counties. In addition, I will recognize Trails of Honor (minimum

of 10 boxes and 2.0-2.39 bluebirds fledged/box) and Trails of Excellence (minimum of 10 boxes and production of 2.4+) bluebirds per box.

Presentations:

Last spring I made 8 presentations on bluebirds around the state. I pay for my own transportation, but ask that you allow me to sell nest boxes, mounting posts and Informational Packets for BRAW at these presentations. My power point presentation usually lasts 45 minutes and the Q & A session lasts another 15 minutes or so. These presentations can help different groups attract new monitors for their trails and maintain a high level of motivation for bluebird monitoring for their respective groups. If the talk is for service groups (Lion's Clubs, etc.), I ask for a flat \$100 fee for BRAW in addition to the sale of BRAW items. If interested in a presentation date (I suggest February & March), contact me at: (715) 344-8081 or kentsue@charter.net.