

## Iowa's 2016 Midwinter Bald Eagle Survey

A total of 1,939 Bald Eagles were counted during the 2016 Bald Eagle Midwinter Count, which was the second lowest number of eagles counted on the annual survey since 2003 (Fig. 1). This is below the previous 10-year survey average of 3,064.3. The average number of birds counted per route was 38.78 or 1.14 eagles per mile surveyed (Fig. 2). Fifty routes were completed in 45 counties, covering 1,698 miles of habitat.

The dates for the 2016 survey were December 30 to January 13, with target dates of January 8 and 9. All but 3 of the 53 active routes were run, and all but 1 was done during the prescribed survey period. Fifteen of the 50 surveys were run on the target dates with the biggest group (21 routes) being run on January 6<sup>th</sup> which was the target date for the Midwinter Waterfowl Survey. The average temperature during the survey period was relatively high at 25 degrees Fahrenheit. Overall, there were only 11 routes run with the temperature below 20 degrees Fahrenheit, and the rest of the winter, outside of the survey period, was relatively mild. The very mild temperatures in the early part of winter resulted in there only being an estimated average of 30% of ice cover on the waterways, the lowest since 2006.

As documented by the survey, the most frequent distribution of Iowa's wintering eagles is highest along the Mississippi River. In recent years, however, there has been shift towards more use of the Des Moines River and this is the case this year. The Mississippi River held only 25% of the total birds counted on the survey while the Des Moines River held roughly 43%. The two rivers together still account for a majority of the counted birds but it should be noted they are also the most heavily surveyed waterbodies. Small numbers of birds were counted along the rest of the waterways, with the Skunk River being the only other river with over 100 birds. These fluctuations in distribution are interesting and are likely driven by food availability. It is one of the trends that will be monitored closely in future years.

The Midwinter Waterfowl Survey is run during the same time period and uses similar methods as the Midwinter Bald Eagle Survey and, in fact, some eagle and waterfowl surveys are run simultaneously. The target date for that survey was January 6<sup>th</sup>, 2016. The total number of bald eagles counted on the Waterfowl survey totaled 1,742 (1,172 adults and 570 immatures). A total of 139 (90 adults, 49 immatures) of these birds were counted in the 54 counties where no standardized bald eagle survey route exists, making the probability that these are double counted birds small.

The percent of immature eagles in the count was the same as 2015 at 28% but it is slightly lower than the previous 10 year average of 33% (Fig. 3) though it still represents a steady trend.

The long-term Midwinter Survey results suggest that the number of eagles that winter in Iowa continues to fluctuate widely from year to year. The 2014 survey saw the highest number of eagles ever counted, while 2015 represented the lowest since 2007 and 2016 was the lowest since 2003. This year very low numbers are at least partially an artifact of so little ice on the waterways which allowed the eagles to spread out to hunt and not concentrate as much in limited open water areas. In addition, waterways further north in Minnesota and Wisconsin stayed open until close to January, so eagles had no reason to move south for food. The overall trend continues upward but at a slightly lower rate. This state trend mirrors the results of a recent national analysis of the first 25 years of the survey which suggests that Bald

Eagle population trends may be flattening as the bird's numbers reach a level that can be supported by the existing habitat available( Eakle et al. 2015). If this is the case we would expect to see the trend to continue to become more level in future years. Regardless, Iowa provides important wintering habitat and resources for the Bald Eagle population in the U.S. and we will continue to monitor their numbers.

Literature Cited:

Eakle, W.L., L. Bond, M.R. Fuller, R.A. Fischer and K. Steenhof. 2015. Wintering Eagle Count Trends in the Conterminous United States, 1986-2010. *Journal of Raptor Research* 49(3): 259-268.

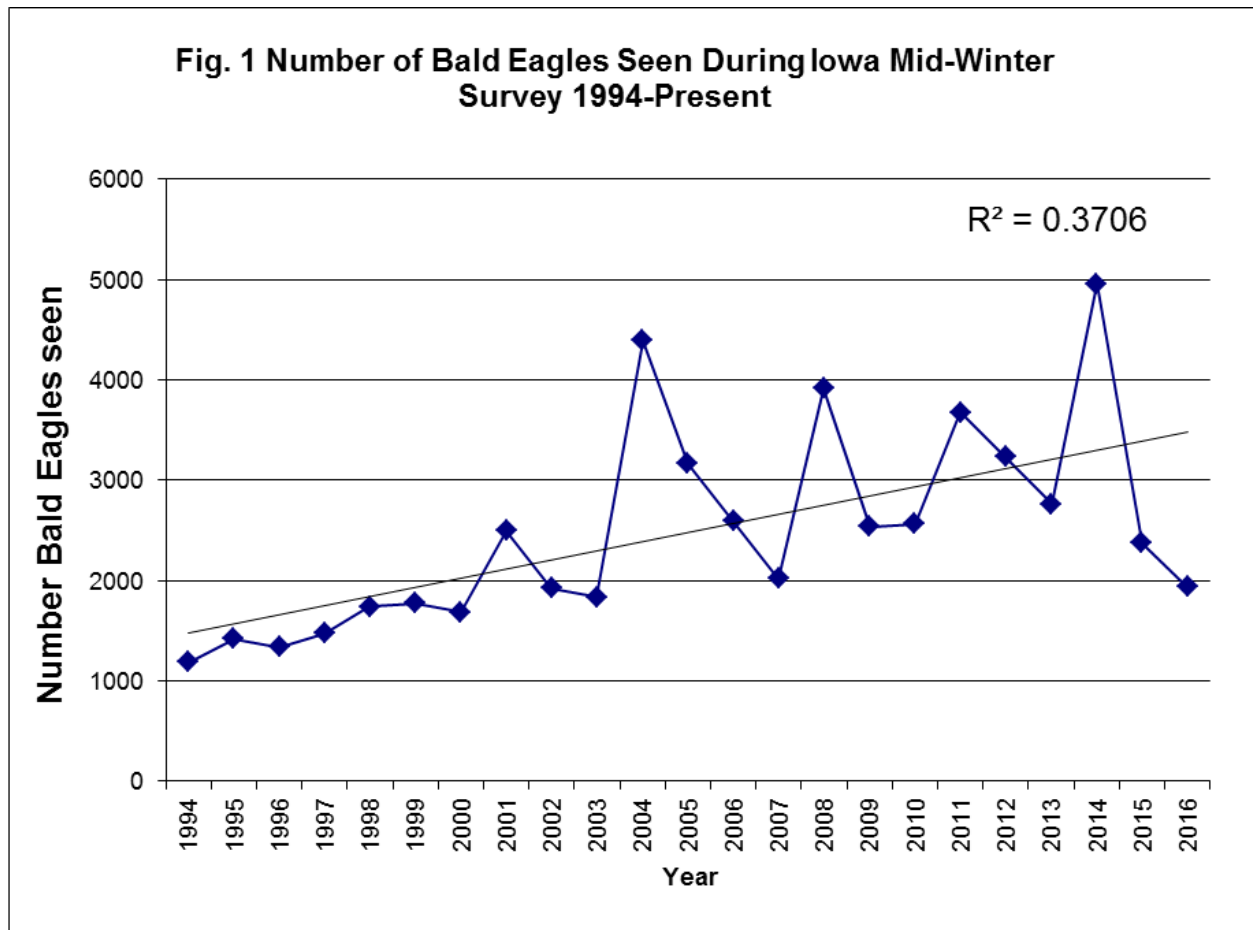


Fig. 2 Average Eagles per Route

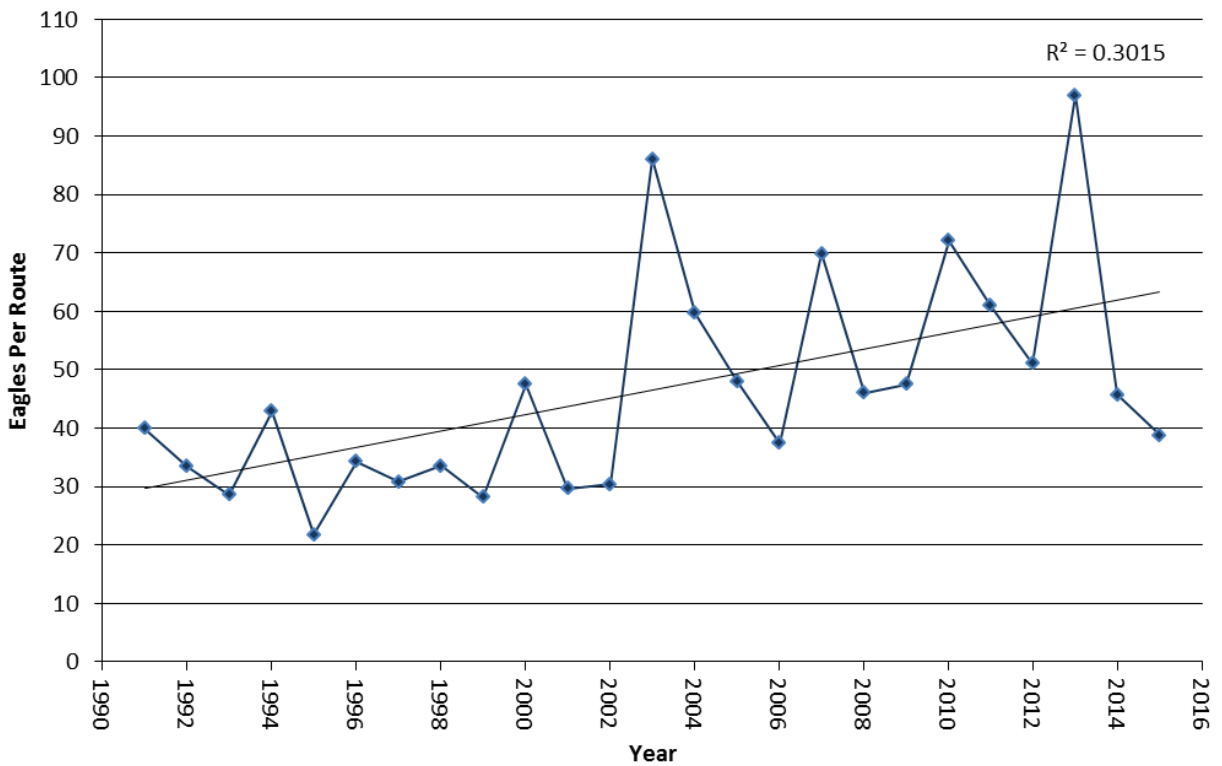


Fig. 3 Percent Immature Bald Eagles in Iowa Bald Eagle Midwinter Survey, 1995-present

