

# Ten Week Brood Observations 2015

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## **Abstract**

A slightly earlier than normal spring green up led to good game bird breeding and nesting conditions for the game bird species in the state. Average temperature and precipitation during the month June led to normal nesting and early brood rearing conditions for Wisconsin's game bird population. Brood rearing conditions in Wisconsin in 2015 were average for temperature with much of the state seeing temperatures about average for the months of June and average to slightly below for July and August. Precipitation too was about normal, with no large or prolonged rain events followed by cold weather. Pheasant and ruffed grouse broods counted per observer in 2015 increased from 2014 levels. Turkey broods counted per observer decreased slightly from 2014 levels, and gray partridge remained the same, with zero broods reported. Participation in the 2015 Ten Week Brood Survey was at its lowest level in the 45 year history of the survey.

## **Methods**

An e-mail containing an electronic survey form was sent to all department field personnel. Field personnel were asked to record the number of gray partridge, ring-necked pheasant, ruffed grouse, and wild turkey broods observed while doing normal field operations. The survey period began the second week in June and ended the third week of August, 2014. When one of the four species was observed with a brood, participants recorded the date, county of the observation, number of young in the brood, and whether all the young in the brood were counted. A summary form was e-mailed at the end of August to all field personnel. On the summary form, participants reported all brood observations, the percent of their time spent in the field, and whether they or others that worked for them collected the observations. These forms were returned to Wildlife Surveys and the data were entered into the DNR production server and summarized using the Statistical Analysis System (SAS).

## **Results**

One hundred and ninety-eight (198) observers sent back 144 surveys, reporting their observations of game broods of gray partridge, ring-necked pheasant, ruffed grouse, and wild turkey in the summer of 2015. The number of observers decreased from 2014 to 2015 by -18%, the lowest since the inception of the survey.

A winter with normal temperatures and below normal snow fall set the stage for an early spring green up. This set the stage for a good breed and nesting season. Temperatures for much of Wisconsin were normal with no large precipitation events that could have caused losses of recently hatched broods. July and August were slightly below average for temperature but normal for precipitation. Overall brood rearing conditions should not have adversely effected brood survival in 2015.

## **Gray Partridge**

No Gray Partridge broods were seen in 2015, the same as in 2014 and 2013. Small pockets of gray partridge still exist in areas of the state but not at levels that are not detectable by this survey method or in the numbers they have in the past (Fig 1). Observers have seen 10 or

fewer gray partridge broods now for over a decade.

#### Ring-necked Pheasant

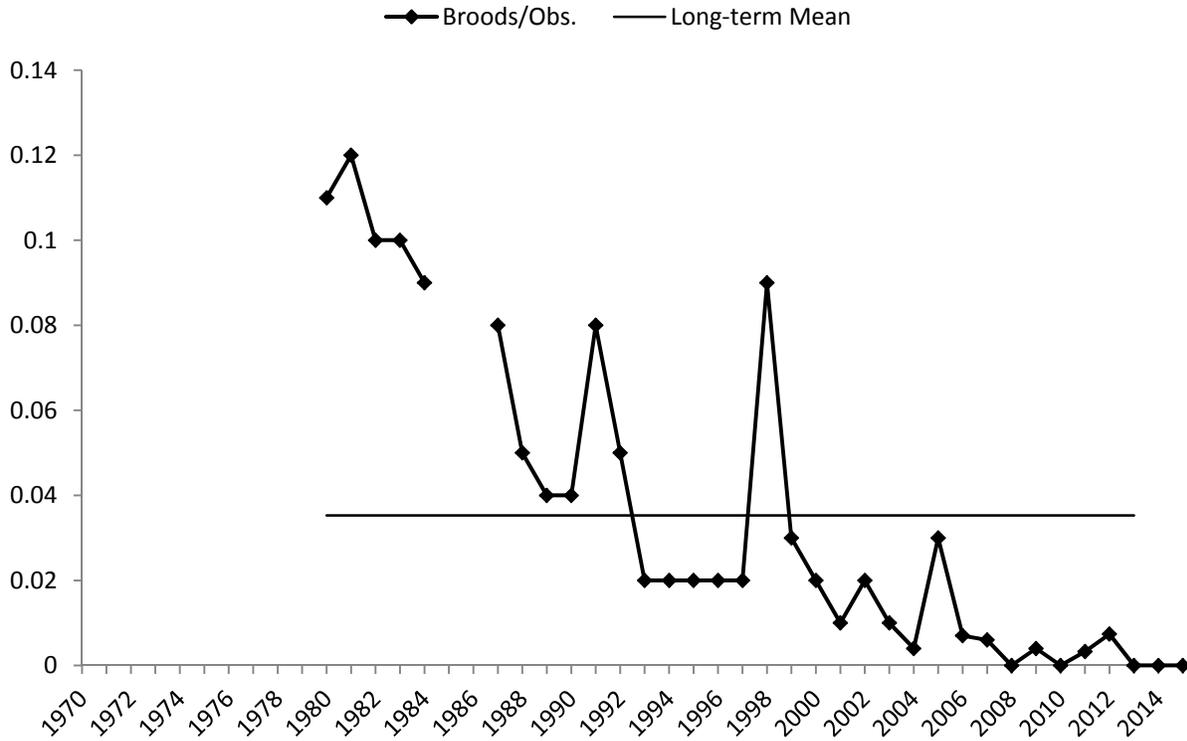
Pheasant broods seen per observer hour were up 69% in 2015 compared to last year. Pheasant production was up in the primary pheasant range 41% from the 2014 level, and increased 47% in the rest of the state. Pheasant brood size was down slightly, with an average of 4.0 young per brood in 2015 vs. 4.9 in 2014. The average number of broods per observer was below the long-term (1970-2014) mean of 0.45.

#### Ruffed Grouse

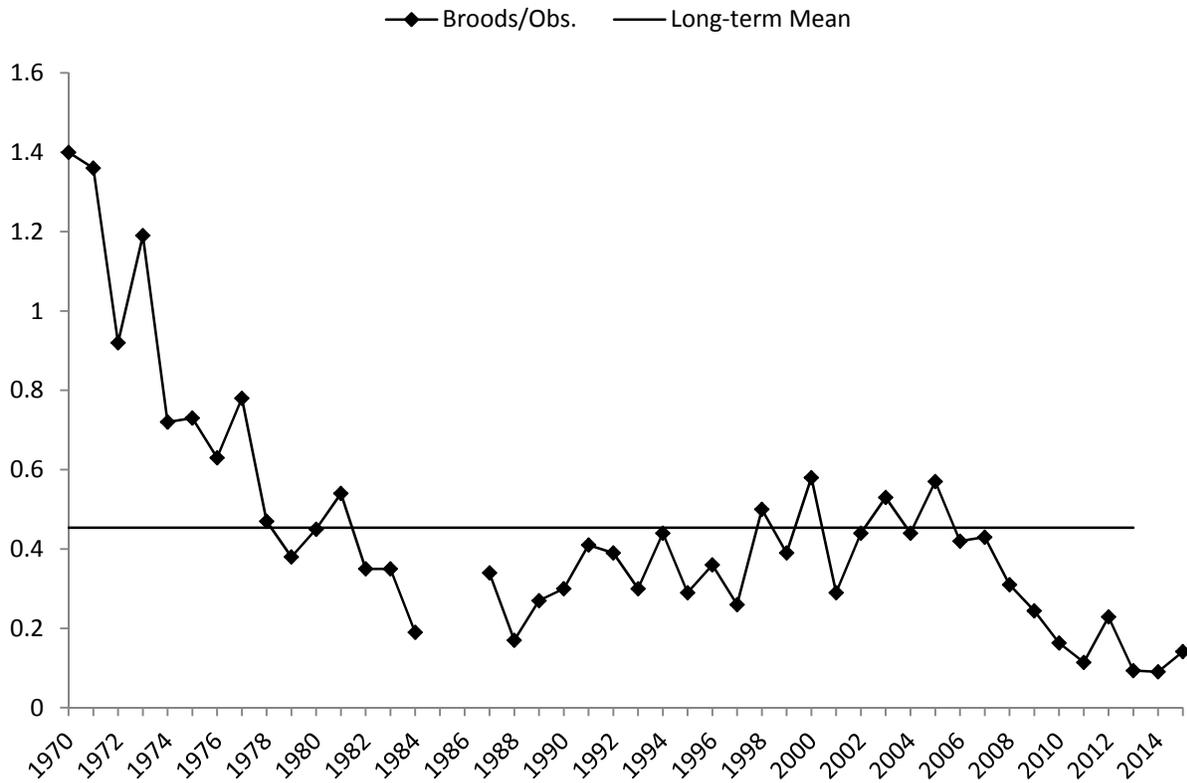
The average number of ruffed grouse broods observed during the ten week period per observer hour in 2015 was up 15% from the previous year. Broods per observer increased 12% from 2014 when 0.63 broods per observer were recorded (Fig 3). The average number of broods observed was below the long-term (1970-2014) mean of 1.22 broods per observer. The number of young observed per brood in 2015 was 4.2, up from the 4.1 observed last year.

#### Wild Turkey

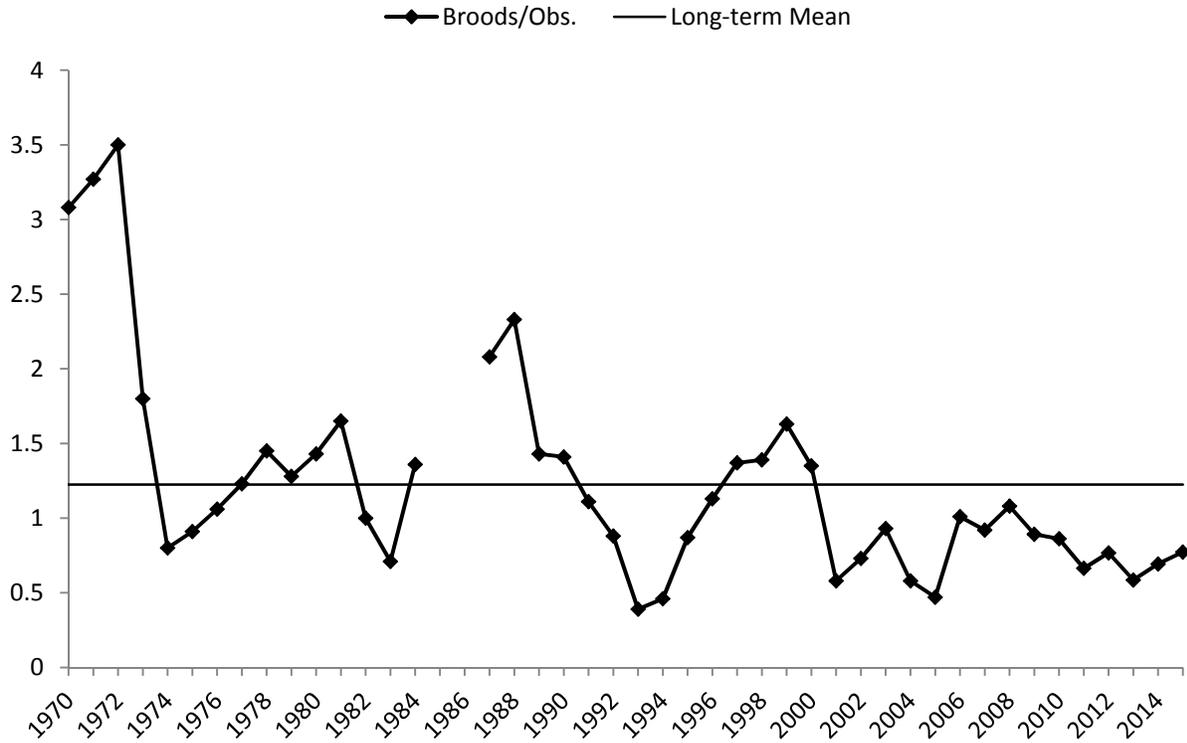
Wild Turkey broods seen per observer decreased from the previous year, 3.17 in 2015 vs. 3.38 in 2014 (Fig 4). Broods per observer decreased 6% but is above the long-term (1987-2014) mean of 2.09 broods per observer. The average brood size (4.3) for 2015 is down slightly from the 4.5 observed in 2014.



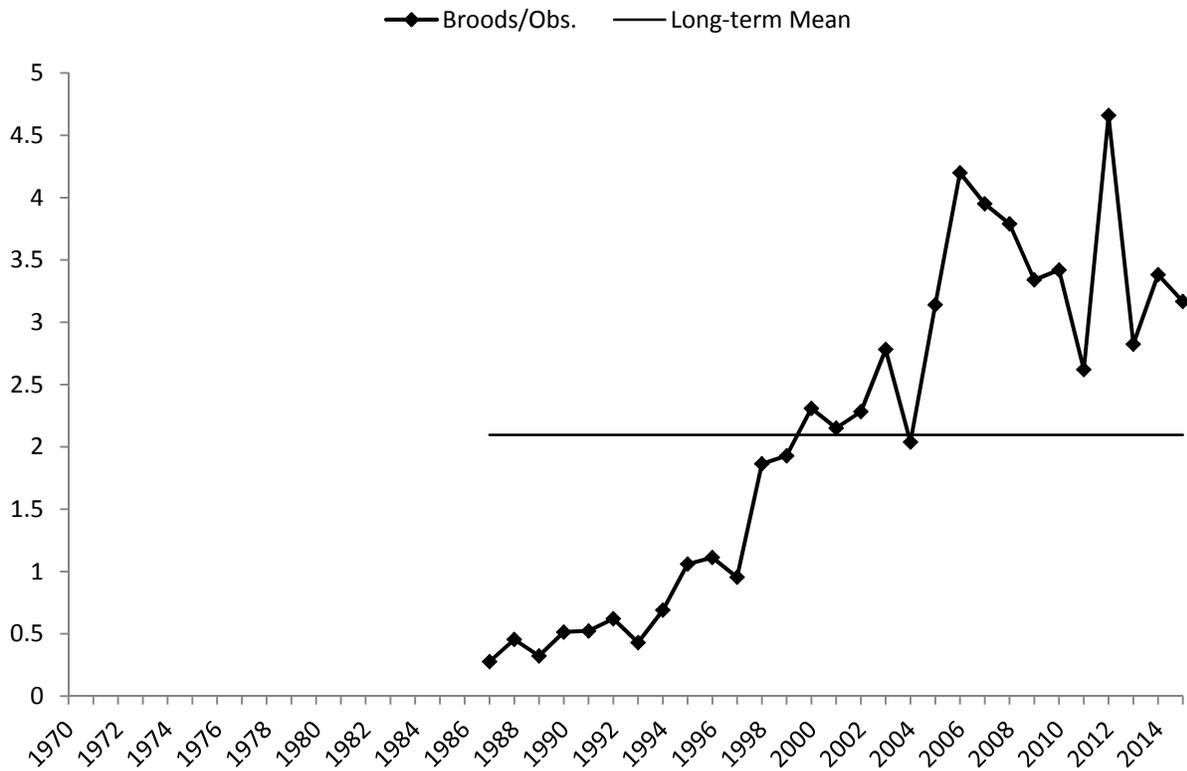
**Figure 1.** Number of gray partridge broods per observer 1980-2015.



**Figure 2.** Number of ring-necked pheasant broods seen per observer 1970-2015.



**Figure 3.** Number of ruffed grouse broods seen per observer 1970-2015.



**Figure 4.** Number of wild turkey broods seen per observer 1987-2015.