

Northern Bobwhite Status Report, 2016

Agriculture and Grassland Wildlife Program Note 16-2

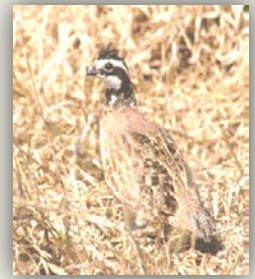


photo by Adele Hodde

Northern Bobwhite Quail Hunting in Illinois

Quail hunting in Illinois was very popular for most of the early and mid-1900's with well over 150,000 hunters that often harvested over 2 million quail per year from the 1950's through the early 1970's. Due primarily to changes in land use and farming practices, this game bird that had been such an abundant by-product of the agricultural landscape in the early part of the 20th century began a dramatic decline in the mid 1970's (Figure 1). Estimates of harvest and the number of quail hunters put this decline in perspective; by 1990, there were 84,000 hunters and they harvested 937,000 birds. Ten years later, there were 40,500 quail hunters that harvested 271,500 birds. The small, diverse farms of the 1950's had abundant small grains (wheat, oats etc.), livestock and hay fields with lots of fencerows and hedgerows separating small fields that provided great cover for quail.

Today, corn and soybeans have replaced most of the small grains, pastures, and hayfields that were once common in Illinois. The hedgerows and fencerows that provided cover for game are gone or have been 'cleaned up' with herbicide, leaving very little habitat and eliminating travel corridors between the remaining blocks of habitat. In addition, field size and the size of equipment have increased dramatically in the last 50 years. Larger and more efficient equipment decrease the amount of time it takes to harvest crops and disc fields, covering most crop stubble early in the fall. There is very little winter cover left and crops get planted quickly in the spring. During the summer, 'recreational' or aesthetic mowing of roadsides and non-crop areas often occurs during prime nesting season (April – August) for the ring-necked pheasant and other grassland birds. The changes to the landscape and the loss of habitat have occurred slowly, over several decades, but the additive effects on quail and pheasant populations are dramatic.

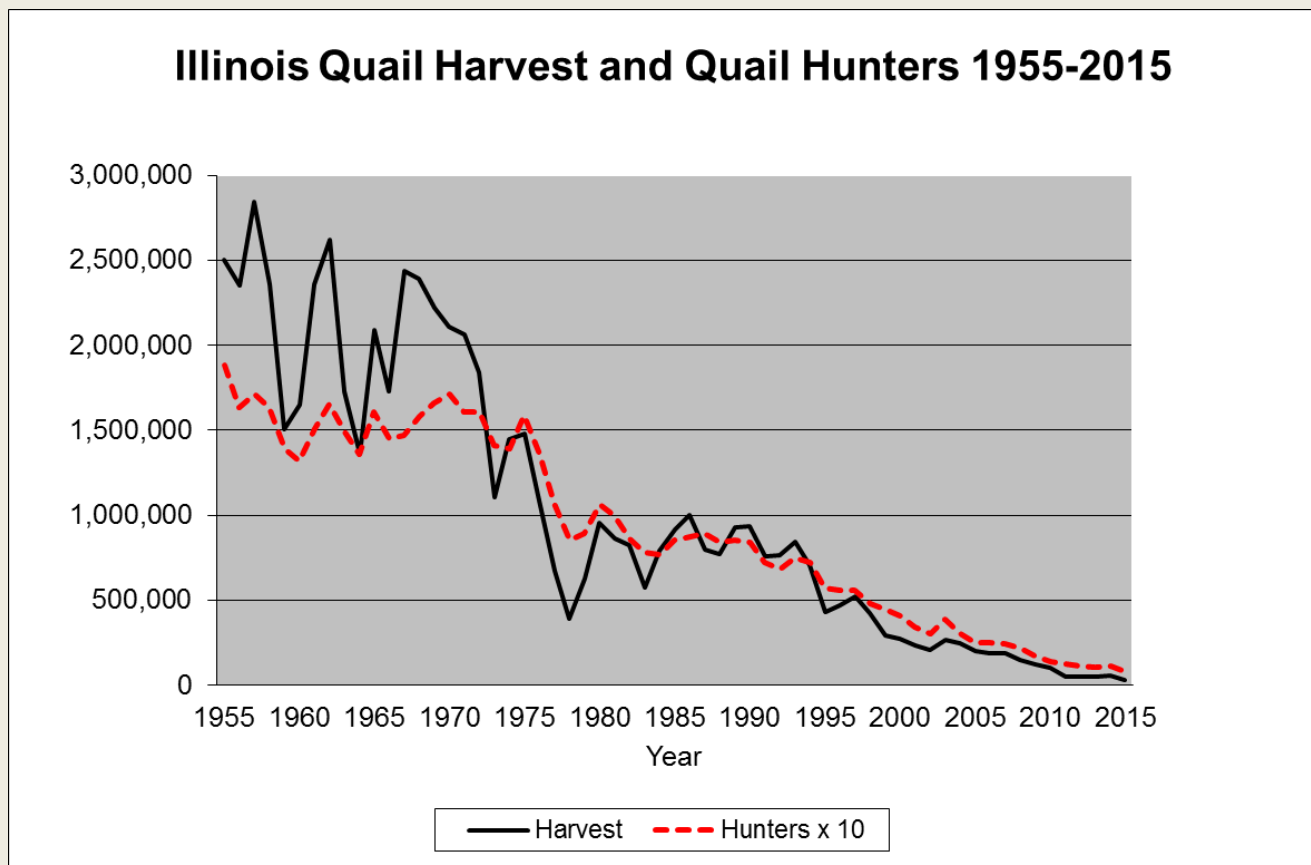


Figure 1. Illinois Quail Harvest and Quail Hunters 1955 - 2015

2015-16 Hunter Harvest

Harvest estimates are based upon results of the 2015-16 Illinois Hunter Harvest Survey. During the 2015-16 quail season, an estimated 7,665 hunters (32% decrease) harvested 29,674 wild quail (46% decrease). Quail hunters averaged 0.52 quail per day (38% decrease). Harvest and effort were significantly lower in 2015-16 compared to 2014-15.

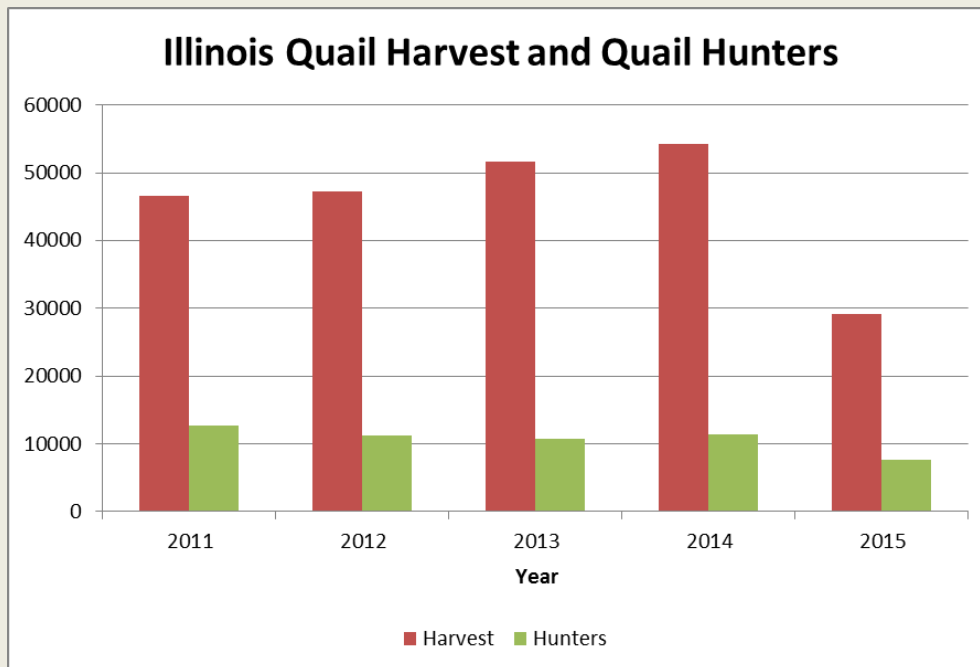
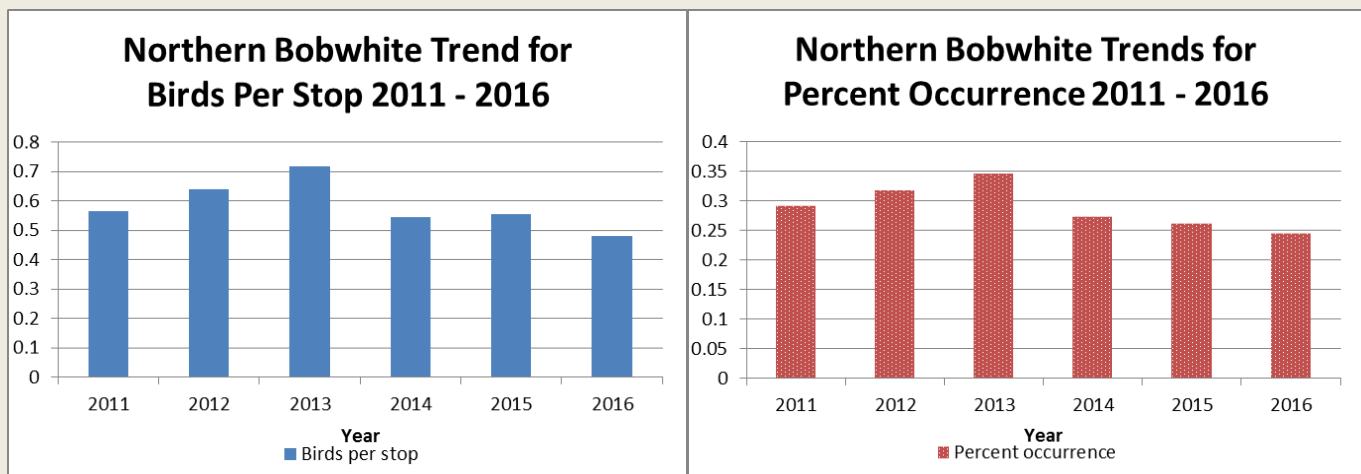


Figure 2. Quail Harvest and Hunters 2011 - 2015

Quail Population Index

There are established routes across the state and biologists run the routes two times annually during the spring/summer. The first run is completed during the peak breeding window for ring-necked pheasant (May 10 – June 10) and the second run is completed during the peak of quail breeding (June 10 – July 10). Each route has 20 stops for 3 minutes each to record individuals heard or seen. The number of routes surveyed annually depends on staff availability, but as many of the surveys are completed as possible.

During 2016, observers recorded an average of 0.48 quail per stop during the surveys (13% decrease). Quail were recorded at 24% of stops (percent occurrence), down 6%. The number of quail counted and the number of stops where quail were seen or heard in 2016 were lower than the 2015 surveys.



Figures 3 and 4. Northern Bobwhite trends for Birds per Stop and Percent Occurrence

Weather 2015-16

Fall of 2015 was mild and wetter than average. Except for some flooding at the end of December, winter temperatures were above average and precipitation was below average. This trend continued through spring and into the early part of summer. May and June were warm with little rain, however, July and August brought heavy rains to much of the state.

Some of the rain during nesting and brood-rearing season also delayed mid-summer mowing in many areas of the state, leaving cover in ditches and along field edges through much of July and August. Overall, 2016 weather conditions during nesting and brood rearing seasons were fair.

2016-17 Season Outlook

The key to a successful 2016-17 quail season is finding high-quality habitat. With a lower harvest in 2015-16 and fewer birds observed on the annual surveys, it appears that quail populations have declined yet again. The most productive quail regions in the state this year seem to be Central and West-central Illinois. Quail numbers in southern Illinois are struggling after several years of above average rains and late winter storms that brought ice and snow cover. Establishing quality quail habitat or managing existing habitat is more important than ever for the future of quail and quail hunting.

Habitat Management Tips

- Good quail habitat looks messy and “weedy”. Fields that look ‘clean’ with tall grasses dominating, are probably not good quail habitat!
- Do not mow roadsides, idle areas or field edges from May 1 – August 1, and encourage friends and neighbors to keep the mowers parked as well. Summer mowing kills the eggs/chicks in the nest and often the hen as well.
- A general guideline for quail habitat is to provide 40% brood cover (flowering forbs and scattered grasses with open, bare dirt underneath), 30% nesting cover (unburned grasses with scattered forbs), 20% escape cover (thickets in and along the edges of grasslands that provide heavy cover, ie. blackberry, dogwood, giant ragweed, sumac, loose brush piles, etc.), 5% roosting cover (bare ground with sturdy, overhead cover) and 5% food plots (if there are no adjacent ag fields). These components must be provided in every 40 – 80 acre block of suitable habitat, since quail do not typically move very far from escape cover.
- October is a good time to spray and/or disc strips through existing grasslands that have become too thick. Fall mowing or burning in late September or early October can clear away thatch and stimulate vigorous regrowth of cool-season grasses. Once this new growth reaches 6” – 12” tall, read and follow label directions for a foliar application of herbicide like glyphosate to set back areas of tall fescue, brome or reed-canary grass. These strips should provide good brood habitat next summer.
- October and early November are good times to prepare for ‘edge feathering.’ This practice is simply dropping non-desirable trees along the edges of field borders to provide escape and roosting cover in the grassland edges. Before cutting trees (and before a hard freeze), spray any brome or fescue in the landing zone with glyphosate to ensure open areas beneath the trees after they are dropped. Cutting can be done through March.

For additional information on quail or quail management:

- Illinois Department of Natural Resources, **District Wildlife Biologists** (<http://web.extension.illinois.edu/wildlife/professionals.cfm>)
- **Quail Forever**, habitat management tips (<https://quailforever.org/Habitat/Why-Habitat/Quail-Facts/Upland-Habitat-Basics.aspx>)
- **National Bobwhite Conservation Initiative** (<http://bringbackbobwhites.org/>)
- Missouri Department of Conservation's **Covey Headquarters Newsletter** (<http://mdc.mo.gov/wildlife/attracting-wildlife/covey-headquarters-newsletter>)

Thank you for your interest in the northern bobwhite quail. Have a safe and enjoyable hunting season in 2016!

Stan McTaggart
Agriculture and Grassland Wildlife Program Manager

Season Dates

November 5, 2016 – January 8, 2017 (North)

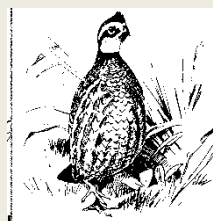
November 5, 2016 – January 15, 2017 (South)

Hours

Sunrise to Sunset

Bag Limits

8 per day with 20 in possession after the 3rd day



*Prepared by Stan McTaggart 10/16
Illinois Department of Natural Resources
Division of Wildlife Resources*

