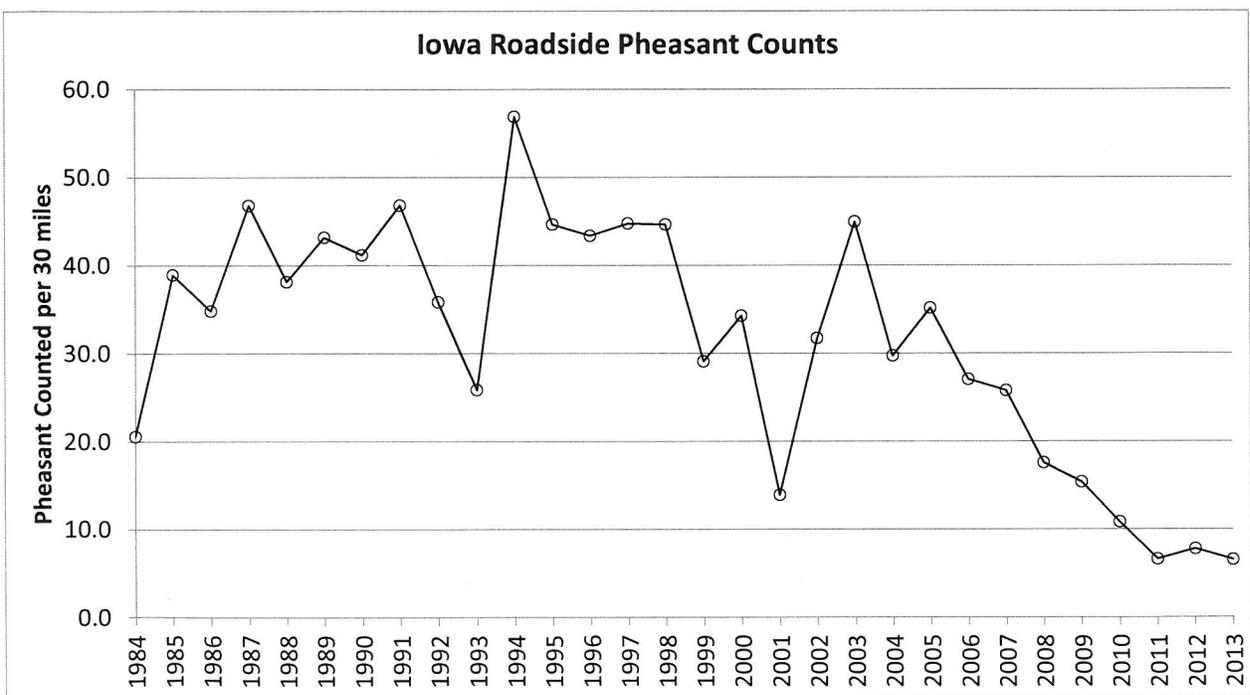


Proposal to Aid in the Recovery of Iowa Pheasant and Quail Populations

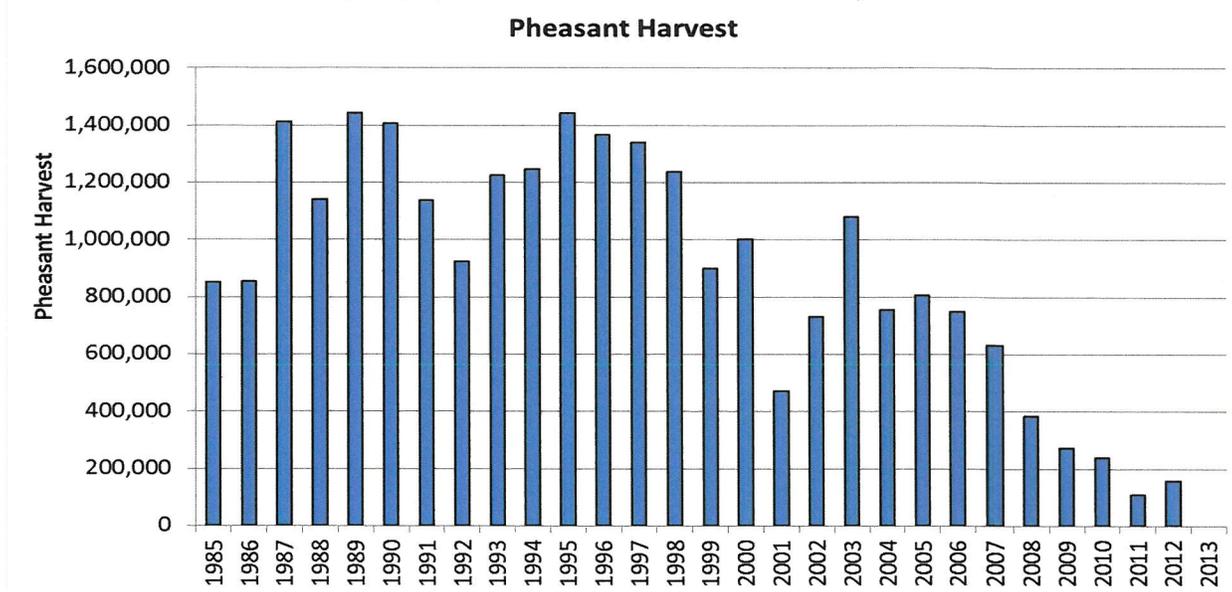


Pheasants Forever Inc.
January 2014



Executive Summary

Iowa's 2011 pheasant population index of 7 birds per survey route is the lowest ever recorded. Estimated 2011-12 pheasant harvest was 109,000 roosters. Iowa's long term average harvest is 1.2M roosters. This loss of pheasants has had a large impact on Iowa's economy. In 1996, 205,000 pheasant hunters harvested 1.3M pheasants and contributed an estimated \$80M to the Iowa economy. In 2010 that figure fell to 60,000 hunters and an estimated \$24M impact, a \$56M loss to the Iowa's economy.



Long term habitat loss, the poor quality of “old” Conservation Reserve Program fields, and weather (2007-11) are responsible for the decline of pheasant numbers. Iowa lost 1.1M acres of potential pheasant habitat between 1996 and 2010 an area equal to three Iowa counties. Based on this figure alone Iowa pheasant harvest should be 27% lower in 2010 than in 1996. However, harvest in 2010 was 83% lower than harvest in 1996. The much lower harvest is attributable to 5 consecutive years (2007-11) of severe winters and poor nesting seasons. Historic national weather service data shows no similar winter weather pattern ever occurring in Iowa. If weather patterns were normal, at 2010 habitat levels, Iowa should be harvesting 500,000 to 750,000 roosters.

This proposal show's several potential options for aiding a recovery of Iowa gambird populations. Some will say significant success of any option is largely dependent upon a return to more normal weather patterns. This proposal seeks ways to adapt to a changing Iowa by creating working landscapes that support biodiversity. The options focus on establishing buffers, quality private land habitat with public access, research, and Gamebird Recovery Areas emphasizing core habitats on public and private lands in township complexes.

Following the guidance of the 2009 legislatively mandated Upland Gamebird Advisory committee, this proposal calls for expanding the marketing effort to private landowners and providing funding for additional habitat.

Funding Request (\$6.65M)

- Kitchen Table Conservation Planning for Water Quality and Wildlife - Provide \$500,000 to expand Iowa Pheasants Forever/DNR biologist partnership.
- Buffer Iowa Initiative – Provide \$1,000,000 to help enroll 200,000 acres into field and stream buffers. This project can directly affect nutrient reduction across Iowa, will improve pheasant habitat statewide, and reduce erosion.

- Habitat Initiative - Provide \$650,000 annually for core pheasant and quail winter habitat on a township basis. Habitat projects would concentrate on public lands and surrounding private lands.
- IHAP (Iowa Habitat an Access Program) – Provide \$500,000 to expand the Iowa Habitat and Access program.
- Targeted IHAP – Provide \$2,000,000 to target the Iowa Habitat An Access program in a 2 county area. To study the economic impact of increased recreation and public access due to upland bird hunting.
- Research – Provide \$2M for upland bird research. Iowa pheasant numbers are at historic lows. This is an important opportunity to study this catastrophic decline. Iowa must adapt to a changing environment and agricultural industry. Research would concentrate on improving habitat and stocking pheasants.

The Iowa Pheasant Plan concept in this proposal provides ample opportunity for citizens and communities to match state dollars impacting potentially an even larger area. There is also significant opportunity to stretch state dollars by coordinating with local Pheasants Forever chapters, Iowa Department of Agriculture and Land Stewardship and of course USDA conservation programs.

Background

The 2011 pheasant population is the lowest ever recorded since roadside surveys began in 1941, with a statewide average of 7 pheasants/route. The 2011 harvest was 109,000 birds. Last year during the 2012 hunting season hunters reported harvesting 238,000 pheasants. Statewide average roadside count in 2010 was 11 pheasants/route.

Iowa’s pheasant decline is tied to both weather and habitat loss. In addition to low counts in 2010 and 2011, previous low roadside counts are 13, 14, 15, and 18 pheasants/route in 1947, 2001, 2009, and 2008 respectively. The low counts listed above followed severe winters (30-60” snowfall) with subsequent springs that were wet (8-15” rainfall) and/or cold. The recent string of low pheasant counts 2008-11 is due to the 5 consecutive years of severe weather from 2007-11. Iowa has never seen 5 consecutive winters with 30+” of snowfall, followed by wet springs 4 of those 5 years (Appendix 1).

What we know about weather and it’s impact of pheasants

Rainfall – greater than 8” during nesting season population declines

Snowfall – greater than 30” during winter populations declines

Table shows the 12 worse weather years for pheasants in the last half century.

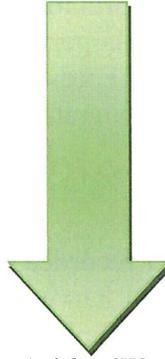
Of these, 6 are since 2001! Bad weather occurs virtually every year now!

In the past we saw bad weather once or twice a decade.

Year	% Chg	Rainfall	Snowfall	Rank
1965	-37%	9.3	39.9	3
1978	-4%	8.5	36.6	10
1982	-51%	9.5	32.4	8
1984	-13%	10.5	33.9	5
1991	14%	10.9	26.1	11
1999	-35%	11.2	30.8	4
2001	-59%	10.7	39.4	2
2004	-34%	9.7	35.1	6
2007	-5%	10.0	27.6	12
2008	-32%	11.7	42.1	1
2010	-30%	8.1	47.0	7
2011	-39%	8.8	37.8	9

Iowa’s pheasant habitat has also declined. Preferred spring habitats for pheasants are grassland habitats like hay, oats/wheat, and Conservation Reserve Program (CRP) fields, while preferred winter habitat is CRP or wetlands. CRP lands have become “old” the fields become less inviting to pheasants and other ground nesting birds. Iowa continues to lose quality grassland habitat – Iowa CRP acreage in 1996 was 2.17 million acres, in 2013 CRP has dipped below 1.5 million acres.

CRP 1996 = 2.17 million acres



CRP 2014 = 1.46 million acres

The CRP that Iowa has is “old” and not quality nesting cover

Summary

While both winter and spring weather are important to pheasant numbers, there is not much we can do to influence the weather. Adapting to more intense rain events and destructive winters must begin now. Restoring pheasant and quail habitat is the only reasonable tool the Iowa DNR Wildlife Bureau or Pheasants Forever has to help recover population numbers from weather related mortality.

Habitat restoration, both public and private lands, should be targeted to counties with the best potential (primary range). Special attention should be given to core winter habitat as well as nesting habitats. It will take the addition of habitat to both public and private land in Iowa to affect a population recovery in Iowa.

Table 1. Recent trends in pheasant habitat loss, predicted, and actual pheasant harvest.

Year	Hay Acres ^a	Wheat/Oat Acres	CRP Acres	Total Habitat Acres	Predicted Harvest ^b	Actual Harvest
1996	1,650,000	230,000	2,178,228	4,058,228	1,235,291	1,367,060
2010	1,200,000	80,000	1,673,000	2,953,000	873,675	238,208
Difference	-450,000	-150,000	-505,228	-1,105,228	-361,616	-1,128,852
Percent Loss	-27%	-65%	-23%	-27%	-29%	-83%

a - Habitat data from USDA (NASS, FSA).

b - Predicted harvest calculated on available habitat, adjusted for pheasant productivity by habitat type.

The above table does not reflect CRP acres in 2014 – Iowa has lost another 210,000 acres of CRP.

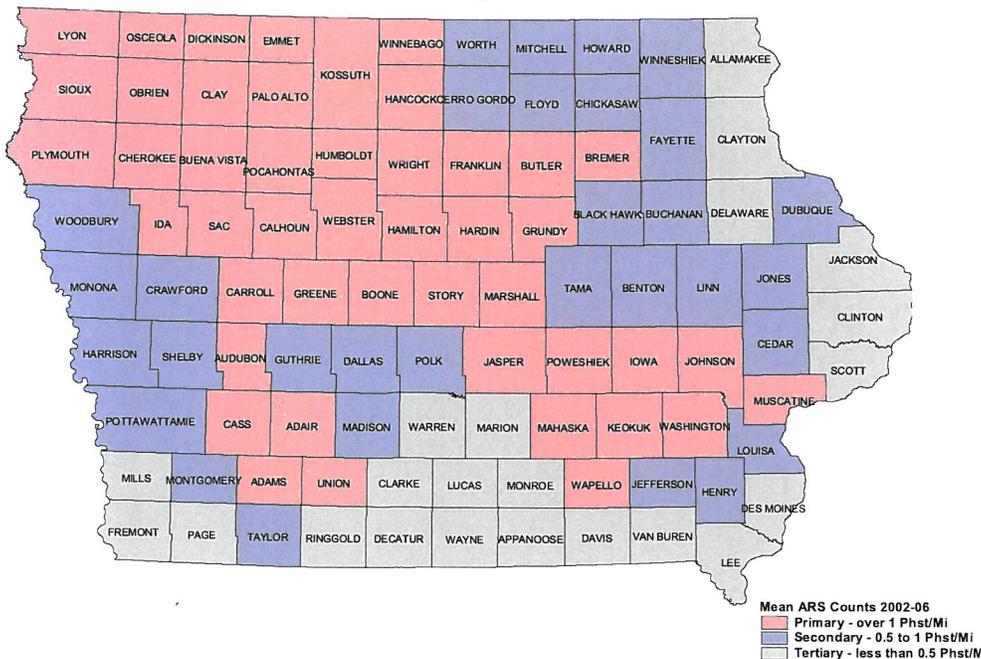
Most important to remember, Iowa is not just seeing a dramatic decline in pheasant numbers. Quail numbers are at all-time lows, Monarch butterfly populations have never been lower, pollinators are disappearing, Great Horned Owls, Bobolinks, Meadowlarks, honey bees, and water quality are all in decline. Creating a working landscape that supports biodiversity and keeps nutrients and soil where they belong is critical to Iowa’s future.

Defining Iowa's Primary Pheasant and Quail Range

The period from 2002-06 was the most recent period of relatively “normal” weather and also reflective of current land use, which makes it a good period for using roadside counts for defining Iowa’s pheasant range. Iowa’s pheasant range can be divided into primary (Good – over 30 birds/route), secondary (Fair – 15 to 30 bird/route), and tertiary (Poor – less than 15 birds/route) range based on roadside count data. Iowa’s primary quail range was mapped in 2010 as part of the National Bobwhite Conservation Initiative (NBCI) with input from management staff using a combination of roadside count data and knowledge of existing and potential habitat conditions (Figure 1).

Figure 1. Priority habitat development regions for pheasant and quail populations in Iowa.

Roadside Count Priority Pheasant Regions



NBCI Priority Quail Regions

