



IOWA'S PHEASANTS

THE EFFECTS OF WEATHER AND HABITAT ON PHEASANT SURVIVAL

FOUR-PART NEWS MEDIA SERIES BY MICK KLEMESRUD, ILLUSTRATIONS BY EMILY BAINTER

Iowa pheasant hunters have harvested more than one million birds annually 33 times since 1962. Since 2000, that's happened only twice. In the upcoming season, the projected harvest of 150,000 to 200,000 is expected to set another record low. With its title of Pheasant Capital of North America gone for more than a decade, Iowa seems destined to be an afterthought in pheasant hunting circles.

How has the once grand tradition of hundreds of thousands of hunters heading to the Iowa countryside each autumn become nearly nonexistent?

This is the first in a four-part series looking at pheasants past, present and future in Iowa.

Pheasants Arrive, Thrive in Iowa: Part 1

Wild pheasants were brought over from China by Owen Denny in 1882 to establish a population in Oregon's Willamette Valley. That initial stocking and other imports from China are the sources for current day ring-necks across the U.S.

Iowa's wild population came through an accidental release of the Oregon birds' descendants. An early 1900s wind storm turned loose 2,000 wild pheasants from William Benton's Cedar Falls game farm to Iowa's patchwork of small grain, hay and corn fields and pastures. They thrived, eventually prompting crop damage complaints.

By 1913, the Iowa Conservation Commission, the forerunner of the Department of Natural Resources, was stocking hatchery-raised pheasants, anticipating creation a hunting season. Results were mixed.

In 1924-25, the Commission began to trap and relocate wild birds and eggs to southern Iowa.

Iowa's first pheasant season was October 20-22, 1925, in Kossuth, Humboldt, Winnebago, Hancock, Wright, Cerro Gordo, Franklin, Mitchell, Floyd, Butler, Grundy, Black Hawk and Bremer counties. The season opened one-half hour before

sunrise and ended at noon with a bag limit of three cocks. "It appears that the first counties opened to pheasant hunting were also those where complaints of pheasants caused crop damage were common," said Todd Bogenschutz, upland wildlife biologist for the Iowa DNR.

In 1932 state game farms closed, but reopened in 1938 after several poor weather years. Better weather in the 1940s helped bird populations recover. By 1945, most of northern Iowa was open to hunting. Through the '40s and '50s, it became apparent that pen-raised pheasants were not contributing to wild bird numbers. Yet, by 1965, pheasant hunters spread across Iowa, save for a few southeastern counties.

Populations Ebb and Flow

Northwest, north-central and central Iowa held the most pheasants through the 1950s. However, since the 1960s, changes in agriculture led to a decline in pheasant numbers.

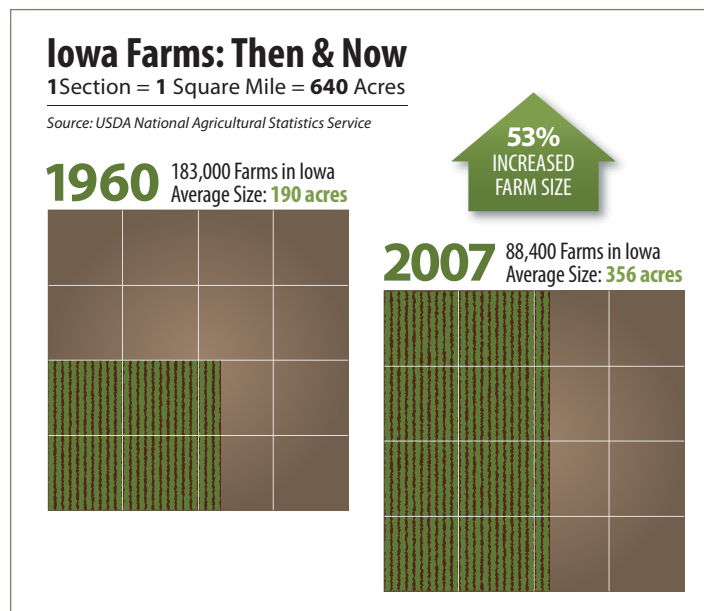
By the early 1970s, southern Iowa had become the premier pheasant range. The last state game farm was closed in 1973 and entire state was opened to hunting in 1976.

Pheasant populations in the northern and central regions rebounded with establishment of the federal Conservation Reserve Program (CRP) between 1985 and 1996. Counts rose in the southern counties initially, but have declined steadily since 1992.

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hunters consistently harvesting more than one million roosters annually, clouds hung over Iowa's pheasant population.

Since 1962, populations and brood size have declined. Changes in farming practices greatly reduced grassy field corners and fence rows. Advances in seed genetics nearly eliminate weeds and allow crops to be planted closer together. But weather is THE major factor influencing pheasant numbers. Cold, snowy winters reduce marginal habitat and



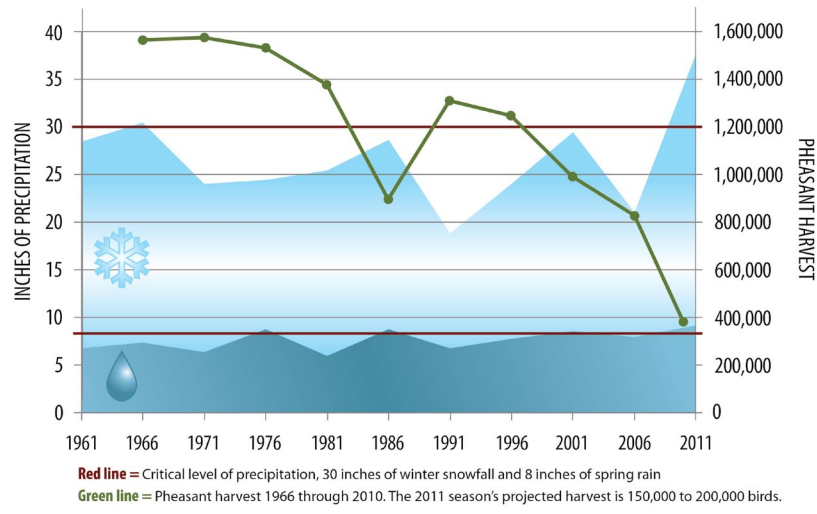
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Iowa's Precipitation Impact on Pheasant Harvest

Chart is based on five year averages for precipitation and harvest.



Why the plunge? The primary factor is one we cannot change: the weather. Coming out of the 2010-2011 winter, Iowa marked five years in a row of average statewide snowfall over 30 inches. That causes heavy mortality among overwintering pheasants. In a half century of standardized data collection, Iowa pheasant numbers never have increased in a year following a winter with 31 inches of snow.

Add an April-May hatching period with over eight inches of rain—the fourth time in five years—and survival of chicks from those remaining hen pheasants dropped drastically, too. Iowa sees an average of seven inches of rain during that nesting period. In the last 50 years, only once has there been a significant increase in pheasant numbers, when eight inches or more fell.

“A lot of folks will remember back to bad winters we’ve had in Iowa before,” agrees Mark McInroy, wildlife research technician for the Department of Natural Resources. “However, they forget that we have never had five consecutive years of bad winter-spring combinations. There hasn’t been a chance for our pheasants to recover.”

Throw in loss of good habitat — especially winter cover — and pheasant survival faces a triple whammy. From 1990 to 2005, Iowa lost 2,500 square miles of Conservation Reserve Program (CRP), hay and small grain lands. That equals an eight-mile-wide strip across Iowa from Davenport to Omaha. Another 485 square miles of CRP has gone back to row crops since 2007. That leads to heavy game bird losses over the winter.

concentrate pheasants and predators. By spring, much nesting habitat is reduced to road ditches, terraces and grassed water ways, where spring rains flood nests and drown chicks.

“The bottom line is weather trumps all when it comes to hen survival and nesting success,” said Bogenschutz. “Tell me the amount of snowfall, the amount of rain and the temperature in the spring, and I can tell you if pheasant counts will be up or down that summer. The weather models are that accurate. We are now in a weather pattern of five consecutive winters with heavy snow and springs with lots of rain. That has not happened in 50 years.”

“It was pretty common to see hunters from Michigan, Georgia, Texas and every state around us,” said Rich Jorget, law enforcement supervisor for the DNR in northwest Iowa. “I remember checking hunters from 14 different states on opening day.”

Nonresident license sales also provided a boost in Iowa’s Fish and Wildlife Trust Fund.

Pheasant Plunge to Current Status: Part 2

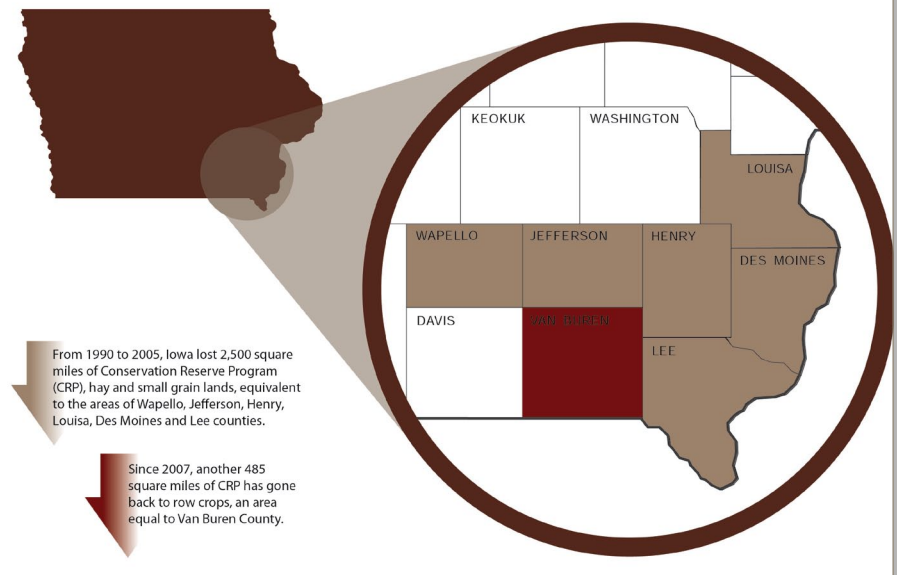
An extra inch or two of spring rain. A few more inches of winter snow. Each by itself raises short term concern for Iowa pheasants. Strung together over multiple years and they spell major trouble for Iowa’s pheasant population, as well as our tradition of pheasant hunting and the economic boost it provides rural Iowa.

Heading into the 2011 season, biologists are forecasting a record low harvest of ring-necks — again. Not that many years ago, it was normal for hunters to take a million birds a year (often well above that). This year, the projected harvest is 150,000 to 200,000.

Habitat Loss in Iowa

Quality habitat gives pheasants a better chance to survive the winter.

Counties highlighted represent the equivalent loss of habitat statewide.



Yet where there is quality habitat, there are pheasants

Bill Kron owns 200 acres near West Branch, in Cedar County. On his CRP acres, he has grasses and wildflowers. He works periodic burning into his management routine. Alfalfa, clover and small food plots of corn and sorghum enhance cover and food sources.

“Our counts are down, but I can still go down a mile long stretch of gravel and count 10 pheasants, more or less, on any given day,” says Kron.

He lives within minutes of the two Cedar County routes surveyed each August by DNR wildlife biologists. Each 30 mile route is along heavily cropped fields, with little year-round cover. One route yielded zero pheasants this summer. The other tallied birds in the single digits.

The answer to plummeting pheasant numbers? The birds need a break.

“We’ve seen birds recover on their own, when Mother Nature has taken a break,” recalls McInroy. “We had a severe winter in 2001, then a wet spring. However, pheasant numbers doubled after good weather patterns in 2002 and 2003. The best thing Iowans can do is to maintain or improve habitat. We have habitat now that could support an 800-thousand pheasant harvest, if we could get a couple years of favorable weather.”

Still, only about one percent of pheasant habitat is on public land. The DNR’s private lands program and non-government conservation groups, like Pheasants Forever, are working with private landowners to get more high quality habitat on the ground.

Another opportunity is Iowa’s walk in access program, through which property owners are reimbursed for conservation practices and allowing hunters on specified acres. This year, 1,500 acres are offered. Over three years, that program may grow to 10,000 acres.

Working to Improve Iowa Pheasant Numbers: Part 3

Left without a weather changing device, the Iowa DNR and other conservation groups are working to improve existing habitat and getting new habitat on the ground so when Mother Nature does relent, pheasants are in the best position for recovery.

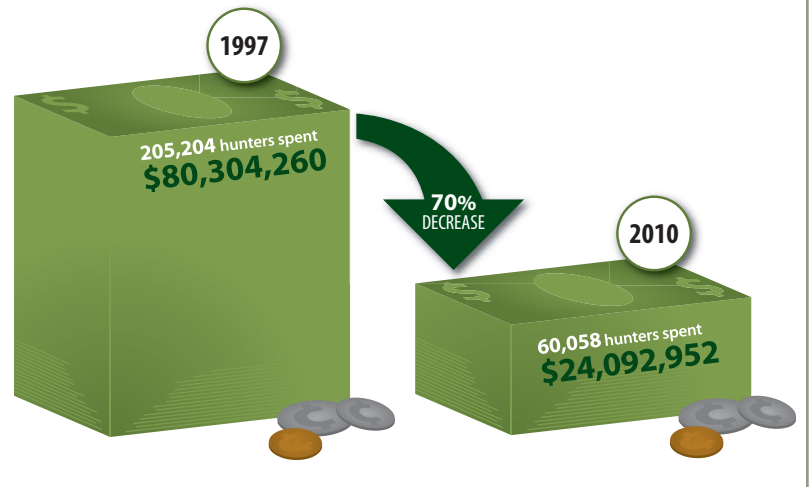
That work includes increasing habitat on private land, using the federal farm bill, conducting an Iowa legislature-sponsored pheasant and quail restoration pilot project, participating in a new habitat for hunting access pilot project and developing a new pheasant plan targeting Iowa’s various climate regions.

In 2002, the DNR conducted a pheasant and quail restoration pilot project on private land, primarily in four counties in

Economic Impacts: 1997 Peak vs. 2010

Estimated annual amount spent by Pheasant Hunters (resident and nonresident) in Iowa.

Data comes from a national survey of hunters conducted every 5 years by US Fish and Wildlife Service.



As the Pheasant Population Goes, So Go the Hunters

Iowa hosted 30,000 to 50,000 nonresident pheasant hunters in years past. They stayed for days in small town hotels, ate in the cafés down the street; and bought supplies from local stores. This was a multi-million dollar shot in the arm for small town Main Street.

southern Iowa – Clarke, Decatur, Lucas, and Wayne. The DNR paid for habitat improvement on about 2,500 acres per year for five years.

The study concluded in 2007 and used spring crowing counts to judge the outcome. There was an average of 6.4 roosters per stop on the managed farms, versus 2 roosters on unmanaged farms. Quail counts found similar results - 2.3 bobwhites per stop on managed farms versus 0.2 on unmanaged farms.

“Those numbers are not great by any means but what it shows us is that habitat will attract existing birds,” said Todd Bogenschutz, upland wildlife biologist for the Iowa Department of Natural Resources.

In general, most wildlife species do not benefit by having less habitat and, with grain farmers enjoying healthy profits, the amount of land enrolled in the Conservation Reserve program has been shrinking each year.

But not all private land has gone that way.

Mike Nelson believes the sound of pheasant cackles will again be common across southern Iowa’s landscape. Nelson has been adding habitat on his Lucas County farm since he bought it four years ago and the results have been pleasing to the eyes and ears.

While the number of pheasants and quail on Nelson’s farm is not huge, particularly with the recent weather patterns, it still showed him that the right mix of habitat will draw and hold birds.

Nelson installed a continuous edge, 20 acres of CRP, buffers around timber and feather edging. Each year he adds a couple of projects, including most recently planting dogwood and nine bark bushes. These efforts provide nesting and winter survival opportunity for the birds.

Not only has he been seeing pheasants and quail on his property, he is hearing from neighbors who are seeing birds as well, which is exciting, he said.

“As guys start seeing birds, they are starting to believe we can get them back,” Nelson said. “I do believe we can get there. It just takes work.”

That excitement is echoed by Doug Spies who jumped at the chance to buy the land he grew up hunting when it was offered for sale and then enrolled his 60 acres of rolling Woodbury County hills into CRP 12 years ago.

Spies spent time and money to install high quality habitat, including adding 20 forbs, a few acres of bushes, he includes annual food plots and manages the grasslands with fire.

The result? Unlike most of Iowa, Spies had great pheasant hunting last year and this year he even has some quail. His property is adjacent to another 100 acres in CRP that happens to be owned by his childhood hunting friend, providing additional habitat.

“I have pheasants here,” Spies said. “Best pheasant hunting was out my back door.”



But once he left his property, there was not much habitat in the area to hunt.

Gordon Garrison can relate to that. He has a mix of grasses, forbs and bushes, restored wetlands, farm ponds and a water diversion canal on 200 of his acres in Emmet County in continuous and general CRP. And yes, Garrison has pheasants.

“Habitat restoration has been very rewarding for me,” Garrison said. “The property is totally different than what existed in 1972 when we moved here. The opportunity to exit the house for a morning or evening walk among the ‘wild things’ is a priceless adventure.”

Replicating that success on a smaller scale is a large part of the workload of the DNR’s private lands staff. The DNR has been working in partnership with Pheasants Forever’s Reload

Iowa Program to ramp up efforts to help landowners establish habitat on private land.

The DNR is promoting Iowa’s new hunting access program. Landowners will establish or improve existing habitat on private property in exchange for allowing hunter access. This is the first year for the program that enrolled 10 sites in nine counties opening 1,365 acres of private land to hunters.

“Landowners are interested in this program and based on the response during this first year, we are optimistic that we could increase the number of sites and acres enrolled each year,” said Kelly Smith, with the Iowa DNR’s Wildlife Bureau who is leading the new program.

Hunters who choose to hunt these areas must obey hunting laws and must remain only on the land enrolled in the program.

2011-12 Iowa Pheasant Season Forecast: Part 4

An estimated 58,000 hunters will crisscross the countryside pursuing Iowa ring-necks when the season opens Oct. 29.

While Iowa pheasant numbers statewide are down from 2010, the northwest, central and north central regions offer the highest population of birds based on the August roadside survey. The survey counted more pheasants in southwest, east central and south central than in 2010, but the numbers were only marginally higher.

“We estimate a harvest of 150,000 to 200,000 birds this fall based on the August roadside survey,” forecasts Todd Bogenschutz, upland research biologist for the Department of Natural Resources. “About 30 percent of our harvest is in the first nine days of the season. That’s a lot of activity spread over those first two weekends.”

Barring any rain or grain storage issues, most of the remaining crops should be out of the field by opening day which will concentrate the birds in areas of good cover. Hunters who walk through those areas should see birds.

“Concentrate on those core habitat areas: the areas with exceptional habitat, a lot of our public land and those CRP fields with good switchgrass and other native plantings,” suggests Bogenschutz. “If you get into the marginal areas: fence lines, streams and brome grass, the birds are not going to be plentiful.”

The drop in pheasant numbers is not restricted to Iowa. South Dakota pheasant population is down 46 percent; Minnesota is down 64 percent; North Dakota is down 36 percent; and Nebraska counted 20 percent fewer birds than last year.

The 2011 pheasant hunting season runs through January 10, 2012. Shooting hours are 8 a.m. to 4:30 p.m. Daily bag limit is three rooster pheasants, with a possession limit of 12.

For more information, contact Todd Bogenschutz, Upland Wildlife Research Biologist, 515-432-2823.