History

Originally an Asian species, the ring-necked pheasant was successfully introduced into North America in 1881 and into Iowa about 1900. Iowa's first ring-necks were introduced accidentally when a severe windstorm wrecked the pens of game breeder William Benton of Cedar Falls releasing approximately 2,000 birds. Benton's birds spread north and west and constitute Iowa's founding stock. The DNR began stocking pheasants around 1910 with most regions of Iowa receiving large stockings of ring-necks by 1930. The ring-neck has since become the most important gamebird in Iowa with an estimated statewide population of 4 to 6 million birds.

Pheasants are found on rich farmlands throughout the state, but they are most numerous on land that has a good mixture of agriculture, hay, idle grassland, and wetlands. Early on, 1930-40s, northwest and northcentral Iowa boosted Iowa's best pheasant numbers, but as row crop agriculture intensified, eliminating wetlands and hay lands, Iowa's best pheasant range has shifted to southern Iowa in the 1970s. However, the idling of farmland under the Conservation Reserve Program in 1985 has shifted pheasant numbers back to northern and eastern Iowa.

The DNR uses an August Roadside Survey to monitor pheasant populations. The survey is conducted in early August with over 6,000 miles of gravel roads driven annually to estimate population trends. Iowa's abundant interspersion of grasslands and croplands make her one of the top pheasant harvest states in the nation with an average annual harvest of 1.2 to 1.4 million roosters. Many local retailers and chamber of commerce refer to Iowa as the pheasant capitol of the world.

Identification

Pheasants are long-tailed, seed-eating, chicken- like gamebirds. Male pheasants, "roosters or cocks" are brilliantly colored with a combination of russet, copper, brown, gray and black on the body, iridescent dark green on the neck, and bright red wattles on the head. A white neck ring is present on most males. In contrast, females or "hens" are light brown with black flecking on each feather. Newly hatched chicks are covered with soft buff- colored down with dark markings on the head and back, and weigh about a half an ounce. Juveniles of both sexes, up to 10 weeks old, resemble females in color, and by 16 weeks of age, they are almost indistinguishable from adults. Adult males weigh about 2 ¾ pounds and females about 2 pounds. Cock pheasants have spurs on their legs that increase in length, as they grow older. The spurs on juvenile males are generally less than 3/8 of an inch in length; spurs on old males may be almost an inch long.

Reproduction

Increasing day length triggers reproductive activity among pheasants. Cock pheasants begin crowing, fighting, and establishing breeding territories to attract hens in early March. Pheasants are polygamous, meaning one male will breed many hens. Pheasants do not form pair bonds. Pen studies indicate hens can continue to lay fertile eggs for three weeks after a single mating, and one cock is capable of mating with 50 hens with no loss of fertility.

Nesting can begin as early as March in southern Iowa, but egg laying usually begins in mid to late April, peak incubation occurs in May, and peak hatch is usually early to mid June. Only the hen takes part in nesting and incubation. Hens conceal their nests in dense, erect grassy vegetation at least 8 to 10 inches tall. The nest bowl consists of a shallow, scratched-out depression in the ground that is lined with grass or leaves. Hens lay about an egg a day and first nests usuallyhave 10 to 12 eggs. The eggs hatch in about 23 days. A complete nesting cycle from laying to hatch takes about 37 days.

The young chicks hatch covered in down (precoccial) and can leave the nest and follow the hen within a few hours of hatching. Young can make short flights at 12-14 days of age and resemble adults by 16 weeks of age. Pheasant hens are persistent renesters, meaning they will initiate new nests if their existing nest is destroyed. This is why many people report seeing different age broods during the summer. This is also why many people think pheasants produce more that one brood per year. However, research has shown that hen's only hatch one nest per year; older broods are from first nests and younger broods are from renests. Because of the hen's persistence and large clutch size, pheasant populations in Iowa can double or triple in a single season given proper weather and spring habitat.

Food Habits

Because of their rapid growth rate, the diet of young chicks is comprised almost entirely of protein from insects, spiders, slugs and other invertebrates until six weeks of age. Seeds and other plant materials become more important in the diet of, older birds.

Corn and soybeans are very important fall, winter and spring foods. Weed seeds, berries and green vegetation also are consumed, but pheasants are seldom found in areas where they do not have easy access to agricultural crops. Pheasants can meet their daily water requirements through daily feeding activities, thus water is not required.

Limiting Factors

Lack of adequate nesting and winter habitats are the biggest limiting pheasant numbers in Iowa. Changes in land use and intensive row-crop farming have reduced the availability of suitable nesting and winter habitat in Iowa since 1940. A comparison of 1939 and 1972 aerial photographs from 27 counties in north-central Iowa (Iowa's traditional pheasant range) revealed a 76 percent decline in good quality pheasant nesting cover and a 33 percent decline in winter cover. A shortage of suitable nesting and brood-rearing habitat has resulted from the elimination of many pastures, idle areas, hay and small grain fields. Increased herbicide use with cleaner and larger crop fields have also contributed to the loss of pheasant habitat.

Research in Iowa has shown that narrow, linear strips and small patches of nesting habitat, less than 40 acres, are death traps for nesting hens because predators can search these small habitats very effectively. Pheasant populations have improved in areas where blocks of cropland have been enrolled in the Conservation Reserve Program. The Conservation Reserve Program provides larger blocks of idle grasslands for nesting and wintering pheasants. In spite of this program, however, much of Iowa still lacks adequate pheasant habitat.

Waste grain is a widely available and readily accepted food source, and lack of food rarely becomes a limiting factor to Iowa ring-necks. However, fall plowing and deep snow can certainly reduce available food supplies. Fall plowing has been reported to reduce the amount of available waste grain in a picked cornfield from more than 200 pounds per acre to about 15 pounds per acre. Predation, hunting, severe weather, accidents and other factors obviously contribute to pheasant mortality, but given suitable habitat, pheasant production can equal or exceed annual losses.

Habitat Needs

Hayfields, oat fields, pastures, idle grassland areas, wetlands and Conservation Reserve Program lands provide good pheasant nesting cover. Hens seek out herbaceous, grassy areas (fields with a mixture of grasses and forbs) for nesting because diverse fields provide abundant insects for newly hatch chicks and the forbs reduce the density of the grasses making it easier for the chicks to move around. Mowing hayfields and grassy areas in June and July results in severe nest losses, and chick and hen mortality. Delaying hay mowing until the pheasant-nesting season is over is impractical for the farmer. However, the use of native prairie grasses for hay and pasture greatly reduces nest disturbance in June.

Researchers have found pheasants prefer tall, herbaceous grassy habitats for nighttime roosting cover, while areas with tall weeds or shrubby/brushy habitats and a minimum of ground cover are usually selected for loafing. Dense ground cover may help roosting birds retain body heat at night while open brushy areas provide safety from predators while allowing the birds an opportunity to sun themselves on clear winter days. Tall, lush stands of cattail, bulrush or switchgrass about 20 to 40 acres in size are good examples of winter roost habitat.

During blizzard conditions, tall, dense vegetation that effectively stops snow drift and greatly reduces wind-chill is essential to pheasant survival. Large, multi-row conifer windbreaks with dense, low-hanging branches,

and tall, dense cattail or bulrush marshes provide safe refuges for pheasants during blizzards. Unfortunately, farmers often remove these cover types to make way for larger cropfields. Research indicates four good wintering areas (each 20 acres or larger in size) per township are sufficient to support a good pheasant population. Smaller wintering areas tend to drift full of snow and become death traps for pheasants during severe blizzards. Food plots should be situated adjacent to winter habitat as pheasants seldom travel more than ¼ mile from winter habitat to feed.

Pheasant stocking, predator control, winter- feeding and reduced hunting pressure do not automatically result in greater pheasant populations. Severe weather can result in dramatic, short-term fluctuations in pheasant populations, but long-term trends in pheasant numbers reflect the quality and quantity of the habitat.

Hunting

Pheasant hunting in Iowa begins the last Saturday in October and runs through 10 January. Harvest is limited to cocks only. The majority of the hunting activity for Iowa's 140,000 resident and 40,000 non-resident pheasant hunters occurs on Iowa's 34 million acres of private land during the first three weeks of the season. It is absolutely essential for everyone to respect private property and obtain permission from the landowner prior to hunting.

If you are unable to locate a hunting spot on private lands, the Iowa Department of Natural Resources maintains 300 public hunting areas, which total 300,000 acres. Public hunting areas often provide very good hunting late in the season after cold weather has concentrated the birds in heavy cover.

Equipment needed for successful pheasant hunting is minimal compared to other shooting sports. Warm clothing, good walking boots and a shotgun are about all you really need. There is a lot of personal preference involved with selecting a pheasant gun. Many hunters use 12-gauge, full- choke shotguns and number #4 or #5 shot. Such hardware may be essential for long shots late in the season, but other hunters prefer an open-bore, 20- gauge with #6 to #7-1/2 loads for early-season roosters.

A wide variety of techniques can be used when hunting pheasants. This is probably one of the reason pheasant hunting appeals to so many people. A lone hunter can usually hunt field edges, fencerows and small weed patches. Many enjoy the solitude and easy pace of this type of hunting. Larger blocks of cover such as standing cornfields, cattail marshes, shelterbelts and large waterways may be difficult for one hunter to cover. Several hunters working together not only find more birds, but sharing the outdoor experience with good friends can be a very important part of the hunt. Larger hunting parties have found that they can bag more birds if they post "blockers" at the far end of the field, particularly if the birds seem prone to running or flushing wild. For many hunters, it just isn't a pheasant hunt unless you have a good bird dog along. A well-trained dog is a tremendous help in locating and retrieving crafty ring-necks. Selecting a good bird dog is again a matter of personal preference. English setters, Brittany spaniels, German shorthair/wirehair pointers and Labrador retrievers seem to be some of the most popular breeds among Iowa pheasant hunters.

Once the bird has been bagged, it is essential to take good care of the meat, particularly if the weather is warm. Perhaps the best way is to dress and cool the meat immediately after the hunt. Almost any recipe calling for chicken will also work on pheasants.

During some years, Iowa hunters harvest as much as 80 percent of all the available roosters. In biological terms this is not excessive. Due to their polygamous breeding habits, only a small percentage of the males are actually needed for reproduction the following spring. Iowa's comparatively long; cock-only season is really quite conservative because the hen segment of the population is always protected from legal hunting losses. Shortening or closing a cocks-only pheasant season during population lows does not result in increased pheasant production in the future, because hens are protected and the lack of breeding males has never been a limiting factor for Iowa pheasants.

Economics

Pheasant hunters outnumber all other Iowa hunters. Revenue from licenses, wildlife habitat stamps and excise taxes on sporting arms and ammunition provides money needed for many Iowa DNR programs, including land acquisition, habitat development, wildlife management and wildlife research. These activities ultimately result in better habitat conditions for a wide variety of upland wildlife species.

Iowa pheasant hunting is also important to the economy. Owners of restaurants, service stations, discount centers, motels, and grocery, hardware, dry goods and sporting goods stores all benefit from money spent by the Iowa pheasant hunter. Many hotels/motels in Iowa have no vacancies during the first few weekends of Iowa's pheasant season. According to the most recent survey, Iowa residents and non- residents spend $85 million annually, exclusive of license fees, to hunt pheasants in Iowa. Through multiplier effects, spending by retailers and wholesalers as result of the hunter's original purchase, pheasant hunting generates an additional $154 million of additional spending annually. Taken together pheasant hunting's impact on the Iowa economy approaches almost a quarter billion dollars annually.

IOWA DEPARTMENT OF NATURAL RESOURCES
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THE RING-NECKED PHEASANT

(Phasianus colchicus)

Biological Facts

Weight: males 41-46 oz; females 31-34 oz.
Length: 30"-36".
Flight speed: 38-48 mph.
Habitat: grasslands, wetlands, and brushy areas interspersed with agriculture.
Foods: waste grains and weed seeds.
Life expectancy: 70% annual mortality rate; 2-5% of population lives to age 3.
Mating: polygamous; one male breeds many females.
Nesting period: peak April-June, range March-August.
Nests: usually shallow, scratched-out depression in the ground lined with grass or leaves.
Clutch size: 11 eggs for first nests.
Eggs: olive-brown; ovate (17/8" x 13/8").
Incubation: 23 days.
Young: precoccial; leave nest immediately; can make short flights at 12-14 days.
Broods per year: 1; will renest up to 4 times.
Nest success: ave. 43%.
Fledge: hen and brood separate 8-11 weeks post-hatch.
Recruitment: ave. 3.7 young/hen.
Migration: none; year-round resident.