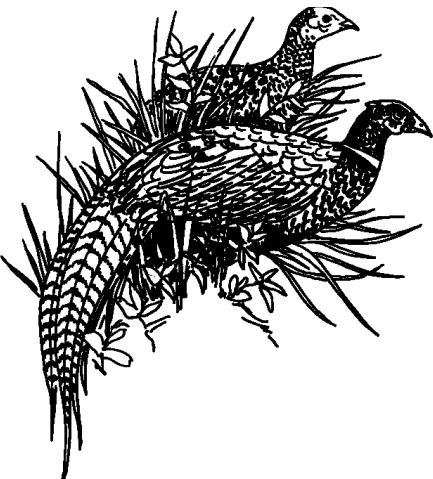


PHEASANTS



After their introduction from China in 1895, it didn't take long for ring-necked pheasants to become one of Michigan's most popular wildlife species. Because pheasants thrive in a mix of cropland, hayland, grassland, wetland, and brush, populations exploded in southern Michigan. Much of the farmland in the 1940's and 1950's provided outstanding pheasant habitat. At that time, farms had small fields from 10 to 20 acres in size surrounded by brushy fencerows and diverse crop rotations.

However, by the 1960's farmland began to change and people weren't seeing as many pheasants. The number of farms fell from 190,000 in 1940 to less than 60,000 by 1990. The amount of land farmed also decreased from more than 18 million acres in 1940 to less than 11 million acres in 1990. Although predation, genetics, and overuse of pesticides are among many explanations for the decline of pheasants, Michigan's changing agri-



cultural scene and loss of habitat are the main reasons.

Furthermore, farming practices have changed over time. Many practices are no longer wildlife friendly, and are aimed at making more money. This has been detrimental to pheasants. Such practices include early and numerous cuttings of hayfields, overgrazing by livestock, spraying of pesticides and herbicides, double-cropping, and fall plowing and discing of crop residues.

However, there are still many opportunities for farmers and other landowners who want to increase pheasants on their property while continuing to make a profit. Many landowners are presently purchasing property to manage specifically for wildlife and, through proper grassland management, are experiencing the revitalization of pheasants in their area. Other landowners with larger acreage have signed agreements with the U.S. Department of Agriculture to take hundreds of thousands of acres out of crop production and put them into federal conservation programs. These programs are used to manage grassland species.

Habitat Needs

Pheasant habitat would include a combination of grasslands, idle fields, wetlands, croplands, haylands, and shrublands. Optimal habitat for pheasants include the following:



- (1) undisturbed low- to medium-high grasses and legumes for nesting and brood rearing
- (2) wetlands
- (3) windbreaks and dense covers of cattails or switchgrass to protect the birds from heavy snow and cold winds
- (4) fields of grain and weeds for a consistent winter food supply

The larger the parcel targeted for pheasant management, the bigger the positive impact will be. Ideally, you would want to manage at least a 40 to 80 acre tract. However, small landowners who work with their neighbors can increase their chances of helping pheasants.

Stocking of pheasants may increase sightings for a while, but game-farm birds are not equipped to thrive in the wild. Most become victims of predation. The best way to

produce more pheasants is to improve habitat—the places where pheasants live.

Breeding Habitat

Beginning as early as March and lasting into May, cock pheasants establish and defend breeding territories against other males. The territories, which may be as small as one or two acres, occur in weed fields, grasslands, crop-stubble fields, and along fence rows.

Cock pheasants display themselves by choosing open areas near secure habitat rather than displaying in the protective cover itself. They draw attention to themselves by flapping their wings and crowing once every minute or two to attract hens. This displaying makes them vulnerable to predators. When hens appear, they too become targets for predators. This is why it is important to have good cover nearby.

Nesting Habitat

Hens choose nesting sites in fields with cover that is low enough for them to see over, and not too thick to walk through. Eight to 10 inches of height is ideal. Alfalfa or other legumes, such as clover, fulfill these requirements. They will use a perennial mixture of legumes and grasses. However, brome grass and fescue are usually too thick, and neither goldenrod nor wild asters are preferred. Although hens will nest in narrow, linear cover such as brushy fence rows and roadside ditches, wider linear nesting habitat (at least 40 yards wide) is more secure.

Nesting habitat must be undisturbed for about 40 days. Hens visit the nest site for a half-hour each day for 12 to 15 days to lay a single egg. When the clutch is ready for incubation, the hen reverses her activities.

She now stays on the eggs for approximately 23 days, leaving once daily for one-half hour to one hour to feed. Eggs typically hatch from late May through June, and the average brood size is 11 chicks. Hens may renege up to three times if their clutch or brood is lost, but the number of eggs decreases each time. When the eggs hatch, the hen will stay with her chicks for at least three months. This time period allows for the rearing of only one brood per year.

The cutting of hayfields during the nesting season has the biggest negative impact on pheasants because a sitting hen usually stays with her eggs. Mowing machines and evening and night-cutting practices further increase the chances of the hen being killed.

Farmers growing alfalfa and other forage for livestock, but who also want to increase pheasant numbers, might want to plant clover and other mixed grasses and legumes that don't mature until late June. If possible, refrain from mowing until July 15. Also, don't mow after August 30 or the field may not grow to the minimum eight-inch height that hens require the following spring.

The U.S. Natural Resource Conservation Service and Michigan Department of Natural Resources recommend several different combinations of legumes and grasses to improve nesting habitat for wildlife and to check erosion. The Natural Resource Conservation Service or Conservation District in your county can be contacted for details.

Rearing Habitat

For the first five weeks of life, pheasant chicks thrive on protein-rich grasshoppers, ants, beetles and other insects. The best place to find insects and their larvae is in fields of weeds or grass that have not been treated with pesticides. The habitat should not be too thick for young birds to walk through, but it should contain enough overhead cover in the form of grass or leaves to protect them from hawks and owls. Wide brushy fence rows provide food as well as security for chicks to travel between food sources.



switchgrass

To provide optimum nesting and brood-rearing habitat, your property should be comprised of 20 to 50 percent grasslands in fields from 3 to 10 acres in size, surrounded by brushy cover or crop fields. To provide diverse stands, grasslands should be planted to orchard grass, timothy, and clovers like ladino, medium red, and alsike. Native prairie grass stands of big bluestem, little bluestem, Indiangrass, or side-oats grama provide outstanding nesting and brood-rearing cover.

By late summer or early fall,



when chicks are old enough to survive on their own, brood size will normally be half that at time of hatching. Ground and aerial predators, heat stress, and poor diet all take their toll on young pheasants. By providing quality cover, the impact of these mortality factors can be lessened.

Secure Winter Habitat

The pheasant's world changes drastically in winter. Canopy covers of leaves are gone, and high grasses are usually blown down or matted by drifting snow. Pheasants are better equipped than some birds, such as quail, for scratching through a few inches of snow for grit, grain residues, and weed seeds. But as snows deepen and winter intensifies, pheasants are forced into heavier security cover such as cattails, swales, and ditch banks.

Pheasants seeking grit along roads are victims of car collisions. The concentration of birds in winter makes hunting easier for predators, whose normal songbird prey has migrated south or is buried under snow, such as mice, voles, and other small mammals.

A snow or sleet storm blowing across unprotected fields can be dangerous for pheasants. Because birds must face into the wind in order for their streamlined feathers to keep them warm, their nostrils may ice up and they can suffocate. An especially vicious storm may fill even deep drainage ditches, smothering pheasants under several feet of snow.

Thick stands of cattails or switchgrass provide pheasants with secure winter shelter from such weather. A thick field of forage sorghum helps, although switchgrass, which grows



from four to six feet high and won't break down under snow, is better. Good winter cover, isolated from woodlands and tall trees, within a quarter-mile of winter food is the key to pheasant survival. Besides grain and seeds, fruit-bearing trees, and shrubs such as silky dogwood, hawthorn, elderberry, and highbush cranberry are good sources of food and cover for pheasants.

Three to five acre blocks of switchgrass, with two to three surrounding rows of shrubs, will provide great winter cover. If this winter home borders a food plot or non-tilled cropland, you will have the necessary components to maintain pheasants throughout the winter.

Management Considerations

Landowners interested in managing lands for pheasants should create blocks 10 to 20 acres in size. Each block should be comprised of the following:

- 3 to 7 acres of nesting cover (grasses/legumes)
- 3 to 7 acres of heavy winter cover (native grasses such as switchgrass)

- 2 to 4 acres of grain crops (corn, buckwheat or sunflowers)

- 2 to 4 acres of fruit-bearing shrubs (hawthorn, highbush cranberry, elderberry, or dogwood)

Modifying some modern farming practices can help pheasants without creating loss of income. In some instances, money can actually be saved. Examples are:

- Practicing conservation tillage reduces cultivation and compaction and makes grain residue available for wildlife.

- Planting slopes and waterways with native grasses such as switchgrass checks erosion, and provides winter cover and sometimes nesting cover.

- Undergrazing pastures slows erosion and also provides pheasant habitat.

- Planting warm-season grasses such as big bluestem, little bluestem, and switchgrass provides high-quality summer forage when cool-season grasses stop growing. Switchgrass gives pheasants nesting, brood rearing, and secure winter habitat.

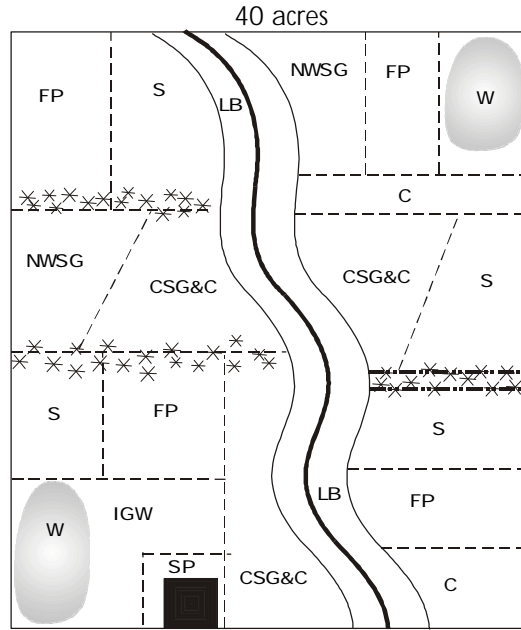
- Incorporating red clover, alfalfa, or other legumes into pasture management improves food value for both livestock and pheasants.

Other practices that will also help pheasants:

- Delay hayfield mowing until July 15 and do not mow after August 30.

PHEASANTS

Existing features	
	Road
	House
	Stream
	Brushy fencerow
W	Cattail marsh wet land
IGW	Idle grass and weeds
NWSG	Native warm season grasses
LB	Lowland brush
Habitat projects	
	Shrubs
FP	Food plot corn
S	Switchgrass
CSG&C	Cool season grasses and clover
C	Clover
SP	Shrub planting



This map is an example that demonstrates the many management options discussed throughout this chapter. The option(s) you choose should depend not only on your goals, but the location, condition, and present use of your land.

- Alternate strips of corn, soybeans, and other row crops with wheat, legumes, or grass.
- Maintain field borders of brush, grass and shrubs.
- Plant idle land with grassland or crops, for winter food.
- Leave intact a portion of row crops until March 15 or later.
- Remove trees taller than 15 feet along fencerows. Cutting such trees eliminates sentinel perches for hawks and owls.

- Wetlands should be maintained or restored wherever possible.

In summary, pheasant populations have declined due to a change in farming practices and loss in agricultural lands. However, it is possible to incorporate wildlife friendly practices when farming to help increase pheasant populations.

FOR ADDITIONAL CHAPTERS CONTACT:

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Private Land Partnerships: This partnership was formed between both private and public organizations in order to address private lands wildlife issues. Individuals share resources, information, and expertise. This landowner's guide has been a combined effort between these groups working towards one goal: Natural Resources Education. We hope this guide provides you with the knowledge and the motivation to make positive changes for our environment.

FOR ADDITIONAL ASSISTANCE: CONTACT YOUR LOCAL CONSERVATION DISTRICT