SUGGESTIONS FOR MANAGEMENT OF UPLAND GAME
IN ILLINOIS

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To produce a permanent population of upland game it is obvious that farmlands must possess (1) adequate cover for protection at all times of the year, (2) places for nesting and rearing young, (3) a year-round food supply. The great majority of Illinois farms are lacking in one or more of these requirements and therefore possess a minimum of game and other wildlife.

Food and Cover

Proper distribution of food and cover is necessary. For the less mobile species the winter food supply on the farm may be too far distant from cover to be available. Even pheasants or other game that ranges widely suffer undue losses if they have to go too far for food in winter.

Farmers and other landowners who desire to increase the amount of useful wildlife on their lands may usually do so by making available weed seed or grain food during the critical winter and early spring periods, and by plantings of thorny shrubs, or by allowing woodlots, corners, roadsides, ditch banks and fence rows or eroded areas to produce grass and brush cover.

Cover.—Dense brushy cover is important to farm game as a means of escaping enemies. Furthermore, it promotes a feeling of security which keeps game from wandering away.
Although this type of cover is most important for quails, it is also used by other kinds of game, including the field-inhabiting Hungarian partridge. Very small and isolated cover areas may not always be used but dense, tangled cover areas, not too far apart, are more important than one or two large thickets. Brushy areas that are too thin may become good cover if burnings and grazing are prevented, or where interplanted with evergreens or other shrubs. Brush piles, standing corn and grain plantings for food patches may also be provided to supplement existing cover.

The common trees and shrubs most useful for game protection and food in Illinois include black locust, willows, pines, spruces, mulberries, haws, plums, wild grapes, wild roses, wild honeysuckle, blackberries, raspberries, hazel and buckbrush. Mulberries and most of the shrubs also produce attractive summer or autumn food. Many of these can be secured locally by going to the wooded areas for them. The forestry section of the Illinois Natural History Survey will advise as to sources of reasonably priced tree planting stock.

Food.—Food patches should be located not more than one hundred yards from good cover, and for best results should be at least one-quarter to one-half acre in extent. Experiments at the University of Wisconsin indicate that food patches should contain two types of grains with respect to the ability to stand up during the winter. (1) Stiff-stemmed varieties including wheatland milo, kalo sorghum, feterita, kaffir corn and field corn or sweet corn. These grains are planted from May 15 to June 1
and ordinarily should be planted in separate rows—not mixed.
Plant not over 10 pounds to the acre to insure seeding. Where
it is possible to devote as much as one acre to a food patch half
of the area should be planted the first spring, and the other half
the following spring, while allowing the first to lie fallow.
This plan provides an additional supply of weed seeds and also
provides excellent nesting cover.

Nesting cover.—Provision of undisturbed nesting cover
is essential to successful game management. Avoid unnecessary
burning of wide fence rows and roadsides at any time of the year.
Fence off and plant or allow natural growth of brush and grass
of all eroded areas. Leave field corners and strips of ungrazed
grass along ditch banks. Grassy strips should be eight feet or
more wide to minimize danger from nest-robbing enemies.

In fields the majority of game-bird nests lie within
the first 25 or 30 feet from the edge. By making three or four
trips on foot around hay fields ahead of the mowing machine,
these nests may be located and an "island" of vegetation left
around them during mowing.

Flushing bars attached to mowing machines work well
under some conditions, but have not yet been tried out sufficiently
in Illinois to enable us to state which type is best suited to our
conditions.

Although the native species—quails, rabbits and
squirrels—thrive everywhere in the state where favorable condi-
tions are provided, pheasants and Hungarian partridges appear not
to be well adapted to latitudes of southern Illinois, probably because of unfavorable influences associated with climate.

Management Suggestions

Quails, pheasants, partridges and rabbits are the more common kinds of farm game in Illinois.

Quail.—(1) For a maximum population establish as many dense brushy tangles as possible. Ungrazed woodlots, plum and hawthorn thickets, especially where wild grapes are present, thick hedges, plantings of locusts, buckbrush and honeysuckle in gulleys are the type of cover necessary for quail. Remember that well-distributed coverts of good quality are more effective than a single large thicket. Two areas of evergreens and brambles each 50 feet long or more per 40 rods of fence line may be nearly as effective as a continuous hedge.

(2) Supplement brushy areas that are too thin with brush piles and corn shocks open at the bottom. An artificial shelter may easily be made by encircling a wigwam-shaped frame of poles with several turns of barbed wire and training around it a grapevine that is growing on the fence or ground nearby.

(3) Insure a winter food area of ungrazed standing corn or a patch of small grain and weeds within 75 yards of each good brushy area.

(4) For nesting cover, protect wide roadsides and other grassy places from burning or pasturing in autumn or spring.
Allow corners, ditchbanks, old orchards and gulleys or other waste areas to grow up to grass and vines.

**Pheasants.**—(1) Ungrazed standing corn, marshlands or weedy fields are the most important pheasant cover in Illinois. Cover of this type is most effective when brush or hedge cover is also present. Hedges, dense willow patches along streams, and brushy gulleys are important for travel lanes and for headquarters for the male birds during the nesting season.

(2) Dense herbaceous growth, grass or food patches along ditches are attractive hiding places.

(3) To insure adequate winter food, leave several rows of ungrazed standing corn, preferably weedy, with part of the ears unhusked until spring, or plant food patches along ditches, marshlands or close to brushy cover.

(4) The majority of nests are made in hay or grass fields in most sections of Illinois. Look for nests in the outside 25 or 30 feet of hay fields.

(5) Prevent dogs and cats from ranging the fields during the nesting season.

**Hungarian partridges.**—(1) Brushy cover is not necessary for Hungarian partridges if ungrazed standing corn fields are present during the winter. Several rows should be protected from grazing to provide winter cover and food for each covey of birds.

(2) In small grain sections stubble should be cut high to provide cover for young in summer. Strips of weedy stubble
should be left unplowed along hedges until spring.

(3) For winter food leave a few rows of unhusked standing corn, or plant small grain or sweet corn food patches near hedges or corn fields.

(4) The tendency to nest in hay fields or in exposed locations where nesting cover is inadequate calls for special attention to nesting cover. Protect wide ditch banks and roadsides from burning and do not mow weedy areas or roadsides until after July 15. Pastures that are not grazed too hard in May and June may provide safe nesting places. Look for nests in the outside 30 feet of the alfalfa fields. Populations of Hungarian partridges can be built up by attention to winter foods and nesting grounds.

Rabbits.—(1) Rabbits thrive best in regions where a variety of cover is present. Hedges are useful for hiding places and for travel lanes. Brush piles, thickets of plum, raspberry and buckbrush are important refuge covers. Cord wood piled on poles, old farm machinery and rolls of old wire are used extensively. Old tiles and hollow limbs along hedges provide considerable protection.

(2) Food patches, clover fields, standing corn, sumac, berry vines and piles of pruned apple limbs are important sources of food. Corn fields are important winter feeding and ranging grounds if adjacent to woodlots or thickets.

As for other possible game species, undisturbed grassy areas are most important as nesting places.