

Centre County Soil Survey Report Soil Use and Management

Wildlife

Many species of animals, fish, and songbirds are found throughout Centre County. The soils, topography, and pattern of land use are favorable for increasing the kinds and numbers of these species.

All soils are capable of supporting some kind of wildlife, and every kind of soil is generally occupied by several game and nongame species. In planning land use, the soils that are most suitable for crops and that have the highest economic value are generally not used or devoted entirely to wildlife. Soils that are devoted mainly to wildlife are most often those that have severe limitations that make them unsuitable for cultivation.

The kinds and the abundance of wildlife depend largely on the type of habitat available. An area is inhabited by the wildlife that have their habitat requirements met by the vegetation in the area. The vegetation, in turn, depends greatly on the kinds of soil. If natural conditions of the area are altered by drainage, cultivation, or other practices used in managing farmland or woodland, the kinds and patterns of vegetation change. There can also be a change in the kinds and numbers of wildlife.

The soils in Centre County can be used for developing wildlife habitat on farms, in parks, in private or commercial shooting grounds, and in public and private wildlife refuges. Ponds can be built and stocked with fish. In addition, most of the present streams, lakes, and reservoirs have potential for greater use.

The following paragraphs describe the major kinds of wildlife in Centre County. Descriptions of the soil associations referred to can be found in the section "General Soil Map." The location of each soil association is shown on the general soil map at the back of this publication.

White-tailed deer are the most abundant large game animals in the county. They are generally considered a forest species of wildlife, but they prefer and grow best in areas where brush or young trees are interspersed with small open areas. They are generally distributed throughout the county, but the greatest concentrations are in the wooded areas on the soils of associations 1, 2, 10, and 11. A smaller concentration is in the central part of the county in associations 3, 4, and 6.

Black bear are common in the mountainous areas of Centre County. The greatest numbers are found in the northern part of the county in associations 1 and 2 north of U.S. 322. Lesser concentrations are also found on Nittany Mountain and in the Seven Mountains area of associations 10 and 11 in the eastern and southern parts of the county.

Wild turkey are abundant throughout the mountainous areas of the county. Turkey prefer mature forests that provide mast, but they range into open brushy land and cultivated fields during summer to feed. They are most commonly found in associations 1, 2, 10, and 11.

Ring-necked pheasant are the most abundant game birds in Centre County. Their range is limited mainly to the Nittany, Penns, and Brush Valley areas on the soils of associations 5, 7, 8, and 9. Lesser concentrations are also found in Bald Eagle Valley in associations 3 and 4. They are found mostly in areas of active farming.

Cottontail rabbits are fairly abundant in Centre County, but populations fluctuate considerably from year to year. They are found in the same areas as the ring-necked pheasant.

Gray squirrel populations also fluctuate greatly from year to year, depending on the food supply. They prefer woodlots that are interspersed with cropped areas. They are found mainly in associations 3, 4, 10, and 11.

Ruffed grouse populations are quite limited, but some are found in the mountains of the extreme northern part of the county and in the mountains of the southern and eastern parts. Population densities depend on the food supply.

Woodcock are found in limited numbers mainly in the southern end of Nittany Valley and in Bald Eagle Valley. Mourning doves are common in the farming areas of the county.

Waterfowl, mainly mallard, black duck, and wood duck, are found where there is open water. These areas are mainly Sayers Dam, Black Moshannon Dam, Bald Eagle Creek, and Penns Creek.

Muskrat and beaver are the principal fur-bearing animals in the county. Muskrat are found in marshy areas, in farm ponds, and along small streams. Beaver are quite limited in number, and they are found mainly in the headwater areas of mountain streams.

Fishing in Centre County is excellent. Brook, rainbow, and brown trout are found in 275 miles of unpolluted streams. Warm-water fishing thrives in numerous ponds, lakes, and reservoirs throughout the county.

Nongame birds and animals are numerous. Many of them, particularly the songbirds, are important because of their esthetic value, and they eat insects and seeds of harmful weeds. Many of the songbirds inhabit residential areas, where birdwatching is a popular pastime.

Suitability of the soils for wildlife

Soil suitability is one of the important factors necessary for the production of desired populations of wildlife. Other important factors are present land use and existing wildlife populations, which require onsite investigation for their evaluation. Soil interpretations should be used along with other types of information in a total study of resource suitability of an area for the production of wildlife.

Every species of wildlife requires certain kinds of soil, vegetation, and water areas for food and cover. Proper manipulation of soil, water, and plants to produce suitable habitat is the most effective means of maintaining and improving wildlife populations. Through knowledge of the properties of soils, it is possible to predict their suitability to produce the habitat elements essential for wildlife.

In table 4, the soils are rated according to their suitability to produce essential elements of wildlife habitat and kinds of habitat (1). Each rating reflects only the characteristics of the individual, unmodified soil. A rating of good indicates that habitat generally is easily created, improved or maintained. There are few limitations in management and satisfactory results can be expected. A rating of fair indicates that habitat generally can be created, improved, or maintained. Moderate soil limitations affect management. Moderate intensity of management and frequent attention is required in some areas for satisfactory results. A rating of poor indicates that habitat generally can be created, improved, or maintained. Severe soil limitations affect management and in places maintenance is difficult and expensive. Results are questionable. A rating of very poor indicates that under prevailing conditions, habitat is impractical to create, improve, or maintain. Unsatisfactory results are probable.

It should be noted that the ratings indicate only potential suitability for wildlife habitat. Changes in land use may modify the local environment and the species of wildlife which inhabit the area. Also, the capability of wildlife to move from place to place and to utilize more than one kind of habitat are not considered in making the ratings.

The elements of wildlife habitat rated in table 4 are described in the following paragraphs:

Grain and seed crops are domestic grains and seedproducing annual plants, such as corn, wheat, and millet.

Grasses and legumes are domestic perennial grasses and herbaceous legumes, such as timothy, alfalfa, and reed canarygrass.

Wild herbaceous plants are grasses and weeds that furnish food and cover for wildlife. Examples are goldenrod and pokeweed.

Hardwood trees are deciduous trees, shrubs, and vines that produce fruit, nuts, buds, and foliage and are used by wildlife for both food and cover. Examples are oak, dogwood, grape, and briar.

Coniferous plants are cone-bearing trees and shrubs, such as pine, cedar, and yew.

Wetland plants are wild herbaceous plants that are commonly associated with moist to wet areas, exclusive of submerged and floating aquatic plants. Examples are such plants as smartweed, bullrushes, reed canarygrass, and cattail.

Shallow water areas are areas of surface water not more than 5 feet deep. Such areas may be natural or created by low dikes, level ditches, and water control devices on marshy streams.

The kinds of wildlife habitat rated in table 4 are described in the following paragraphs:

Open-land wildlife inhabits cropland, pasture, Meadow, and areas overgrown with grasses, herbs, vines, or shrubby plants. Such areas provide habitat for quail, pheasants, doves, woodcock, cottontail rabbits, meadowlarks, killdeer, and field sparrows.

Woodland wildlife inhabits areas of either hardwood or coniferous trees and shrubs, or combinations of both. Such areas provide habitat for grouse, turkeys, deer, squirrels, wood thrushes, warblers, and vireos.

Wetland wildlife inhabits marshes, swamps, and open water areas. Such areas provide habitat for ducks, geese, rails, snipe, muskrats, and beaver.