

# WILDLIFE INTERPRETATIONS Atchison County, Kansas

## Use and Explanation of Wildlife Interpretations

Soils directly affect the kind and amount of vegetation that is available to wildlife as food and cover. They also affect the development of water impoundments. The kind and abundance of wildlife that populate an area depend largely on the amount and distribution of food, cover, water, and living space. If any one of these elements is missing, inadequate, or inaccessible, wildlife will be scarce or will not inhabit the area. If the soils have the potential, wildlife habitat can be created or improved by planting appropriate vegetation, properly managing the existing plant cover, and fostering the natural establishment of desirable plants.

In the Wildlife Interpretations table, the soils in the survey area are rated according to their potential for providing habitat for various kinds of wildlife. This information can be used in planning parks, wildlife refuges, nature study areas, and other developments for wildlife; in selecting soils that are suitable for establishing, improving, or maintaining specific elements of wildlife habitat; and in determining the intensity of management needed for each element of the habitat.

## Suitability Ratings

The potential of the soil is rated good, fair, poor, or very poor.

Good - means that the element of wildlife habitat or the kind of habitat is easily created, improved, or maintained. Few or no limitations affect management, and satisfactory results can be expected if the soil is used for the designated purpose.

Fair - means that the element of wildlife habitat or kind of habitat can be created, improved, or maintained in most places. Moderately intensive management is required for satisfactory results.

Poor - means that limitations are severe for the designated element or kind of wildlife habitat. Habitat can be created, improved, or maintained in most places, but management is difficult and requires intensive effort.

Very Poor - means that limitations are very severe for the designated element or kind of wildlife habitat. Habitat is difficult to create, improve, or maintain in most places, and management is difficult and requires intensive effort.

## Description of Wildlife Habitat Elements

Openland habitat consists of croplands, pastures, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. The kind of wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, killdeer, cottontail rabbit, red fox, and coyote.

Woodland habitat consists of hardwood or conifers, or a mixture of these and associated grasses, legumes and wild herbaceous plants. Examples of wildlife attracted to this habitat are wild turkey, thrushes, woodpeckers, owl, tree squirrels, raccoon, and deer.

Wetland habitat consists of water-tolerant plants in open, marshy or swampy, shallow water areas. Examples of wildlife attracted to this habitat are ducks, geese, herons, bitterns, rails, kingfishers, shorebirds, muskrat, mink, and beaver.

The elements of wildlife habitat are described in the following paragraphs.

Grain and seed crops are domestic grains and seed-producing herbaceous plants. Soil properties and features that affect the growth of grain and seed crops are depth of the root zone, texture of the surface layer, available water capacity, wetness, slope, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of grain and seed crops are corn, wheat, oats, and barley.

Grasses and legumes are domestic perennial grasses and herbaceous legumes. Soil properties and features that affect the growth of grasses and legumes are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, flooding, and slope. Soil temperature and soil moisture also are considerations. Examples of grasses and legumes are fescue, lovegrass, bromegrass, clover, and alfalfa.

Wild herbaceous plants are native or naturally established grasses and forbs, including weeds. Soil properties and features that affect the growth of these plants are depth of the root zone, texture of the surface layer, available water capacity, wetness, surface stoniness, and flooding. Soil temperature and soil moisture also are considerations. Examples of wild herbaceous plants are bluestem, goldenrod, beggarweed, wheatgrass, and grama.

Hardwood trees and woody understory produce nuts or other fruit, buds, catkins, twigs, bark, and foliage. Soil properties and features that affect the growth of hardwood trees and shrubs are depth of the root zone, available water capacity, and wetness. Examples of these plants are oak, poplar, cherry, sweetgum, apple, hawthorn, dogwood, hickory, blackberry, and blueberry. Examples of fruit-producing shrubs that are suitable for planting on soils rated good are Russian-olive, autumn-olive, and crabapple.

Coniferous plants furnish browse and seeds. Soil properties and features that affect the growth of coniferous trees, shrubs, and ground cover are depth of the root zone, available water capacity, and wetness. Examples of coniferous plants are pine, spruce, fir, cedar, and juniper.

Shrubs are bushy woody plants that produce fruit, buds, twigs, bark, and foliage. Soil properties and features that affect the growth of shrubs are depth of the root zone, available water capacity, salinity, and soil moisture. Examples of shrubs are fragrant sumac, chokecherry, American plum, sand plum, and gorden currant.

Wetland plants are annual and perennial wild herbaceous plants that grow on moist or wet sites. Submerged or floating aquatic plants are excluded. Soil properties and features affecting wetland plants are texture of the surface layer, wetness, reaction, salinity, slope, and surface stoniness. Examples of wetland plants are smartweed, wild millet, saltgrass, cordgrass, rushes, sedges, and cattails.

Shallow water areas have an average depth of less than 5 feet. Some are naturally wet areas. Others are created by dams, levees, or other water-control structures. Soil properties and features affecting shallow water areas are depth to bedrock, wetness, surface stoniness, slope, and permeability. Examples of shallow water areas are marshes, waterfowl feeding areas, and ponds.

The habitat for various kinds of wildlife is described in the following paragraphs.

Habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses and legumes, and wild herbaceous plants. Wildlife attracted to these areas include bobwhite quail, pheasant, meadowlark, field sparrow, cottontail, red fox and coyote.

Habitat for woodland wildlife consists of areas of deciduous and/or coniferous plants and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include wild turkey, thrushes, woodpeckers, squirrels, gray fox, raccoon, and deer.

Habitat for wetland wildlife consists of open, marshy or swampy shallow water areas. Some of the wildlife attracted to such areas are ducks, geese, herons, shore birds, muskrat, mink, and beaver.

Habitat for rangeland wildlife consists of areas of shrubs and wild herbaceous plants. Wildlife attracted to rangeland include antelope, deer, cottontail rabbit, prairie chicken, meadowlark, quail, and pheasant.

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Atchison County, Kansas

Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	Range- land wild- life
013PD: PADONIA-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
MARTIN-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
013SG: SHELBY-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
013SM: SHELBY-----	Poor	Fair	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
085WB: WYMORE-----	Fair	Good	Fair	Good	Good	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
085WC: WYMORE-----	Fair	Good	Fair	Good	Good	Fair	Very poor	Very poor	Fair	Good	Very poor	Fair
087MO: MARTIN-----	Good	Good	Good	Fair	Fair	Good	Poor	Poor	Good	Fair	Poor	Good
OSKA-----	Fair	Good	Good	---	---	Good	Poor	Poor	Fair	---	Poor	Good
087SC: SHELBY-----	Fair	Good	Fair	Good	Good	---	Very poor	Very poor	Fair	Good	Very poor	---
PAWNEE-----	Fair	Good	Good	---	Fair	Fair	Very poor	Poor	Good	---	Poor	Fair
601GC: GOSPORT-----	Very poor	Poor	Fair	Fair	Fair	---	Very poor	Very poor	Poor	Fair	Very poor	---
601GT: GRUNDY-----	Fair	Good	Fair	Good	Good	---	Fair	Fair	Fair	Good	Fair	---
601KH: KNOX-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Fair
601LA: LADOGA-----	Fair	Good	Fair	Good	Good	---	Very poor	Poor	Fair	Good	Very poor	---
601SH: SHELBY-----	Fair	Good	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	---
601SM: SHELBY-----	Fair	Good	Fair	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	---
Ab: ALBATON-----	Fair	Fair	Fair	Poor	Very poor	Very poor	Good	Good	Fair	Poor	Good	---
Ae: AKSARBEN-----	Fair	Good	Good	Good	Good	Good	Very poor	Poor	Good	Good	Very poor	Good
AED: ARENTS, EARTHEN DAM-----	---	---	---	---	---	---	---	---	---	---	---	---
Aq: FLUVAQUENTS-----	---	---	---	---	---	---	Good	---	---	---	Good	---
Ar: ARMSTER-----	Fair	Good	Good	Good	Good	---	Very poor	Very poor	Good	Good	Very poor	---
As: ARMSTER-----	Fair	Good	Good	Good	Good	---	Very poor	Very poor	Good	Good	Very poor	---
Ch: CHASE-----	Fair	Good	Good	Good	Good	Good	Fair	Fair	Good	Good	Fair	Good

WILDLIFE INTERPRETATIONS--Continued  
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Map symbol and soil name	Potential for habitat elements								Potential as habitat for--			
	Grain and seed crops	Grasses and legumes	Wild herba- ceous plants	Hard- wood trees	Conif- erous plants	Shrubs	Wetland plants	Shallow water areas	Open- land wild- life	Wood- land wild- life	Wetland wild- life	Range- land wild- life
Go: GOSPORT-----	Very poor	Poor	Fair	Fair	Fair	---	Very poor	Very poor	Poor	Fair	Very poor	---
Gr: GRUNDY-----	Fair	Good	Fair	Good	Good	---	Fair	Fair	Fair	Good	Fair	---
Gu: GRUNDY-----	Fair	Good	Fair	Good	Good	---	Fair	Fair	Fair	Good	Fair	---
Gx: GRUNDY-----	Fair	Good	Fair	Good	Good	---	Poor	Very poor	Fair	Good	Very poor	---
Hn: HAYNIE-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
Ho: HAYNIE-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
ONAWA-----	Fair	Fair	Fair	Fair	Very poor	---	Good	Good	Fair	Good	Good	---
Ju: JUDSON-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
Ke: KENNEBEC-----	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Good
Kf: KENNEBEC-----	Poor	Poor	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Good
Kg: KENNEBEC-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
COLO-----	Good	Fair	Good	Fair	Poor	---	Good	Good	Fair	Fair	Good	---
Kn: KNOX-----	Fair	Good	Good	Good	Good	---	Very poor	Very poor	Good	Good	Very poor	---
Ky: KNOX-----	Poor	Fair	Good	Good	Good	---	Very poor	Very poor	Fair	Good	Very poor	---
GOSPORT-----	Very poor	Poor	Fair	Fair	Fair	---	Very poor	Very poor	Poor	Fair	Very poor	---
M-W: MISCELLANEOUS WATER-----	---	---	---	---	---	---	---	---	---	---	---	---
Mc: MARTIN-----	Fair	Good	Good	Fair	Fair	Good	Poor	Very poor	Good	Fair	Very poor	Good
Mw: MUSCOTAH-----	Fair	Good	Good	Fair	Fair	Good	Fair	Fair	Good	Fair	Fair	Fair
No: NODAWAY-----	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Good
Od: ONAWA-----	Fair	Fair	Fair	Fair	Very poor	---	Good	Good	Fair	Good	Good	---
On: ONAWA-----	Fair	Fair	Fair	Fair	Very poor	---	Good	Good	Fair	Good	Good	---
WALDRON-----	Fair	Fair	Fair	Fair	Very poor	---	Fair	Good	Fair	Fair	Fair	---
Ow: ONAWET-----	Very poor	Poor	Poor	Poor	Poor	Poor	Good	Good	Poor	Poor	Good	Poor
Pa: KNOX-----	Fair	Good	Good	Good	Good	---	Very poor	Very poor	Good	Good	Very poor	---
PALERMO-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Fair

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Pb: PALERMO-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Fair
Pc: PAWNEE-----	Fair	Good	Good	---	Fair	Fair	Very poor	Poor	Good	---	Poor	Fair
Pd: PAWNEE-----	Fair	Good	Good	---	Fair	Fair	Very poor	Poor	Good	---	Poor	Fair
Pt: Pits, quarries--	---	---	---	---	---	---	---	---	---	---	---	---
Re: READING-----	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	---
Sb: SHARPSBURG-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
Sc: SHARPSBURG-----	Fair	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
Sh: SHELBY-----	Fair	Good	Fair	Good	Good	---	Very poor	Very poor	Fair	Good	Very poor	---
Sm: SHELBY-----	Fair	Good	Fair	Good	Good	---	Very poor	Very poor	Fair	Good	Very poor	---
Ss: SHELBY-----	Poor	Fair	Fair	Fair	Fair	---	Very poor	Very poor	Fair	Fair	Very poor	---
STEINAUER-----	Poor	Fair	Good	Good	Good	Good	Very poor	Very poor	Fair	Good	Very poor	Good
Vr: ROCK OUTCROP----	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor	Very poor
VINLAND-----	Poor	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Vs: VINLAND-----	Poor	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
W: WATER-----	---	---	---	---	---	---	---	---	---	---	---	---
Wa: WABASH-----	Poor	Poor	Poor	Poor	Poor	---	Good	Good	Poor	Poor	Good	---
Wb: WABASH-----	Poor	Poor	Poor	Poor	Poor	---	Poor	Good	Poor	Poor	Fair	---
Wg: WAMEGO-----	Poor	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good
VINLAND-----	Poor	Poor	Fair	Fair	Fair	Fair	Very poor	Very poor	Poor	Fair	Very poor	Fair
Wh: WATHENA-----	Poor	Poor	Fair	Poor	Poor	---	Very poor	Very poor	Poor	Poor	Very poor	---
HAYNIE-----	Good	Good	Good	Good	Good	---	Poor	Poor	Good	Good	Poor	---
Wm: WYMORE-----	Good	Good	Good	Good	Good	Good	Poor	Poor	Good	Good	Poor	Good
Wn: WYMORE-----	Fair	Good	Good	Good	Good	Good	Very poor	Very poor	Good	Good	Very poor	Good

