

Emporia State University Natural Areas

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Emporia State University owns five natural areas varying in size from 10 to 200 acres. The areas are: Campus Woods (10 acres), Howe Natural Area (12 acres), Reading Woods Natural Area (32 acres), Coughlen Natural Area (44 acres), and Ross Natural History Reservation (200 acres). All the areas are within Lyon County with the closest to the University being on campus and the most distant being 18 miles from the campus. The following are brief physical and biological descriptions of the tracts.

CAMPUS WOODS

The 10 acre area is located on the north side of the campus. The topography is level. Predominant vegetation is representative of east-central Kansas riparian woodlands. Large bur oak, hackberry, sycamore and basswood trees form most of the forest canopy; the understory vegetation is sparse because of reduced light filtering through the canopy and frequent scouring by flood waters.

Campus Woods, similar to many mature woodlands, does not support a large aggregation of vertebrate animals. Fox squirrels and raccoons, and occasional whitetail deer and opossums are the major elements of the mammalian fauna. Mice and shrews are scarce as a result of frequent flooding. Likewise, amphibian and reptile populations are virtually non-existent. The most common and conspicuous vertebrates are permanent, summer and winter resident, and migrant birds.

The only evidence of recent alteration of the area by man was an observation of the removal of sawlogs by H. A. Stephens (pers. comm.) in the late 1930's. The vegetation should remain unaltered by man.

Present use of the tract includes biology class field trips and student research, bird watching, and nature photography. A well-used hiking and jogging trail is located close to the outside perimeter.

HOWE NATURAL AREA

The 12 acre tract given to the University by Sarah Howe, an Emporia resident, is located approximately ½ mile east of Lyon Fishing Lake. The area is situated along a branch of Duck Creek that flows out of the state

fishing lake. Topography is essentially level except for an area in the southeastern corner.

Vegetation is characteristic of riparian woodlands and is composed of large bur and red oak, black walnut, red elm, and honey locust. Several other tree species, although less abundant, are also present. The area has a well developed understory and ground cover of vegetation.

The area supports populations of native animals and provides good to excellent habitat for woodland species. One negative aspect is grazing by cattle and horses on the south and west portions of the tract. The situation will be remedied in the near future to fulfill the commitment of the University to maintain the area in a "natural state."

Present uses include biology class field trips and research by undergraduate and graduate biology students.

READING WOODS NATURAL AREA

Reading Woods, approximately 1 mile northwest of Reading, is part of a 42 acre tract purchased in the 1960's by the Emporia State University Endowment Association. A portion of the tract, approximately 10 acres, was later sold to the City of Reading to be used as a refuse landfill.

The vegetation in the area is more diverse than in either Campus Woods or Howe Natural Area; due, in large part, to the diversity of the topography. Reading Woods is situated on the top and sides of a bluff, rising from the lowland along Duck Creek. Both riparian and upland woods are present and trees characteristic of east central Kansas woodlands predominate.

Reading Woods is unique in being one of the most westerly tracts of mature deciduous forest in east central Kansas that has not been markedly altered by human activities. The area supports a rich fauna enhanced, in part, by the Melvern Wildlife Area which is adjacent to the east border of Reading Woods.

Present activities include biology class field trips and student research projects, nature photography and limited hiking.

COUGHLIN NATURAL AREA

The 44 acre area, composed of native grassland and former cropland, is located approximately 9 miles southwest of Emporia on the west side of the Kansas Turnpike. A spring fed branch of Jacob Creek flows through the area from east to west. Mrs. Doris Coughlen, an Emporia resident, deeded the tract to the University in 1986 with the understanding that it would be used for education and research, and as a refuge for wildlife. The University intends to utilize the tract for education and research, and develop the wildlife potential of the area.

Dominant vegetation north of the stream and pond is native grasses and forbs. Trees and shrubs grow along the stream banks, and an old field com-

munity occupies most of the area south of the stream. Since acquisition of the tract has been relatively recent, little study of the flora and fauna has occurred; however, there is considerable evidence of diverse animal populations. The grasses, forbs, trees and shrubs present on the tract are typical of the vegetation growing on the rangelands and disturbed areas of the Flint Hills.

ROSS NATURAL HISTORY RESERVATION

The 200 acre grassland tract is approximately 16 miles northwest of Emporia in west-central Lyon County. Approximately one-half of the tract is native grassland and one-half is composed of former cropland and a previous farmstead. A small tributary stream of the Neosho River, flowing from west to the northeast, has been impounded to form a large pond; three other smaller ponds are dispersed at various sites.

Mr. and Mrs. F. B. Ross, former Emporians, deeded the Reservation to the University in 1960. Their stated objectives for use and management of the area are education and research in the sciences, preservation of a segment of the tallgrass prairie ecosystem, and enhancement of the area for wildlife. The University activities over the past 26 years have been directed toward these goals.

At the time the University acquired the Reservation, the area was being grazed by livestock and had been grazed since farming activities ceased in the late 1940's. After acquisition, the area was fenced, and burning, mowing and livestock grazing ceased for several years. Protection from these activities resulted in several changes in vegetation, most conspicuous of which was rapid invasion by woody species. Controlled burning and mowing and limited grazing, have been since incorporated into the management program for the area.

Ross Reservation vegetation is diverse. The major types are: native warm season tallgrasses and forbs; non-native cool season grasses and forbs; native and non-native trees and shrubs; cultivated grains and forbs in food plots. The high degree of plant diversity has resulted in high animal diversity. The Reservation probably supports a greater variety of plant and animal life than any area of comparable size in the region. Management practices are directed toward preserving native tallgrass tracts and enhancing the area for wildlife while simultaneously using the area for education and research in the sciences. Biology classes are taught at the Reservation and most field-oriented classes utilize the area. Hundreds of visitors (mostly elementary school groups) are provided guided, educational tours and groups and individual scientists from both in and out of state visit the Reservation each year.

The Ross Reservation is the only University natural area containing buildings. The facilities consist of several metal buildings either built or moved to the Reservation. One is large, providing a 30 by 90 foot classroom,

laboratory facilities, and shop. Collections of the local flora and fauna used for reference are also housed in the building. Equipment used for natural area maintenance is kept in storage sheds, a mobile unit is used as a bunk-house and the former residence of H. A. Stephens is also available as living quarters.

In summary, the natural areas are an important part of the educational and research facilities at Emporia State University. In addition to providing controllable field sites, the natural areas serve as small islands of relatively undisturbed "natural" habitat, a commodity becoming more difficult to find as agricultural practices intensify and the rate of habitat destruction accelerates. When the areas were deeded to Emporia State University and the State of Kansas, the University accepted the stated conditions of preservation in perpetuity. The University is obligated to see that this is done.