

FLORA OF WABAUNSEE COUNTY, KANSAS

by

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## INTRODUCTION

The work upon which this thesis is based was done in Wabaunsee County, Kansas, during the growing seasons of 1926-1927. It is my purpose to give in this paper a list

of the species of plants in the county with some account of their distribution, habitat and time of first flowers or fruiting.

As early as 1898, some collections were made in Wabaunsee County by J. B. Norton, G. L. Clothier and A. S. Hitchcock. Seemingly they were limited to the northern portion of the county.

#### GEOGRAPHY

Wabaunsee County is an area of 304 square miles situated in the eastern third of the State of Kansas, having the eastern boundary near  $96^{\circ}$  W. and extending west to just beyond  $96^{\circ}30'$ . The northern boundary is the Kansas River. It is extremely irregular, following the winding course of the Kansas River, the northeast corner being six miles south of the northwest corner. The south boundary is at latitude  $38^{\circ}45'$  N.

The altitude varies throughout the county. Near the headwaters of Mission Creek immediately east of Keene, the altitude, according to the U. S. Geological Survey, is 1000 feet and points five miles west are 1250 feet. In the northern portion of the county at the western boundary it is recorded as 1150 feet while at Maple Hill

on the extreme eastern boundary it is 1000 feet. Bakridge is 1412 feet and McFarland 1025 feet.

Streams are numerous in the county, the major one being Mill Creek. In addition there is Elm Creek and the headwaters of Locust, Elk, Chicken and Onion creeks. These smaller tributaries are dry a portion of the year. These are all, except Mill Creek, south flowing streams. The northern three-fourths of the county is well drained with quite large permanent streams flowing northwestward and emptying into the Kansas River. The main one, as mentioned before, is Mill Creek with West Branch Mill Creek, Illinois Creek, Middle and East Branch, Hehring Creek and Kinsley Creek. Four other smaller streams flow northward and empty directly into the Kansas River. The eastern part of the county is drained by Dragon and Mission Creeks, with their respective tributaries.

#### GENERAL DESCRIPTION

The east and west portions of the county are undulating prairie, but the north and central portions are hilly, breaking into bluffs along streams. The valleys, ordinarily are about a mile wide. The timber belts are con-

lined exclusively to the borders of the streams and vary in width from a few rods to one-fourth of a mile. Thick ledges of limestone underlie the entire county. Thin veins of coal have been found at various places. The red granular soil, according to geologists, is of sandstone origin while the yellow clay soil is of limestone origin. Glacial drift is evident in the northern portion of the county and also comes to the surface on the east boundary of Mission creek.

Figures 1-10 following show a variety of environments with their respective plant formations and geologic sections of the county.



Fig. 1. High prairie near Maple Hill.  
Photo by author, June, 1926



Fig. 2. Wooded area south of Alma.  
Photo by author, June, 1926.



Fig. 3. Tree-shrub formation on sandstone cliff  
on Mission Creek east of Keene.  
Photo by author, June, 1926.



Fig. 4. Open woodland of elm, walnut, oak  
west of Wabunsee. Photo by author,  
April, 1927.



Fig. 5. High prairie sloping into wooded valley southeast of Alma. Altitude 1900 feet. Photo by author, May, 1937.



Fig. 6. *Rhus-Symphoricarpos* association west of Wabaunsee. Photo by author, May, 1937.

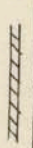
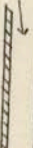




Fig. 7. *Sagittaria-Eleocharis* association east of Wabauunsee. Photo by author, June, 1927.



Fig. 8. Glacial drift as exposed on high prairie east of Wabauunsee. Photo by Author, June, 1927.

 = Limestone.  
 = Shale and sandstone.

Horizontal scale:-- 1 inch = 5 miles.  
 Vertical scale:-- 1 inch = 500 feet.

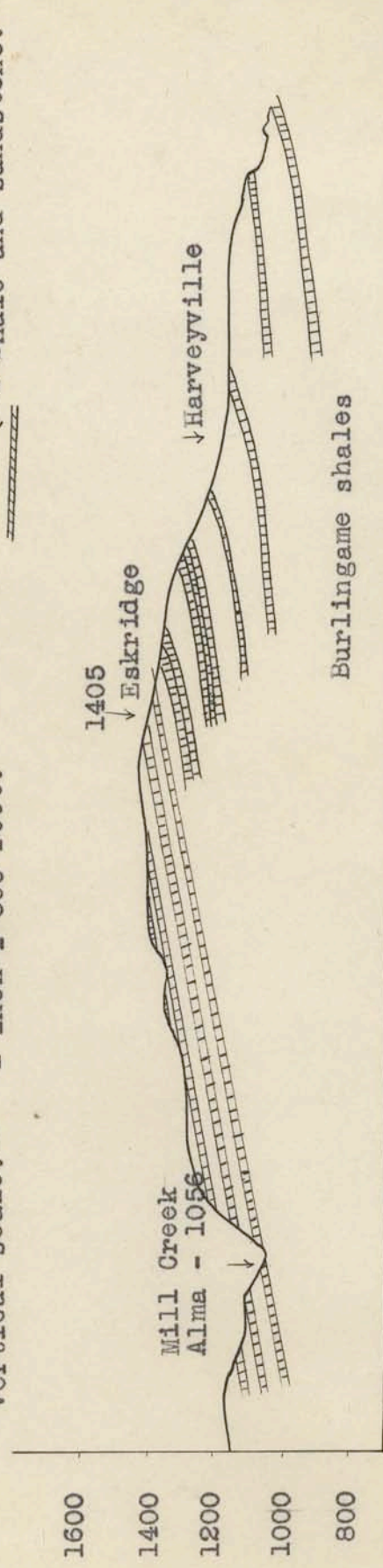


Fig. 9. Geologic section of the southern portion of Wabaunsee County.  
By John G. Hall.

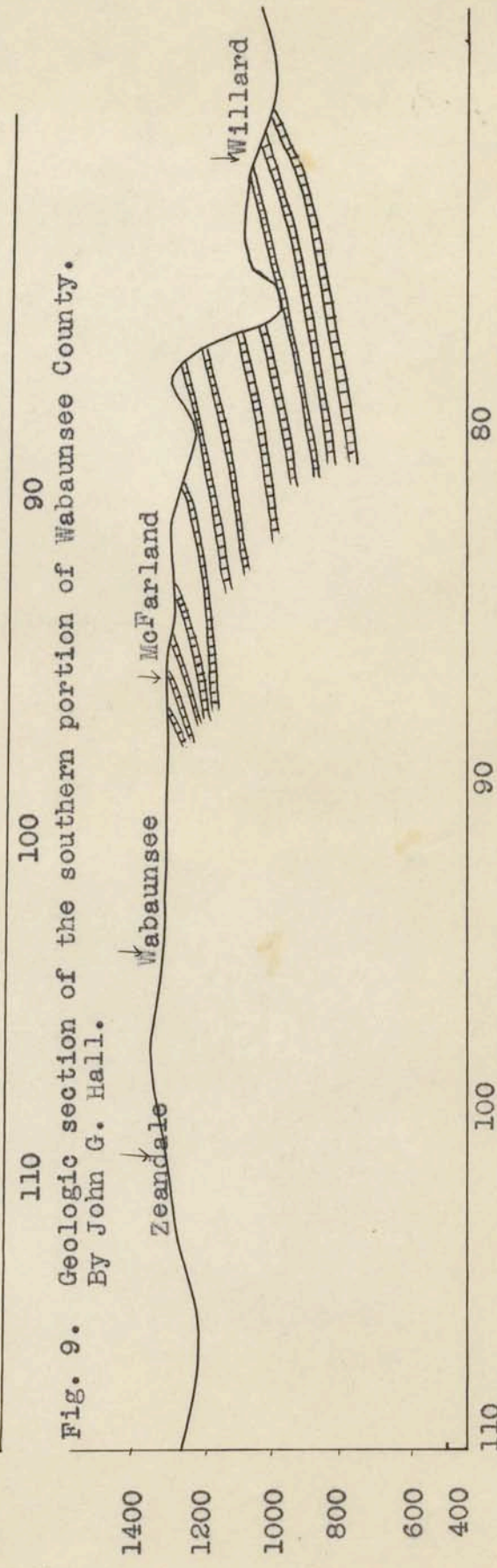


Fig. 10. Geologic section from eastern to western boundary of Wabaunsee County in northern portion.  
By Bennet and Adams.

## HISTORY OF THE COUNTY

Wabaunsee county has an ancient history of surpassing interest, partly printed in the old Spanish Chronicles and partly determined by archaeological evidence, the two making a record recently completed (1902) which covers a period of 500 years. In 1897, Mr. J. Brewer discovered near Alma, in Mill Creek Valley, an ancient village site from which he gathered chert spearheads, arrow points, knives, scrapers and pieces of clay pots. Judge J. T. Hoagy and others, associated with Mr. Brewer in the work, have continued explorations and investigations until the identity of the people who inhabited this country during the pre-columbian age has been ascertained as the same people who were discovered by Coronado in 1541, at two provinces called Quivira and Naraboy, part of which constituted the prairies and valleys of Wabaunsee County, the dividing line crossing Deep Creek and Mill Creek near Volland (now Volland). (Kansas Cyclopedia, Vol. 11, p. 650.)

Prior to 1833 the county now known as Wabaunsee County belonged to the Kaw Indians. In that year Rev.

Isaac McCoy, a missionary having charge of the location of the different Indian tribes, assisted by his son, John McCoy, surveyed a strip 20 miles in length from east to west, and 19 miles in width from north to south, for an outlet for the Shawnee Indians from their reservation to the buffalo country. This was known as the Shawnee Purchase. By a treaty with the Kaws, January 14, 1846, the Pottawatomies were granted a tract of land thirty miles square, a part of which comprised a portion of Wabauzee County.

Wabauzee was one of the 33 counties created by the first territorial legislature in 1855, and at that time was named Richardson. In 1859 the legislature changed the name to Wabauzee in memory of the Pottawatomic Chief "Wabansa" signifying 'The Dawn of Day.'

The earliest permanent settlers were about 1853-54. One of the first settlers, a few miles north of the present town of Wilmington, was Henry Harvey and in 1860 a post-office was established and named Harveyville in honor of him. In 1856, the Beecher Bible and Rifle Company from Connecticut, 65 in number, exclusive of women and children, encamped May 1, 1856, on the south bank of the Kansas River where Wabauzee now stands.

A saw-mill was purchased at Kansas City and brought to this vicinity, and as there was a good supply of timber, log cabins were soon built.

A second colony was formed by a party of Germans in Cincinnati, Ohio, who upon their arrival in Wabaunsee County selected a site near the two branches of Mill Creek and laid out the town of Alma. This colony starved out but in 1857 many settlers came directly from Germany and the first grist mill was built, also a saw-mill. The white population of Wabaunsee County at the close of 1857 was about 400.

The first railroad to enter the county was a branch of the Atchison, Topeka and Santa Fe, running from Burlingame northwest through Harveyville, Belridge to Alma, which was built about 1880. Since then the Chicago, Rock Island and Pacific has been built entering near the northeast corner and crossing the county in a southwest direction to Alta Vista. A branch of the same system leaves the main line at McFarland and runs northwest through Wabaunsee and Manhattan. There are over 75 miles of main track in the county.

FACTORS AFFECTING NATIVE PLANT GROWTH AND THE  
INTRODUCTION OF NEW SPECIES

As is indicative of the thin veins of coal that have been found in the county, geological records tell us that there must have been in geological times a luxuriant growth of plant life. (State Geological Survey of Kansas, Bull. No. 3, p. 161 and 367.)

We have no records of the nature of the flora from the archaeological investigations nor from Coronado's journey in 1541. However, it probably was of such the same character as when the Indians owned it in 1833 and when Rev. Isaac McCoy made a survey. Early travellers into Kansas leave records of the nature of the country as follows. "As we descended from the high prairie into these timber bottoms, we found thick growth of tall thrifty trees: oaks, elms, cottonwoods, sycamores mingled with hickory and ash, forming a wide grove on either side of the stream." (Boynton and Mason, 1855)

The Indians that travelled frequently over the county did not alter the plant life materially, however, they recognised certain plants which were valuable for

food and no doubt collected these to some extent.

Such animals as are reported to have been observed and many killed were the wildcat, deer, buffalo, turkey, geese, brant, bear, catamount, gray wolf, beaver, panther, muskrat, mink, grouse, skunk, jack-rabbit, buffalo fish and cat fish. All of these were able to maintain themselves either on the flesh of their kind or the plants that grew in the vicinity. Undoubtedly certain plant species were distributed more rapidly because of the animals than had their distribution been dependent upon natural invasion over the area. No record is given of the birds, which by means of migrations, made it possible for the introduction of new plant species.

The prairie fire as a factor played an important part in limiting the growth of seedlings up into the prairies. From records of itess from the press and other sources, prairie fires swept thru portions of the county in the years of 1869, 1870, 1871, 1873, 1889, 1891 and in 1874 the locusts devoured foliage of every growing plant which was equally as destructive as the nearly annual prairie fires which gave the established species no chance to spread further or conquer barriers and the

introduced species no opportunity to become established.  
(Matt Thomson, 1901, pp. 315-330.)

When the settlement of the earliest permanent pioneers came, it marked the beginning of a factor that had the most influence upon the introduction and destruction of species. Along with the pioneer came the responsibility of the prairie fire, the saw mill, and the introduction and cultivation of certain food plants and the destruction of others. The building of the railroads was favorable for the distribution of foreign species even from Europe. With this means of transportation and the natural facilities for cattle grazing, the Alma Signal reported in 1891 that 15,000 foreign cattle grazed in the county in that year and in the issue of the same paper on April 26, 1896, it was reported that 7,000 cattle were owned by people of the county and in addition to these nearly 20,000 head belonging to outsiders would be grazed in the vicinity of Alma. This enormous increase in numbers of cattle coming yearly into the county influences the flora by giving an opportunity for wider and more rapid distribution of native plant species as well as limiting some because of constant pasturage.



Man is chiefly responsible for the orderly growth of the Geage Orange hedges as expressed in Boynton and Mason's book, "A Journey Through Kansas," p. 72. It reads as follows: "To some, perhaps, the following statement, from one who has had experience in hedge growing, may be useful.

"Plant the seed in a nursery, with ground very carefully prepared. In the following spring (April in Kansas) transplant; cut the young plants close to the ground or 'down to the yellow bark,' and, on ground prepared with care, and to be kept free from weeds set them out in diagonal lines six inches apart, thus ----- The plants will then shoot out branches thickly, close to the ground and form an impenetrable fence, sufficient to turn any stock the third year, and which even the second year is a good defense. One quart of seed, as is said properly managed, will produce plants enough for one-fourth mile of hedge. The seed should be swelled and sprouted before planting."

In addition man brought with him seeds of other species from other parts of United States and Europe, which he placed under cultivation as soon as he could

break the virgin prairie. No doubt several of these species were exterminated because of unfavorable climatic conditions while others established themselves permanently.

Physiographic factors such as slope, or the degree to which the surface of the land departs from the level have been discussed in general under the head of Geography. Those factors that have to do with local variations in soil relations are called edaphic factors. These include the physical and chemical composition of the soil or other substratum, the degree of acidity or alkalinity. Physiographic factors which change the local conditions such as erosion, soil leaching, landslides are also of great importance in determining the plant species of a community. All of these factors have entered into the change of the flora of this county to a greater or less degree. This would present a very interesting problem from the ecological standpoint.

Two climatic factors along with type of soil determine largely the plant species of any region. The following table will express the relationship of these two factors, temperature and precipitation and the resulting plant formations.

Table I.--Showing the relation between the temperature, the amount and distribution of precipitation and the type of vegetation.

Formation	Amount of Rainfall			Distribution of rainfall
	Cold temper- : etc	Warm temper- : etc	Trop- : ice	
(a) Forest	20-30"	40-60"	70-90"	Well distributed
(b) Grassland	10-20"	20-40"	30-70"	Dry winters, moist summers
(c) Sclerophyllous forest	10-20"	20-40"	30-70"	Dry summers, moist winters
(d) Desert	10"	20"	30"	Dry practically all of the time

Referring to the meteorological records of Manhattan, just to the west and the closest station with a long record, (Table No. II) it is evident that grassland is to be expected, except in the immediate vicinity of streams.

Table II. Meteorological data for Manhattan, Riley Co., Kansas (1901-1903)

	Temperature										Precipitation					Direction of prevailing winds
	Mean	Mean of maximum	Absolute maximum	Mean of minimum	Absolute minimum	Highest	No. mean	Lowest	No. mean	Mean	Total	Yearly	Yearly	Yearly	Average	
Dec.	30	45	75	23	-16	42	20	20	0.8	3	0.5	0.5	2.8	SE		
Jan.	26	40	74	18	-26	35	12	0.0	0.0	3	0.0	0.0	4.4	SW		
Feb.	30	40	72	15	-32	40	15	1.1	1.1	4	1.0	0.0	7.7	SW		
Winter mean	28	42	73	18	-24	39	14	2.7	2.7	10	2.0	1.1	14.9	SW		
March	40	54	85	20	+9	51	25	1.4	1.4	4	1.5	4.0	5.0	SW		
April	54	71	96	44	17	62	47	2.6	2.6	0	0.1	7.5	0.7	SW		
May	64	78	101	54	29	70	53	4.4	4.4	0	1.1	6.7	0.0	SW		
Spring mean	58	73	100	48	25	67	50	3.6	3.6	19	2.7	17.2	5.7	SW		
June	73	87	109	62	27	80	61	4.4	4.4	6	2.7	4.6	0.0	S		
July	78	91	115	66	40	87	72	4.7	4.7	6	2.1	5.7	0.0	S		
Aug.	76	92	110	64	40	84	70	5.3	5.3	7	2.9	10.7	0.0	SW		

Summer	76	:	90	:	64	:	18.0	:	25	:	7.7	:	21.0	:	0.0	:	S						
mean																							
Sept.	68	:	85	:	88	:	28	:	74	:	60	:	3.0	:	5	:	1.3	:	5.1	:	0.0	:	SW
																			(a)				
Oct.	55	:	72	:	96	:	44	:	11	:	64	:	2.3	:	5	:	0.4	:	1.6	:	0.2	:	SW
Nov.	40	:	55	:	96	:	29	:	- 9	:	49	:	1.5	:	5	:	1.0	:	1.9	:	1.2	:	SW
Autumn																							
mean	54	:	70	:	44	:	5.5	:	13	:	3.5	:	0.5	:	2.4	:	SW						
Annual																							
mean	55	:	67	:	115	:	42	:	32	:	50.9	:	65	:	16.6	:	46.9	:	22.0	:	SW		

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(a) Sept. incomplete 11 days.

## AREAS OF LOCAL INTEREST

There are several areas of local interest which would well bear detailed study. I'll mention two areas which I think are outstanding. In the northern and central parts of the county, where the land breaks into bluffs, usually bordering large streams, one will note that some of the hills are entirely void of trees while others support tree growth perhaps to the very top of the hill. The valleys intervening are in nearly every case heavily wooded. For the most part the soil on the hills is deficient in soil moisture and will not support tree growth while the moisture in the intervening valleys is sufficient for tree growth. However, the lack of tree growth may not be entirely due to this factor. There may be sufficient moisture on some of the hills, but because of the heavy growth of grasses, the fruits of the trees find it difficult to light in proper germinating conditions and if such is the case the tree seedling cannot compete with the tall grasses for a number of years, thus invasion into the prairie is not favorable, but not impossible. Two reasons may explain the few hills which support heavy tree growth. One

may be a matter of protection from the early prairie fires and the trees have had sufficient time to gradually invade the prairie and the second point of reasoning lies in the fact that there are in these hills several layers of limestone (pp. 3-4) and in several cases a permanent spring, which would supply sufficient moisture for the growth of trees.

The second area which is outstandingly conspicuous, is situated on a steep (150-200 ft.) north bluff directly south and west of McFarland along a branch of Mill Creek. This area is composed of a number of trees of native Junipers or red cedar and it is the only such area in the county to my knowledge. The Juniper has been protected from the prairie fires that swept thru portions of this county annually. Not only has it had the protection from fires but from animals and prairie grasses. The seedlings of Junipers have a difficult time for the first five years. They are very small and grow slowly; grasses grow over them and shade them too much, then too, they are subject to tramping by stock and pedestrians which result in their death before they are well enough established to withstand all these destructive forces. The native Junipers in this area have been in a favorable environment and have grown

to full-sized trees.

Figures 11 and 12 show distant views of this bluff at McFarland.



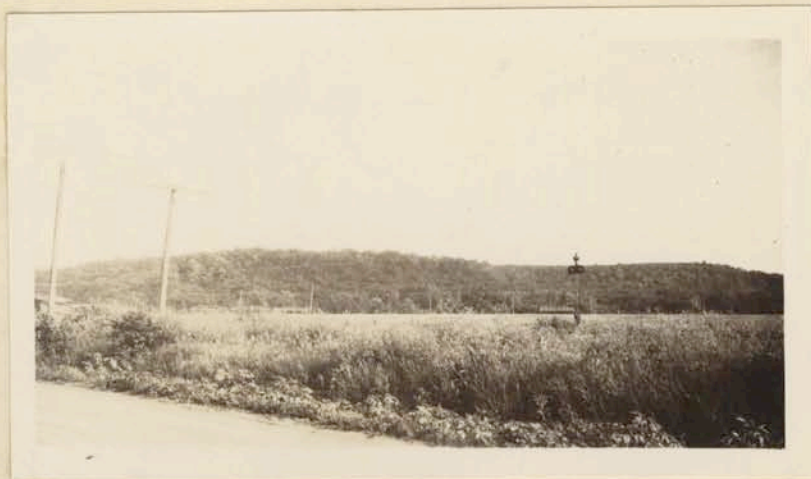


Fig. 11. Southeastward to bluff at McFarland on which native Junipers (*Juniperus virginiana*) are growing. Photo by author, June, 1927.



Fig. 12. Southward to bluff at McFarland on which native Junipers are growing. Photo by author, June, 1927.

## IMPORTANT SPECIES OF POISONOUS PLANTS

Robert (in Farnel, 1910) and other physicians define a poison as "A non-organized body, either organic or inorganic, which under certain conditions affects temporarily or permanently one or more organs of the body, when in a state of health or in a healthy condition." Such poisons may develop in the body or may come from without. Some substances act injuriously in a mechanical way, that is, they may set up disturbances by irritating some parts of the body. Other substances, while poisonous to one is entirely harmless to other persons or animals in a state of health.

Plants which cause mechanical injury are excluded from this list and only the more important plants are listed and these are listed from the standpoint of stock poisoning. With the increasing knowledge of chemistry, has grown the interest in kinds and effects of poison in plants. Factors affecting poisonous substances are light, heat, season, climate, culture, and soil.

*Asculus arguta*  
*Apocynum cannabinum*  
*Asclepias verticillata*  
*Baptisia australis*  
*Baptisia bracteata*  
*Baptisia leucantha*  
*Cicuta maculata*  
*Datura stramonium*  
*Delphinium carolinianum*  
*Delphinium tricerne*  
*Delphinium virescens*  
*Eupatorium urticifolium*  
*Euphorbia corollata*  
*Euphorbia marginata*  
*Phytolacca americana*  
*Robinia pseudoacacia*  
*Solanum nigrum*  
*Zygadenus nuttallii*

ANNOTATED LIST OF PLANTS OF WARREN COUNTY

In the following annotated list the species are arranged in alphabetical order by families. Authority for identification is based on the 2nd edition of "Illustrated

Flora of the United States and Canada" by Britton and Brown, altho in certain cases comparisons were made with specimens in Kansas State College Herbarium.

The tabular view of the work is arranged according to Bessey's phylogenetic classification of flowering plants. He attempts a natural classification, using as a basis of his work all the characters of the plant rather than one or two characters as Linnaeus did in his artificial classification.

In this list are included only those species collected or observed by the author during the course of her work.

#### AGANTHACEAE

##### Ruellia ciliosa Pursh

Herb, common in moist and dry soil in sunny habitats, flowering from June to September. 20.

#### ACEFACHAE

##### Acer negundo L.

Tree, common in moist soil flowering in April. Dioecious. 130.

##### Acer saccharinum L.

Tree, well distributed thruout the county near farmsteads, flowering in March. 131.

## AESCULACEAE

Aesculus arguta DuRoi.

Shrub, frequent in damp woods, flowering in April.  
146.

## ALISMACEAE

Sagittaria latifolia Willd.

Herb, common in wet ravines, flowering from June. 101.

## ANACARDIACEAE

Rhus glabra L.

Shrub, abundant on rocky hillslopes, flowering in  
June. 29.

Rhus trilobata Nutt.

Shrub, common on rocky hillslopes. Stems when broken  
produce a fetid odor. Flowers appear in March. 59.

Rhus oreanta (Mill.) Greene

One shrub, on roadside 8 miles north of Harveyville  
and  $\frac{1}{2}$  mile east, flowering in April before the leaves  
appear, sweet scented. 102.

Toxicodendron radicans (L.) Kuntze

Liane, common thruout the county in waste land and  
more abundant along moist woods and old rock walls,  
flowering in June.

## APIACEAE

Eryngium yuccifolium Michx.

Herb, common along dry banks and prairies, flowering  
in July. 34.

Pleiotactia nuttallii (DC.) Coult. and Rose

Herb, common on dry rocky hills, flowering in May.  
56.

Cogswellia feniculacea (Nutt.) Coult. and Rose

Herb, abundant on moist and dry prairies, flowering  
in April and May. 149.

Sanicula marylandica L.

Herb, frequent in moist woods, flowering from May.  
201.

Chaerophyllum texanum Coult. and Rose (?)

Herb, in moist woods flowering in April. 152.

Cicuta maculata L.

Herb, common along creeks and low ground, flowering  
from June to August. 232.

## APOCYNACEAE

Apocynum sibiricum Jacq.

Herb, common in waste and borders of cultivated  
fields, flowering from June. 10.

## ARACEAE

Arisaema dracontium (L.) Schott.

Herb, frequent in moist shaded soil, flowering in  
May. 238.

## ASCLEPIADACEAE

Asclepias verticillata L.

Herb, common on prairies, flowering from July to September. 279.

Asclepias tuberosa L.

Herb, common on hillsides and meadows, flowering in June. 9.

Asclepiodora viridis (Walt.) Gray

Herb, common in dry soil, flowering in June. 11.

Acerates angustifolia (Nutt.) Dec.

Herb, occasional in dry soil, flowering in June. 56.

Acerates lanuginosa (Nutt.) Dec.

Rare herb, in dry soil, flowering in May. 104.

## BERBERIDACEAE

Pedophyllum nitidum L.

Herb, occasional in southern and central part of the county in shaded moist soils, flowering in April. 143.

## BIGNONIACEAE

Catalpa speciosa Warder.

Tree, commonly cultivated and escaped from cultivation, flowering in June. 135.

## BORAGINACEAE

Lithospermum linearifolium Goldie

Herb, very common on dry upland soil, flowering in April. 133.

Gnossodium occidentale Mackenzie

Herb, frequent on dry rocky hill slopes, flowering in May. 174.

## BRASSICACEAE

Lepidium virginicum (Tourn.) L.

Herb, very common adjacent to cultivated fields. 53.

Brassica nigra (L.) Koch.

Herb, growing in roadside ditch east of Eskridge, flowering in June. 99.

Brassica campestris L.

Herb, collected along railroad, flowering in April. 159.

Araba caroliniana Walt.

Herb, common on prairies, flowering in April. 118.

Alliaria alliaria Britton

Herb, occasional in moist waste places, flowering in April. 147.

Bursa bursa-pastoris (L.) Britton

Herb, abundant in waste places, flowering in April. 150.

Dentaria laciniata Muhl.

Herb, occasional in damp rich woods, flowering in April. 141.



Sophia pinnata (Walt.) Howell

Herb, frequent in waste grounds, flowering in April.  
188.

Radicula sinuata (Nutt.) Greene

Herb, frequent in waste grounds, flowering in May.  
188.

Thalasspi arvense L.

Herb, occasional in railroad stock yards, fruiting  
in May. 188.

## CACTACEAE

Opuntia humifusa Tourn.

Fleshy herb, frequent in dry open prairie, flowering  
in June. 46.

Cactus missouriensis Sweet.

Fleshy rare herb, in dry rocky soil. One cluster  
of specimens growing  $2\frac{1}{2}$  miles northwest of Blairidge.  
205.

## CAMPAULACEAE

Specularia perfoliata (L.) DC.

Herb, common in moist shaded or partially sunny hab-  
itat, flowering from June to September. 7.

Specularia leptocarpa (Nutt.) A.Gray

Herb, frequent in moist soils, flowering from June.  
265.

Lotelia leptostachys A.DC.

Herb observed. Flowering from June.

## CANNABINACEAE

Cannabis sativa L.

Herb, occasional, growing in fine moist soil, flowering in July. 118.

## CAPRIFOLIACEAE

Sambucus canadensis L.

High shrub, common on rich moist soil, flowering in June. 47.

Tricostema perfoliatum L.

Herb, occasional in dry upland soil, flowering in May. 178.

Symphoricarpos symphoricarpos (L.) Mack.

Shrub, abundant in lowland pastures, flowering in July. 100.

## CARYOPHYLLACEAE

Saponaria officinalis L.

Herb in partial-shade, escaped from cultivation, flowering in June. 5.

Silene antirrhina L.

Herb, frequent in dry upland soil, flowering in May. 178.

Cerastium brachypodum Engelm.

Herb, frequent in pastures and meadows, flowering in April. 186.

Silene stellata L.

Herb, frequent in moist soil, flowering from June.  
261.

## CASSIACEAE

Cercis canadensis L.

Tree, common in woods, flowering in April. 144.

Glodites triacantha L.

Tree, common in woods, flowering in May. 242.

Gymnocladus dioica (L.) Koch.

Tree, observed, frequent in woods, flowering in May.

## CELASTRACEAE

Celastrus scandens L.

Liana, common in woods twining on trees and shrubs,  
flowering in May. 63.

Euonymus atropurpureus Jacq.

Herb, in moist soils, flowering in May. 206.

## CHENOPODIACEAE

Chenopodium album L.

Herb, common on borders of cultivated fields, flower-  
ing from June. 106.

Salsola pestifer A. Nelson

Herb, frequent in the north and west portion of the  
county. A troublesome weed. 267.

## COMMELINACEAE

Tradescantia bracteata Small

Herb, common along moist banks, flowering from May.  
179.

## COMPOSITAE

Trachopogon pratensis L.

Herb, occasional in dry soil, fruiting in June. 93.

Agoseris cuspidata (Pursh) D. Dietr.

Herb, frequent on upland prairies and rocky slopes,  
flowering in April. 31.

Senecio plattensis Nutt.

Herb, frequent in pastures and meadows, flowering  
in May. 169.

Serinia oppositifolia (Raf.) Kuntze

Herb, in moist pastureland, flowering in May. 169.

Lactuca floridana (L.) Gaertn.

Herb, common in moist woods, flowering from July to  
September. 224.

Lactuca spicata (Lam.) Hitch.

Herb, common in moist soil, flowering in July and  
August. 266.

Ratibida columnaris (Sims) D. Don.

Herb, common on dry roadsides and prairies, flowering  
from June. 49.

Silphium laciniatum L.

Herb, common on dry prairies and roadsides, flowering from June. 87.

Silphium integrifolium Michx.

Herb, common in dry prairies, flowering from July. 894.

Cirsium undulatum (Nutt.) Spreng. (?)

Herb, in prairie soil, flowering from June. 75.

Liatris scariosa (L.) Mill.

Herb, frequent in prairies, flowering from August to September. 284.

Aster sericeus Vent.

Herb, occasional in dry open soil, flowering from August to September. 290.

Hieracium longipilum Torr.

Herb, occasional in prairie soil, flowering from July to September. 297.

Brauneria pallida (Nutt.) Britton

Herb, common in prairies, flowering from May to July. 277.

Brauneria purpurea (L.) Moench.

Herb, common throught the county on the prairies, flowering from June. 50.

Chrysanthemum leucanthemum L.

Herb, indigenous to localities in dry prairies, flowering in June. 19.

Achillea millefolium L.

Herb, abundant on prairies, flowering from May to June. 23.

Erigeron philadelphicus L.

Herb, in moist meadows, flowering from May. 170.

Erigeron ramosus (Walt.) E.S.P.

Herb, common in dry meadows, flowering in May and June. 190.

Hesperonia tuberosa (Walt.) Britton

Herb, common in moist and dry soil, flowering from June. 140.

Helianthus petiolaris Nutt.

Herb, in dry waste soil, flowering from June. 308.

Artemisia ludoviciana Nutt.

Herb, common on upland prairies, flowering in August. 109.

Artemisia kanasana Britton

Herb, occasional in dry prairies flowering from July. 166.

Antennaria canadensis Rydberg

Herb, common on upland prairies, flowering in April. 125.

Antennaria neglecta Greene

Herb, in open woods, flowering in April. 2.

Boobera papposa (Vent.) Rydb.

Herb, frequent in dry prairies, flowering in May. 250.

Ambrosia elatior L.

Herb, common in dry soil, flowering from July. 91.

Ambrosia psilostachya DC.

Herb, found in wet ditches, flowering from July. 96.

Ambrosia trifida L.

Herb in river bottoms.

Xanthium americanum Walt.

Herb, abundant in waste grounds and cultivated fields, fruiting in August. 73.

Vernonia missourica Raf.

Herb, abundant in prairies, flowering in autumn. 274.

Solidago missouriensis Nutt.

Herb, common on prairies, flowering from June to October. 256.

Taraxacum vulgare Lam.

Herb in waste land.

Helenium tenuifolium Nutt.

Herb. Five plants along railroad near Wabamoose.  
(Gates, No. 13538.)

## CONVOLVULACEAE

Convolvulus sepium L.

Herb, common in waste grounds, flowering from June. 16.

Convolvulus rostratus L.

Herb, common on dry prairies and waste grounds, flowering in May and June. 171.

Ipomoea hederacea Jacq.

Herb, common in moist rich cultivated fields, flowering from July. 254.

## CORNACEAE

Cornus asperifolia Michx.

Shrub, commonly grows at the borders of woods, flowering in June. 24.

## CUCURBITACEAE

Pepo foetidissima HBK

Vine, frequent in dry waste soil, flowering in June. 26.

Sicyos angulatus L.

Vine, frequent in moist shaded soil, flowering from July. 226.

## CUSCUTACEAE

Cuscuta sp.

Vine, frequent in low grounds, flowering in June. 136.

## CYPERACEAE

Cyperus filiculmis Vahl.

Sedge, occasional in dry meadows, flowering from June to August. 208.



Scirpus atrovirens Muhl.

Sedge, common in wet ravines, fruiting in June. 253.

Scirpus pallidus (Britton) Fernald

Herb, common in wet ravines, fruit maturing in July.  
85.

Scirpus lineatus Michx.

Herb, in wet ditch on upland soil. Mature fruits  
in June. 95.

Eleocharis tenuis (Willd.) Schultes

Herb in wet ditch, fruits mature in June. 104.

Carex pennsylvanica Lam.

Herb, common on dry prairies, flowering in April. 122.

Carex hystericina Muhl.

Herb, in wet ravine, fruits maturing in June. 239.

Carex festucacea Schkuhr.

Herb, in dry open soils, fruiting in May. 232.

Carex stricta Lam.

Herb, in moist soil, fruiting in May. 233.

Carex vulpinoidea Michx.

Sedge, frequent in wet soil, fruiting in June. 257.

## EQUISETACEAE

Equisetum sp.

Herb, frequent in moist soil, fruiting in June. 214.

## EUPHORBACEAE

Tithymalopsis corollata El. and Garcke

Herb, in upland rocky soil, fruiting in June. 111.

Tithymalopsis cyperoides (L.) Hill

Herb, in open prairie, flowering in April. 107.

Tithymalus missouriensis (Barton) Small

Herb, in open prairie flowering in May. 61.

Diclirophyllum marginatum (Pursh) El. and Garcke

Herb, abundant in dry and moist soil, flowering from July to October. 271.

Croton monanthogynus Michx.

Herb, frequent in dry soil. June to Oct. 270.

Chamaesyce proslii (Cass.) Arthur

Herb, frequent in dry waste soils. 200.

## FABACEAE

Robinia pseudoacacia L.

Tree, common in timber, flowering in May. 61.

Aporpha canescens Pursh

Herb, very common in dry prairie, flowering from June. 71.

Aporpha pumila Nutt.

Herb, in dry upland soil, flowering in May. 207

Amorpha fruticosa L.

Herb, common in wet ditches, flowering in May. 803.

Neibomia illinoensis (Gray) Kuntze

Herb, common in dry prairie, flowering from June. 97.

Baptisia leucantha T. and G.

Herb, common in dry prairies, flowering from June.  
118.

Baptisia bracteata Mill.

Herb, common on dry prairies, flowering in April. 51.

Baptisia australis (L.) R. Br.

Herb, common in dry prairies, flowering in May. 13.

Trifolium pratense L.

Herb, frequently cultivated as a forage crop, flowering from May to September. 809.

Trifolium repens L.

Herb, common throught county.

Petalostemon purpureum (Vent.) Rydb.

Herb, very common on dry upland prairies, flowering in June. 66.

Petalostemon candidum (Willd.) Michx.

Herb, common on dry upland prairies, flowering in June. 67.

Helilotus officinalis (L.) Lam.

Herb, abundant and widely distributed on dry waste soils, flowering from June. 69.

Helilotus alba Desv.

Herb, abundant and widely distributed on dry waste soils, flowering from June. Sometimes it is cultivated. 70.

Lespedeza capitata Michx.

Herb, frequent on prairies, flowering from August to September. 229.

Vicia sparsifolia Nutt.

Herb, occasional in dry soil, flowering in April. 42.

Medicago sativa L.

Herb, commonly cultivated, flowering from June to October.

Poaalea floribunda Nutt.

Herb, abundant in prairies, flowering from June. 35.

Poaalea argophylla Pursh.

Herb, rare in prairies, flowering from June. 79.

Poaalea esculenta Pursh.

Herb, occasional in dry prairies, flowering in May and June. 134.

Geoprumen platense (Nutt.) Rydb.

Herb, rare in prairie, flowering in May. 223.

Geoprumen crassicarpum (Nutt.) Rydb.

Herb in prairies, flowering in April, fruit maturing in May. 130.

Glycerhiza lepidota Pursh.

Herb in prairie. 136.

## GENTIANACEAE

Centaurium texense Griseb.

Herb, occasional in dry open soil, flowering in June.  
21.

## GERANIACEAE

Geranium carolinianum L.

Herb, common in waste ground, fruiting in June. 6.

## GROSSULARIACEAE

Grossularia missouriensis (Nutt.) Cov. and Britton

Shrub, common in moist woods, flowering in April.  
156.

## HYDROPHYLLACEAE

Nyctelea nyctelea (L.) Britt.

Herb, common in damp soil usually in woodlands,  
flowering in May. 177.

## IRIDACEAE

Sisyrinchium caespitose Michxell

Herb, occasional in prairie, flowering in April. 248.

## JUGLANDACEAE

Juglans nigra L.

Tree, common in moist soils along streams, flowering  
in April. 60.

## JUNCACEAE

Juncus dudleyi Wiegand

Herb, common in wet ravines, fruiting in June. 221.

## LAMIACEAE

Monarda fistulosa L.

Herb, abundant in moist and dry soils, flowering in June. 14.

Teucrium canadense L.

Herb, common in moist shaded soils, flowering from July. 41.

Leonurus cardiaca L.

Herb, rare in upland waste soil, flowering in May. 65.

Prunella vulgaris L.

Herb, common fields, woods and waste places, flowering from June to September. 276.

Marrubium vulgare L.

Herb, occasional in waste lands, flowering from June. 232.

Lycopus americanus Suhl.

Herb, common in wet soil. 93.

Salvia lanceifolia Peir.

Herb, frequent in dry soil, flowering in May. 134.

Scutellaria parvula Michx.

Herb, occasional in dry soil, flowering in May. 155.

Hepeta cataria L.

Herb, in moist soil, flowering in June. 142.

Hedeoma hispidum Pursh.

Herb, in dry stony soil, flowering in June. 234.

## LILIACEAE

Smilax hispida Muhl.

Liana, common in woods. 105.

Smilax herbacea L.

Liana, in moist woods. 66.

Erythronium mesochereum Knerr.

Herb, common near woods, flowering in March. 120.

Erythronium albidum Nutt.

Herb, common on upland soils, flowering in April. 131.

Erythronium americanum Ker.

Herb, common in rich moist woods, flowering in April.  
145.

Allium canadense L.

Herb common in prairies, flowering in May. 217.

Zygadenus nuttallii Gray

Herb, common in prairies, flowering in May. 170.

Boehmeria bivalve (L.) Britton

Herb, frequent in prairies, flowering in April. 136.

Asparagus officinalis L.

Shrub, rare in open soils, escaped from cultivation.  
Fruits mature in autumn. 204.

Polygonatum commutatum (H. and S.) Dietr.

Herb, common in moist woods, flowering in May. 241.

## LINACEAE

Linum sulcatum (Nutt.) Small

Herb, common on open prairies, flowering in June and July. 28.

## MALVACEAE

Callirhoe involucrata (T. and G.) Gray

Herb, common in variable soils, flowering from June.  
1.

Callirhoe digitata Nutt.

Herb, frequent on rocky hillslopes, flowering in May.  
198.

Callirhoe alcockiana (Michx.) A. Gray

Herb, common in dry prairies, flowering in May. 200.

Callirhoe triangulata Leavenw.

Herb, in prairie soil, flowering in May. 200.



Abutilon abutilon (L.) Rusby

Herb, in low rich grounds, flowering from June. 80.

Hibiscus trionum L.

Herb, common in waste places, flowering from August to September 801.

## MALVACEAE

Crataegus sp.

Tree, occasional in woods, flowering in April. 151.

## MENISPERMACEAE

Menispermum canadense L.

Vine, abundant in moist woods, flowering in May. 45.

## RHOISACEAE

Roronia uncinata Willd.

Herb, common in dry prairie soils, flowering from June. 8.

## ROSEACEAE

Toxylon posiferum Raf.

Tree, frequent in dry and moist soils. Introduced as defense against stock in the early days. 122.

Rorus rubra L.

Tree, occasional on upland soils, fruiting in June. 122.

Morus alba L.

Tree, occasional on upland soil, fruiting in June.  
253.

## HECTAGINACEAE

Allionia nystaginea Michx.

Herb, very common on moist and dry soils, flowering  
in May. 82.

Allionia linearis Pursh.

Herb, common in dry soil, flowering in June. 94.

## CENOTHACEAE

Mezopteris missouriensis Sims.

Herb common in dry open soils, flowering in May. 16.

Meriopsis serrulata (Wutt.) Walp.

Herb, common in open prairies, flowering in June. 199.

Stenosiphon linifolium (Wutt.) Britton

Herb, occasional in open soils, flowering in June.  
52.

Raimannia laciniata (Will) Rose

Herb, occasional in sandy soil, flowering in May.  
138.

Anopra albicaulis (Pursh) Britton

Herb, frequent in sunny habitat, flowering from May.  
235.

Gaura biennis L.

Herb, common on dry banks, flowering from June. 293.

Chamaenerion angustifolium (L.) Scop.

Erect herb, common in open prairies, flowering from June to September. 275.

## OLEACEAE

Fraxinus americana L.

Tree, common in moist woods, fruiting in May. 262.

Fraxinus pennsylvanica Marsh.

Tree, in moist soil. Biccious. 246.

Fraxinus pennsylvanica lanceolata (Borkhausen) Sargent.

Tree, in low ground and planted as an ornamental.

## OXALIDACEAE

Oxalis cymosa Small

Herb, common in dry waste soils, flowering in June. 27.

Oxalis violacea (L.) Small

Herb, abundant in dry rocky soil, flowering in April. White flowers are rare. 163.

Oxalis stricta L.

Herb, common in open soils, flowering in April. 63, 200.

## PAPAVERACEAE

Argemone intermedia Sweet

Milky herb, rare in open sandy soil, flowering in June. 43.

Cannoides micranthum (Engelm.) Britton

Herb, common in low damp woods and roadsides, flowering in April. 160.

Biscuculia cucullaria (L.) Millsp.

Herb, in rich woods, flowering in April. 130.

## PHYTOLACCACEAE

Phytolacca americana L.

Herb, common in moist rich woods, flowering in June and July. 77.

## PIRACEAE

Thuja orientalis L.

Tree, rarely cultivated in farmyards and cemeteries. 165.

Juniperus virginiana L.

Tree, common in farmyards and along moist bluffs and a few specimens along limestone ledges. 249.

Pinus sylvestris Ait.

One tree cultivated in cemetery east of Wabaussee. 103.

## PLANTAGINACEAE

Plantago lanceolata L.

Herb, common in dry waste soils. 78.

Plantago virginica L.

Herb, in dry soil, flowering in May. 232.

Plantago media L.

Herb, common in sun-plant formation, flowering in May. 218.

Plantago purshii R. and S.

Herb, in sunny habitat, flowering in June. 230.

## PLATANACEAE

Platanus occidentalis L.

Tree frequent along streams. 43.

## POACEAE

Tripsacum dactyloides L.

Grass, common throught the county in moist habitats, flowering in June. 64.

Agropyron smithii Rydb.

Grass, in moist soil, mature fruits in July. 247.

Eriopus japonicus Thunb.

Grass, abundant on dry waste ground. 89.

Allypus virginicus L.

Grass, common in moist soils, fruiting in July. 110.

Phleum pratense L.

Grass, occasionally cultivated.

Poa pratensis L.

Grass in lawns and generally escaped, fruiting in June.

Poa compressa L.

Grass abundant in dry and moist soils.

Echinochloa crusgalli L. Beauv.

Grass, in farmyards and waste places. August to September. 272.

Hordium jubatum L.

Grass, occasional in dry soil. June to August. 193.

Bambusa caryloides (Nutt.) Raf.

Grass, frequent in prairies. 203.

Agrostis hyemalis (Walt.) B.S.P.

Grass, frequent in wet ravines. June to August. 180.

Coeleria cristata Pers.

Grass, frequent in cultivated fields. 211.

Panicum scribnerianum Nash.

Grass, frequent in open soils, fruiting in May. 236.

## POLYMONIACEAE

Phlox divaricata L.

Herb, common in damp rich woods, flowering in April. 60.

## POLYGONACEAE

Rumex crispus L.

Herb, common in low moist wastes. 87.

Rumex britannica S. Wats.

Herb, common in low waste grounds. 88.

Rumex altissimus Wood.

Herb, common in moist grounds, flowering in May. 810.

Polygonum aviculare L.

Herb, common in dooryards and waste. 90.

Polygonum pennsylvanicum L.

Herb, common in moist waste soil, flowering from July to September. 289.

Polygonum virginianum L.

Herb, frequent in moist woods, flowering from July. 292.

Polygonum tenue Michx.

Herb, occasional in wastes. July-Sept. 273.

Polygonum convolvulus L.

Herb, occasional in dry open soil. June to July. 286.

Polygonum erectum L.

Herb, in waste soils.

## POLYPODIACEAE

Pellaea atropurpurea (L.) Link.

Herb, common in northern part of the county on limestone ledges. 154.

## PTINULACEAE

Androsace occidentalis Pursh.

Herb, abundant in upland prairies, flowering in March and April. 124.

Steironema ciliatum (L.) Raf.

Herb, frequent in moist waste, flowering from June to August. 235.

## PRUNACEAE

Prunus americana Marsh

Shrub, common in wastes, flowering in April. 231.

Prunus virginiana (L.) Mill.

Shrub, common in moist soil, flowering in April. 83.

## RANUNCULACEAE

Delphinium virescens Nutt.

Herb, common in upland soil, flowering in June. 13.

Delphinium tricorne Michx.

Herb, in moist soil, flowering in May. 197.

Anemone decapetala Ard.

Herb, common on upland prairies, flowering in April. Colors range from bluish purple to white. 126.



Ranunculus abortivus L.

Herb, common in damp woods, flowering in April. 148.

Thalictrum dioicum L.

Herb, in moist woods, flowering in June. 64.

Viorna pitcheri (T. & G.) Britton

Vine, occasional in moist soils, flowering from June. 228.

## RHAMNACEAE

Ceanothus ovatus Deaf.

Low shrub, frequent on rocky slopes, flowering in May. 33.

var. pubescens

Low shrub, on rocky hill slope. 107.

Ceanothus americanus L.

Shrub, frequent on rocky hill slopes, flowering in June. 112.

Rhamnus lanceolata Pursh.

Shrub, common in waste grounds, fruiting in June. 225.

## ROSACEAE

Rosa arkansana Greene

Shrub, frequent along roadsides, flowering in June. 187.

Rosa woodsii

Shrub, flowering in May. 216.

Rosa blanda Lindl.

Shrub, occasional in sunny habitats, flowering in May. 245.

Fragaria virginiana Duchesne

Herb, common in moist soil, flowering in April. 281.

## RUBIACEAE

Houstonia minima Deek.

Small herbaceous plant in dry prairie, reported to be extremely abundant east of Emporia in the spring season of 1927. I also collected specimens in Riley county this same spring. 128.

Galium circaeas Michx.

Herb, common in damp woods, fruiting in May. 175.

Galium aparine L.

Herb, frequent in damp woods, flowering in May. 173.

Symphoricarpos symphoricarpos (L.) Mack.

Shrub, abundant in moist soils, flowering in July. 100.

## RUTACEAE

Zanthoxylum americanum Mill.

Shrub, occasional on rocky hillslopes and woods, flowering in April before the leaves appear. 132.

## SALICACEAE

Populus italica Moench.

A rare cultivated tree. 101.

Populus alba L.

A rare cultivated tree. 237.

Populus sargentii Dode

Tree, common in moist soil. 244.

Salix longifolia Muhl.

Tree, common along Kansas River.

## SANTALACEAE

Comandra pallida A. DC.

Herb, rare on upland soil, flowering in May. 12.

## SCROPHULARIACEAE

Pentstemon cobaea Nutt.

Herb, common in dry prairies, flowering in June. 60.

Pentstemon grandiflorus Nutt.

Herb, frequent on dry prairies, flowering in May. 212.

Verbascum thapsus (Tourn.) L.

Herb, common in dry prairies, flowers in July. 44.

Gnaphalium royeri Torr.

Herb, below permanent spring. Rare, flowering in May. 219.

Veronica peregrina L.

Herb, occasional in moist soil, flowering in May. 201.

## SIMARUBACEAE

Allanthus altissima (Millar) Swingle

Tree, escaped from cultivation. 37.

## SOLANACEAE

Solanum carolinense L.

Herb, common in dry and moist soils, flowering in July. 5.

Solanum rostratum DuRoi.

Herb, very common in waste soils, flowering in June. 4.

Datura stramonium L.

Fleshy herb, common in moist rich soil, flowering from June to September. 26.

## STAPHYLEACEAE

Staphylea trifolia L.

Shrub, occasional on the borders of woods, flowering in April. 163.

## TYPHACEAE

Typha latifolia L.

Herb, common along creeks and in ponds, fruiting from August to September. 203.

## ULMACEAE

Ulmus fulva Michx.

Tree, common in timber. 54.

Ulmus americana L.

Tree, common in moist soil, flowering in March and April. Sessars ripe in May. 270.

Celtis occidentalis L.

Tree, common in open woodland. 32.

## URTICACEAE

Urtica gracilis Ait.

Herb, abundant in moist waste soils.

## VERBENACEAE

Verbena stricta Vent.

Herb, very common in dry and moist soil, flowering from July to September. 30.

Verbena canadensis (L.) Britton

Herb, occasional in dry rocky soil, flowering in April. 56.

Verbena angustifolia Michx.

Herb in prairie.

## VIOLACEAE

Viola rafinesquii Greene

Herb, abundant in upland meadows, flowering in April.  
187.

Viola pedatifida G. Don.

Herb, very common in upland prairie soil, flowering  
in April. 187.

Viola palmata L.

Herb, on dry rocky hillslopes, flowering in April.  
183.

Viola eriocarpa Schwein.

Herb, common in moist woods, fruit mature in May. 161.

Viola papilionacea Pursh.

Herb, in moist woods. Fruit mature in May. 157.

## VITACEAE

Parthenocissus quinquefolia L. Planch.

Liana, abundant in moist soils in woods and along  
fences, fruiting in August. 114.

Vitis vulpina L.

Liana, frequent in rich woods and borders of culti-  
vated fields, flowering in April. 115.

Vitis palmata Vahl.

Liana, occasional in moist grounds. 198.

Vitis cordifolia Michx.

Liana, occasional in moist soil. 264.

TABULAR VIEW OF FAMILIES OF FERNS AND SEED PLANTS  
TREATED IN THIS PAPER

Orders and families	: Species : collected : or observed : by author	: Additional : species re- : ported by : Hitchcock
Order Ophioglossales	:	:
Family Ophioglossaceae	:	: 1
Order Filicales	:	:
Family Polypodiaceae	: 1	:
Order Equisetales	:	:
Family Equisetaceae	: 1	:
Order Coniferales	:	:
Family Pinaceae	: 5	:
Order Alismatales	:	:
Family Alismataceae	: 1	: 1
Family Typhaceae	: 1	:
Order Liliales	:	:
Family Liliaceae	: 10	: 1
Family Commelinaceae	: 1	: 2
Family Juncaceae	: 1	: 1
Order Arales	:	:
Family Araceae	: 1	:

Order Poales	:	:	:	:
Family Cyperaceae	:	10	:	7
Family Poaceae	:	15	:	25
Order Iridales	:	:	:	:
Family Iridaceae	:	1	:	1
Order Ranales	:	:	:	:
Family Anonaceae	:	:	:	1
Family Menispermaceae	:	6	:	3
Family Berberidaceae	:	1	:	:
Family Menispermaceae	:	1	:	:
Order Malvales	:	:	:	:
Family Malvaceae	:	6	:	3
Family Tiliaceae	:	:	:	1
Family Ulmaceae	:	3	:	:
Family Moraceae	:	3	:	:
Family Cannabinaceae	:	1	:	:
Family Urticaceae	:	1	:	2
Order Geraniales	:	:	:	:
Family Geraniaceae	:	1	:	:
Family Oxalidaceae	:	3	:	:
Family Linaceae	:	1	:	:
Family Balsaminaceae	:	:	:	1
Family Rutaceae	:	1	:	:



Family Sinarubaceae	:	1	:	
Family Polygalaceae	:		:	1
Family Euphorbiaceae	:	6	:	11
Order Guttiferales	:		:	
Family Hypericaceae	:		:	1
Family Violaceae	:	5	:	2
Order Brassicales	:		:	
Family Papaveraceae	:	3	:	2
Family Brassicaceae	:	10	:	8
Order Caryophyllales	:		:	
Family Caryophyllaceae	:	4	:	
Family Aizoaceae	:		:	1
Family Portulacaceae	:		:	1
Family Salicaceae	:	4	:	3
Family Phytolaccaceae	:	1	:	
Family Amaranthaceae	:		:	5
Family Chenopodiaceae	:	2	:	6
Family Polygonaceae	:	10	:	7
Family Nyctaginaceae	:	2	:	1
Order Primulales	:		:	
Family Primulaceae	:	2	:	
Family Plantaginaceae	:	4	:	2

Order Polemoniales	:	:	
Family Polemoniaceae	:	1	:
Family Convolvulaceae	:	3	:
Family Cuscutaceae	:	1	:
Family Hydrophyllaceae	:	1	:
Family Boraginaceae	:	1	:
Family Solanaceae	:	3	:
Order Gentianales	:	:	
Family Oleaceae	:	3	:
Family Gentianaceae	:	1	:
Family Apocynaceae	:	1	:
Family Asclepiadaceae	:	3	:
Order Scrophulariales	:	:	
Family Scrophulariaceae	:	5	:
Family Bignoniaceae	:	1	:
Family Orobanchaceae	:		:
Family Acanthaceae	:	1	:
Order Lamiales	:	:	
Family Phrymaceae	:		:
Family Verbenaceae	:	3	:
Family Lamiaceae	:	10	:
Order Rosales	:	:	
Family Rosaceae	:	4	:

Family Malaceae	:	1	:	
Family Prunaceae	:	2	:	
Family Mimocaceae	:	1	:	1
Family Casaiaceae	:	3	:	1
Family Fabaceae	:	23	:	7
Family Grossulariaceae	:	1	:	
Family Grossulaceae	:		:	1
Family Platanaceae	:	1	:	
Order Myrtales	:		:	
Family Lythraceae	:		:	1
Family Oenotheraceae	:	6	:	3
Order Cactales	:		:	
Family Cactaceae	:	2	:	
Order Loasales	:		:	
Family Loasaceae	:		:	1
Family Cucurbitaceae	:	2	:	
Order Celastrales	:		:	
Family Rhamnaceae	:	2	:	
Family Vitaceae	:	4	:	2
Family Celastraceae	:	2	:	
Family Staphyleaceae	:	1	:	
Family Santalaceae	:	1	:	1
Order Sapindales	:		:	
Family Aesculaceae	:	1	:	

Family Aceraceae	:	2	:	
Family Anacardiaceae	:	4	:	
Family Juglandaceae	:	1	:	1
Family Betulaceae	:		:	1
Family Fagaceae	:	2	:	1
Order Umbellales	:		:	
Family Apiaceae	:	6	:	2
Family Cornaceae	:	1	:	
Order Rubiales	:		:	
Family Rubiaceae	:	3	:	4
Family Caprifoliaceae	:	5	:	
Order Campanulales	:		:	
Family Campanulaceae	:	3	:	1
Order Asterales	:		:	
Family "Compositae"	:	34	:	26

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#### GENERAL CONSIDERATION OF THE FLORA OF THE COUNTY

In considering the flora of Wabunsee County in its entire aspect one may say that the flora of the county has changed very materially since the establishment of per-

manent homes with respect to the numbers of individuals of certain species. It would be difficult to say with certainty whether or not species as a whole have increased or decreased in numbers or whether new species have merely replaced the old ones and the number is nearly the same. One fact is very evident with respect to its flora. On virgin prairie, where neither cultivation nor pasturage has been permitted, bright colored flowers are conspicuous. Where cultivation occurs plants of economic value have displaced the prairie, while in the case of areas that are pastured, one no longer finds the display of prairie flowers. Grasses are able to withstand cropping and spread without seed formation while other plants are crowded out. There may not be a great difference in number of species but a vegetation differing in appearance.

The variety of environments throught the county, that is, high prairie, wet ravines, springs, and woods make it very favorable for a diversity in types of species.

Up to date 477 species have been reported from the county. The 19 families which have the largest number of species are:

Compositae	60 species
Poaceae	38 "

Leguminosae	53	species
Brassicaceae	13	"
Polygonaceae	17	"
Euphorbiaceae	17	"
Cyperaceae	17	"
Lamiaceae	14	"
Liliaceae	11	"
Rosaceae	10	"
Ranunculaceae	9	"
Onocharaceae	9	"
Solanaceae	9	"
Onocharaceae	9	"
Scrophulariaceae	9	"
Malvaceae	9	"
Verbenaceae	8	"
Chenopodiaceae	8	"
Apiaceae	8	"

To compare my work with that done up to 30 years ago, the following three lists were made, namely;

1. Species not listed by A.S. Hitchcock in 1899 which I have collected.

2. Species reported by both A.S. Hitchcock (1899) and myself.

3. Species reported by A.S. Hitchcock which I did not collect.

List No. 1.--Species not listed by A.S. Hitchcock in 1899 which I have collected.

Species	Collection Number
<i>Acer saccharinum</i>	189
<i>Acerates angustifolia</i>	86
<i>Acerates lanuginosa</i>	194
<i>Agropyron smithii</i>	247
<i>Agrostis cuspidata</i>	31
<i>Agrostis hyemalis</i>	130
<i>Ailanthus altissima</i>	37
<i>Alliaria alliaria</i>	147
<i>Allionia linearis</i>	94
<i>Allium canadense</i>	217
<i>Azorpha nana</i>	207
<i>Asoga albicaulis</i>	235
<i>Antennaria neglecta</i>	2
<i>Apocynum sibiricum</i>	10
<i>Argemone intermedia</i>	43
<i>Arisaema dracontium</i>	233
<i>Artemisia nascaana</i>	183
<i>Artemisia ludoviciana</i>	109

<i>Asparagus officinalis</i>	304
<i>Brassica campestris</i>	159
<i>Brassica nigra</i>	99
<i>Bromelia purpurea</i>	60
<i>Broussai japonicus</i>	89
<i>Bulbilla daetyloides</i>	203
<i>Bursa bursa-pastoris</i>	169
<i>Cactus missouriensis</i>	205
<i>Callirhoe digitata</i>	193
<i>Callirhoe involucrata</i>	1
<i>Callirhoe triangulata</i>	206
<i>Capnoides micranthum</i>	160
<i>Carex pennsylvanica</i>	122
<i>Carex stricta</i>	233
<i>Catalpa speciosa</i> (cult.)	185
<i>Ceanothus americanus</i>	112
<i>Ceanothus ovatus</i>	107
<i>Centaurium texense</i>	81
<i>Cerastium brachypodum</i>	156
<i>Chaerophyllum texense</i> (?)	122
<i>Chenopodium album</i>	106
<i>Coccoloba pallida</i>	12
<i>Convolvulus repens</i>	171



<i>Cornus asperifolia</i>	24
<i>Crataegus</i> sp.	151
<i>Delphinium virescens</i>	19
<i>Dentaria laciniata</i>	141
<i>Draba caroliniana</i>	139
<i>Eleocharis tenuis</i>	104
<i>Elymus virginicus</i>	139
<i>Equisetum</i> sp.	214
<i>Erigeron philadelphicus</i>	170
<i>Eryngium yuccaefolium</i>	34
<i>Erythronium albidum</i>	131
<i>Fragaria virginiana</i>	261
<i>Fragaria americana</i>	252
<i>Geoprumon plattense</i>	223
<i>Geranium carolinianum</i>	6
<i>Helenium tenuifolium</i> (Gateo 12835)	
<i>Houstonia minima</i>	133
<i>Humulus lupulus</i>	237
<i>Juncus dudleyi</i>	221
<i>Koeleria cristata</i>	211
<i>Leonurus cardiaca</i>	65
<i>Lepidium virginicum</i>	23
<i>Mimulus geyeri</i>	219

<i>Morus alba</i>	263
<i>Notosacordum bivalve</i>	136
<i>Onosmodium occidentale</i>	174
<i>Oxalis cynosa</i>	87
<i>Pellaea atropurpurea</i>	154
<i>Pentstemon grandiflorus</i>	212
<i>Phlox divaricata</i>	40
<i>Phytolacca americana</i>	77
<i>Pinus sylvestris</i> (Cult.)	105
<i>Plantago lanceolata</i>	76
<i>Plantago media</i>	218
<i>Plantago virginica</i>	202
<i>Polygonum aviculare</i>	90
<i>Populus alba</i> (Cult.)	237
<i>Populus italica</i> (Cult.)	191
<i>Populus sargentii</i>	244
<i>Radiola sinuata</i>	103
<i>Ranuncula laciniata</i>	129
<i>Ranunculus abortivus</i>	148
<i>Rhus trilobata</i>	89
<i>Rosa blanda</i> (?)	245
<i>Rosa woodsii</i>	215
<i>Rumex britannica</i>	66

<i>Scirpus pallidus</i>	88
<i>Senecio plattensis</i>	53
<i>Sepinia oppositifolia</i>	100
<i>Sisyrinchium caespitose</i>	248
<i>Smilax herbacea</i>	68
<i>Smilax hispida</i>	105
<i>Sophia pinnata</i>	158
<i>Specularia leptocarpa</i>	265
<i>Teucrium canadense</i>	41
<i>Thalictrum dioicum</i>	64
<i>Thlaspi arvense</i>	105
<i>Thuja orientalis</i> (Cult.)	165
<i>Tithymalopsis cyparissias</i>	167
<i>Tithymalopsis missouriensis</i>	216
<i>Toxylon pomiferum</i> (cult.)	182
<i>Tredoscentia bracteata</i>	179
<i>Trepopogon pratense</i>	93
<i>Triosteum perfoliatum</i>	176
<i>Verbascum thapsus</i>	44
<i>Vicia sparsifolia</i>	42
<i>Viola palmata</i>	157
<i>Viola rafinesquii</i>	157

<i>Vitis palmata</i>	138
<i>Eanthorhizum americanum</i>	138
<i>Zygadenus nuttallii</i>	178

Referring to List number 1, it does not mean that because these species were not reported by Hitchcock that they were not in the county, for example, the orange orange *Forsylon pomiferum*, was introduced into the county in early pioneer days but Mr. Hitchcock does not include it in his list and then again maple trees (*Acer saccharinum*) are well over 40 years of age. In the case of the cultivated plants which are few in number and are cultivated for ornamental purposes primarily, these may not all have been cultivated at that time, however, it is quite likely that *Pinus sylvestris* and *Catalpa speciosa* were, basing my judgment on the size of the trees I observed and knowing that they do not grow rapidly. As far as the other species are concerned it would be safe to say that several have migrated into the county from the west or east. I have observed the *Argemone intermedia* only at the extreme western boundary of the county. It has probably migrated to that point from the west as 15 miles west the plant is quite abundant in waste ground.

*Cactus missouriensis* is not abundant in the county as I observed it in only one locality northwest of Eskridge. It too, is probably a migrant from the west.

List No. 2.--Species reported by both A.S. Hitchcock (1909)  
and the writer. (The collection numbers are  
those of the writer in 1926-27.)

Species	Collection Number
<i>Abutilon abutilon</i>	80
<i>Acer negundo</i>	191
<i>Achillea millefolium</i>	23
<i>Asculus arguta</i>	146
<i>Allionia erythrina</i>	62
<i>Azorpha canescens</i>	71
<i>Azorpha fruticosa</i>	208
<i>Androsace occidentalis</i>	124
<i>Anemone decapetala</i>	126
<i>Antennaria caespitosa</i>	125
<i>Asclepias tuberosa</i>	9
<i>Asclepias verticillata</i>	276
<i>Asclepias viridis</i>	11
<i>Baptisia australis</i>	13
<i>Baptisia bracteata</i>	51
<i>Baptisia leucantha</i>	113
<i>Bluculia cucullaria</i>	130
<i>Brauneria pallida</i>	277
<i>Callirhoe elaeagnifolia</i>	230

<i>Cannabis sativa</i>	116
<i>Carex festucacea</i>	232
<i>Carex hystericina</i>	239
<i>Carex vulpinoidea</i>	257
<i>Scenotherus ovatus pubescens</i>	107
<i>Colastrum scandens</i>	63
<i>Celtis occidentalis</i>	22
<i>Cercis canadensis</i>	144
<i>Chamaesyce ferrellii</i>	230
<i>Chrysanthemum leucanthemum</i>	19
<i>Cicuta maculata</i>	232
<i>Cirsium undulatum</i> (?)	75
<i>Convolvulus sepium</i>	15
<i>Croton monanthogynus</i>	279
<i>Cyperus filiculmis</i>	233
<i>Datura stramonium</i>	26
<i>Delphinium tricorne</i>	197
<i>Dichrophyllum marginatum</i>	271
<i>Draba cuneifolia</i>	119
<i>Dyssodia papposa</i> ( <i>Boebera pa-</i> )	233
<i>Equisetum arvense</i> (?)	
<i>Erigeron ramosus</i>	190
<i>Euonymus atropurpureus</i>	206

<i>Erythronium americanum</i>	120
<i>Fraxinus pennsylvanica lanceolata</i>	240
<i>Galium aparine</i>	173
<i>Galium circeosans</i>	173
<i>Gaura biennis</i>	
<i>Geoprumen crassicaepum</i>	130
<i>Glodites trisectus</i>	242
<i>Glycyrrhiza lepidota</i>	196
<i>Gynocladus dioica</i>	
<i>Hedeoma piperita</i>	254
<i>Helianthus petiolaris</i>	108
<i>Hibiscus trionum</i>	281
<i>Hordium jubatum</i>	193
<i>Ipomoea hederacea</i>	234
<i>Juglans nigra</i>	60
<i>Juniperus virginiana</i>	249
<i>Lactuca floridana</i>	224
<i>Lespedeza capitata</i>	238
<i>Liatris scariosa</i>	234
<i>Linum sulcatum</i>	128
<i>Lithospermum linearifolium</i>	133
<i>Lobelia leptostachya</i>	
<i>Lycopus americanus</i>	98

<i>Medicago sativa</i>	
<i>Megapteris missouriense</i>	18
<i>Meibomia illinoensis</i>	97
<i>Melilotus alba</i>	70
<i>Melilotus officinalis</i>	69
<i>Menispermum canadense</i>	48
<i>Mesadenia tuberosa</i>	140
<i>Menarda fistulosa</i>	14
<i>Morongia uncinata</i>	8
<i>Morus rubra</i>	102
<i>Nepeta cataria</i>	142
<i>Nyctelia nyctelia</i>	177
<i>Oenothera serrulata</i>	17
<i>Opuntia humifusa</i>	46
<i>Oxalis stricta</i>	29
<i>Oxalis violacea</i>	
<i>Panicum scribnerianum</i>	236
<i>Parthenocissus quinquefolia</i>	114
<i>Pentstemon cobaea</i>	26
<i>Pepo foetidissima</i>	66
<i>Petalostemum candidum</i>	67
<i>Petalostemum purpureum</i>	68
<i>Phlox pratensis</i>	



<i>Plantago purshii</i>	230
<i>Platanus occidentalis</i>	43
<i>Poa compressa</i>	
<i>Podophyllum peltatum</i>	143
<i>Polygonatum commutatum</i>	241
<i>Polygonum erectum</i>	
<i>Polygonum convolvulus</i>	236
<i>Polygonum pennsylvanicum</i>	239
<i>Polygonum lapathifolia</i>	238
<i>Polygonum virginianum</i>	232
<i>Polygonum tenue</i>	273
<i>Plectonlea nuttallii</i>	56
<i>Prunella vulgaris</i>	276
<i>Prunus americana</i>	231
<i>Prunus virginiana</i>	53
<i>Psoralea argophylla</i>	179
<i>Psoralea esculenta</i>	134
<i>Psoralea floribunda</i>	35
<i>Quercus macrocarpa</i>	117
<i>Quercus sublenbergii</i>	
<i>Ratibida columnaris</i>	49
<i>Rhamnus lanceolata</i>	255
<i>Rhus canadensis</i>	162
<i>Rhus glabra</i>	59

<i>Ribes gracile</i> ( <i>Crossularia missouriensis</i> )	155
<i>Robinia pseudoacacia</i>	61
<i>Rosa pratincola</i>	197
<i>Ruellia ciliosa</i>	20
<i>Rumex altissimus</i>	210
<i>Rumex crispus</i>	87
<i>Sagittaria latifolia</i>	161
<i>Salix longifolia</i>	
<i>Salvia lanceifolia</i>	134
<i>Sambucus canadensis</i>	47
<i>Sanicula marylandica</i>	201
<i>Saponaria officinalis</i>	3
<i>Scutellaria parvula</i>	135
<i>Sicyos angulatus</i>	226
<i>Silene antirrhina</i>	172
<i>Silene stellata</i>	261
<i>Silphium laciniatum</i>	57
<i>Solanum carolinense</i>	5
<i>Solanum rostratum</i>	4
<i>Solidago missouriensis</i>	256
<i>Specularia perfoliata</i>	7
<i>Stephyica trifolia</i>	153
<i>Steironema ciliatum</i>	235

<i>Stenosiphon linifolium</i>	82
<i>Symphoricarpos symphoricarpos</i>	100
<i>Taraxacum vulgare</i>	
<i>Tithyocalopsis corollata</i>	111
<i>Trifolium pratense</i>	209
<i>Trifolium repens</i>	
<i>Tripsacum dactyloides</i>	84
<i>Typha latifolia</i>	263
<i>Ulmus americana</i>	270
<i>Ulmus fulva</i>	84
<i>Urtica gracilis</i>	
<i>Verbena angustifolia</i>	
<i>Verbena canadensis</i>	35
<i>Verbena stricta</i>	30
<i>Vernonia fasciculata</i>	274
<i>Viola palmata</i>	123
<i>Viola pedatifida</i>	137
<i>Viola orlocarpa</i>	161
<i>Viorna pitcheri</i>	228
<i>Vitis vulpina</i>	115
<i>Xanthium americanum</i>	73
<i>Vitis cordifolia Michx.</i>	264

List No. 5.--Species reported by A.S. Hitchcock but not  
collected by the writer during the course  
of her trips.

*Acalypha ostryaeifoliae*  
*Acalypha virginiana*  
*Aconitum tamariscinum*  
*Acum. illinoensis*  
*Afaelia macrophylla*  
*Agastache reptans*  
*Agrimonia mollis*  
*Agrimonia parviflora*  
*Agropyron repens*  
*Allionia albidula*  
*Allium stellatum*  
*Amaranthus blitoides*  
*Amaranthus gracilis*  
*Amaranthus retrofractus*  
*Amaranthus spinosus*  
*Amelopsia cordata*  
*Andropogon scoparius*  
*Anemone virginiana*  
*Apiastrum patens (Spermeopsis patens)*  
*Apocynum cannabinum*  
*Arabis canadensis*

*Arctium minus*  
*Argemone alba*  
*Arisaema triphyllum*  
*Artemisia dracunculoides*  
*Artemisia graphaloides*  
*Asclepias sullivantii*  
*Asclepias syriaca*  
*Asimina triloba*  
*Aster laevis*  
*Aster multiflorus*  
*Astragalus canadensis*  
*Botrychium virginianum*  
*Bouteloua oligostachya*  
*Bouteloua curtipendula*  
*Brassica juncea*  
*Calceolaria verticillata*  
*Campanula americana*  
*Capsella aurea*  
*Cirsium lanceolatum*  
*Cirsium altissimum*  
*Carex crus-corvi*  
*Carex laxiflora*  
*Carex Muhlenbergii* var. *salicoides*

*Chamaecrista fasciculata*  
*Cochrus pauciflorus*  
*Cophelanthus occidentalis*  
*Chenopodium boscianum*  
*Chenopodium hybridum*  
*Chenopodium leptophyllum*  
*Chenopodium leptophyllum* var. *subglabrum*  
*Chrysopogon avenaceus* (*Sorghastrum nutans*)  
*Cogswellia daucifolia*  
*Comandra umbellata*  
*Conoclinium virginicum*  
*Crotan capitatus*  
*Cuscuta polygonorum*  
*Cyclopia stripicifolia*  
*Cyperus esculentus*  
*Cyperus speciosus*  
*Delphinium carolinianum*  
*Dianthera americana*  
*Ectonia obtusata* (*Sphenopholis obtusata*)  
*Eleocharis palustris* (*Glaucospora*)  
*Elymus canadensis*  
*Eupatorium altissimum*  
*Eupatorium urticifolium*

*Euphorbia dentata* (*Peinsettia dentata*)  
*Euphorbia heterophylla* (*Peinsettia heterophylla*)  
*Euphorbia hexagona* (*Sygphyllum hexagona*)  
*Euphorbia maculata* (*Chamaecybe maculata*)  
*Euphorbia serpens* (*Chamaecybe serpens*)  
*Euphorbia nuttallii* (*Chamaecybe sygphyloides*)  
*Euphorbia strictospora*  
*Euthasia graminifolia* (*Solidago graminifolia*)  
*Evolvulus pilosus*  
*Eragrostis capillaris*  
*Eragrostis ciliacensis*  
*Eragrostis pectinacea*  
*Falcata pitcheri*  
*Festuca sativa*  
*Galium concinnum*  
*Galium triflorum*  
*Gaura parviflora*  
*Gentiana puberula* (*Lasystephana puberula*)  
*Gerardia densiflora* (*Otophylla densiflora*)  
*Geum canadense*  
*Grindelia squarrosa*  
*Hartmannia speciosa*  
*Helianthus annuus*  
*Helianthus grosseserratus*

*Helianthus maximiliani*  
*Helianthus orgyalis*  
*Helianthus scaberrimus*  
*Heliopsis scabra*  
*Hibiscus militaris*  
*Hicoria cordifera*  
*Hordeum pusillum*  
*Houstonia angustifolia*  
*Hydrophyllum virginianum*  
*Hypericum cistifolium*  
*Impatiens pallida*  
*Iponoea pendurata*  
*Iponoea purpurea*  
*Chaetochloa lutescens*  
*Chaetochloa viridis*  
*Juncus torreyi*  
*Ruhnia eupatorioides*  
*Lacinaria punctata (Liatris punctata)*  
*Lappula virginiana*  
*Lepidium densiflorum*  
*Leptilon canadense*  
*Lespedeza violacea*  
*Lippia cuneifolia*  
*Lippia lanceolata*



*Lycium vulgare* (*Lycium halimifolium*)

*Lythrum alatum*

*Malva rotundifolia*

*Malva grandiflora*

*Malva canescens*

*Mentha canadensis*

*Montschia oligosperma*

*Moradonia atriplicifolia*

*Miculus ringens*

*Mollugo verticillata*

*Monolepis nuttalliana*

*Oenothera biennis*

*Onosmodium nolle*

*Ostrya virginiana*

*Penicularia nervata*

*Panicum capillare*

*Parietaria pennsylvanica*

*Parosela dales*

*Paspalum ciliatifolium*

*Penthorum sedoides*

*Petalostemon multiflorus*

~~*Physalis dasycarpa*~~

*Phryma leptostachya*

*Physalis heterophylla*  
*Physalis longifolia*  
*Physalis pusilla*  
*Pilea pusilla*  
*Plantago aristata*  
*Plantago rugelii*  
*Polygala verticillata*  
*Polygonum sachsenbergii*  
*Polygonum littorale*  
*Polygonum ramosissimum*  
*Polygonum scandens*  
*Polygonum persicariae*  
*Polygonum punctatum*  
*Populus deltoides*  
*Portulaca oleracea*  
*Quercus prinoides*  
*Ratibida pinnata*  
*Radicula palustris*  
*Radicula sessiliflora*  
*Rubus canadensis*  
*Rubus occidentalis*  
*Rubus Dalleyanus*  
*Rudbeckia hirta*

*Ruellia strepera*  
*Rumex acetosella*  
*Sagittaria arifolia*  
*Salix amygdaloides*  
*Salix cordata*  
*Salvia pitcherie*  
*Schodonnardus paniculatus*  
*Scirpus validus*  
*Scrophularia marylandica*  
*Sida spinosa*  
*Tridens flava*  
*Sisymbrium officinalis (Lycium officinalis)*  
*Sisymbrium angustifolium*  
*Solenum elaeagnifolium*  
*Solanum nigrum*  
*Sonchus asper*  
*Sophia incisa*  
*Spartina michauxiana*  
*Sporobolus cryptandrus*  
*Stipa spartea*  
*Strophostyles pauciflora*  
*Syntherisma sanguinalis*  
*Tenacium occidentale*

*Thalassia uniflora*  
*Thalictrum revolutum*  
*Tilia glabra*  
*Tridacantha virginiana*  
*Tragia racemosa*  
*Urtica latifolia*  
*Verbena alternifolia*  
*Verbena bracteosa*  
*Verbena hastata*  
*Verbena urticifolia*  
*Vernonia baldwinii*  
*Viola papilionacea*  
*Vitis cinerea*

denotes plant species that are without a doubt present in the county flora, but were not collected during the present study, for the reason that they were not in season for identification.

A continued study of the county, especially during the autumn and in other parts of the county, would without doubt cut down List No. 5. Some of these are plants of very special habitats.

## SUMMARY

1. Wabaunsee County is an area of 804 square miles situated in the eastern third of the state of Kansas, bounded on the north by the Kansas River. The altitude varies from about 1000 to 1900 feet. The streams are well distributed throught the county. Limestone outcrops are common, while glacial drift is evident in the northern part of the county.

2. As a result of continuous dry winters and moist summers grass thoroly dominates the vegetation.

3. The earliest permanent settlers came about 1853-54.

4. Portions of the county were swept by prairie fires in the years 1866-71; 1873, 1888 and 1891, for which the early settlers were responsible. They also introduced the saw mill and many new plant species which were cultivated for food. After the railroad was built many cattle were shipped in and grazed on the open prairie.

5. Areas which have been protected by fires, tramping by stock, and cultivation, for example high bluffs and valleys along streams with sufficient moisture to support quite a dense tree growth, otherwise the area is open prairie. One area of local interest supports the growth of native junipers.

6. Nineteen species of important stock poisoning plants are found in Wabamoose County.

7. A tabulated list shows a total of 477 species of which composites were most numerous, grasses and legumes second, and mustards third.




8. In 1899, A. S. Hitchcock listed about 336 species from the county. In 1926-27, the author collected and observed <sup>277</sup> 332 which included <sup>112</sup> 115 not previously listed which leaves <sup>146</sup> 193 species not found in the limited time. However, <sup>90</sup> 52 of these are without question in the county.

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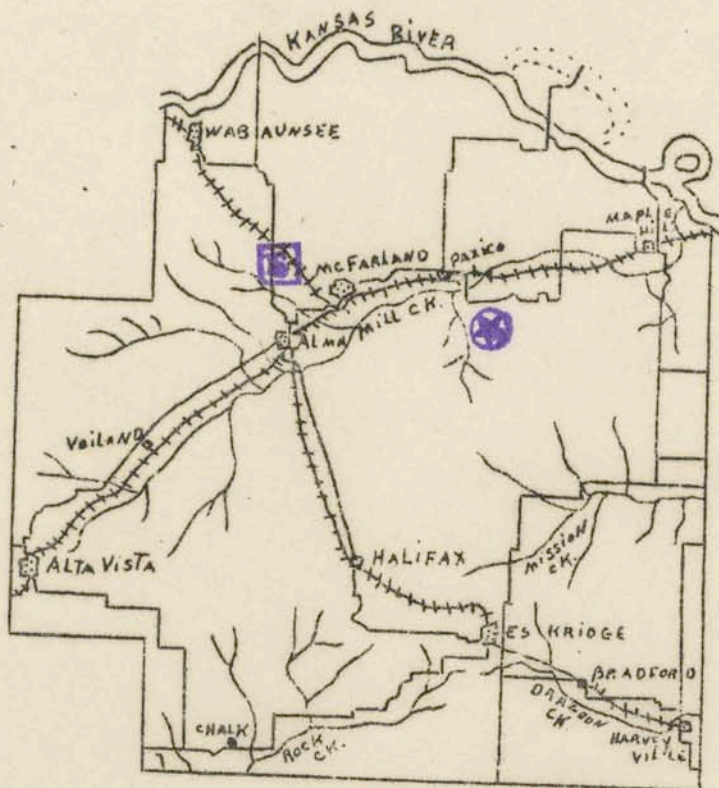
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to Dr. F. C. Gates, for valuable suggestions and criticisms.  
I wish to express my thanks to others who have aided in  
the preparation of this manuscript.

## EXPLANATION OF MAPS

In the instances where the map is plotted with  it refers to the fact that the specimen has actually been collected by the writer in the general location indicated. The symbol  merely means the species has been observed by the writer but not collected and its position on the map has no reference to general location. The symbol  indicates that A. S. Hitchcock has reported the species in the county previous to 1899 and its position on the map has no specific significance.





Reported by A. S.  
Hitchcock.

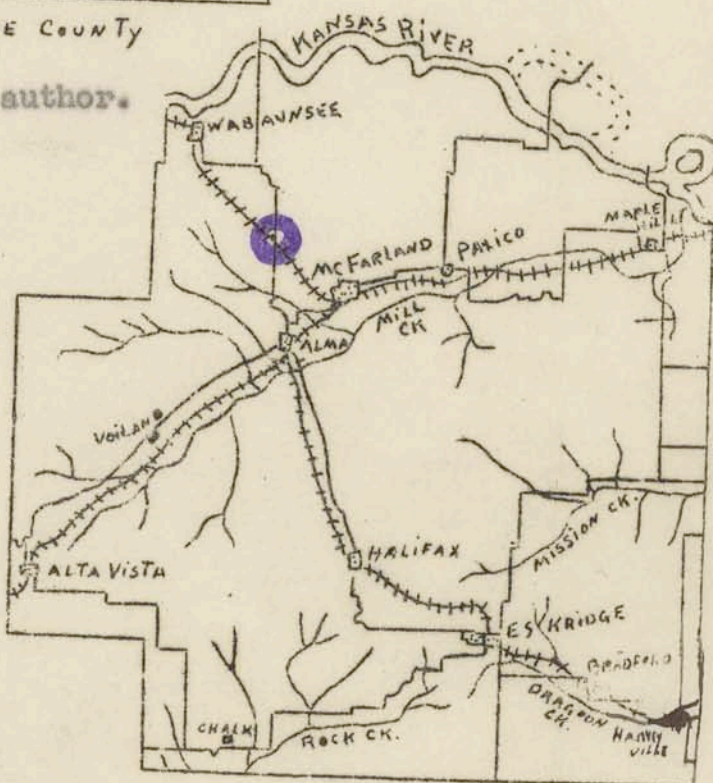


Specimen collected by  
author.

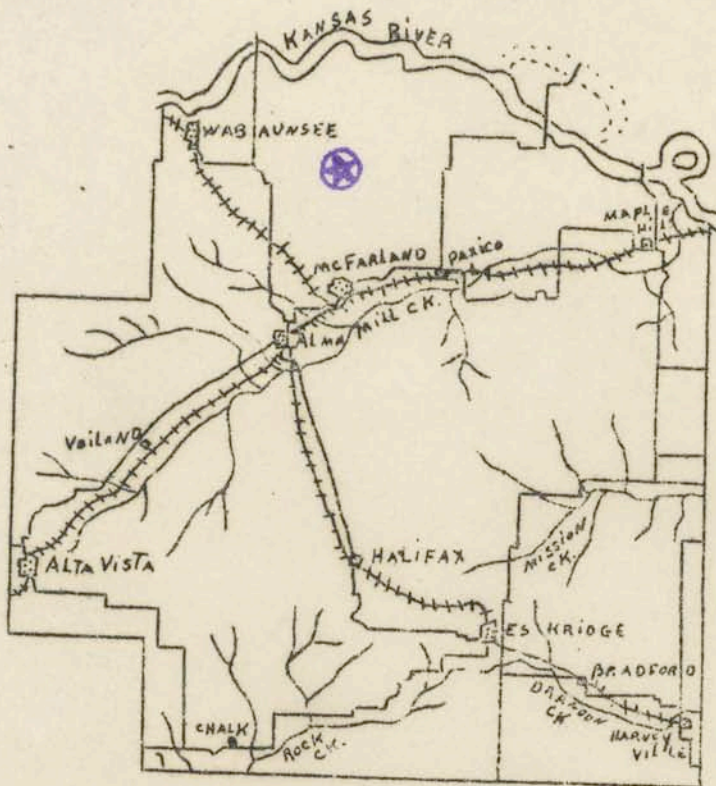


WABAUNSEE COUNTY

Species observed by author.



WABAUNSEE COUNTY



OPHIOGLOSSACEAE

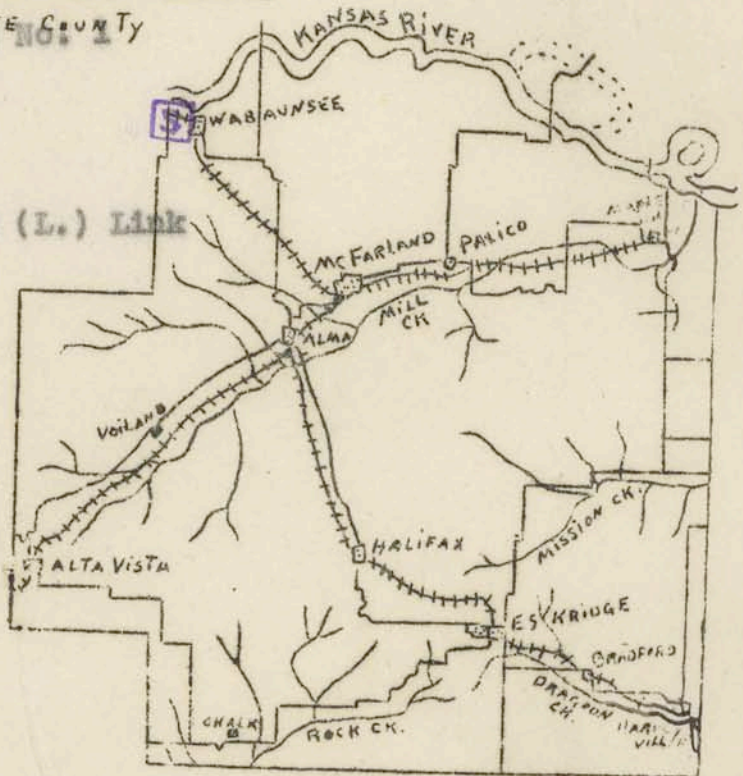
*Botrychium virginianum*

L. SW.

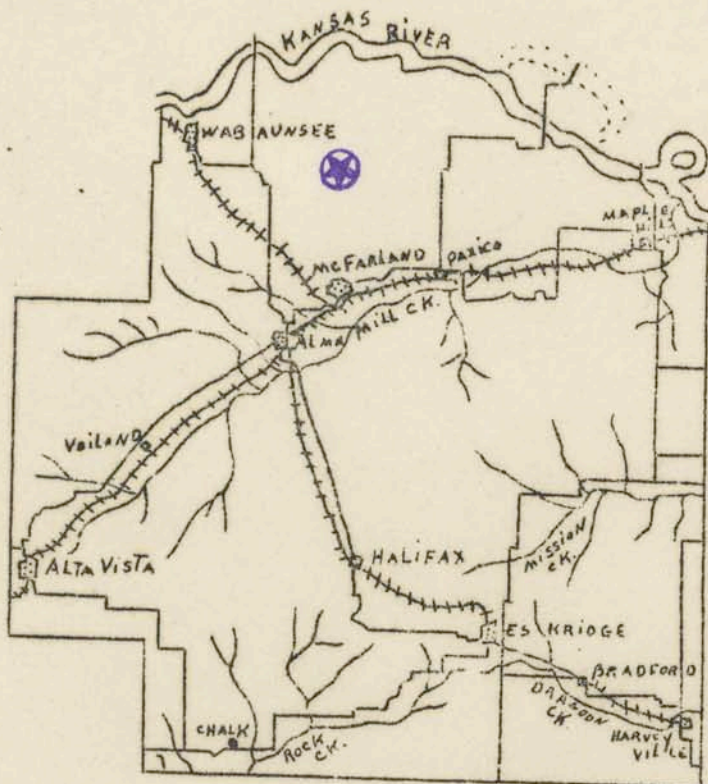
WABAUNSEE COUNTY  
map No. 1

POLYPODIACEAE

*Pellaea atropurpurea* (L.) Link



WABAUNSEE COUNTY  
map No. 2

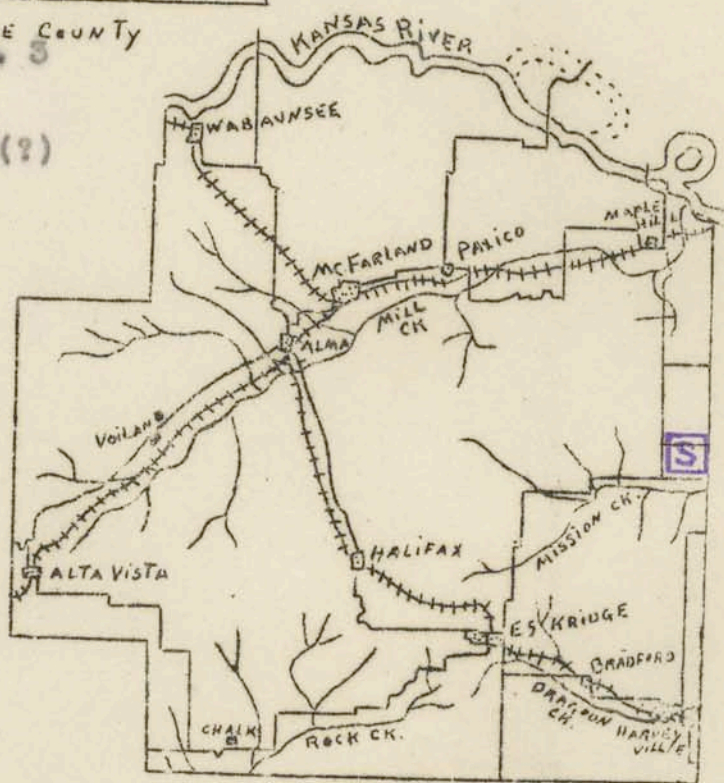


EQUISETACEAE

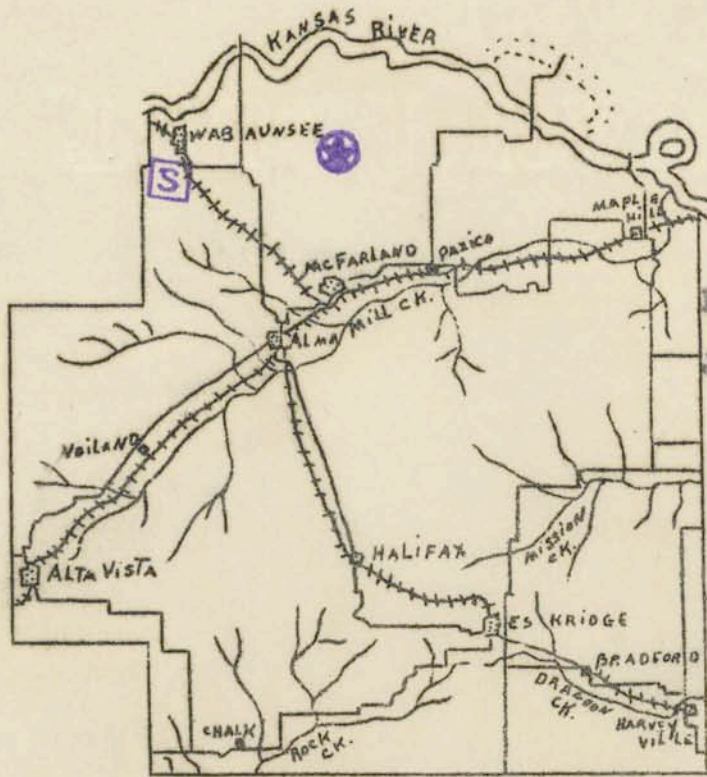
*Equisetum arvense* L.

WABAUNSEE COUNTY  
Map No. 3

*Equisetum hyemale* L. (?)



WABAUNSEE COUNTY  
Map No. 4



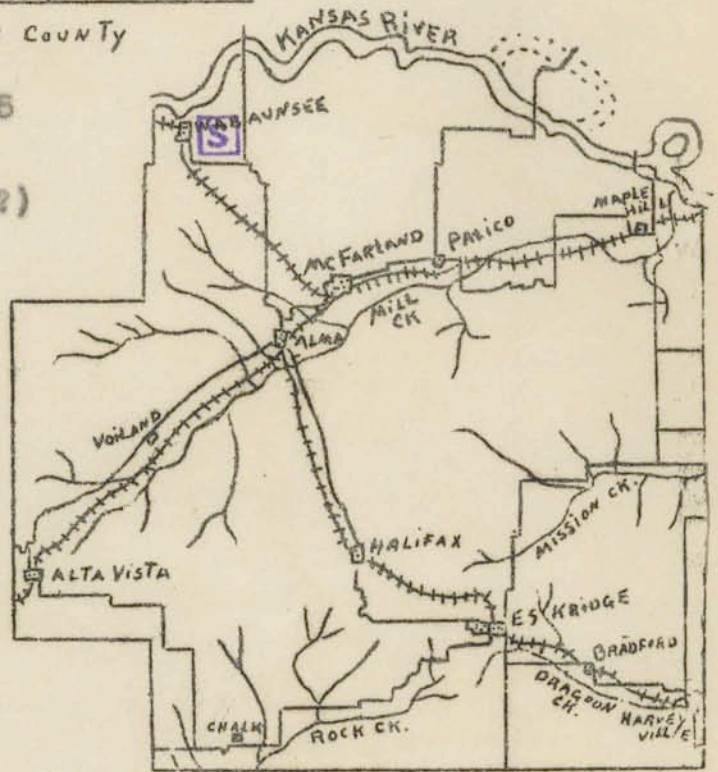
PINACEAE

*Juniperus virginiana* L.

WABAUNSEE COUNTY

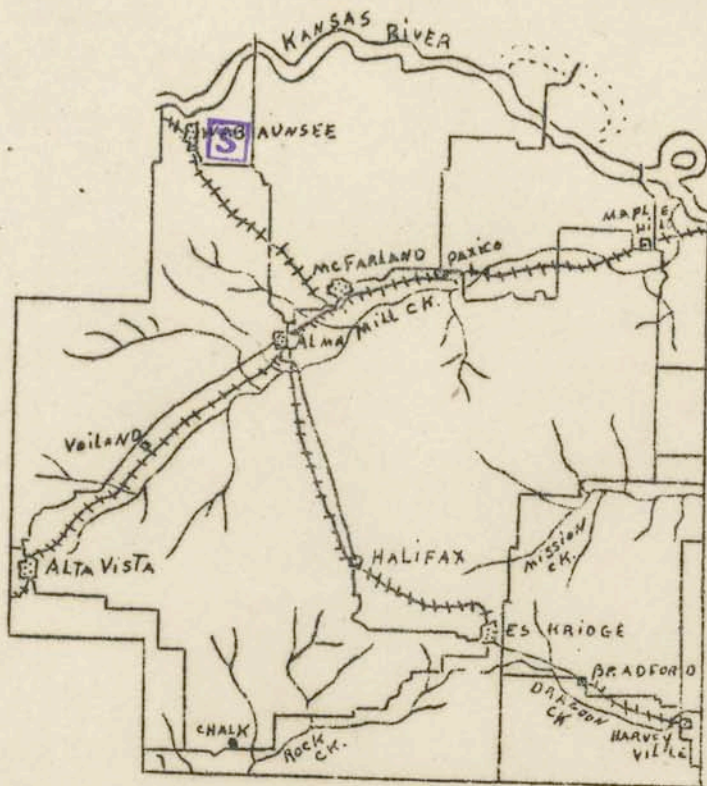
Map No. 5

*Juniperus communis* L. (?)



WABAUNSEE COUNTY

Map No. 6

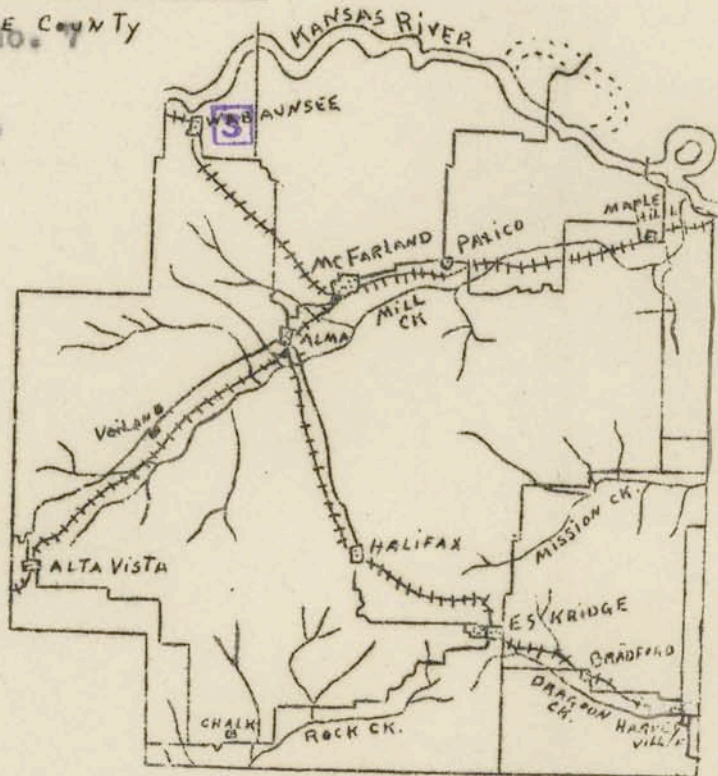


PINACEAE

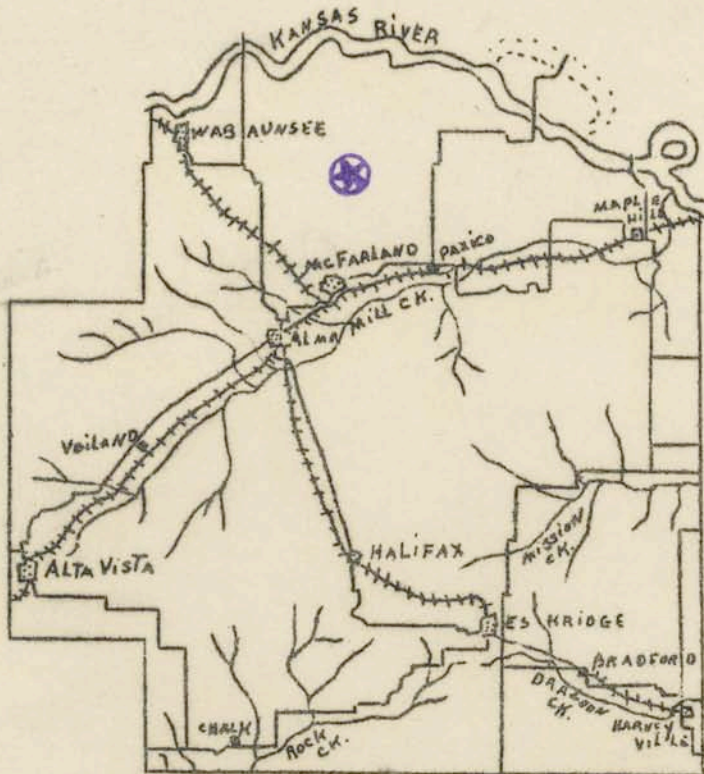
*Thuja orientalis* L.

WABAUNSEE COUNTY  
map no. 7

*Pinus sylvestris* Ait.



WABAUNSEE COUNTY  
map no. 8



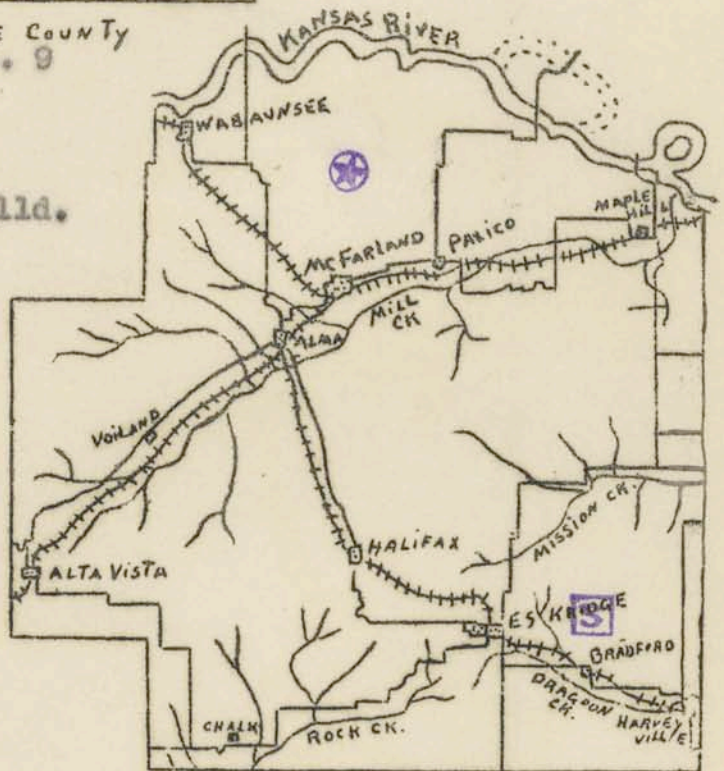
ALISMATACEAE

*Sagittaria ambigua* J.

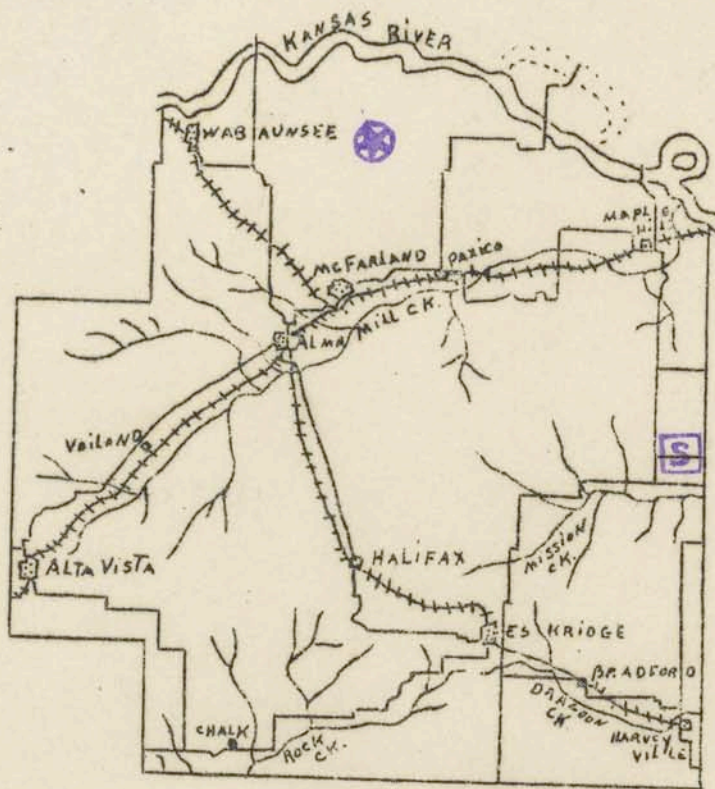
G. Sm.

WABAUNSEE COUNTY  
Map No. 9

*Sagittaria latifolia* Willd.

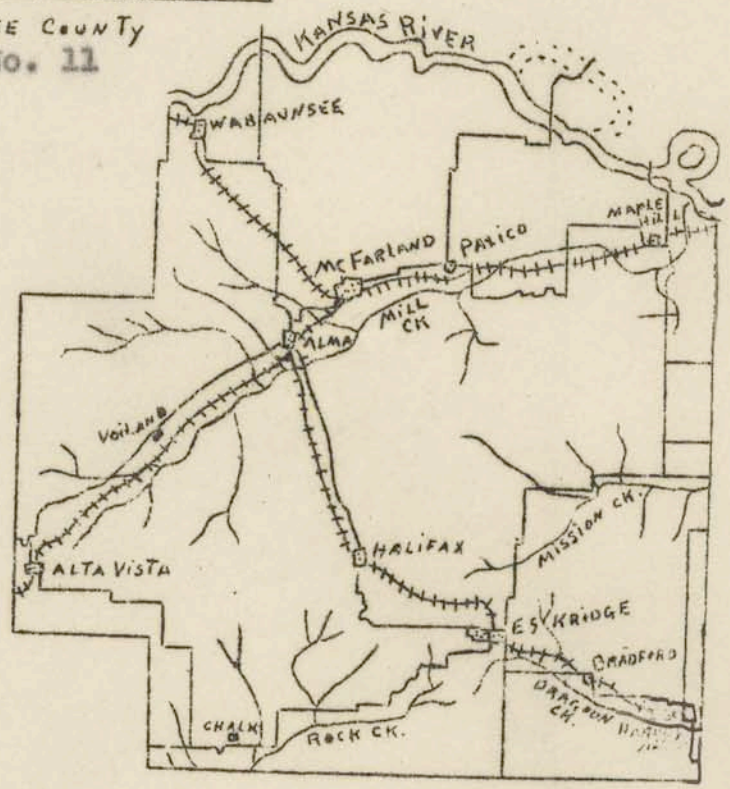


WABAUNSEE COUNTY  
Map No. 10

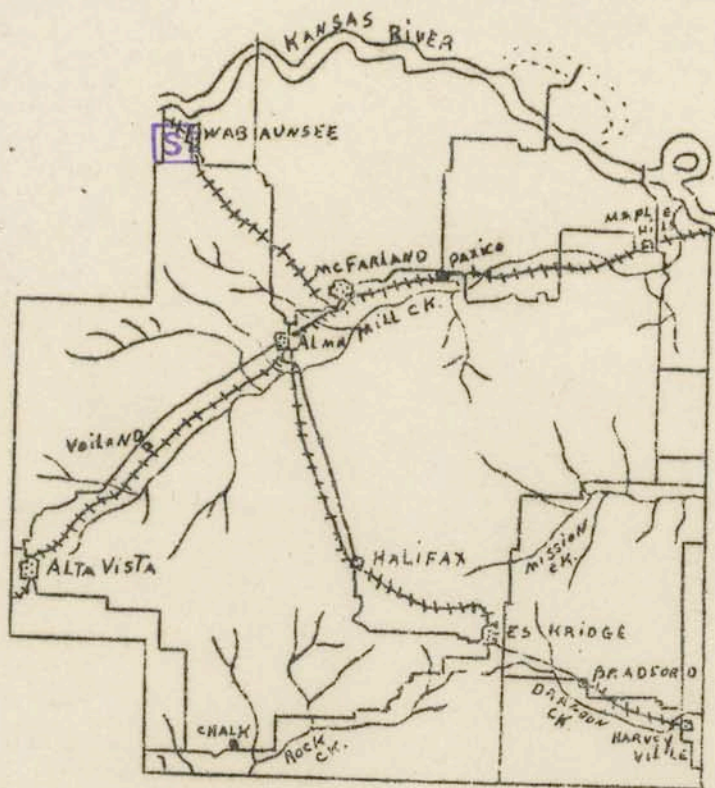


TYPHACEAE  
*Typha latifolia* L.

WABAUNSEE COUNTY  
 Map No. 11



WABAUNSEE COUNTY



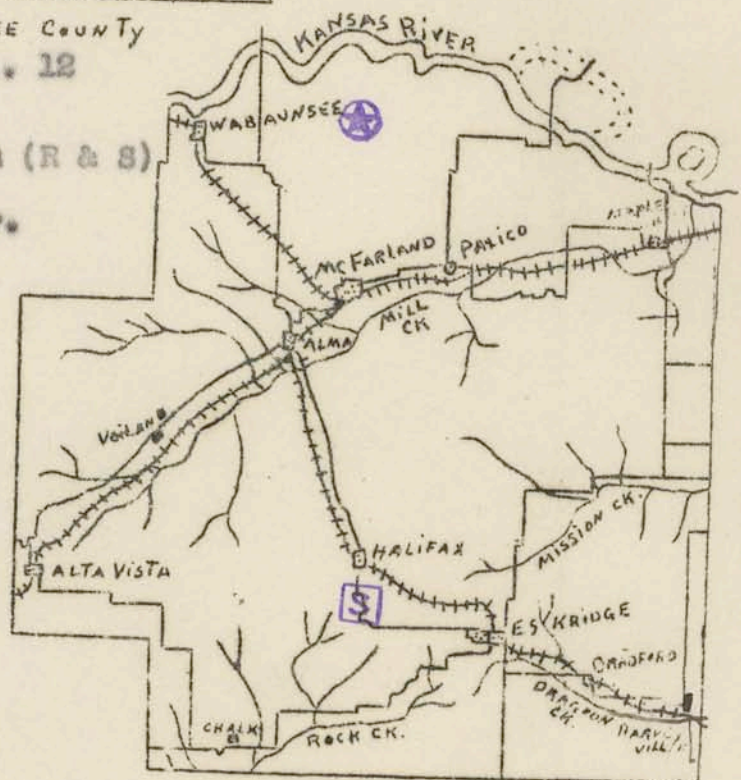
LILIACEAE

*Asparagus officinalis* L.

WABAUNSEE COUNTY  
Map No. 12

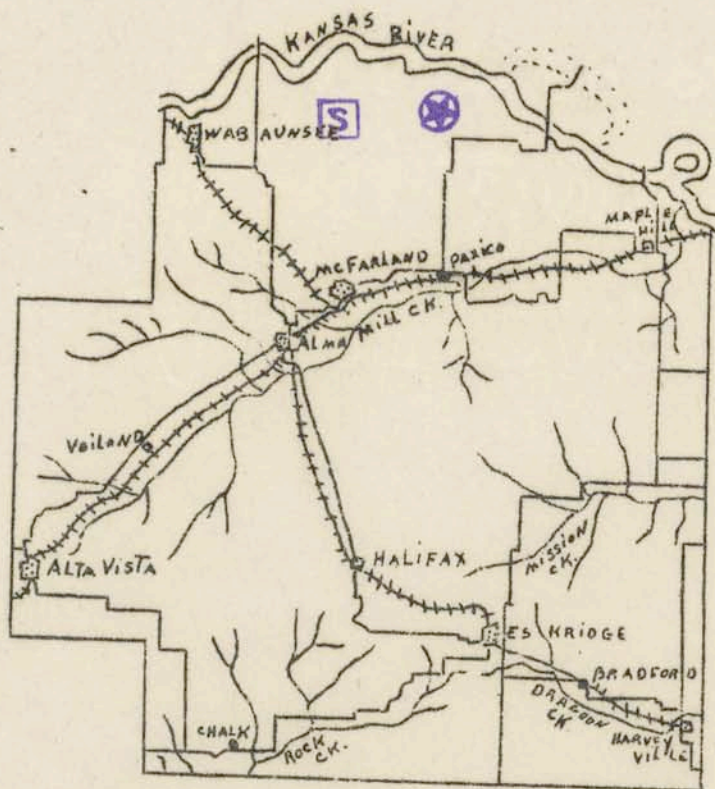
*Polygonatum commutatum* (R & S)

Dietr.



WABAUNSEE COUNTY  
Map No. 13



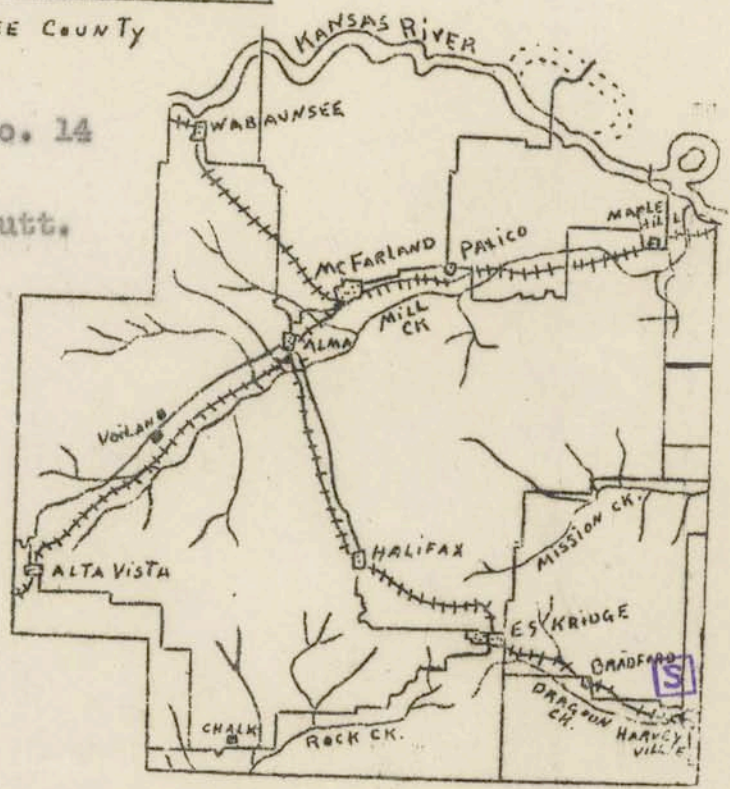


LILIACEAE  
*Erythronium mesachoreum*  
 Kneer

WABAUNSEE COUNTY

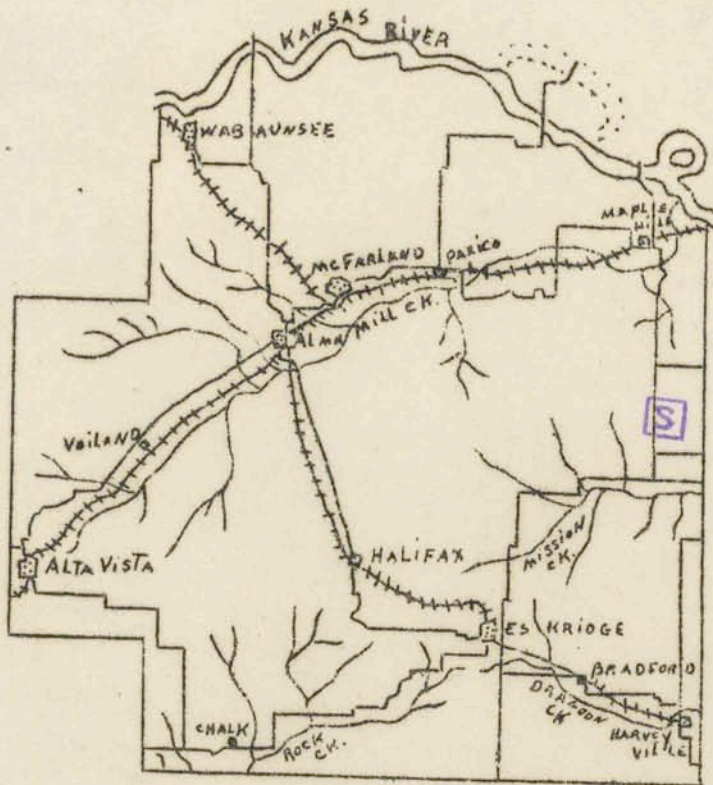
Map No. 14

*Erythronium albidum* Nutt.



WABAUNSEE COUNTY

Map No. 15



LILIACEAE

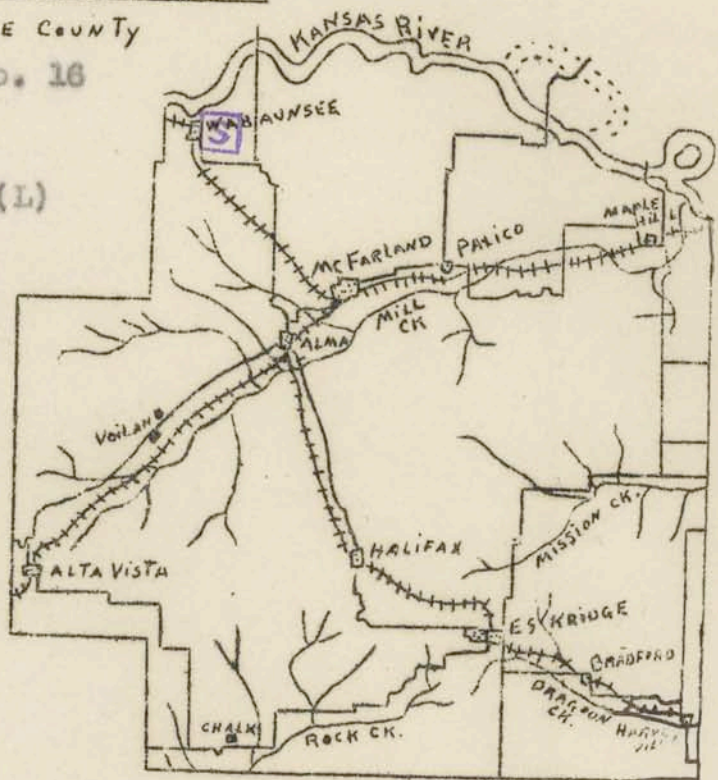
*Smilax hispida* Muhl.

WABAUNSEE COUNTY

Map No. 16

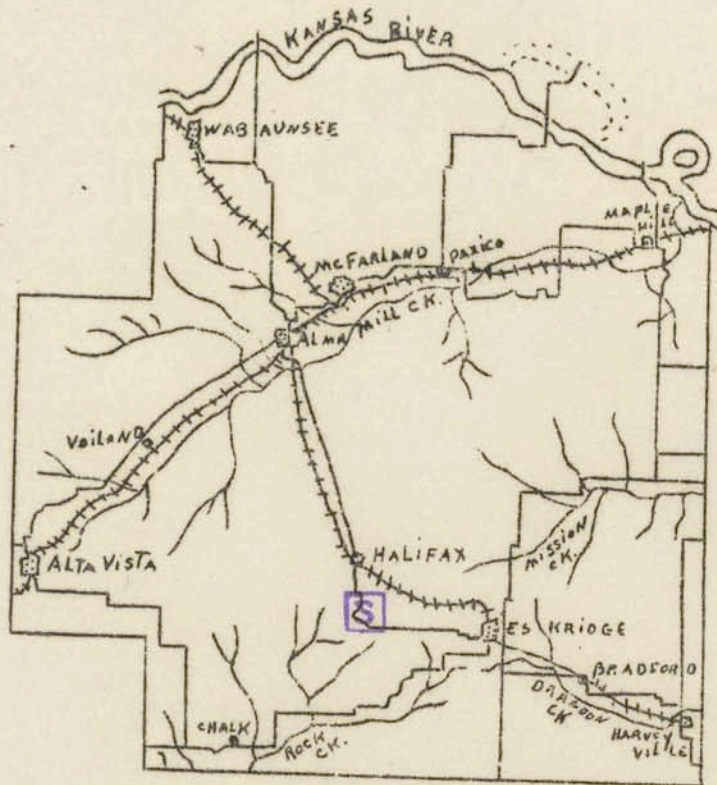
*Nothoscordum bivalve* (L.)

Britton



WABAUNSEE COUNTY

Map No. 17



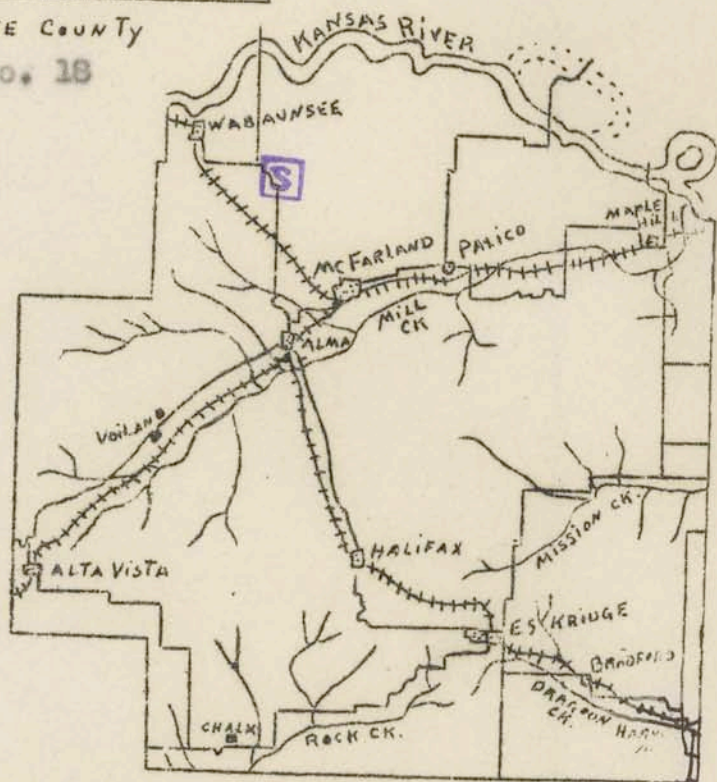
LILIACEAE

*Smilax herbacea* L.

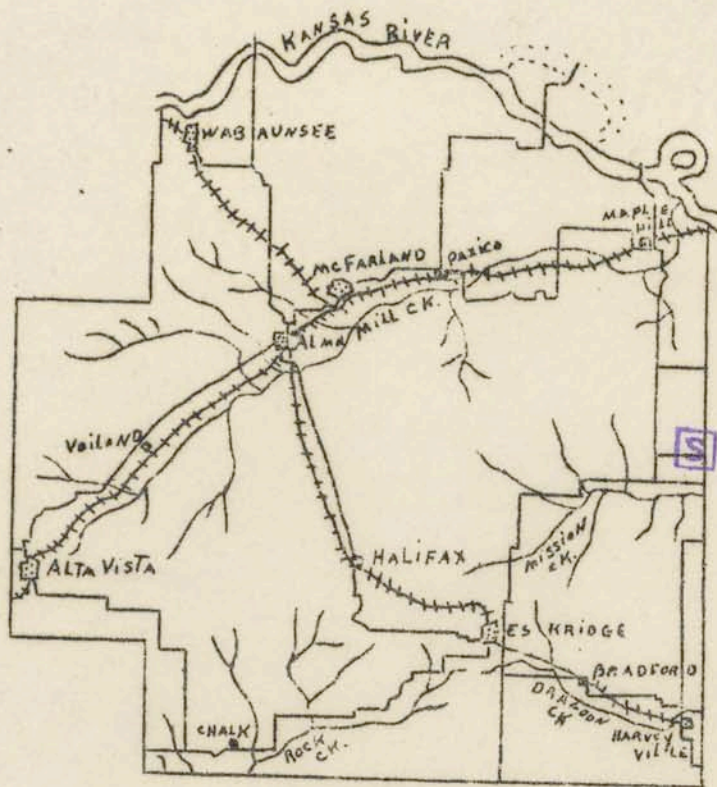
WABAUNSEE COUNTY

Map No. 18

*Allium canadense* L.



WABAUNSEE COUNTY  
Map No. 19



LILIACEAE

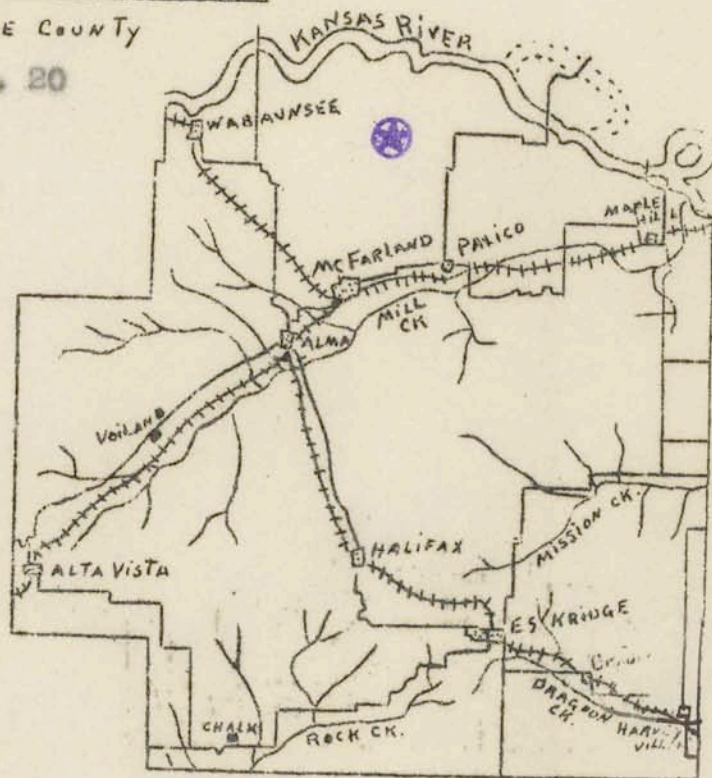
*TorisCORDION nuttallii*

(A. Gray) Rydb.

WABAUNSEE COUNTY

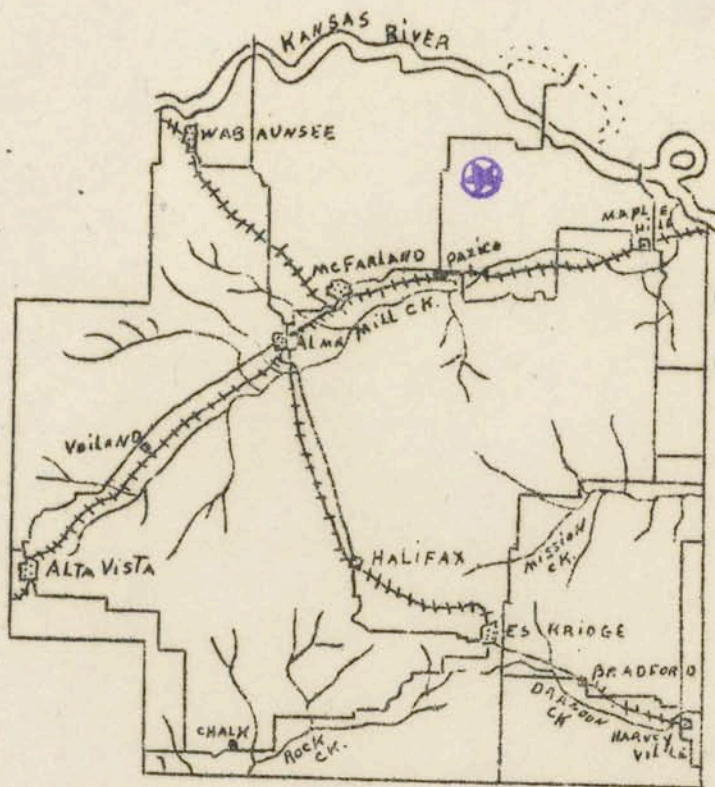
Map No. 20

*Allium stellatum* Ker.



WABAUNSEE COUNTY

Map No. 21



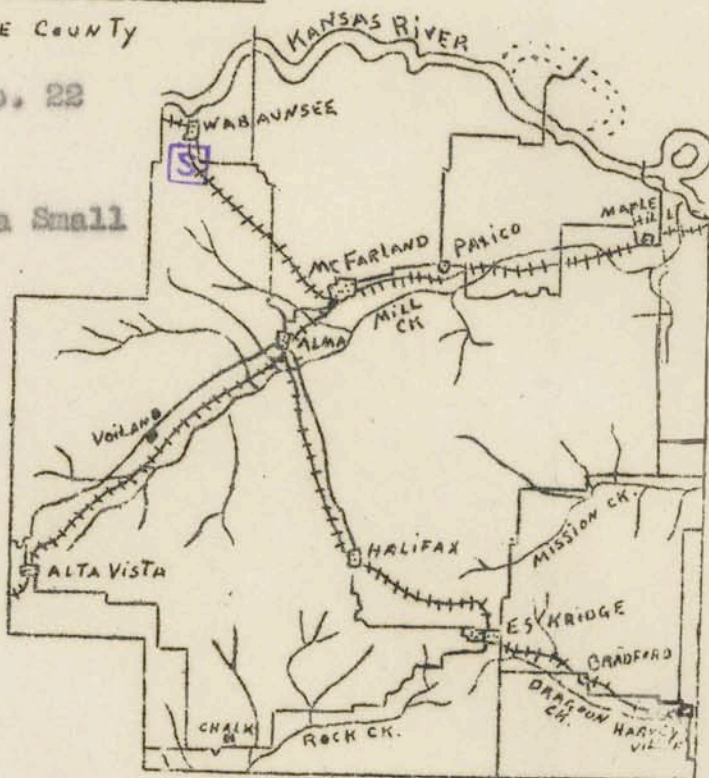
COMMELINACEAE

*Commelina virginica* L.

WABAUNSEE COUNTY

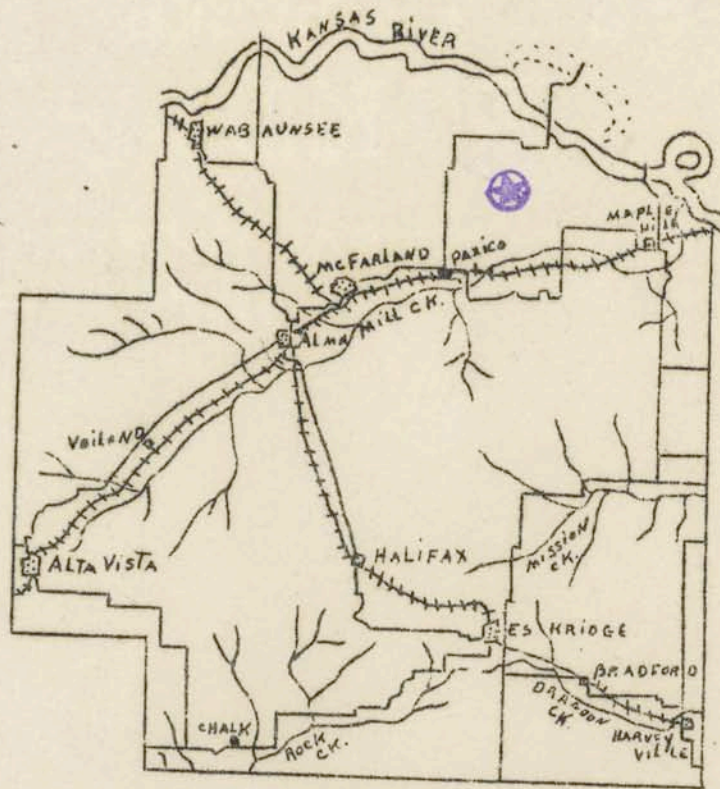
Map No. 22

*Tradescantia bracteata* Small



WABAUNSEE COUNTY

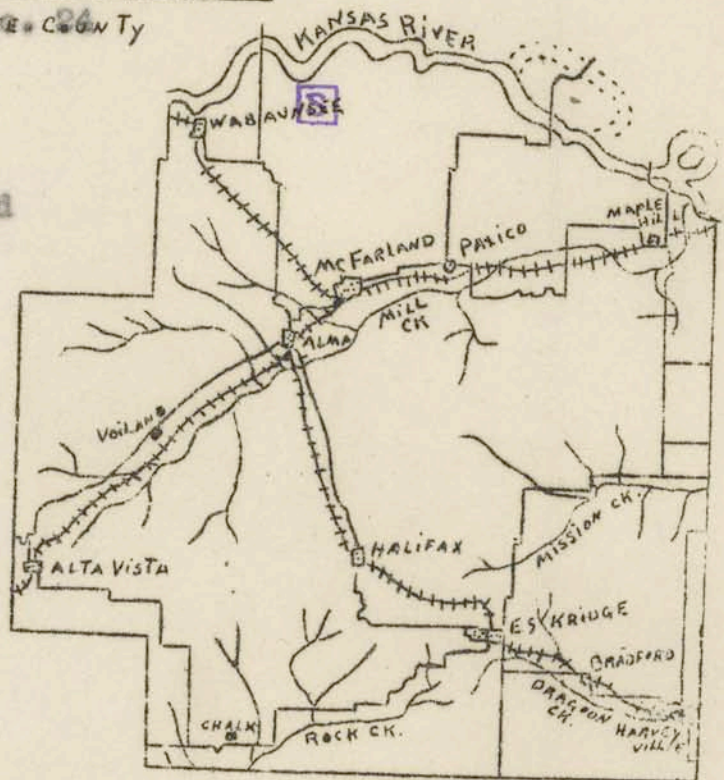
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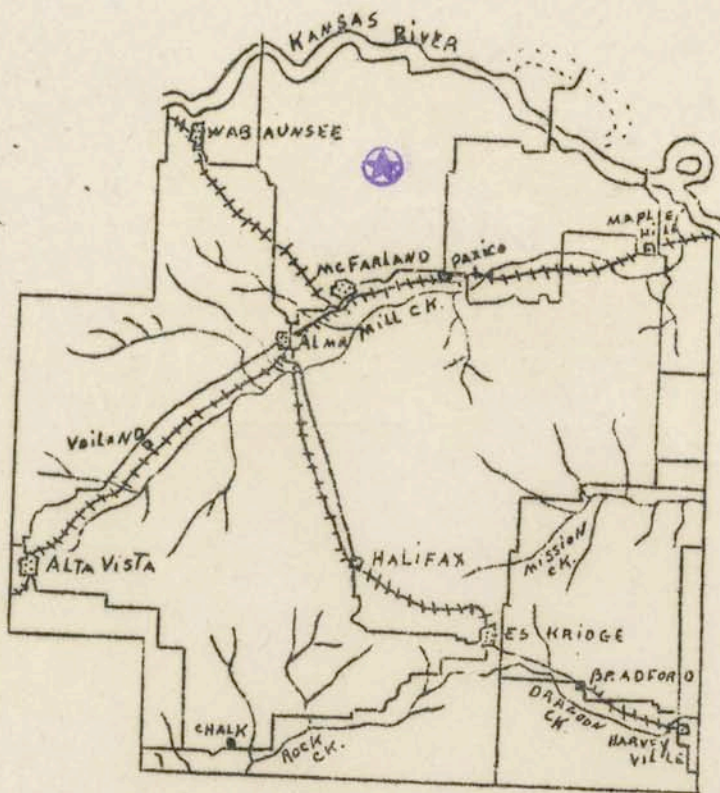
COMNELINACEAE  
*Tradescantia virginiana*  
 L.

WABUNSEE COUNTY

JUNCACEAE  
*Juncus dudleyi* Weigund



WABUNSEE COUNTY

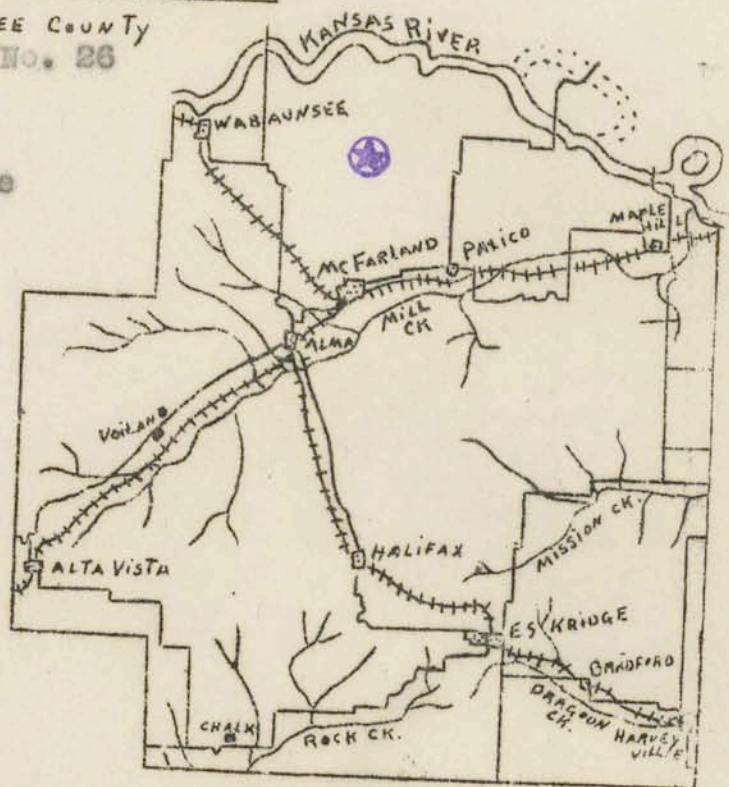


JUNCACEAE

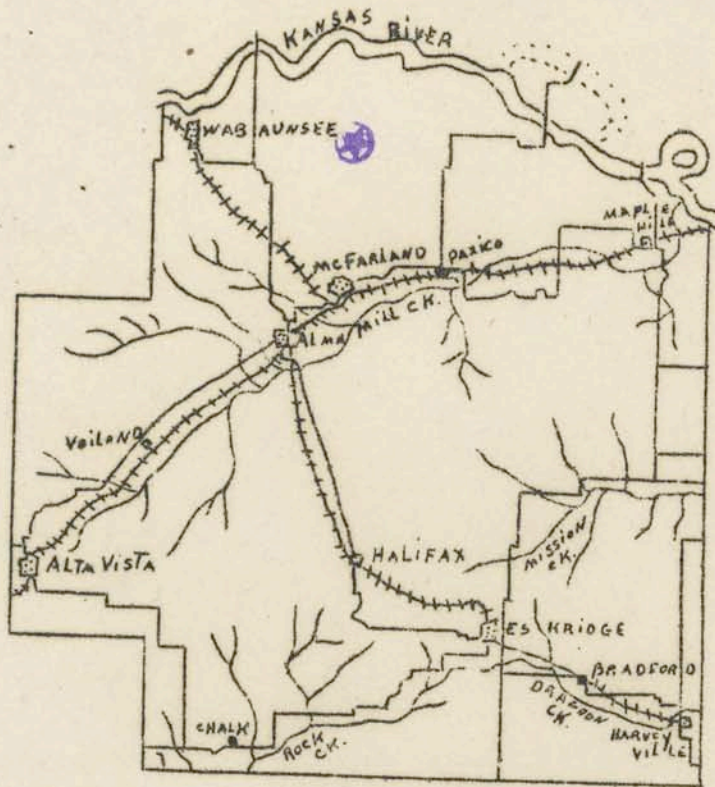
*Juncus tenuis* Willd.

WABAUNSEE COUNTY  
Map No. 26

*Juncus torreyi* Coville



WABAUNSEE COUNTY  
Map No. 27



ARACEAE

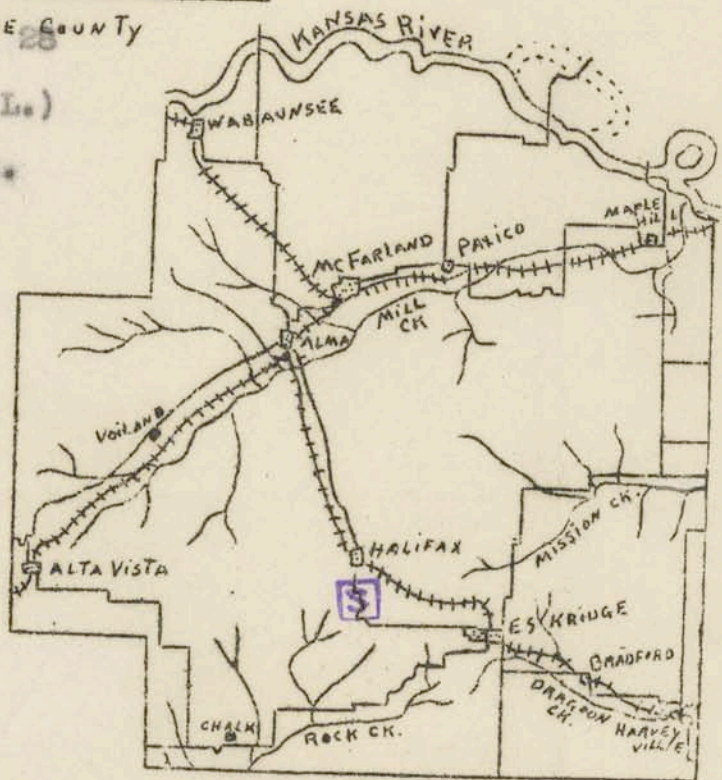
*Arisaema triphyllum*

(L.) Schott.

WABAUNSEE COUNTY  
Map No. 28

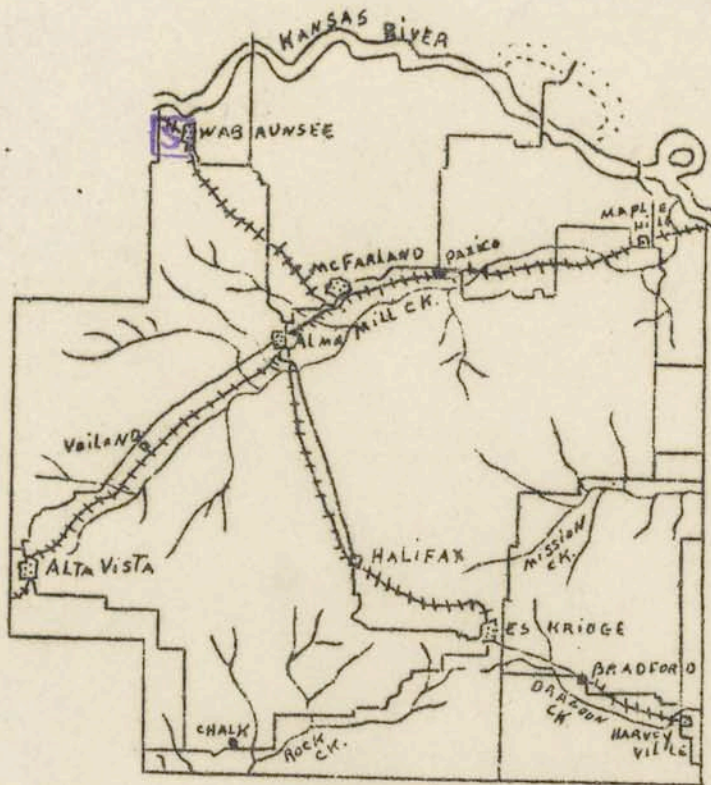
*Arisaema dracontium* (L.)

Schott.



WABAUNSEE COUNTY





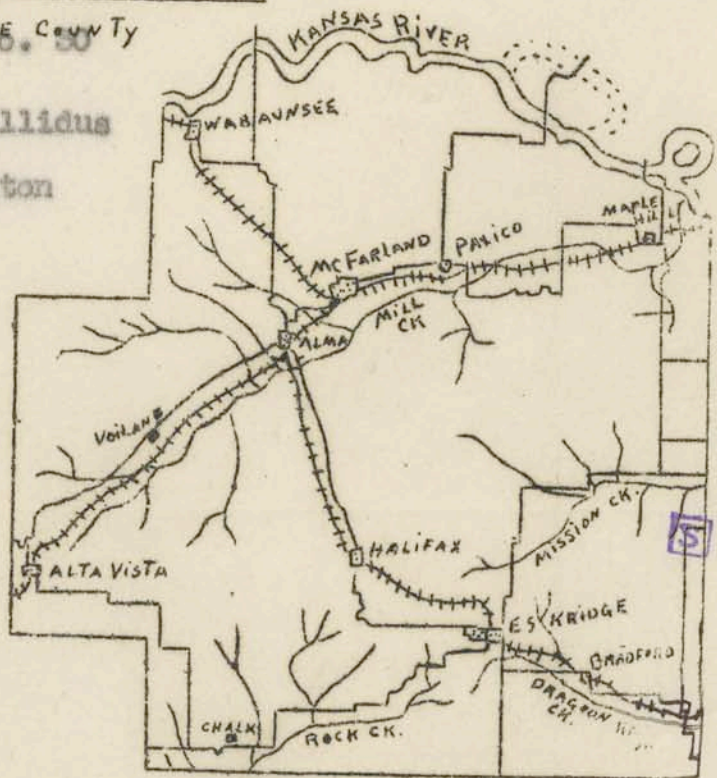
CYPERACEAE

*Carex pennsylvanica* Lam.

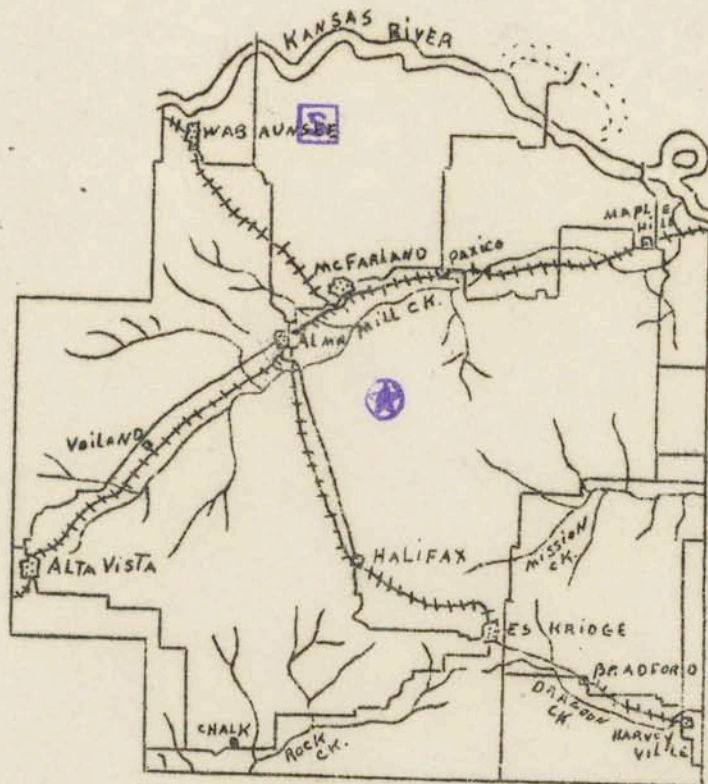
WABAUNSEE COUNTY  
Map No. 30

*Scirpus atrovirens pallidus*

Britton



WABAUNSEE COUNTY  
Map No. 31

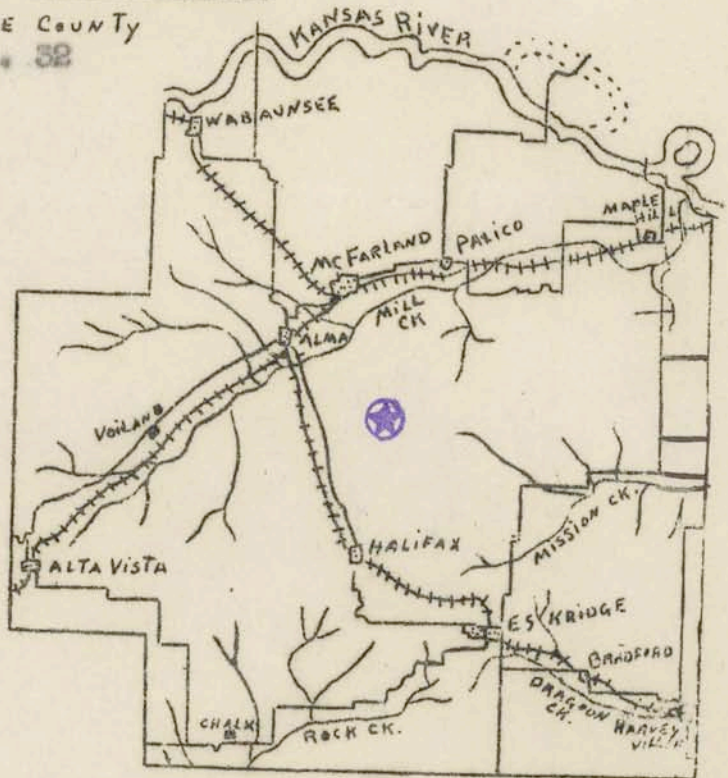


CYPERACEAE

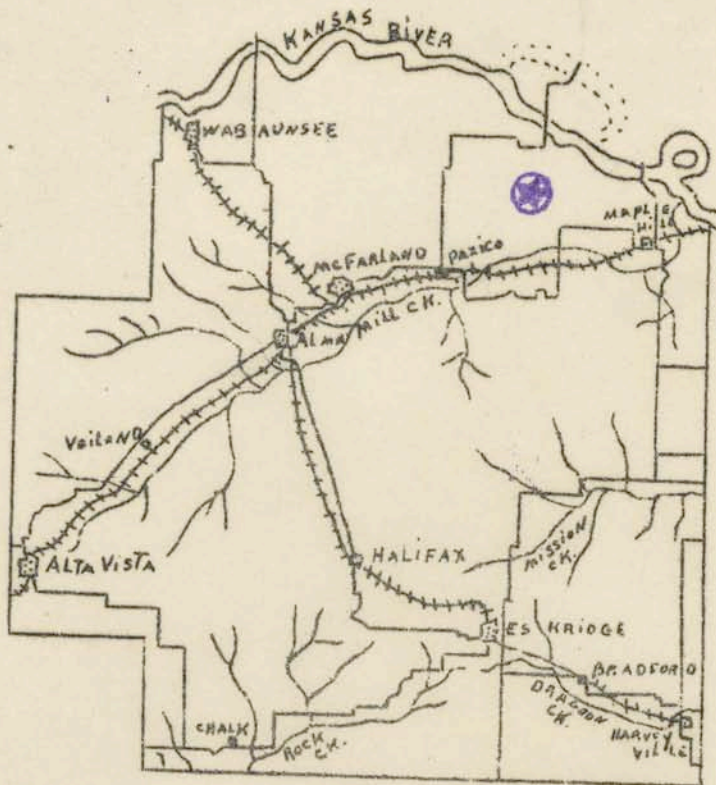
*Carex hystericina* Muhl.

WABAUNSEE COUNTY  
Map No. 32

*Carex laxiflora* Lam.



WABAUNSEE COUNTY  
Map No. 33



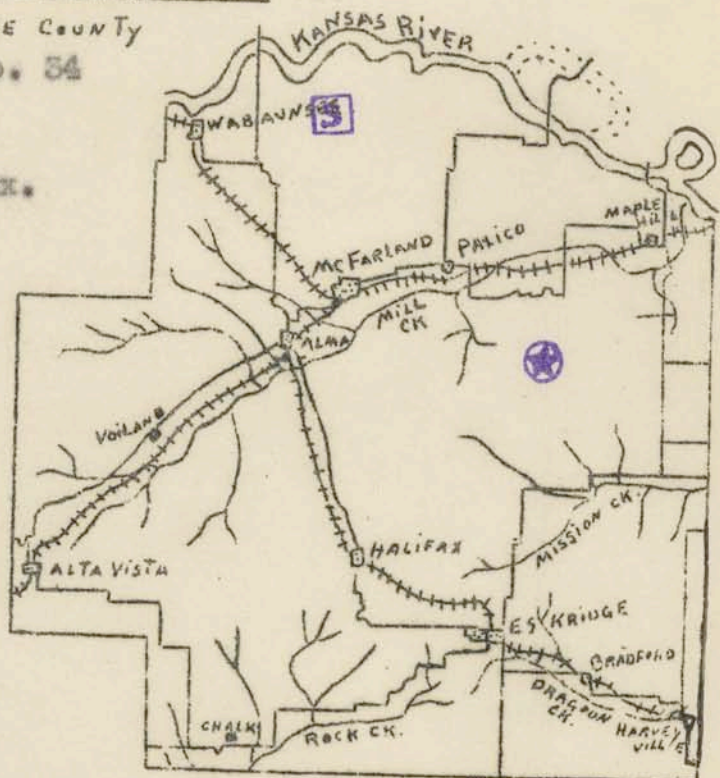
CYPERACEAE

*Carex mühlenbergii*

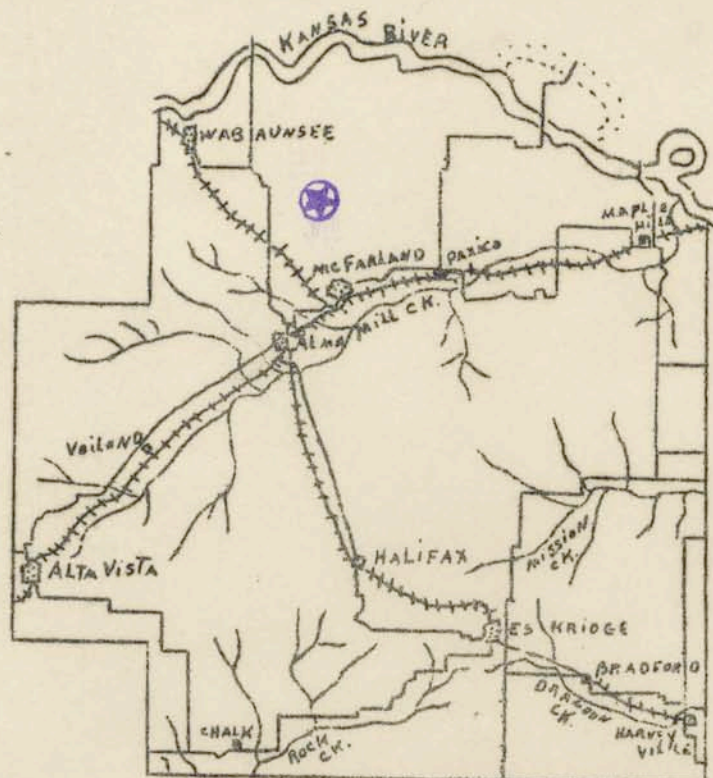
Schk.

WABAUNSEE COUNTY  
Map No. 34

*Carex vulpinoidea* Michx.



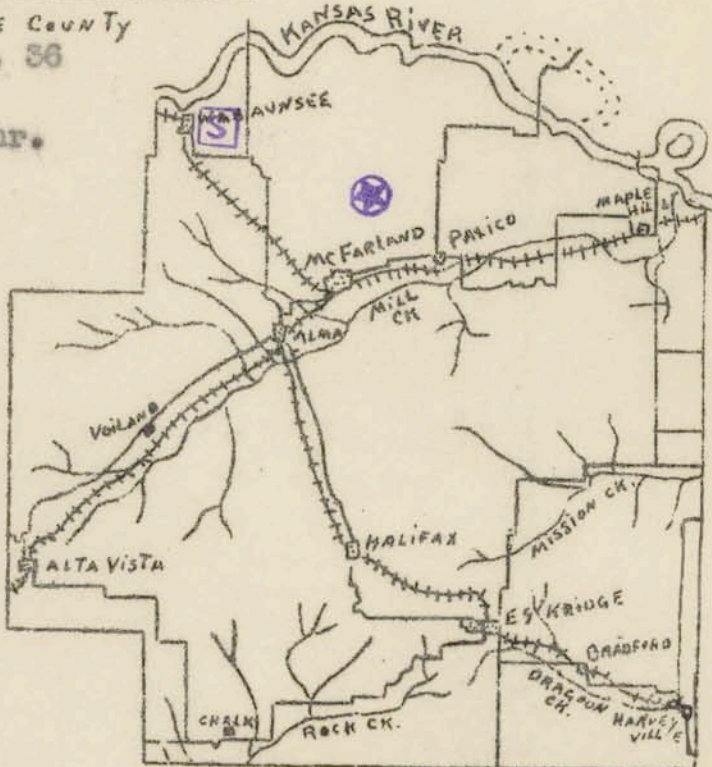
WABAUNSEE COUNTY  
Map No. 35



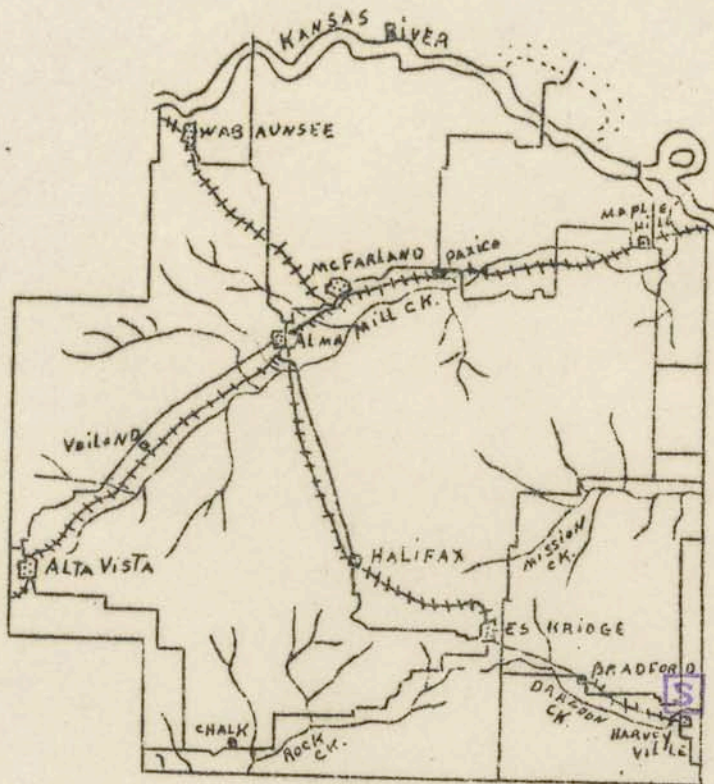
CYPERACEAE  
*Carex crux-corvi*  
 Shuttlew.

WABAUNSEE COUNTY  
 Map No. 36

*Carex festucacea* Schkuhr.



WABAUNSEE COUNTY  
 Map No. 37



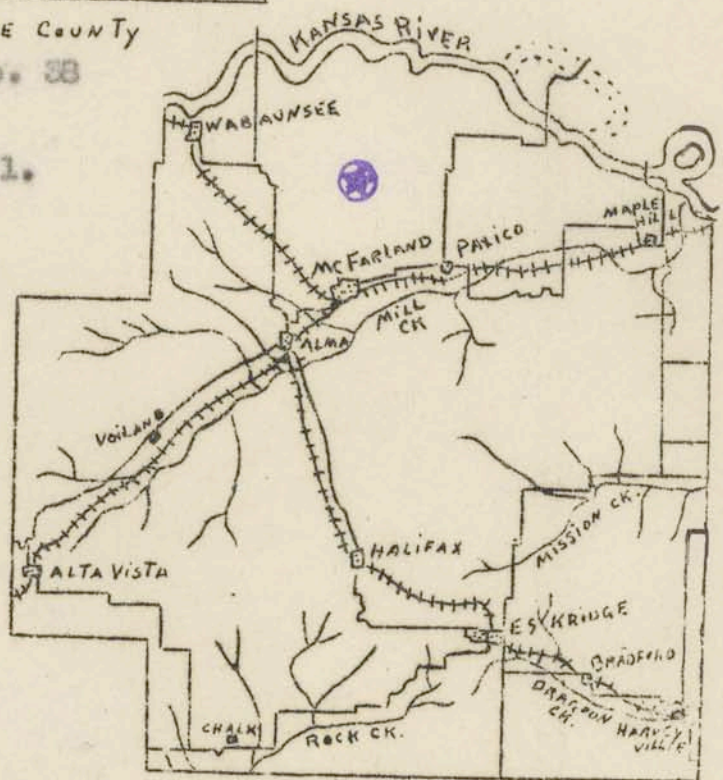
CYPERACEAE

*Carex stricta* Lam.

WABAUNSEE COUNTY

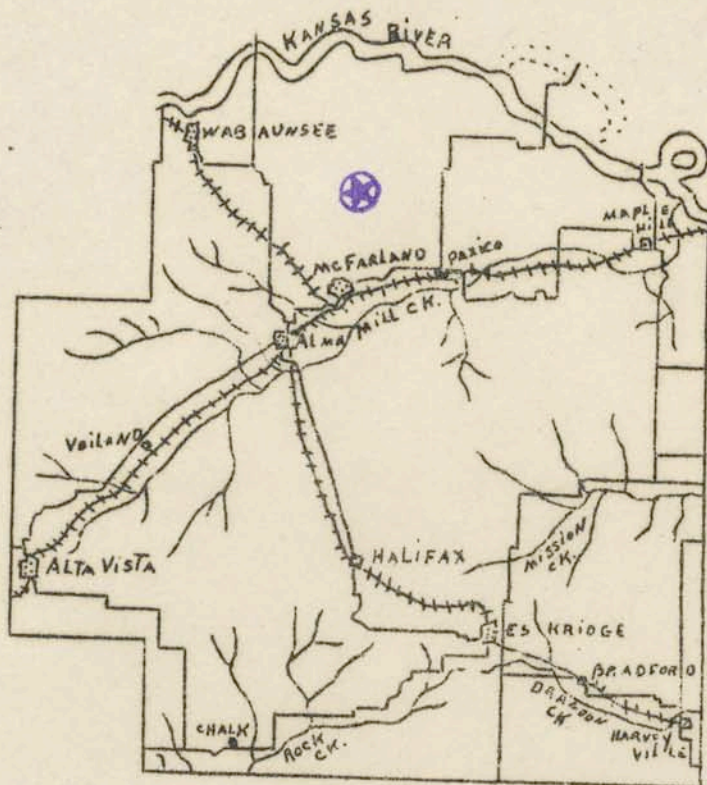
Map No. 38

*Cyperus speciosus* Vahl.



WABAUNSEE COUNTY

Map No. 39

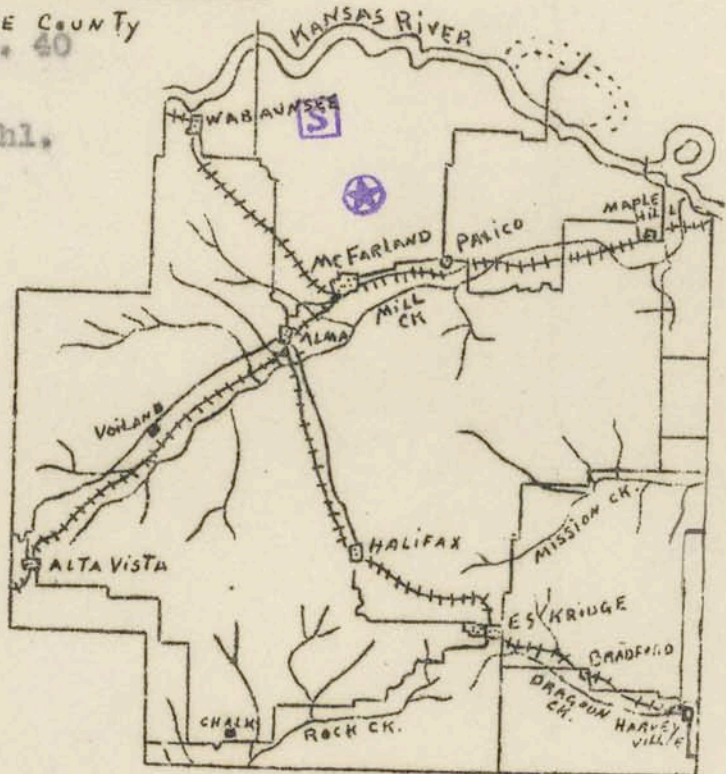


CYPERACEAE

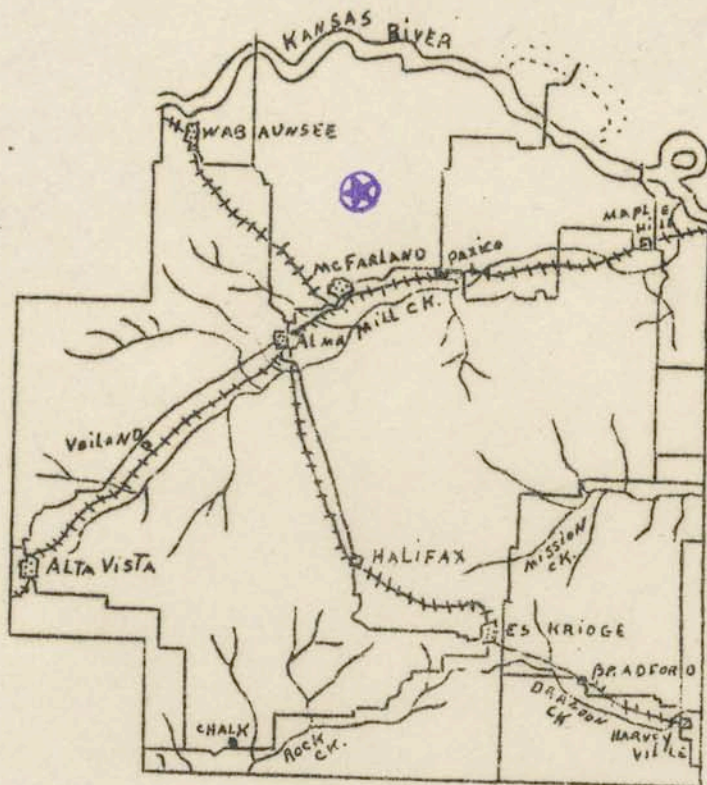
*Cyperus osculentus* L.

WABAUNSEE COUNTY  
Map No. 40

*Cyperus filiculmis* Vahl.



WABAUNSEE COUNTY  
Map No. 41

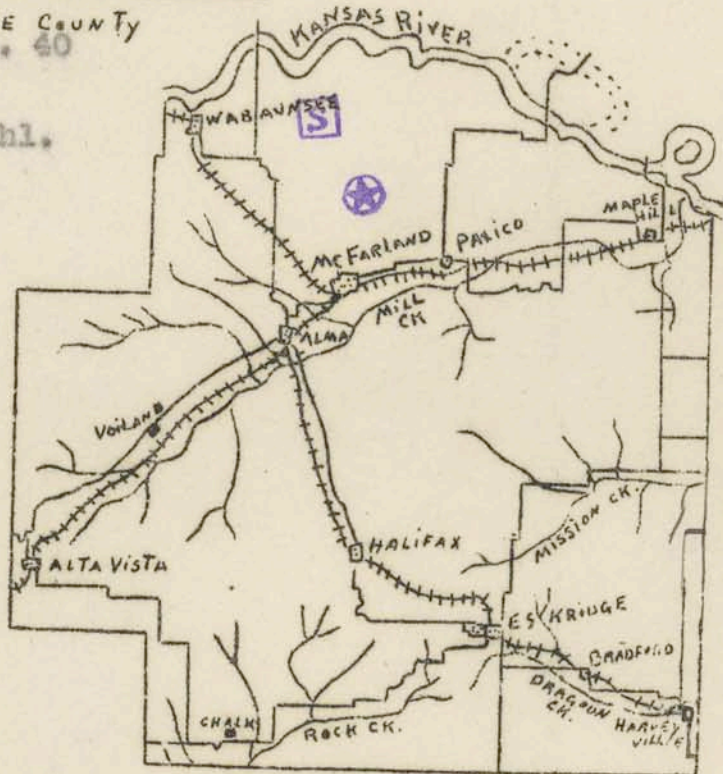


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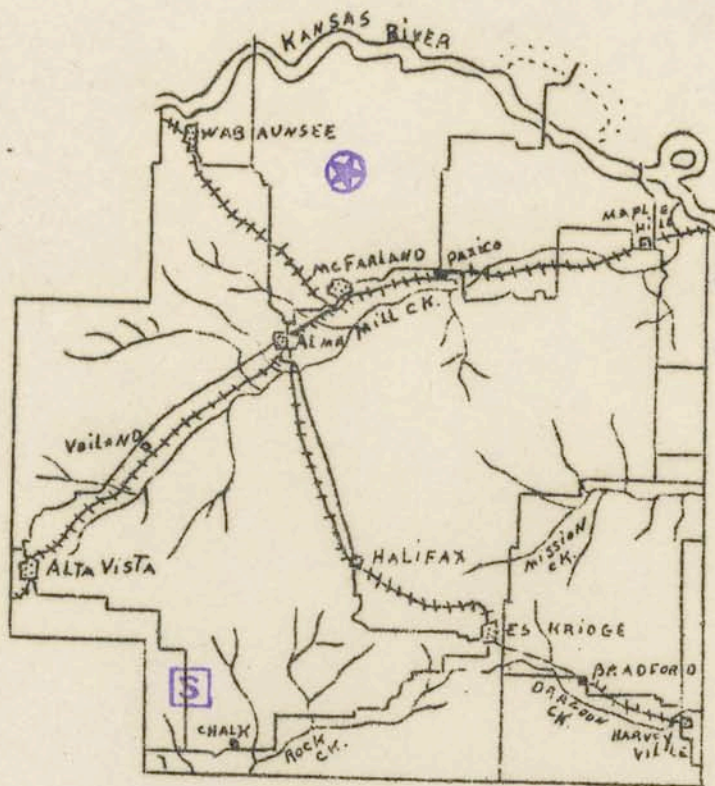
*Cyperus osculentus* L.

WABAUNSEE COUNTY  
Map No. 40

*Cyperus filiculmis* Vahl.



WABAUNSEE COUNTY  
Map No. 41



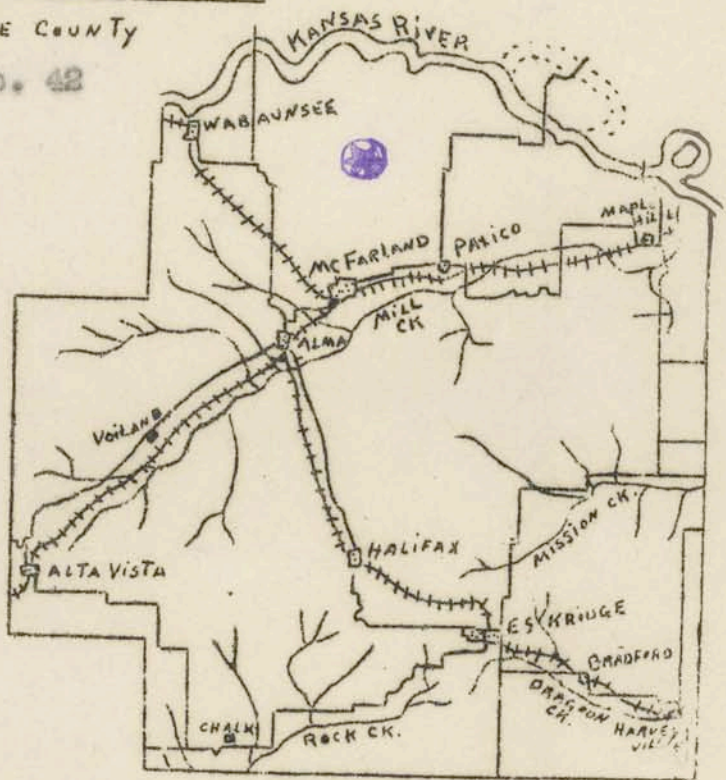
CYPERACEAE

*Scirpus lineatus* Michx.

WABAUNSEE COUNTY

Map No. 42

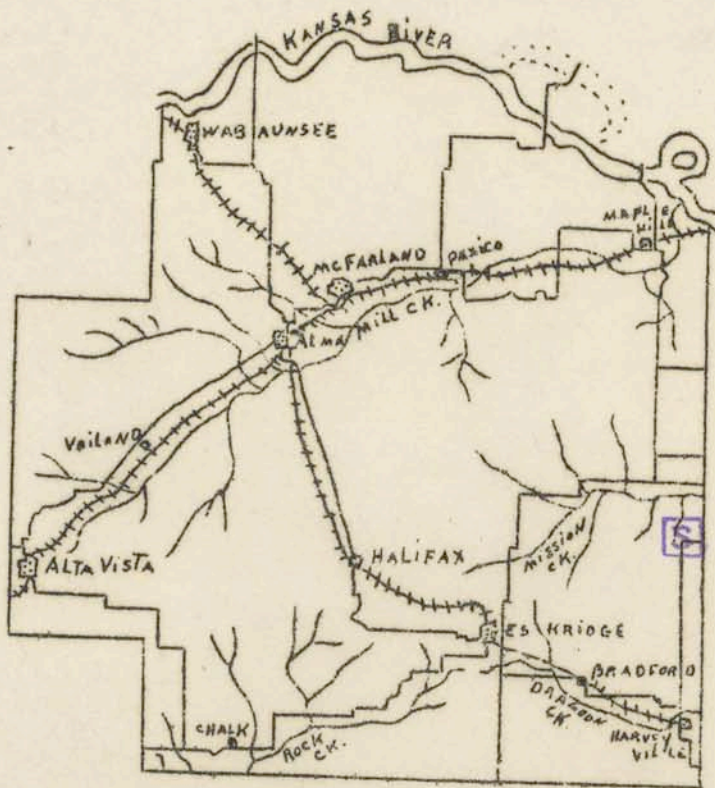
*Scirpus validus* Vahl.



WABAUNSEE COUNTY

Map No. 43





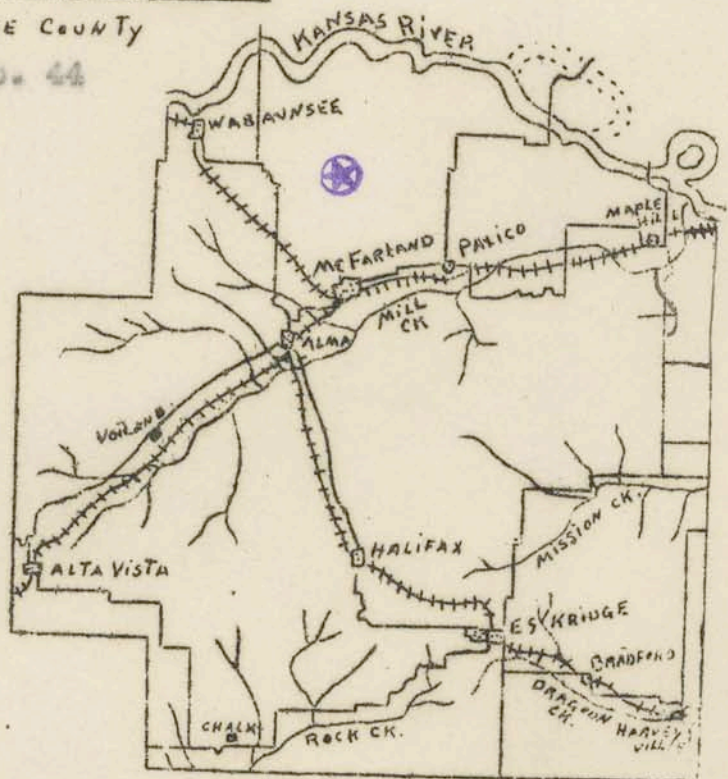
CYPERACEAE

*Eleocharis tenuis* (Willd)

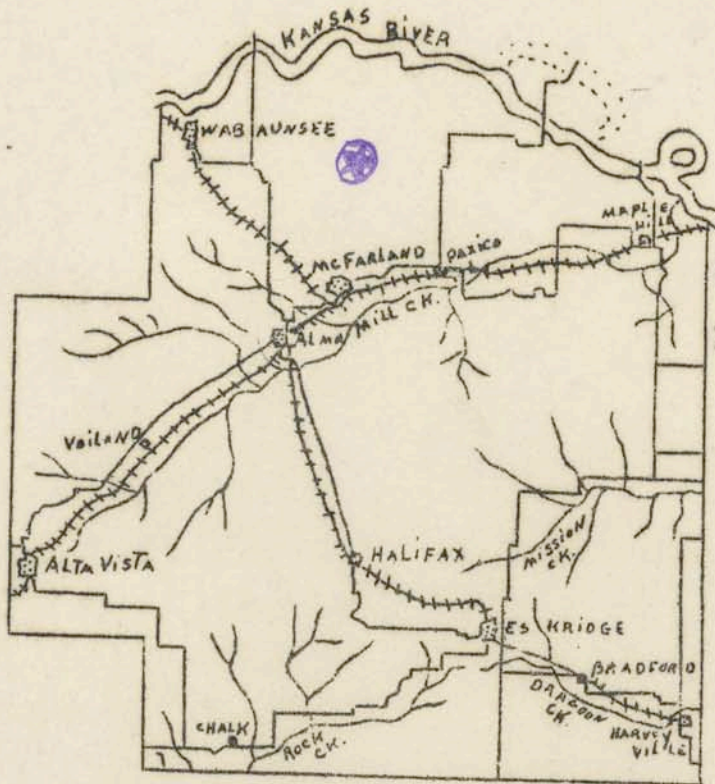
Schultes

WABAUNSEE COUNTY

Map No. 44



WABAUNSEE COUNTY



CYPERACEAE

*Eleocharis palustris*

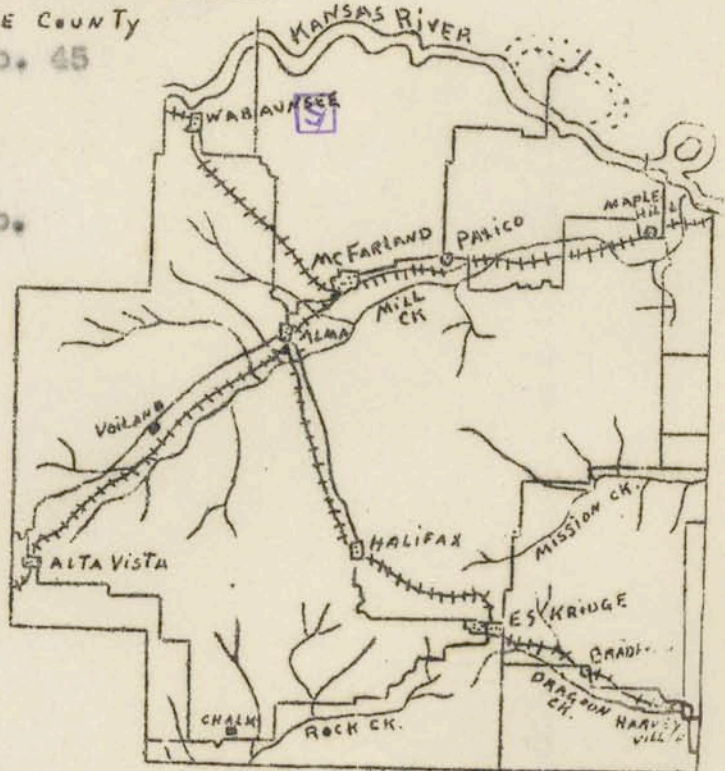
(Willd.) Gray

(*glaucescens*)

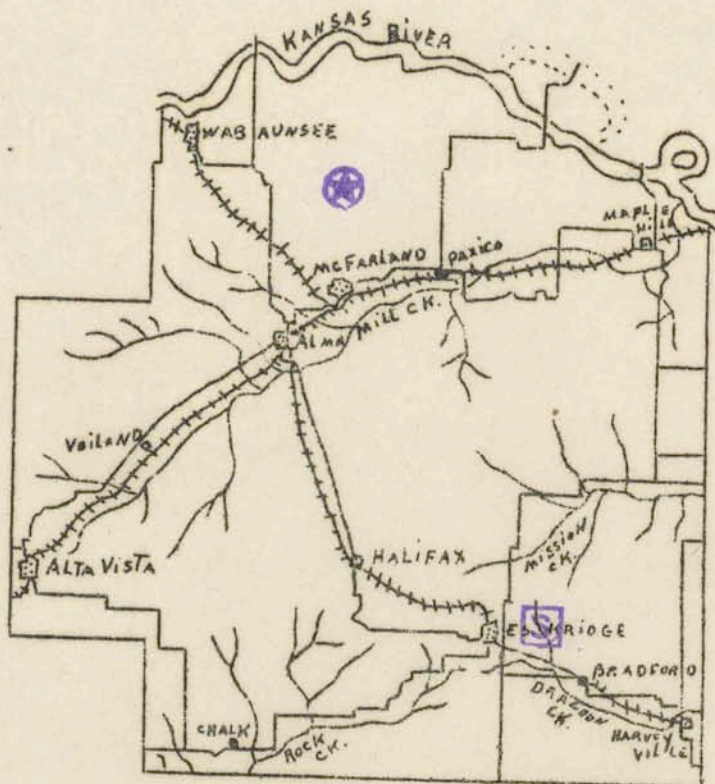
WABAUNSEE COUNTY  
Map No. 45

GRAMINEAE

*Agropyron smithii* Rydb.



WABAUNSEE COUNTY  
Map No. 46

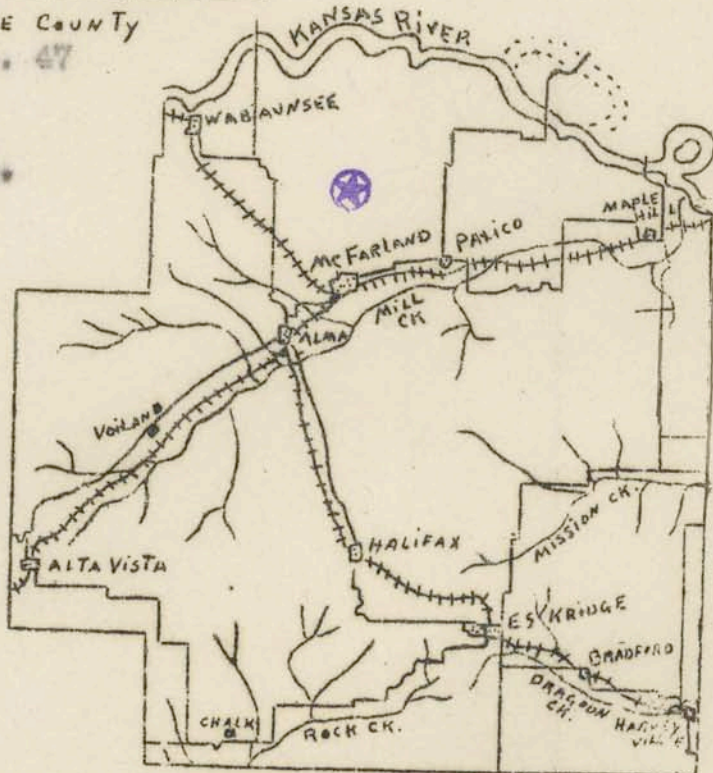


GRAMINEAE

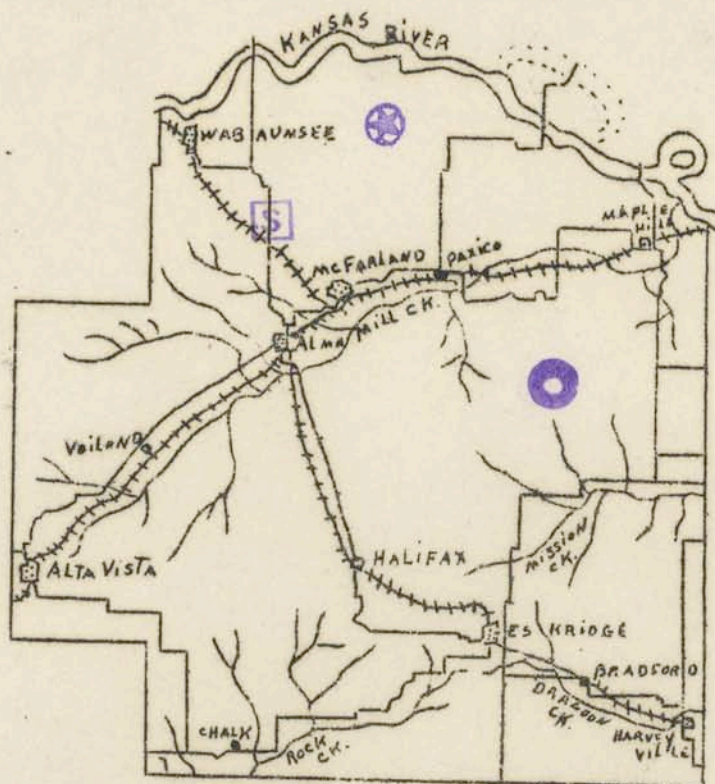
*Hordeum jubatum* L.

WABAUNSEE COUNTY  
Map No. 47

*Hordeum pusillum* Nutt.



WABAUNSEE COUNTY  
Map No. 48



GRAMINEAE

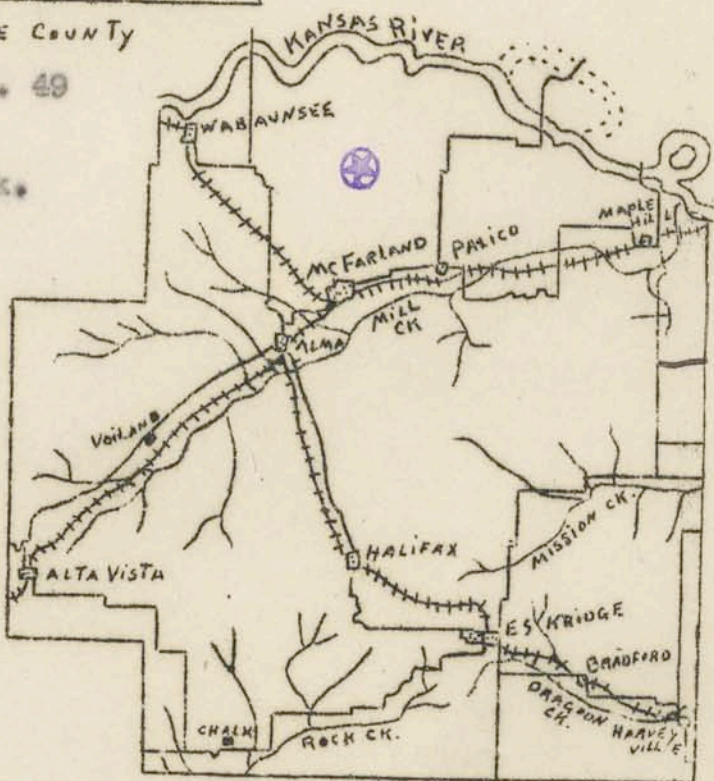
*Tripsacum dactyloides*

L.

WABAUNSEE COUNTY

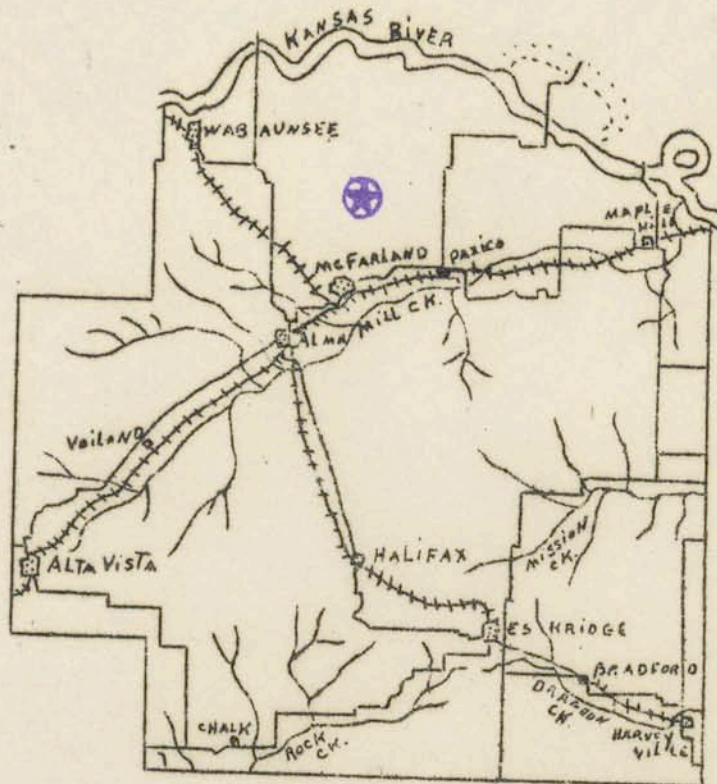
Map No. 49

*Uniola latifolia* Michx.



WABAUNSEE COUNTY

Map No. 50



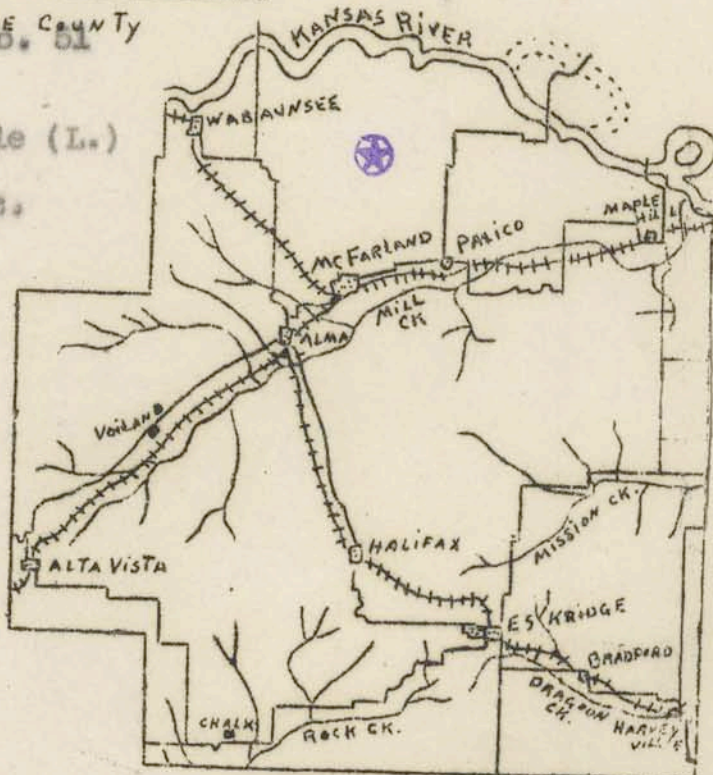
GRAMINEAE

*Stipa spartea* Trin.

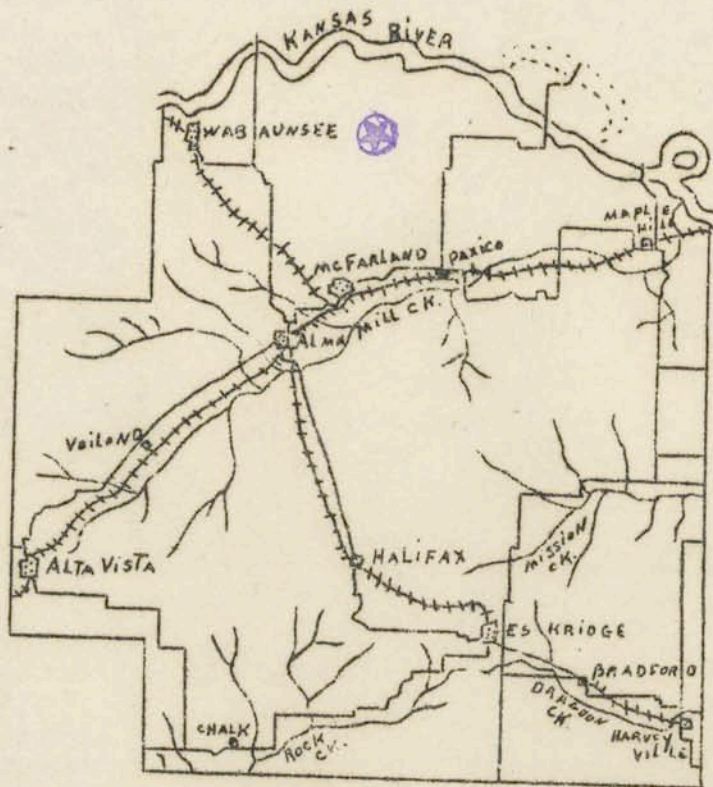
WABAUNSEE COUNTY  
Map No. 51

*Syntherisma sanguinale* (L.)

Dulac.



WABAUNSEE COUNTY  
Map No. 52

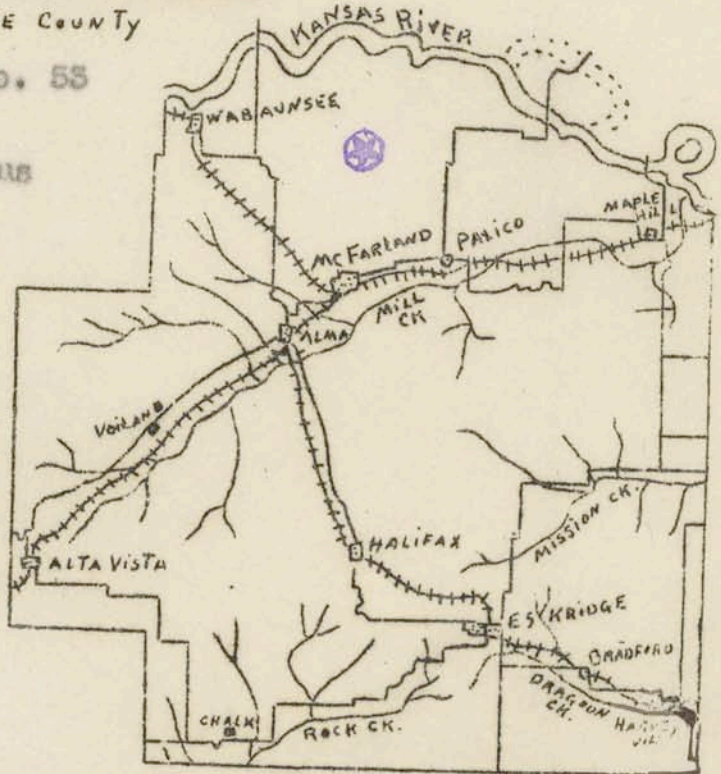


GRAMINEAE  
*Sporobolus cryptanthus*  
 (Torr.) Gray

WABAUNSEE COUNTY

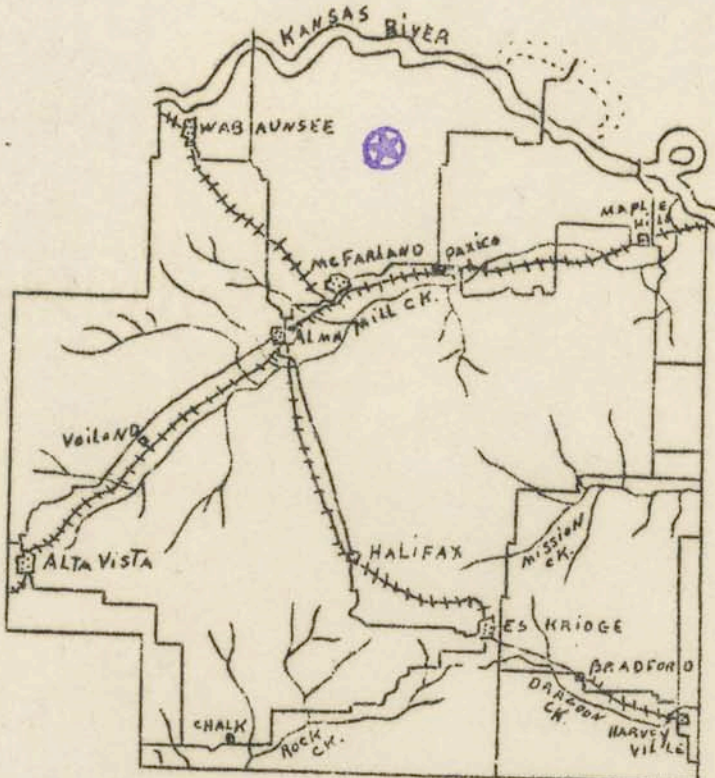
Map No. 55

*Muhlenbergia cuspidatus*  
 (Torr.) Nash



WABAUNSEE COUNTY

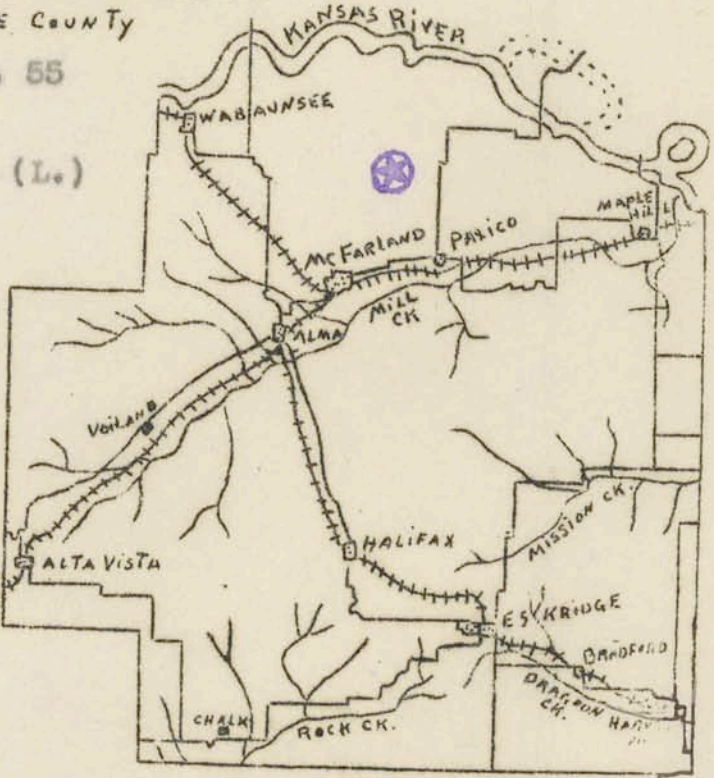
Map No. 54



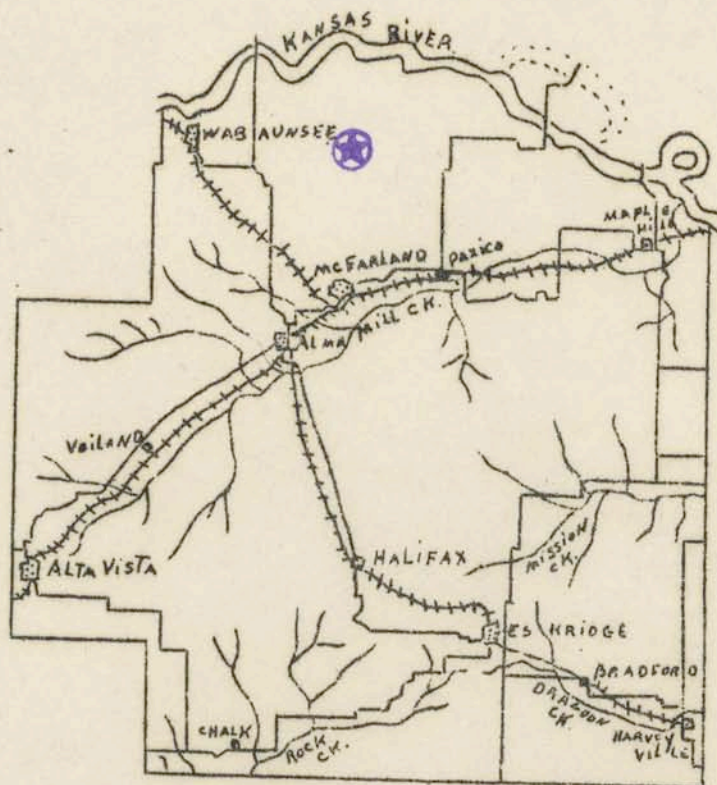
GRAMINEAE  
*Tridens flava* (L.)  
 Hitchc.

WABAUNSEE COUNTY  
 Map No. 55

*Spartina cynosuroides* (L.)  
 Roth.



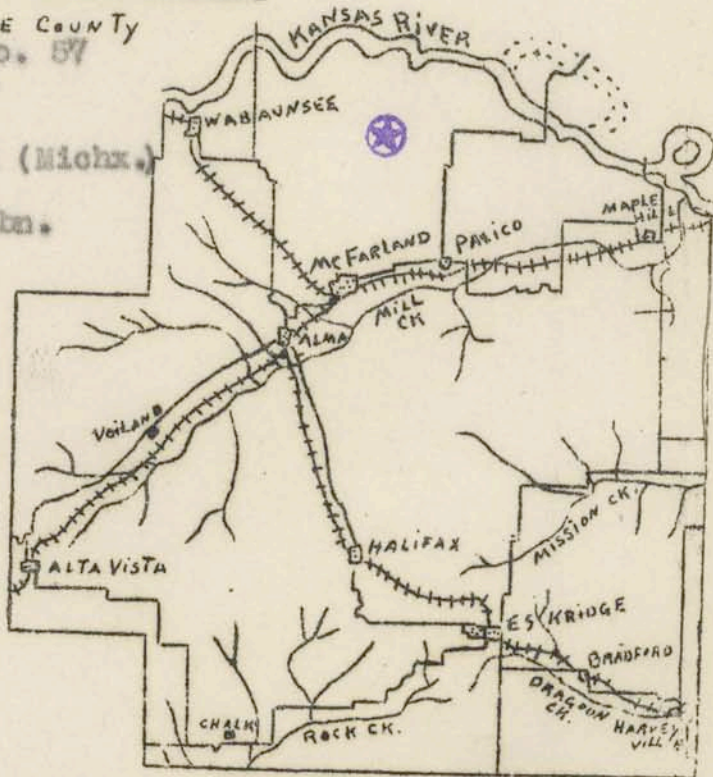
WABAUNSEE COUNTY  
 Map No. 56



GRAMINEAE  
*Sorgastrum nutans*  
 (L.) Nash

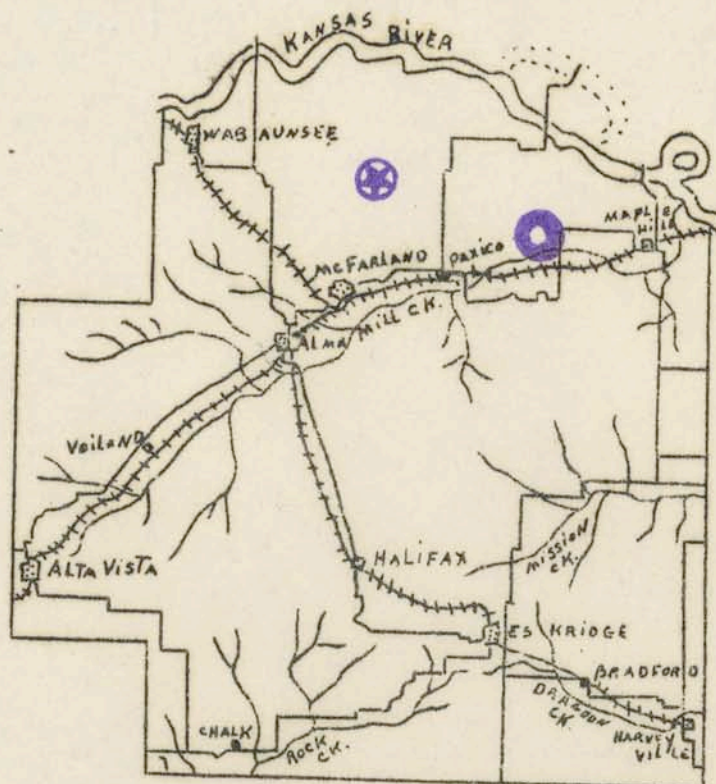
WABAUNSEE COUNTY  
 Map No. 57

*Sphenopholis obtusata* (Michx.)  
 Scribn.



WABAUNSEE COUNTY  
 Map No. 58





GRAMINEAE

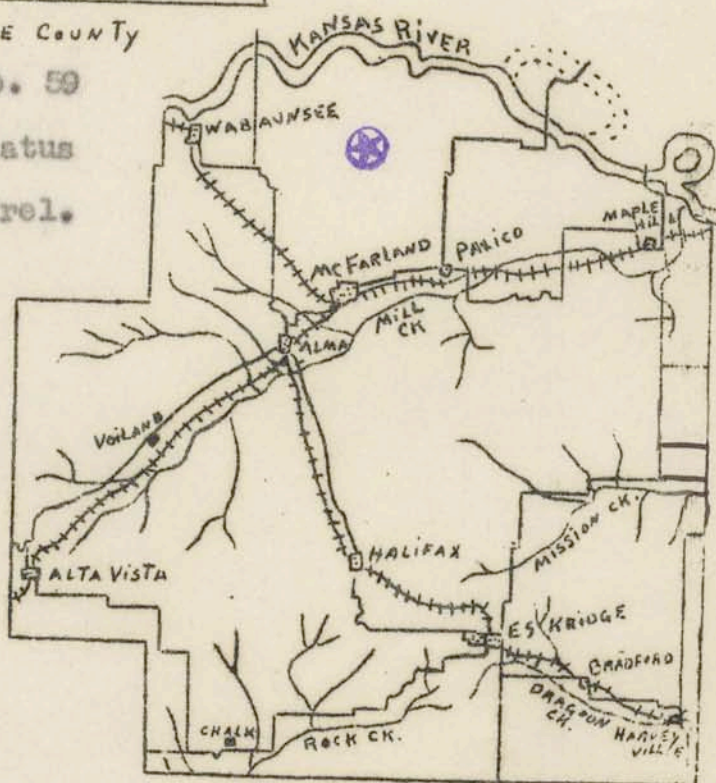
*Poa compressa* L.

WABAUNSEE COUNTY

Map No. 59

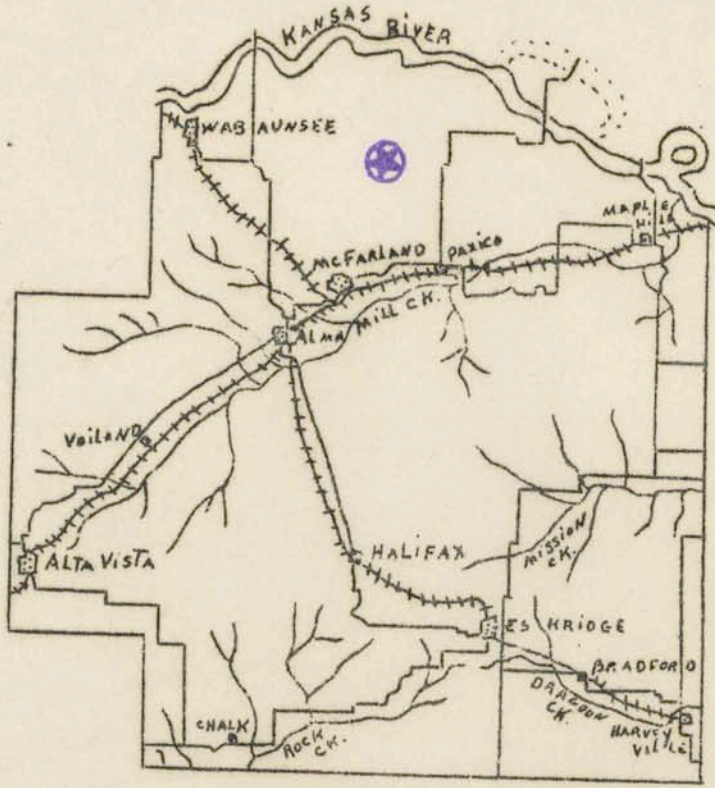
*Schedonnardus paniculatus*

(Nutt.) Trel.



WABAUNSEE COUNTY

Map No. 60



GRAMINEAE

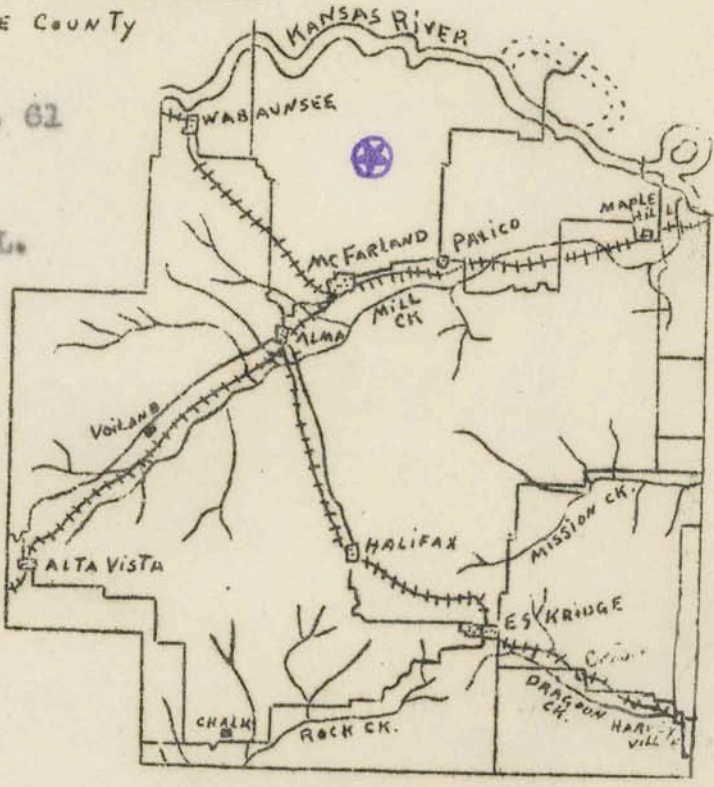
*Atheropogon curtispendus* (Michx.)

Fourn.

WABAUNSEE COUNTY

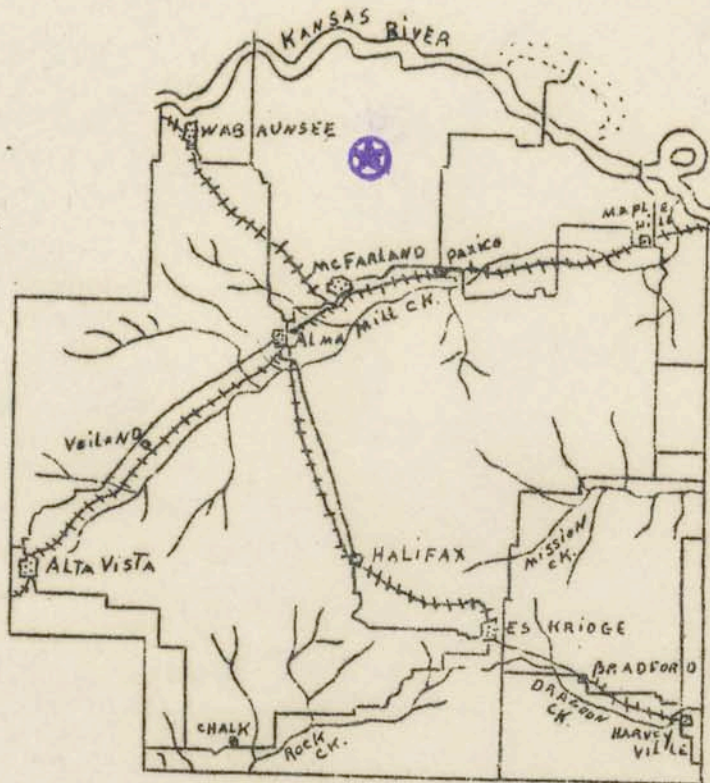
Map No. 61

*Cenchrus tribuloides* L.



WABAUNSEE COUNTY

Map No. 62



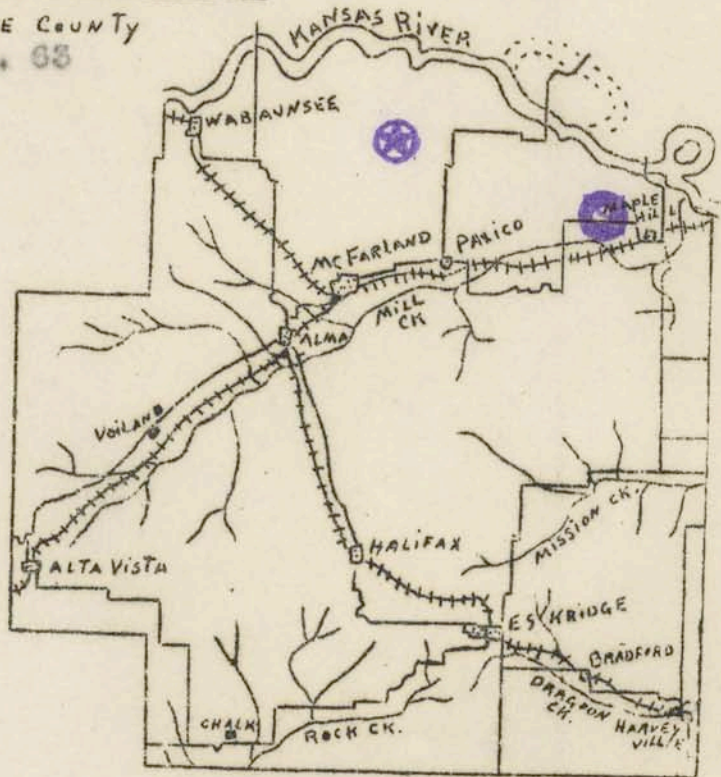
GRAMINEAE

*Paspalum ciliatifolium*

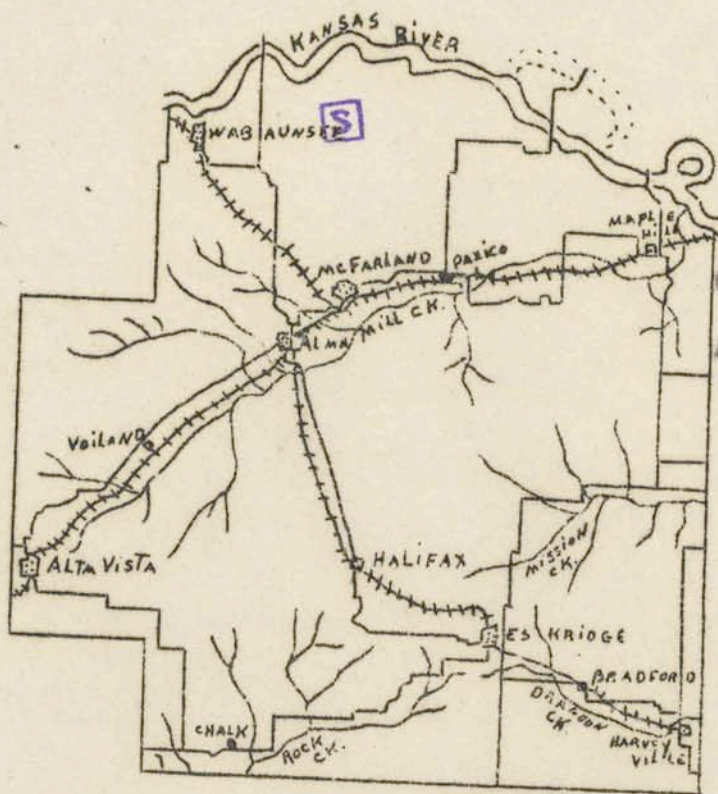
Nichx.

WABAUNSEE COUNTY  
Map No. 63

*Phleum pratense* L.



WABAUNSEE COUNTY  
Map No. 64



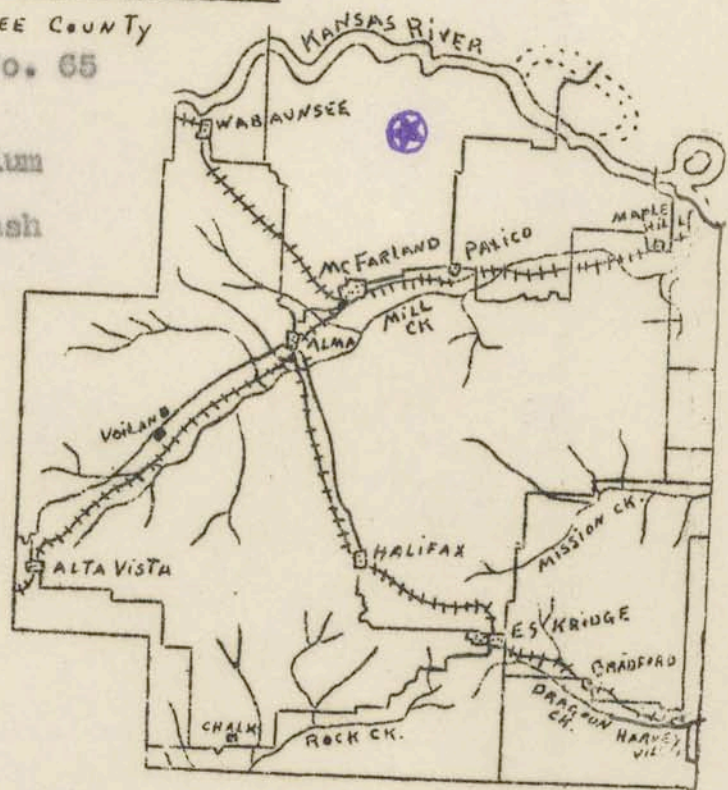
GRAMINEAE

*Agrostis hyemalis* (Walt)

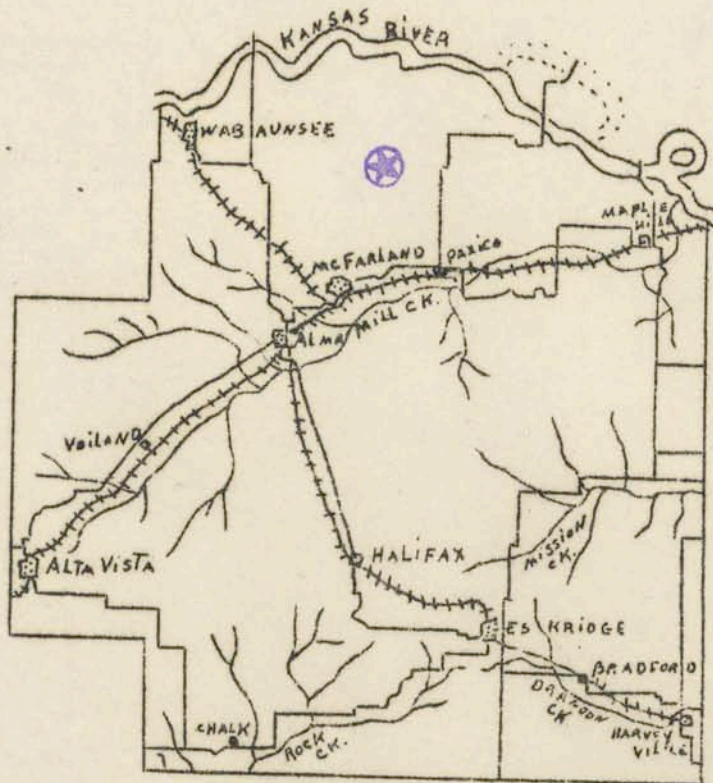
B.S.P.

WABAUNSEE COUNTY  
Map No. 65

*Schizachyrium scoparium*  
(Michx.) Nash



WABAUNSEE COUNTY  
Map No. 66



GRAMINEAE

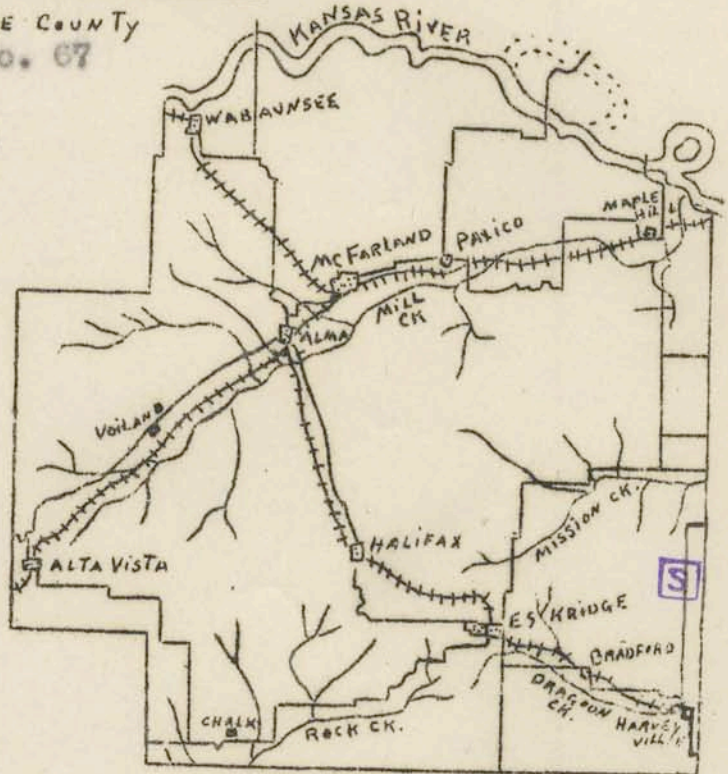
*Agropyron repens* (L.)

Beauv. (glaucum)

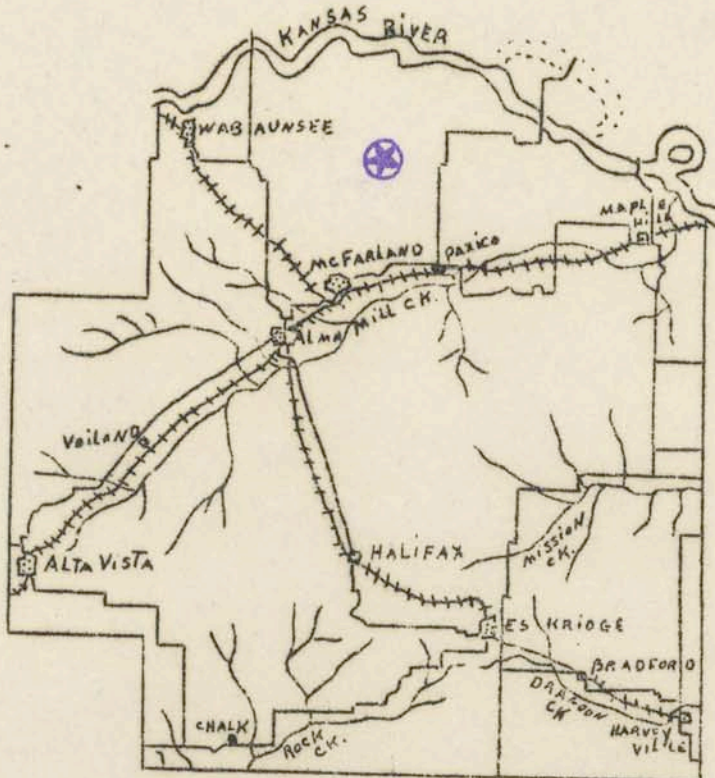
Hitchc.

WABAUNSEE COUNTY  
Map No. 67

*Bromus japonicus* D.C.



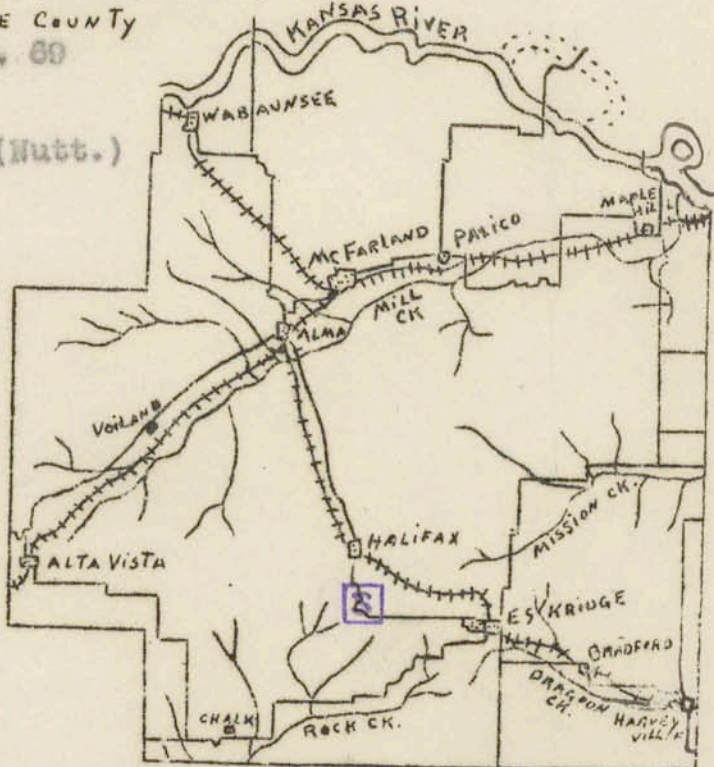
WABAUNSEE COUNTY  
Map No. 68



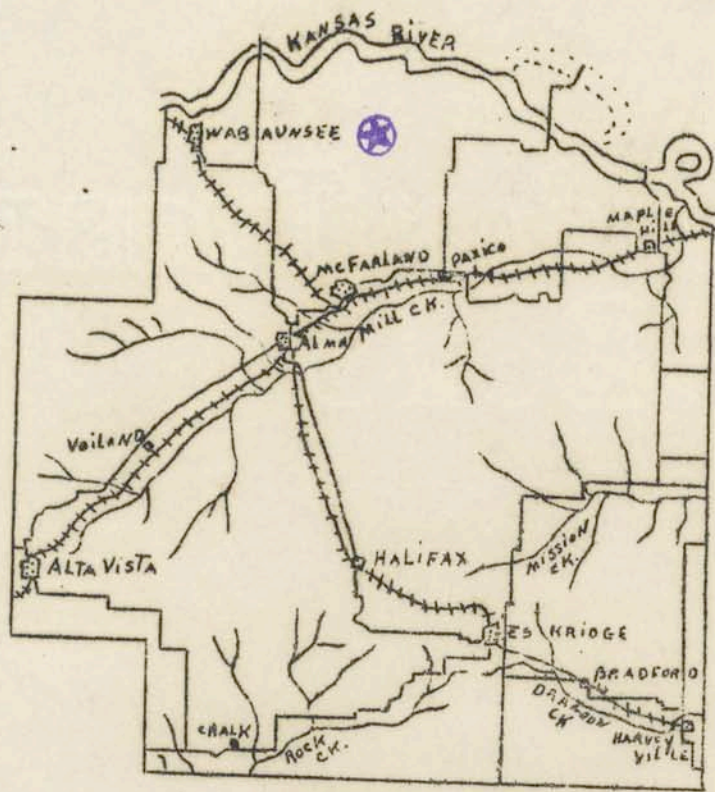
GRAMINEAE  
*Bouteloua oligostachy*  
 (Nutt.) Torr.

WABAUNSEE COUNTY  
 Map No. 69

*Bulbilis dactyloides* (Nutt.)  
 Raf.



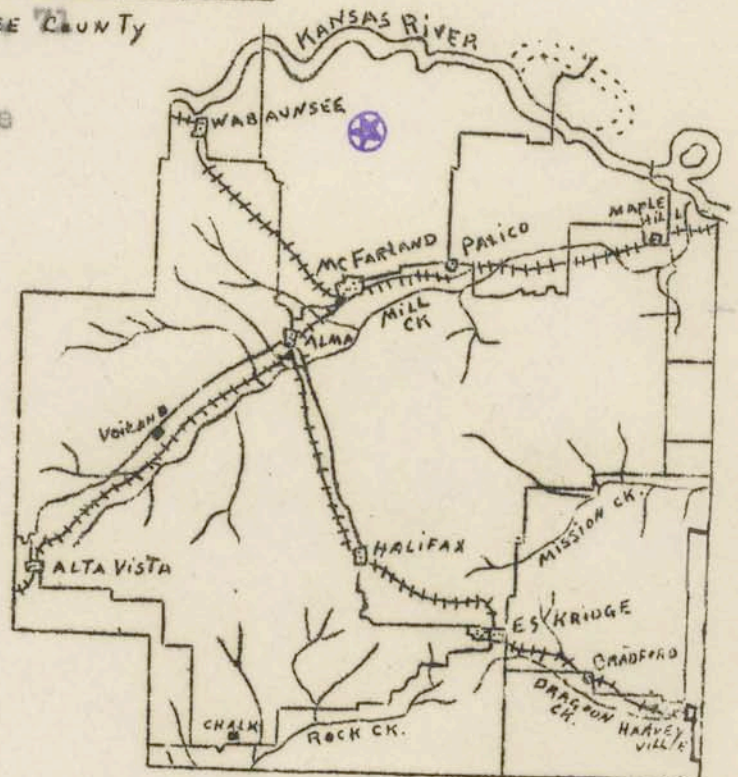
WABAUNSEE COUNTY  
 Map No. 70



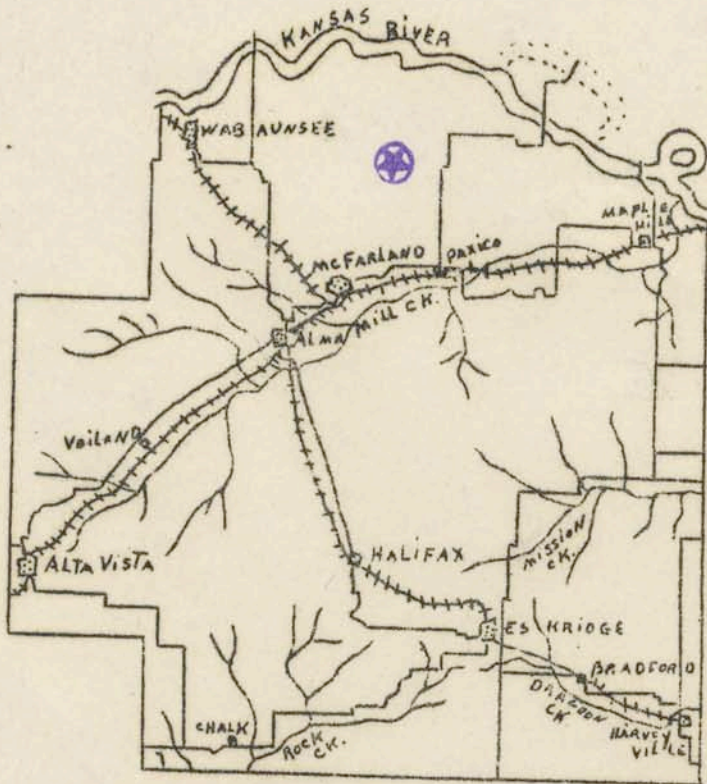
GRAMINEAE  
*Eragrostis capillaries*  
 (L.) Nees.

WABAUNSEE COUNTY

*Eragrostis pectinaceae*  
 (Michx.) Steud.



WABAUNSEE COUNTY  
 Map No. 72

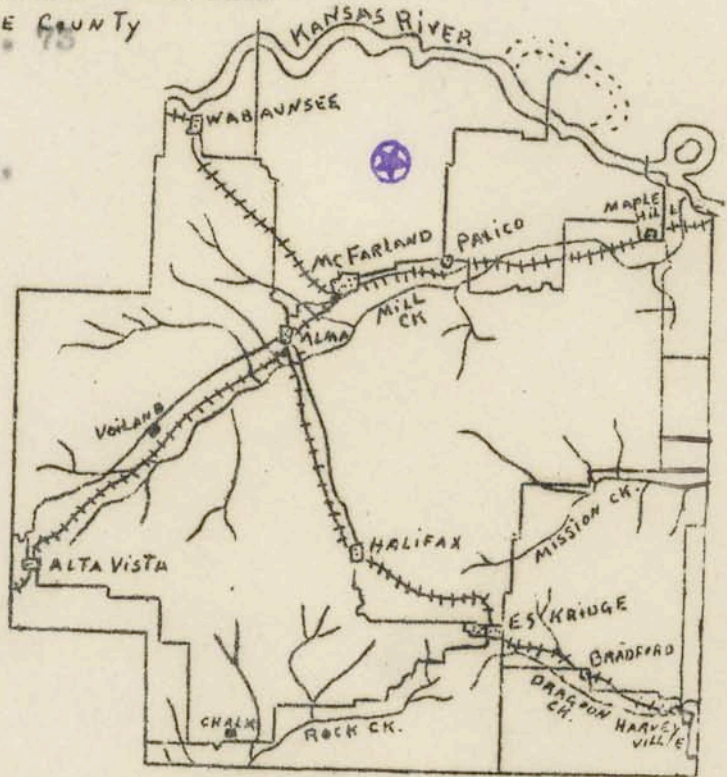


GRAMINEAE

*Eragrostis major* Host.

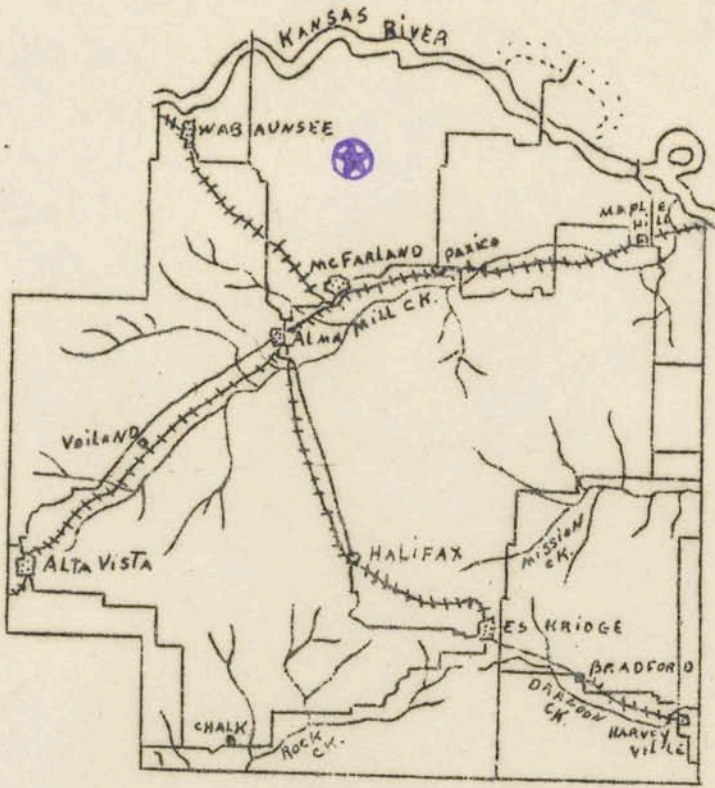
WABAUNSEE COUNTY  
Map No. 73

*Festuca nutans* Spreng.



WABAUNSEE COUNTY  
Map No. 74

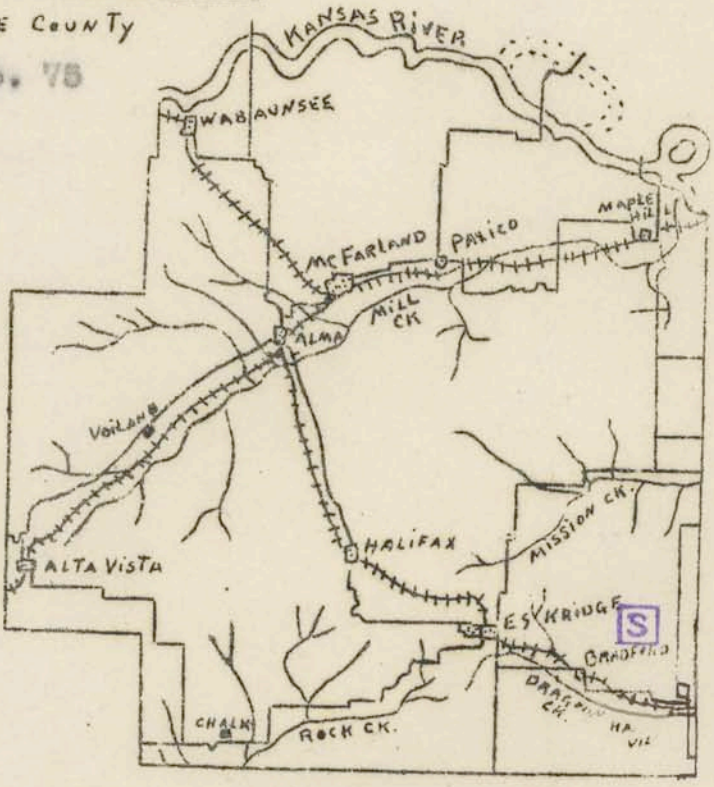




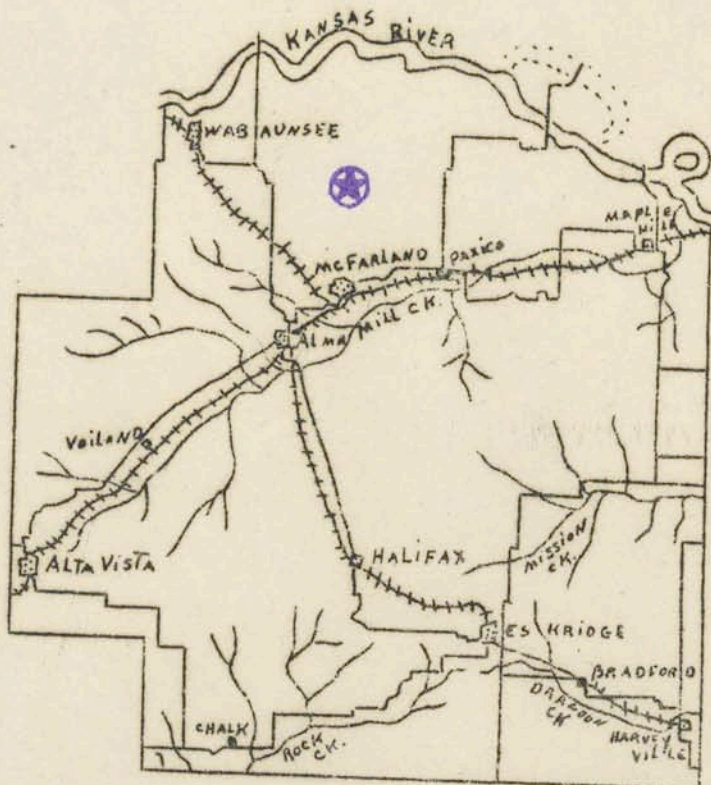
GRAMINEAE  
*Elymus canadensis* L.

WABAUNSEE COUNTY  
 Map No. 75

*Elymus virginicus* L.



WABAUNSEE COUNTY  
 Map No. 76



GRAMINEAE

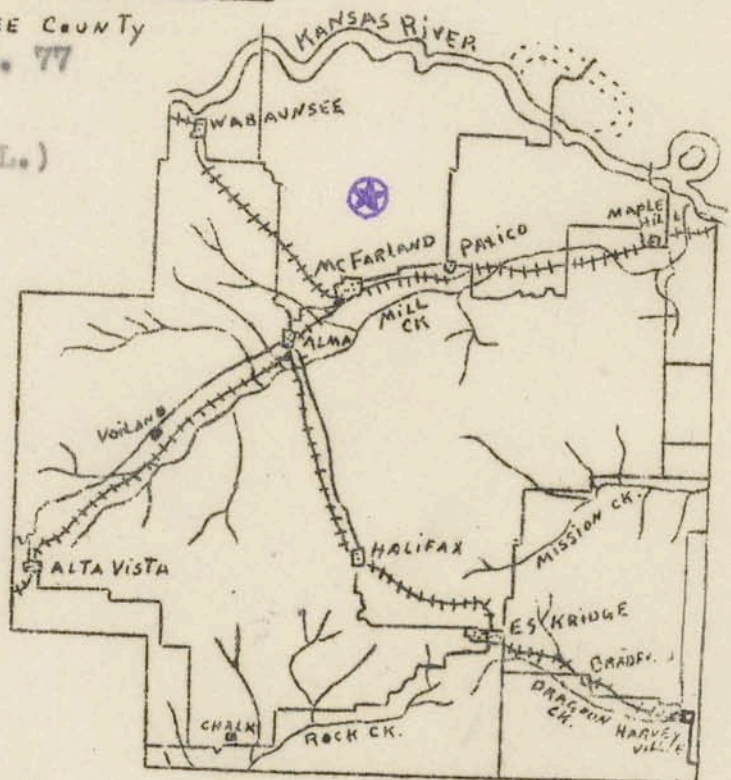
*Chaetochloa glauca* L.

Scribn.

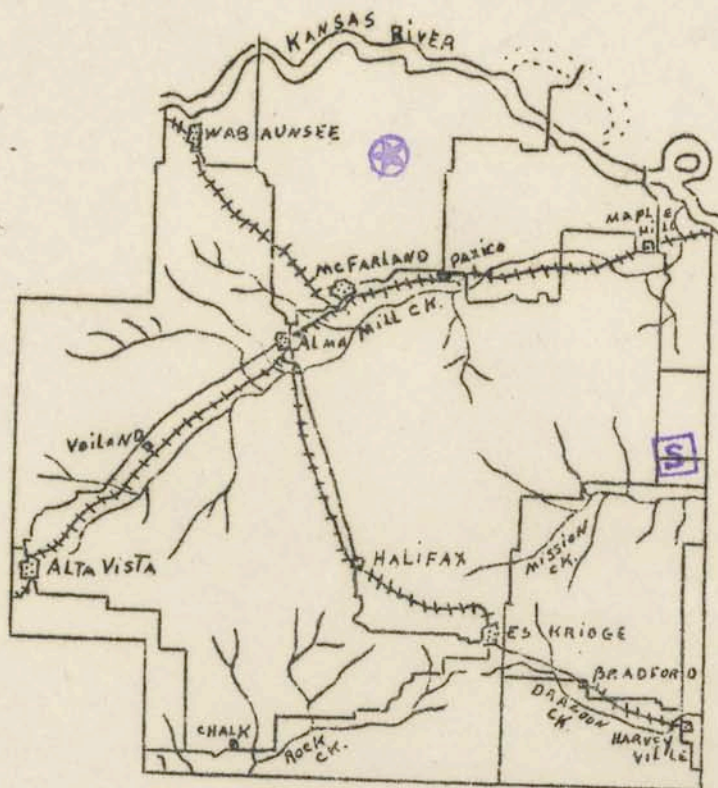
WABAUNSEE COUNTY  
Map No. 77

*Chaetochloa viridis* (L.)

Scribn.



WABAUNSEE COUNTY  
Map No. 78



GRAMINEAE

*Echinochloa crus-galli*

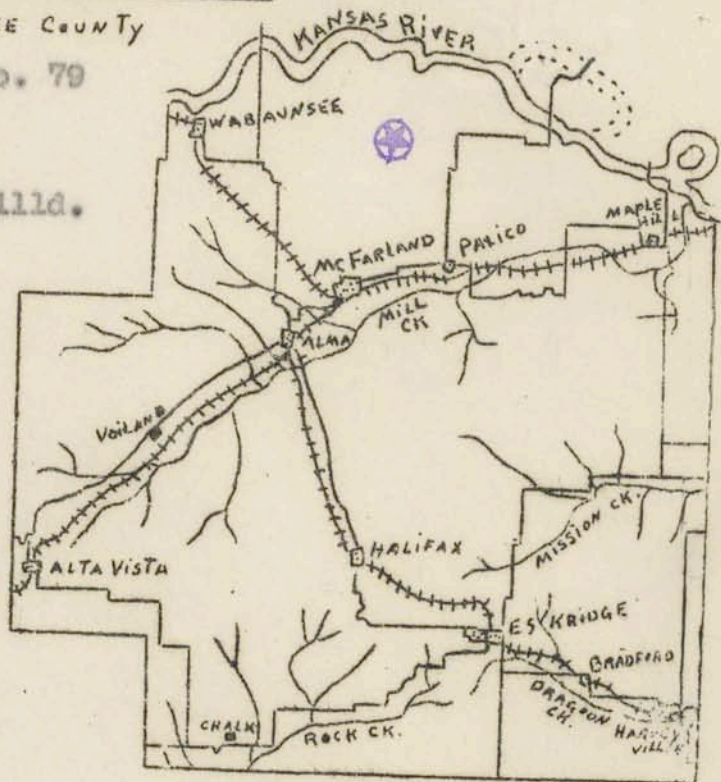
(L.) Beauv.

WABAUNSEE COUNTY

Map No. 79

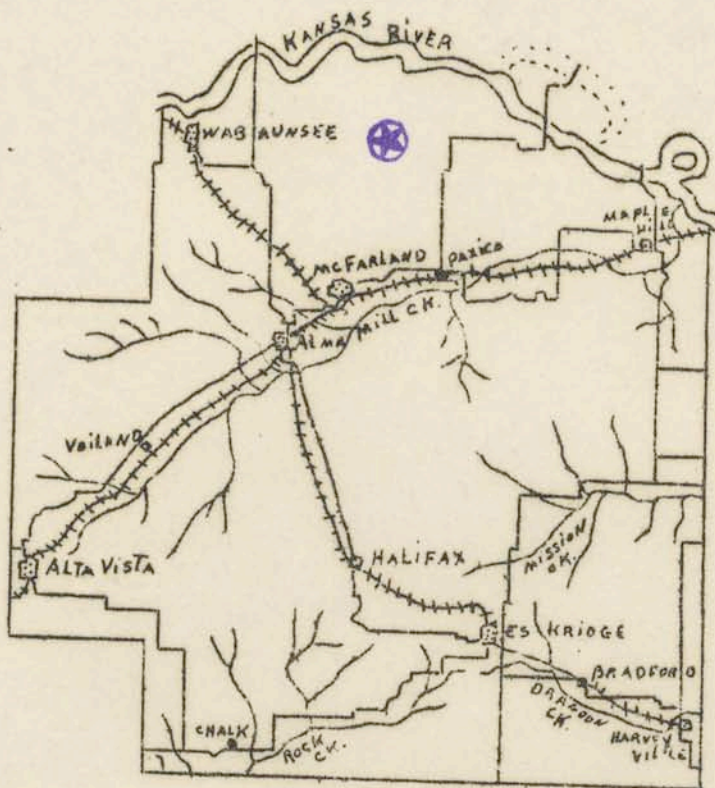
*Panicularia nervata* Willd.

Kuntze



WABAUNSEE COUNTY

Map No. 80



GRAMINEAE

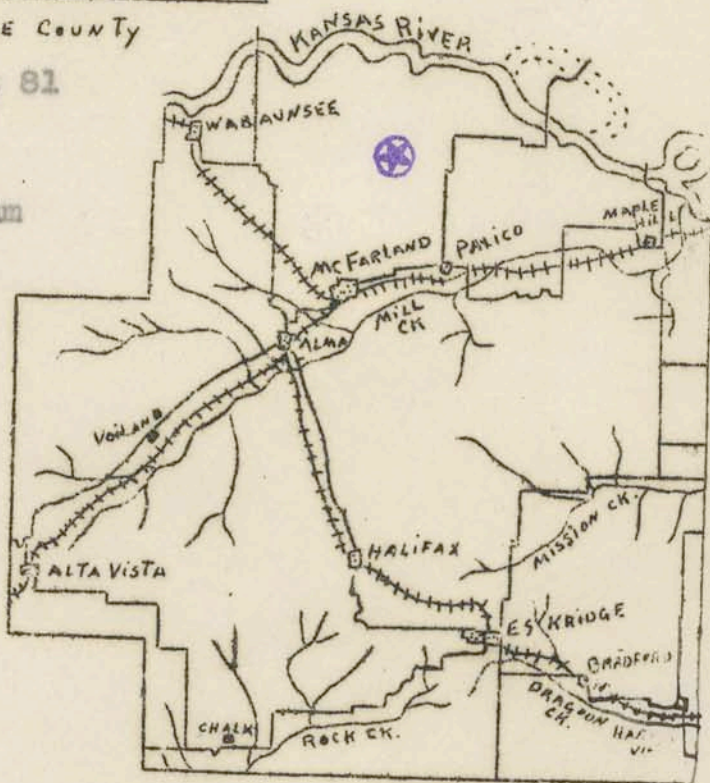
*Panicum capillare* L.

WABAUNSEE COUNTY

Map No. 81

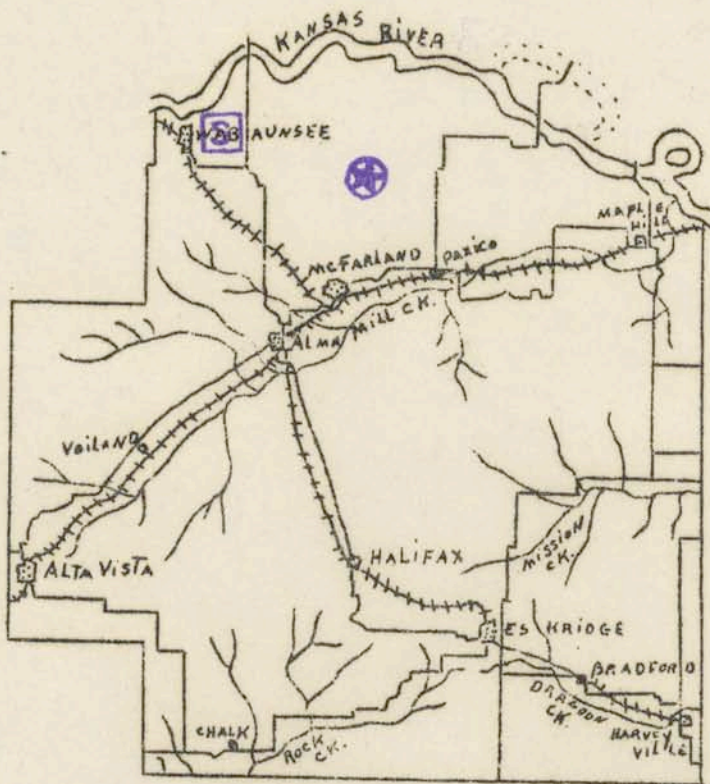
*Panicum dichotomiflorum*

NICHX.



WABAUNSEE COUNTY

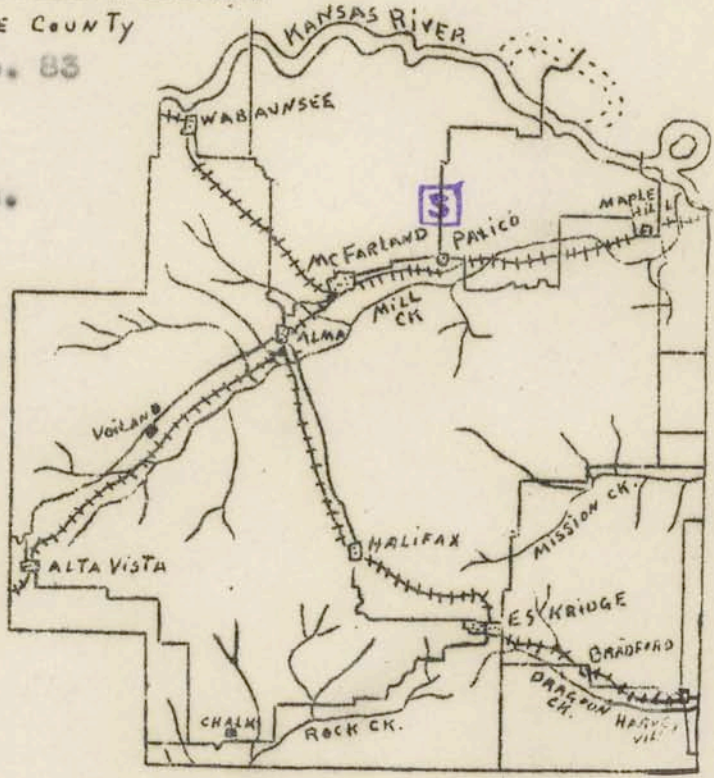
Map No. 82



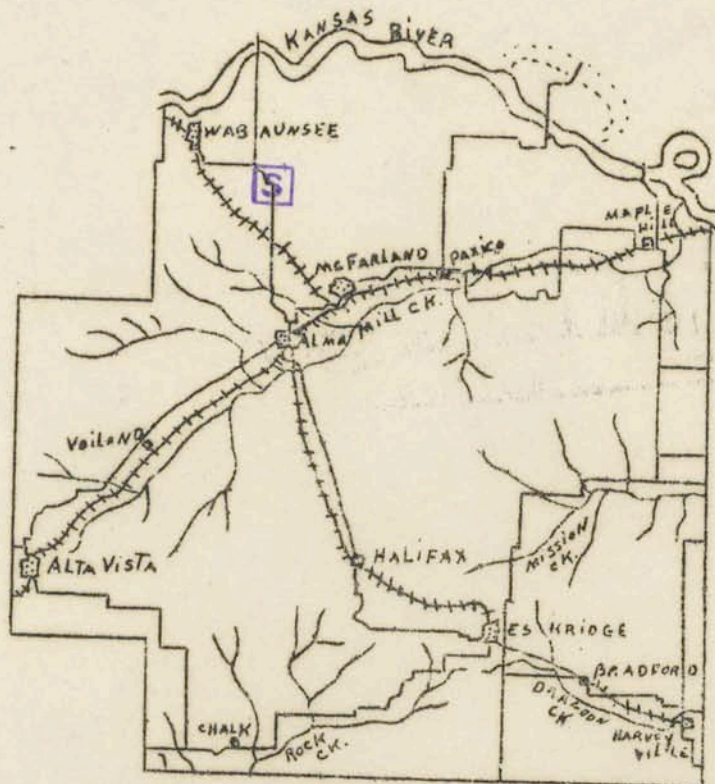
GRASSHOPPER  
*Panicum scribnerianum*  
 Nash.

WABAUNSEE COUNTY  
 Map No. 83

*Koeleria cristata* Pers.



WABAUNSEE COUNTY  
 Map No. 84



IRIDACEAE

*Sistrinchium campestre*

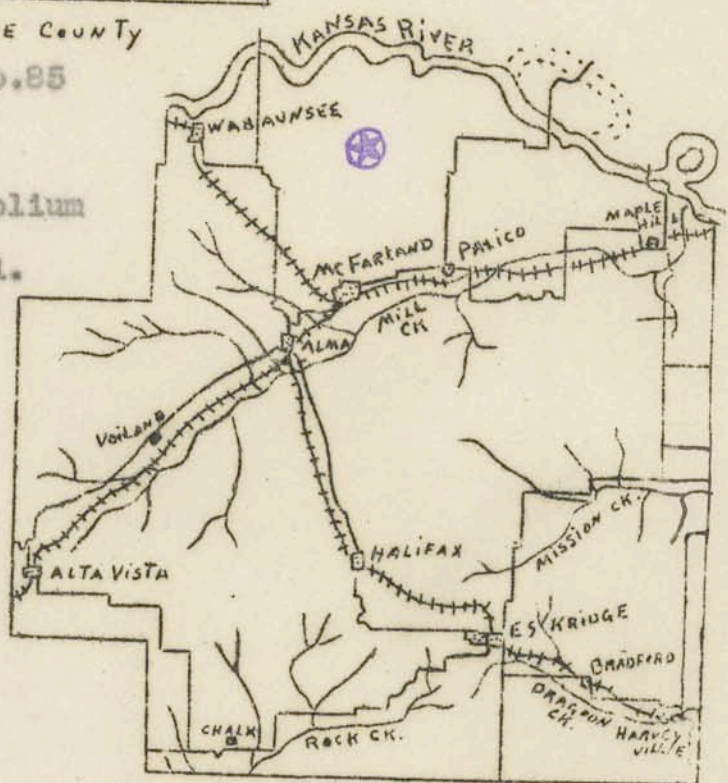
Bicknell

WABAUNSEE COUNTY

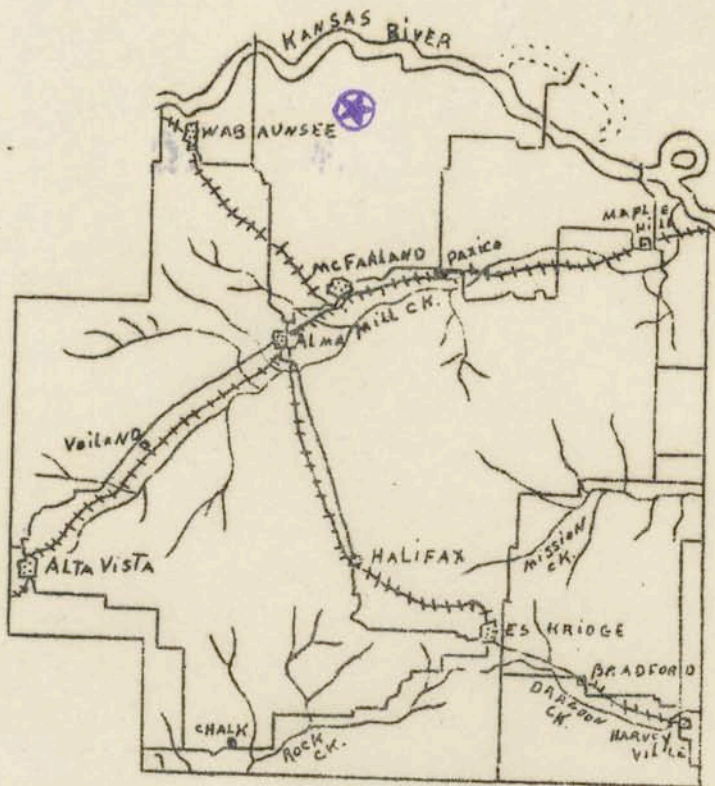
Map No. 85

*Sistrinchium angustifolium*

Mill.



WABAUNSEE COUNTY  
Map No. 86



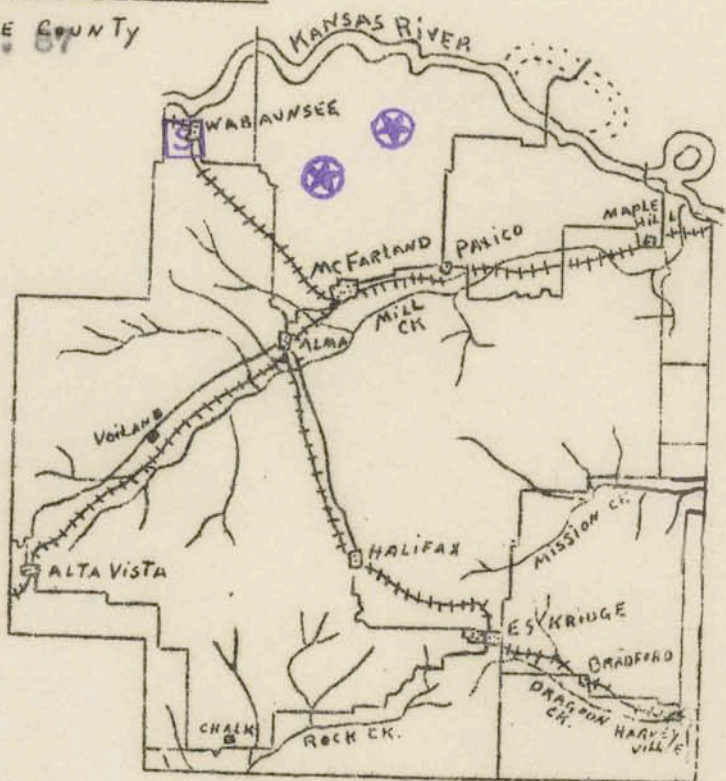
MAGNOLIACEAE

*Asimina triloba* Dunal.

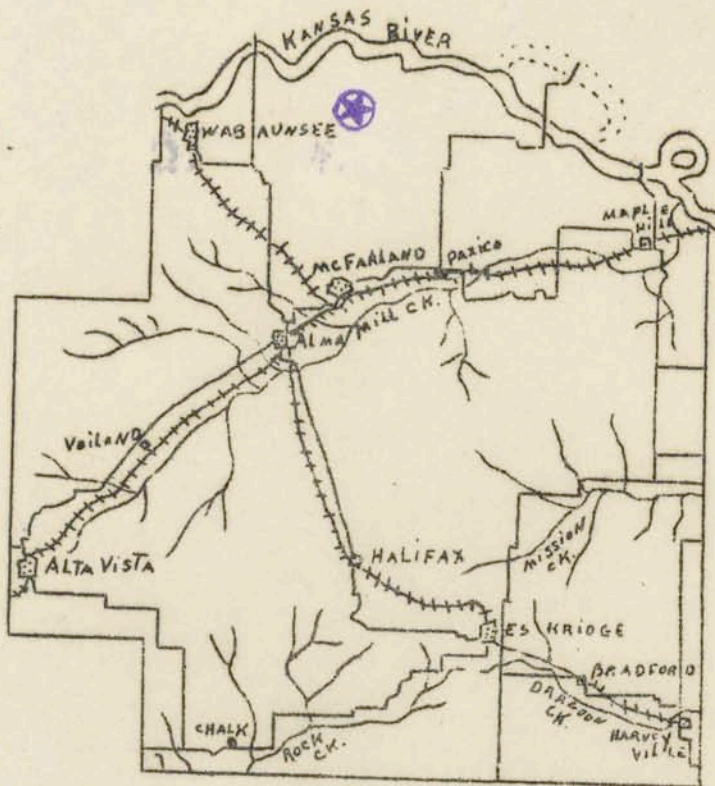
WABAUNSEE COUNTY  
Map No. 87

SAURURACEAE

*Juglans nigra* L.



WABAUNSEE COUNTY  
Map No. 88



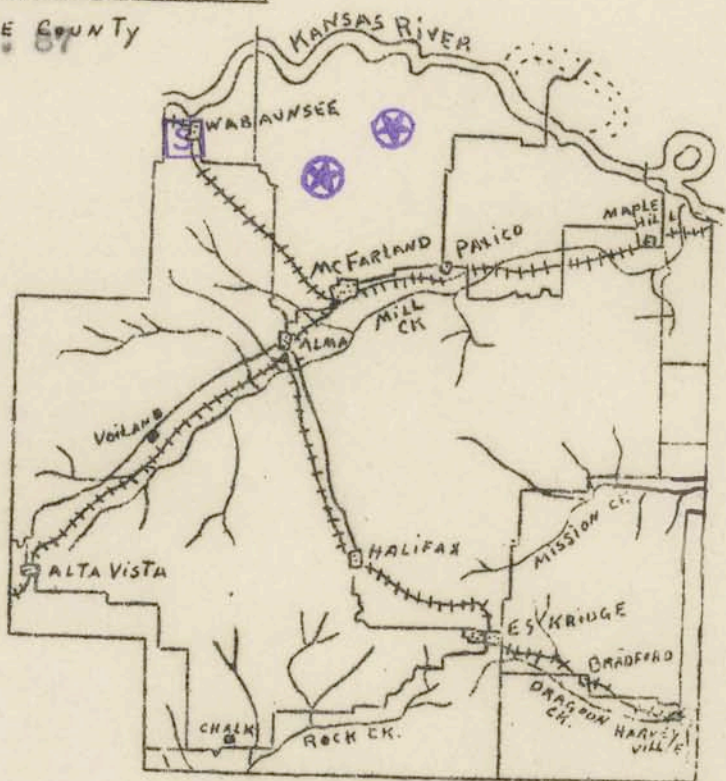
MAGNOLIACEAE

*Asimina triloba* Dunal.

WABAUNSEE COUNTY  
Map No. 87

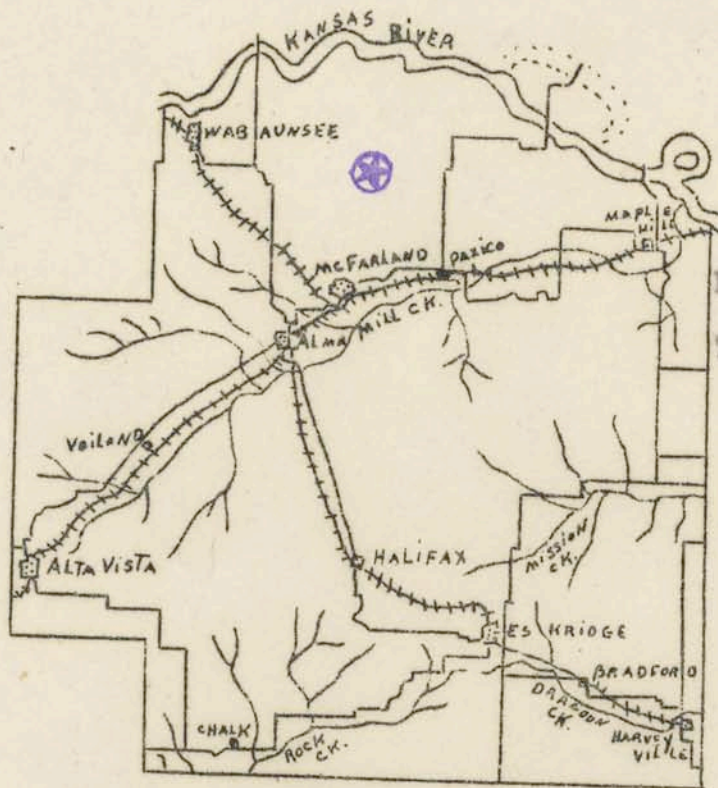
SAURURACEAE

*Juglans nigra* L.



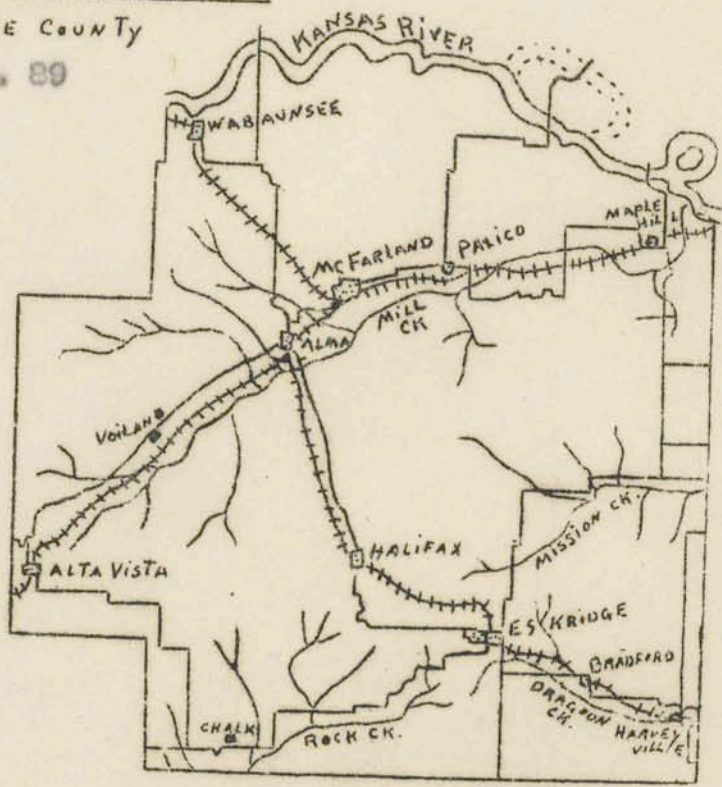
WABAUNSEE COUNTY  
Map No. 88



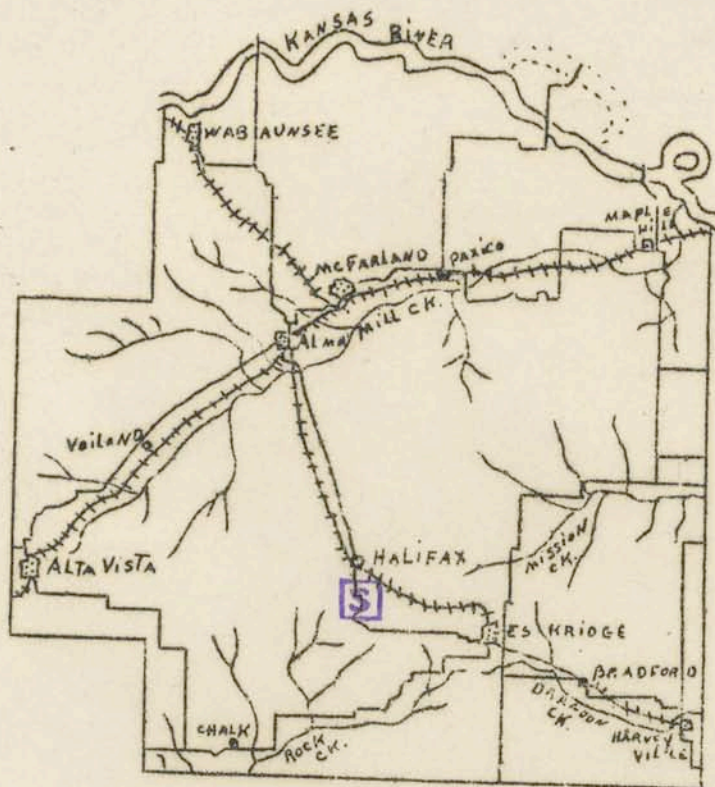


RANUNCULACEAE  
*Thalictrum revolutum* DC.

WABAUNSEE COUNTY  
 Map No. 89



WABAUNSEE COUNTY



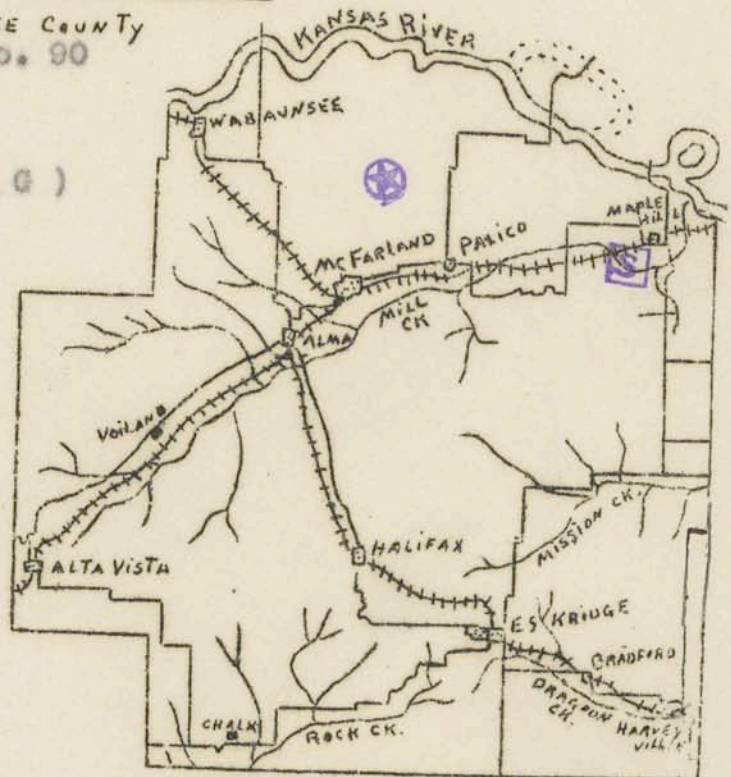
RANUNCULACEAE

*Thalictrum dioicum* L.

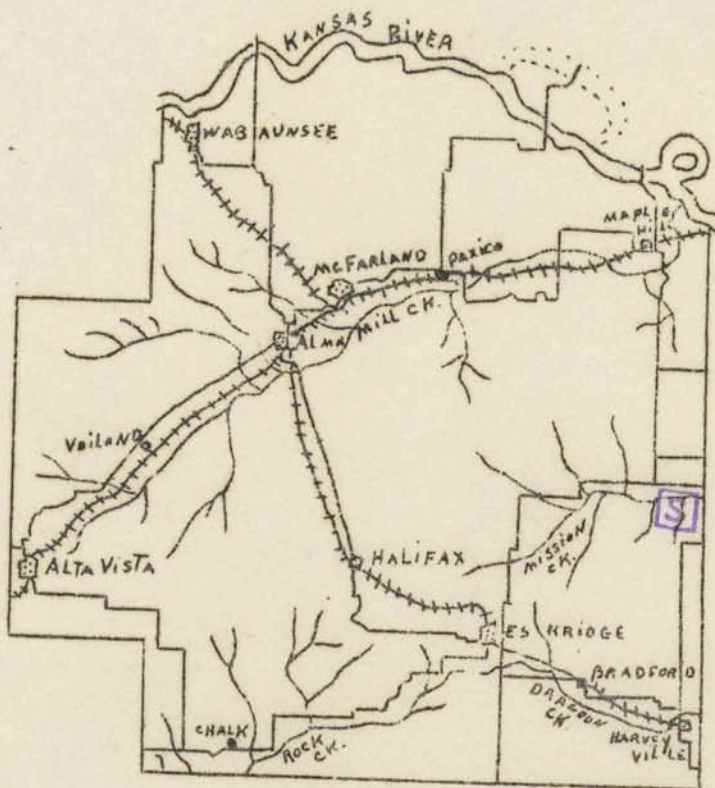
WABAUNSEE COUNTY  
Map No. 90

*Viorna pitcheri* ( T & G )

Britton



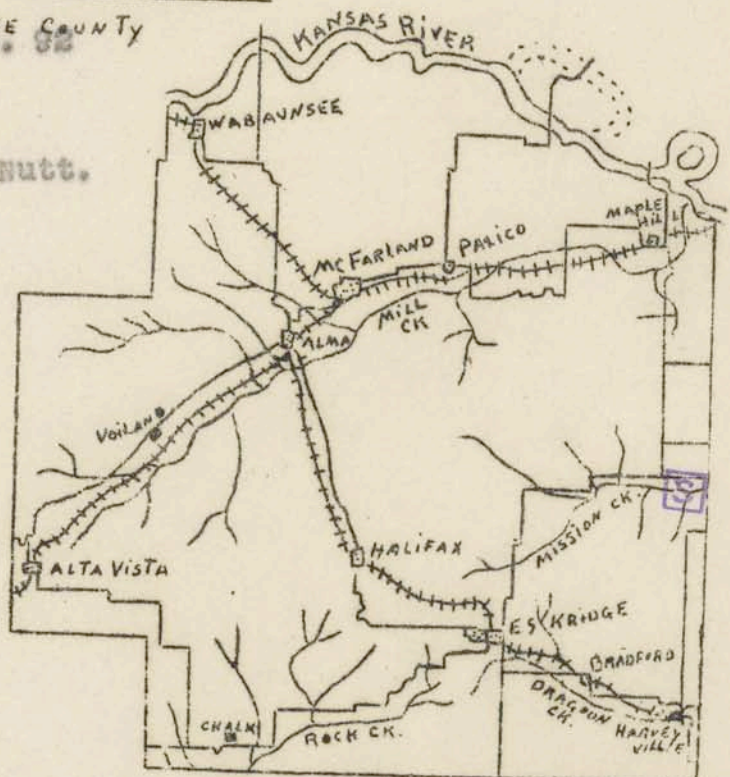
WABAUNSEE COUNTY  
Map No. 91



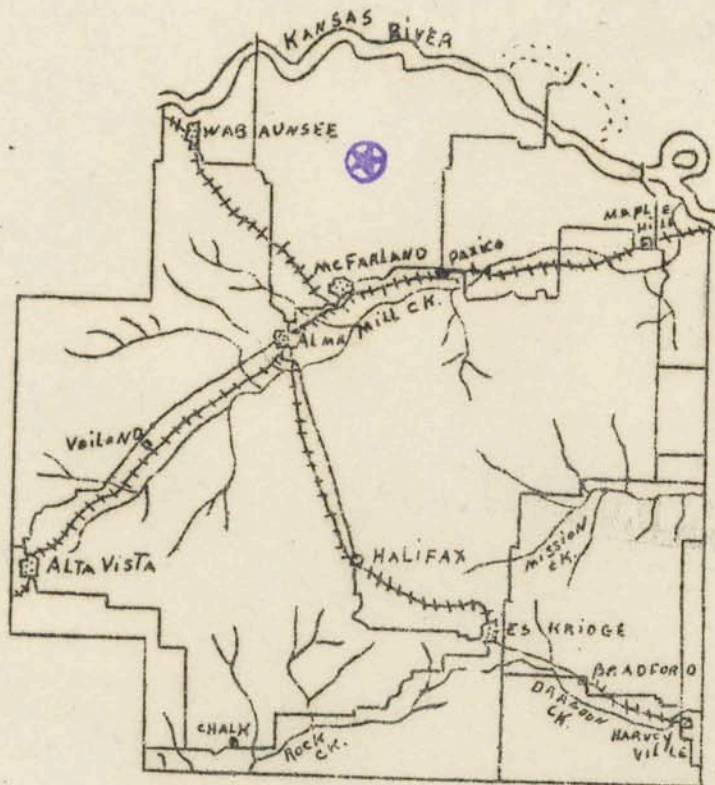
RANUNCULACEAE  
*Ranunculus abortivus* L.

WABAUNSEE COUNTY  
 Map No. 82

*Delphinium virescens* Nutt.



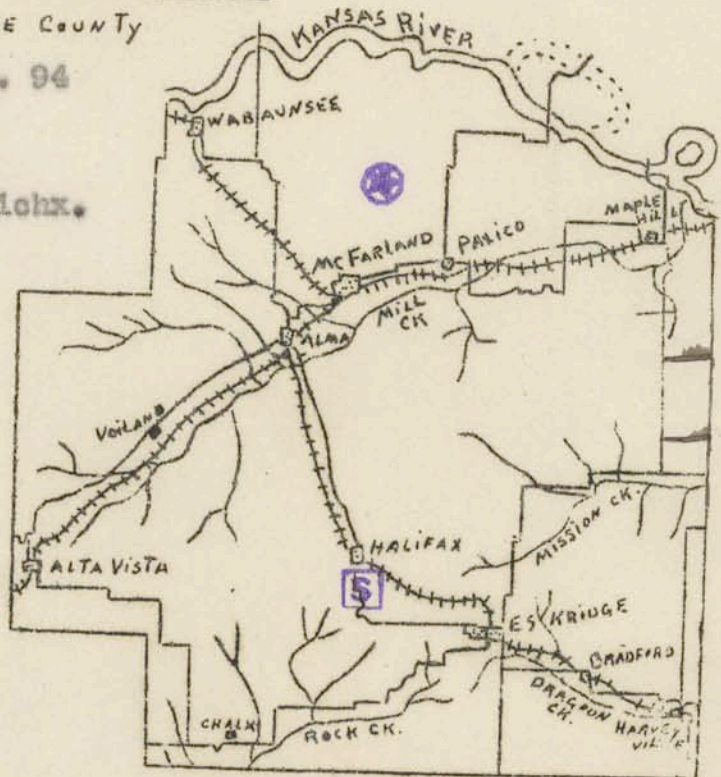
WABAUNSEE COUNTY  
 Map No. 93



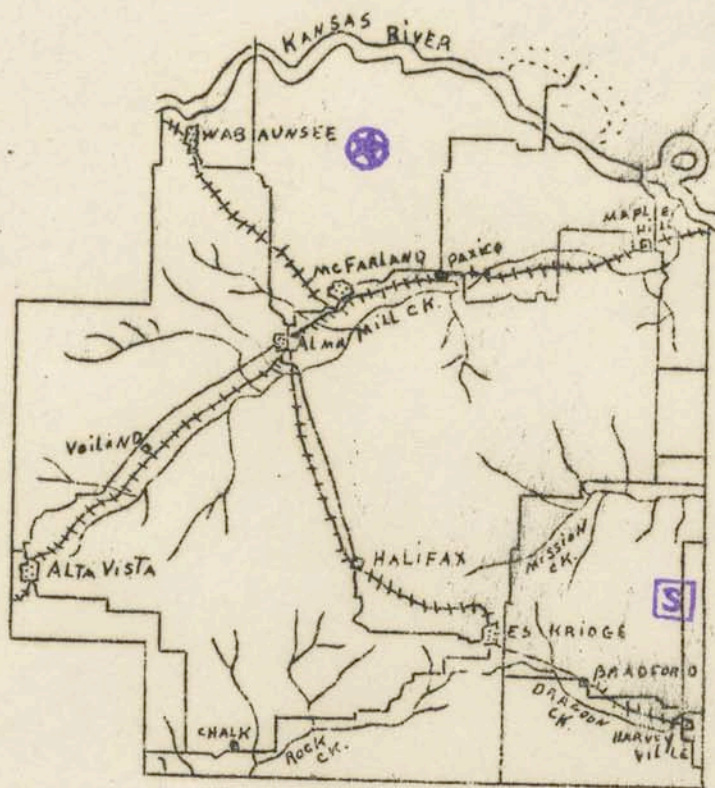
RANUNCULACEAE  
*Delphinium carolinianum*  
 Walt.

WABAUNSEE COUNTY  
 Map No. 94

*Delphinium tricorne* Michx.



WABAUNSEE COUNTY  
 Map No. 95



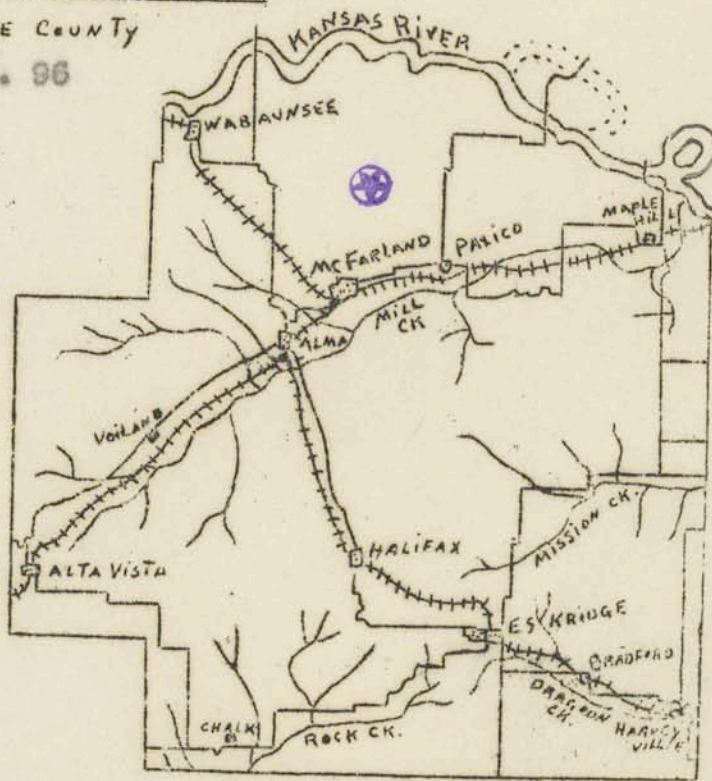
RANUNCULACEAE

*Anemone decapetala* Ard.

WABAUNSEE COUNTY

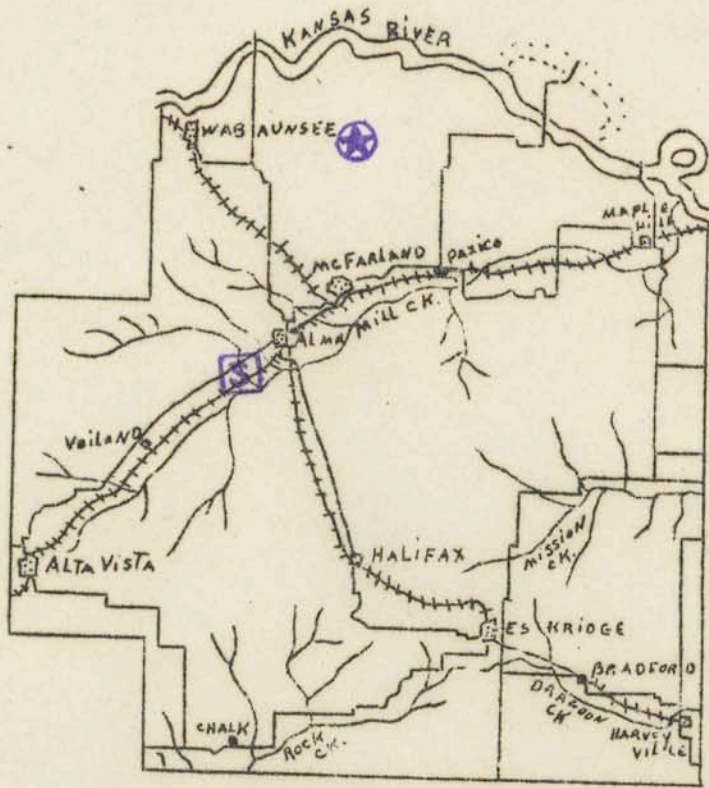
Map No. 96

*Anemone virginiana* L.



WABAUNSEE COUNTY

Map No. 97

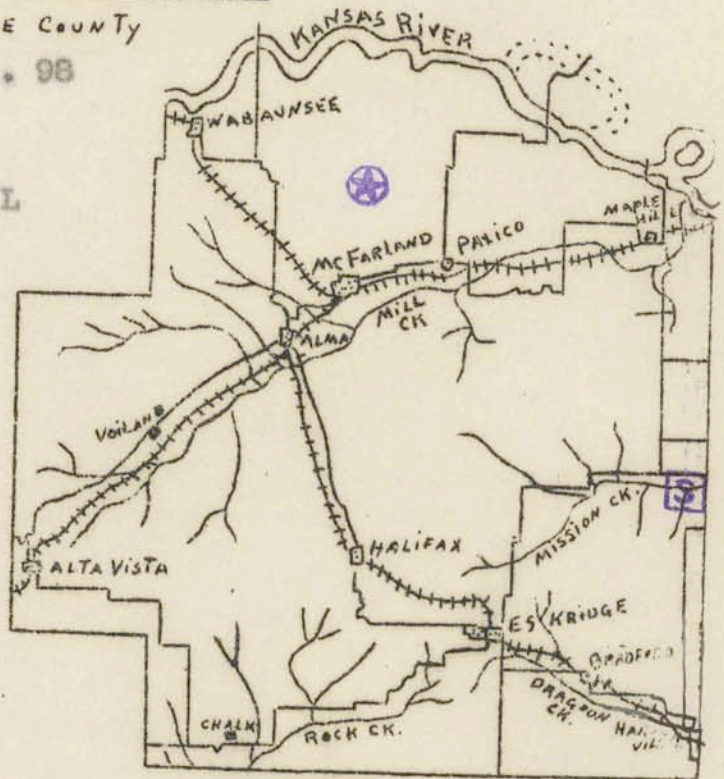


BERBERIDACEAE

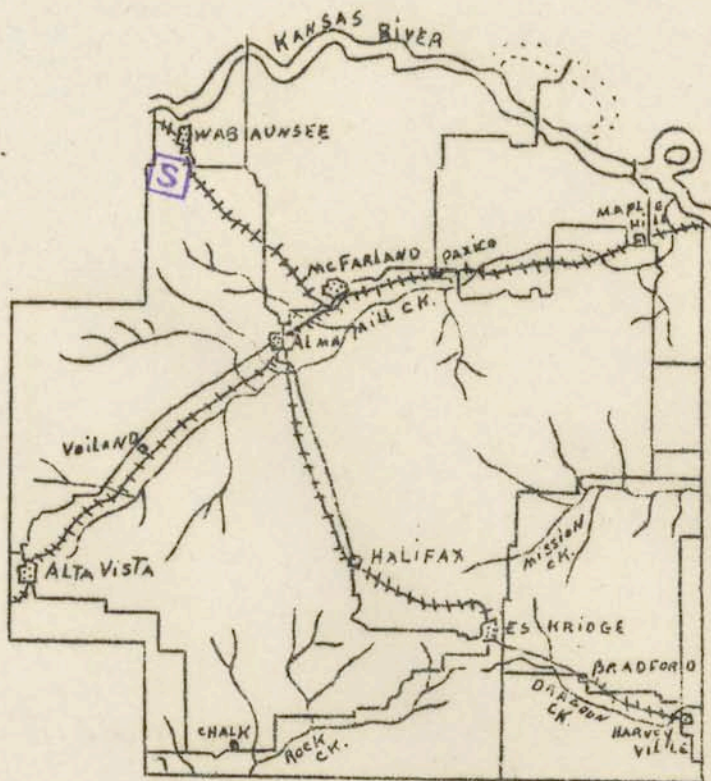
*Menispermum canadense* L.

WABAUNSEE COUNTY  
Map No. 98

*Podophyllum peltatum* L.



WABAUNSEE COUNTY  
Map No. 99

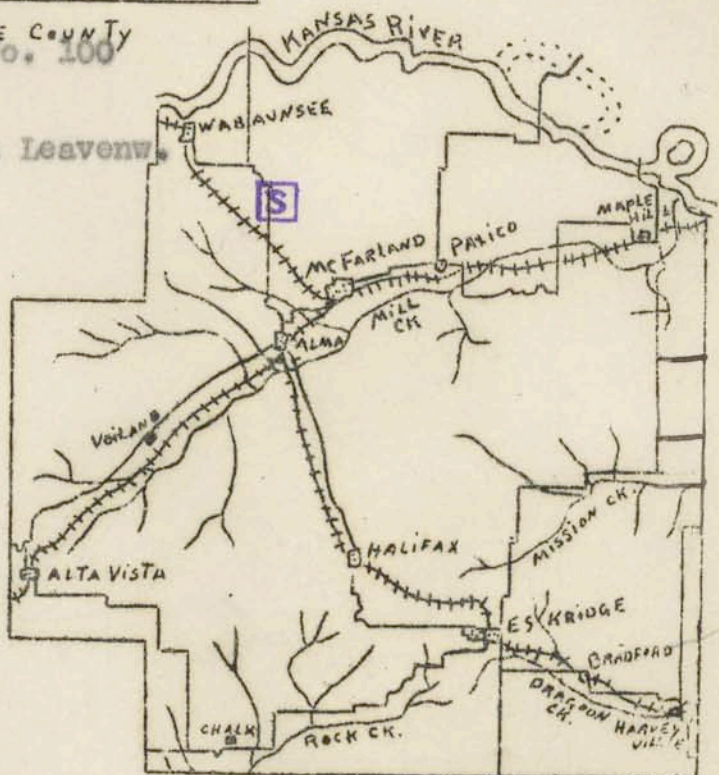


HALVACEAE

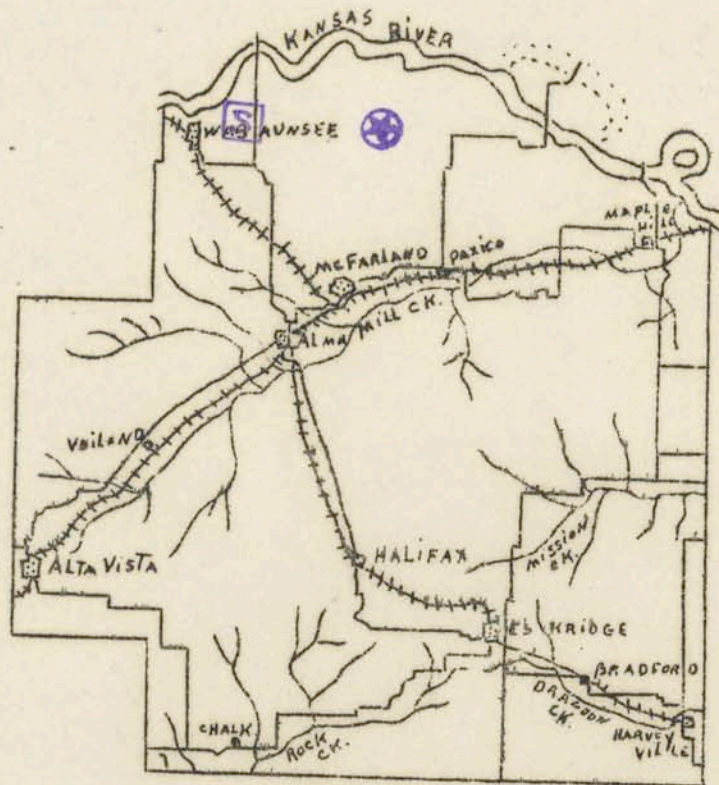
*Callirhoe digitata* Nutt.

WABAUNSEE COUNTY  
Map No. 100

*Callirhoe triangulata* Leavenw.



WABAUNSEE COUNTY  
Map No. 101



MALVACEAE

*Callirhoe alceoides*

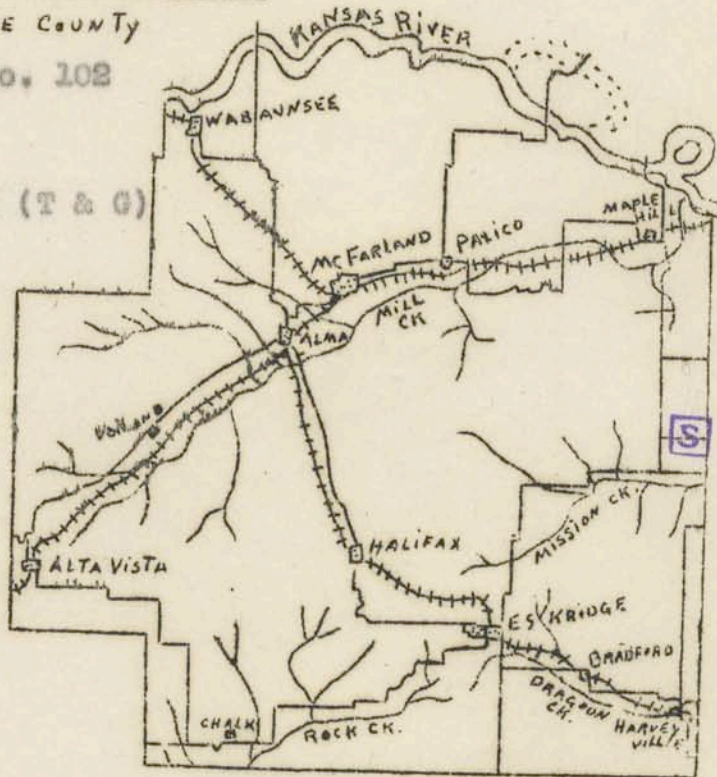
(Michx.) A. Gray

WABAUNSEE COUNTY

Map No. 102

*Callirhoe involucrata* (T & G)

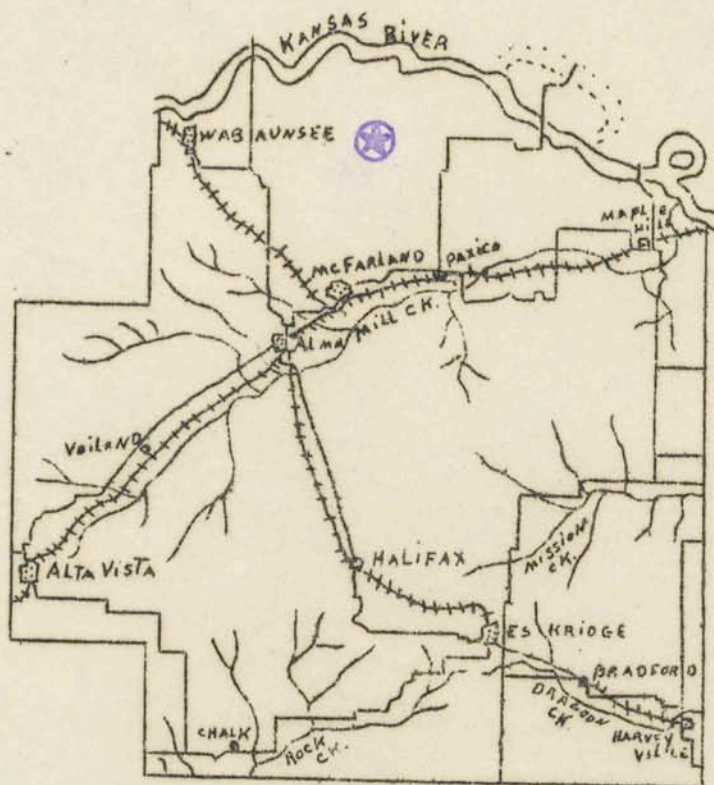
Gray



WABAUNSEE COUNTY

Map No. 103



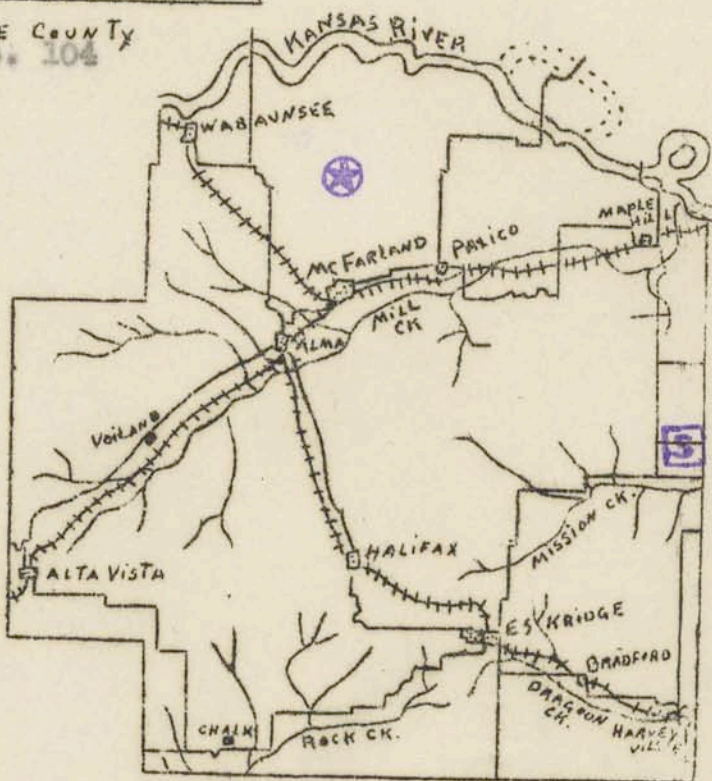


Malvaceae

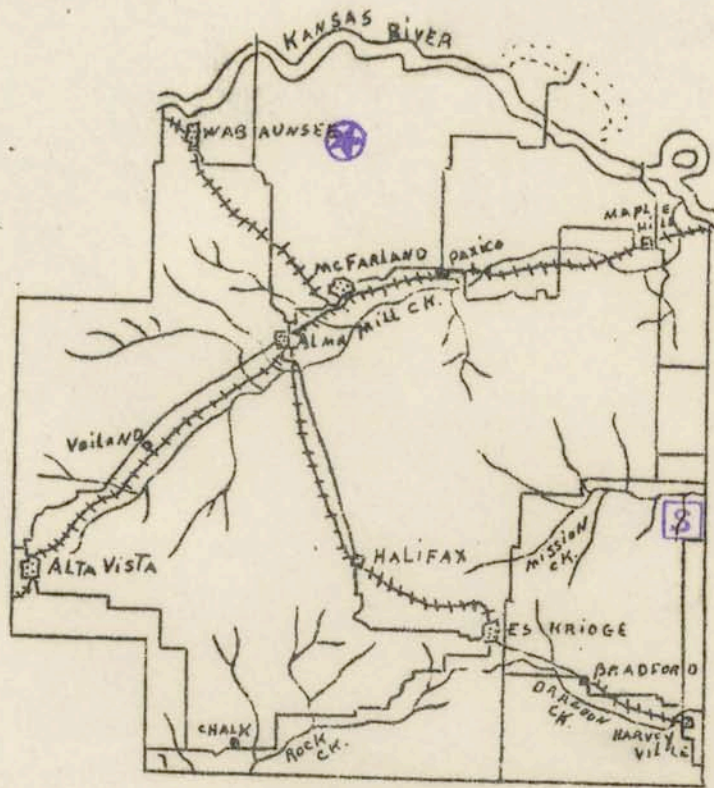
*Hibiscus militaris* Cav.

WABAUNSEE COUNTY  
Map No. 104

*Hibiscus trionum* L.



WABAUNSEE COUNTY  
Map No. 105



MALVACEAE

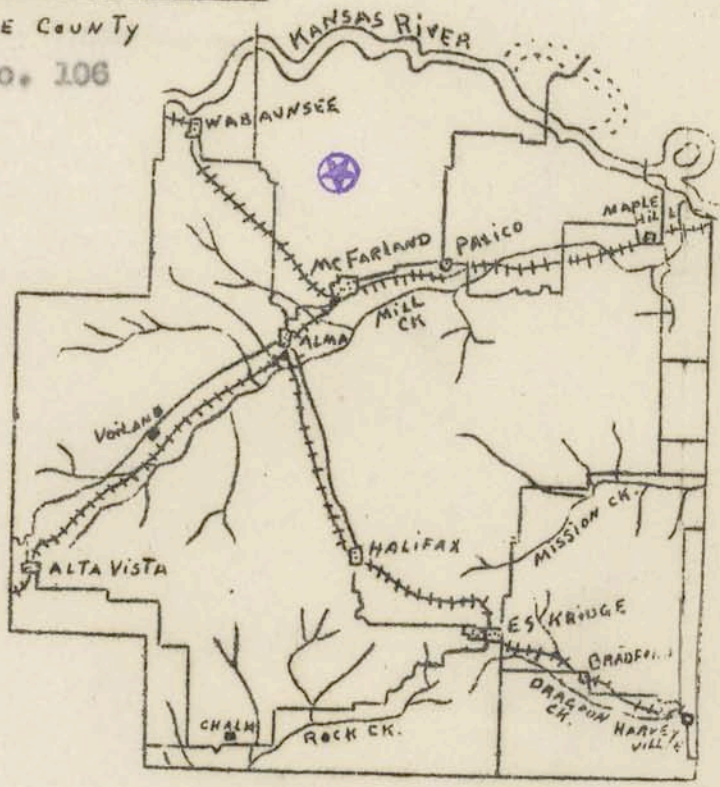
*Abutilon abutilon* (L.)

Rusby

WABAUNSEE COUNTY

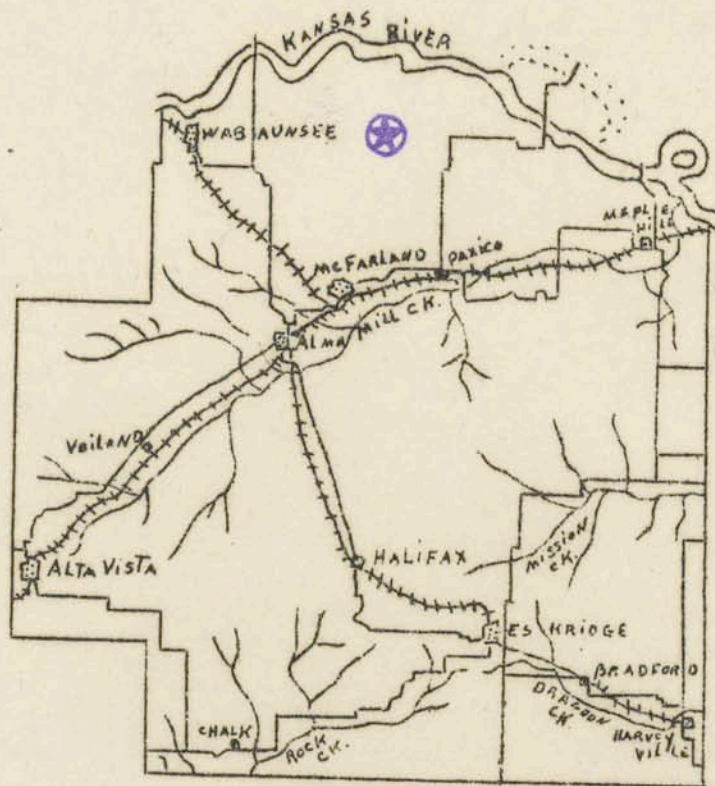
Map No. 106

*Malva rotundifolia* L.



WABAUNSEE COUNTY

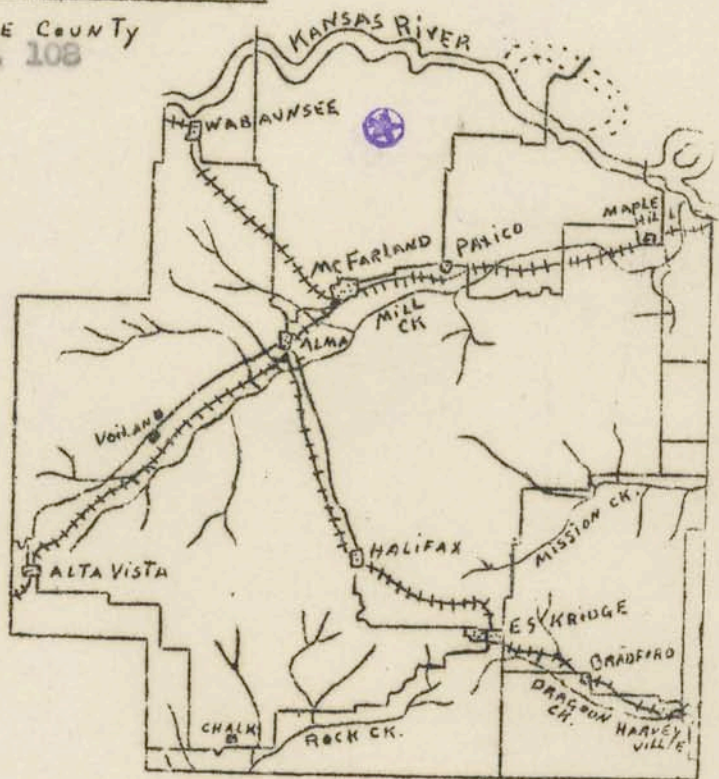
Map No. 107



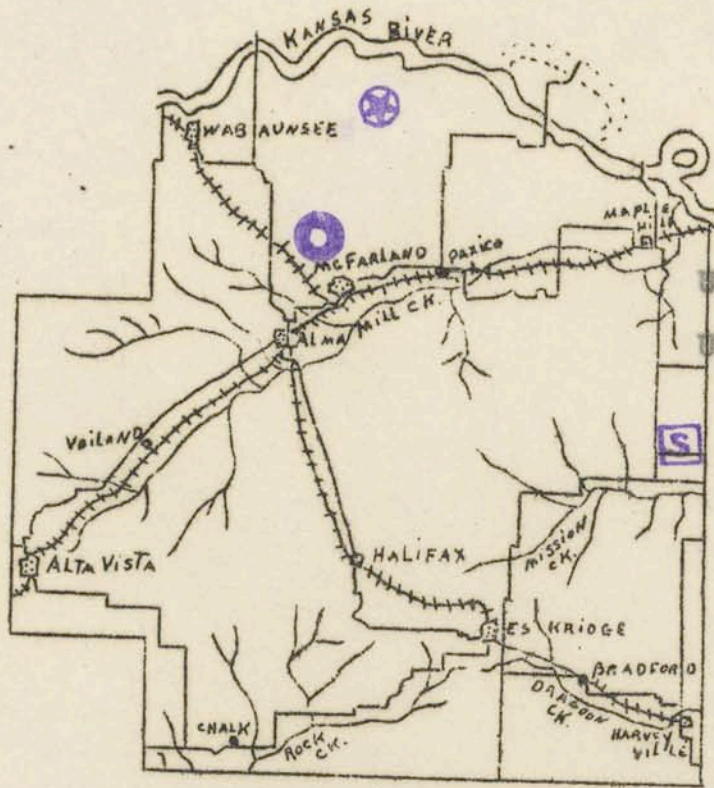
MALVACEAE  
*Sida spinosa* L.

WABAUNSEE COUNTY  
 Map No. 108

TILIACEAE  
*Tilia americana* L.



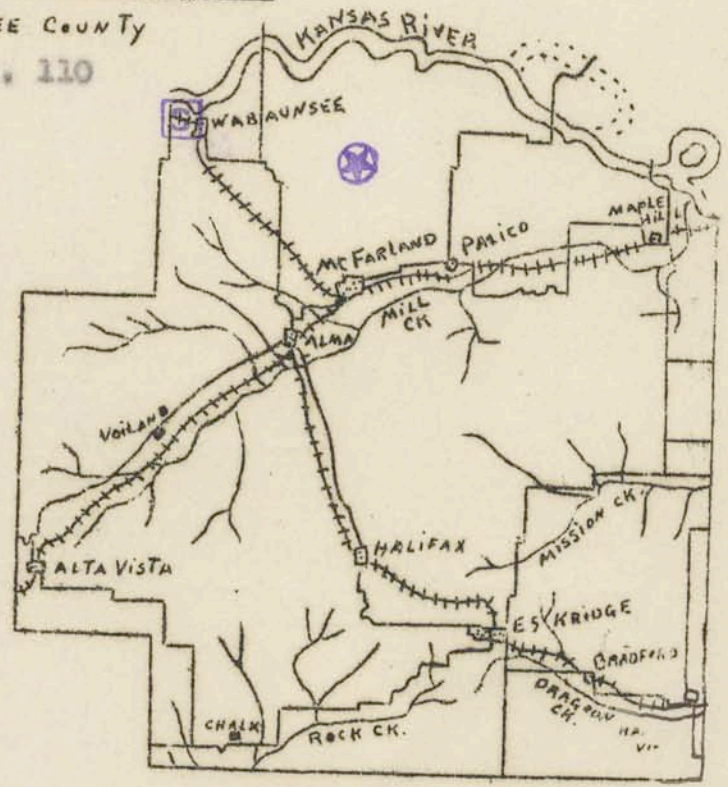
WABAUNSEE COUNTY  
 Map No. 109



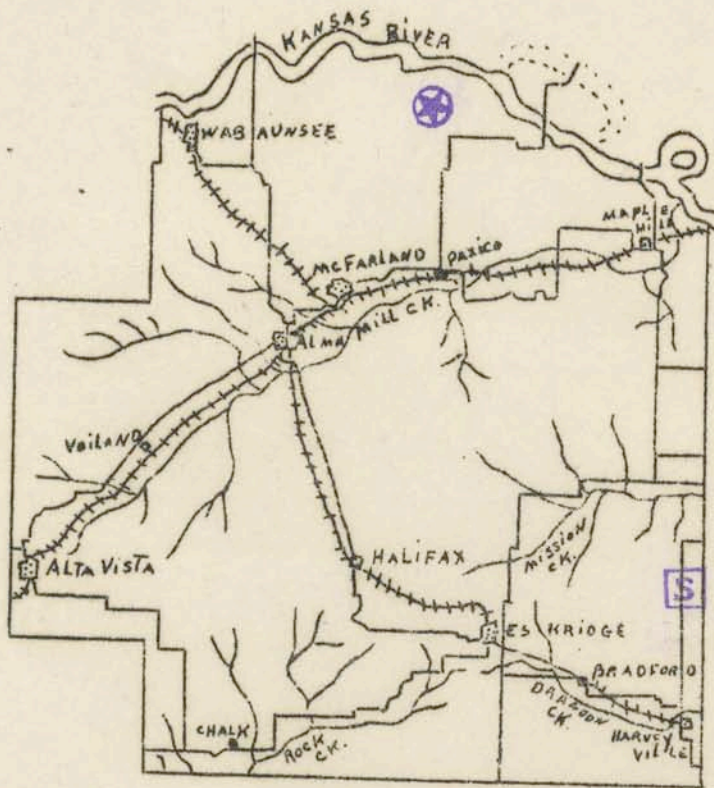
ULMACEAE  
*Ulmus americana* L.

WABAUNSEE COUNTY  
 Map No. 110

*Ulmus fulva* Michx.



WABAUNSEE COUNTY  
 Map No. 111



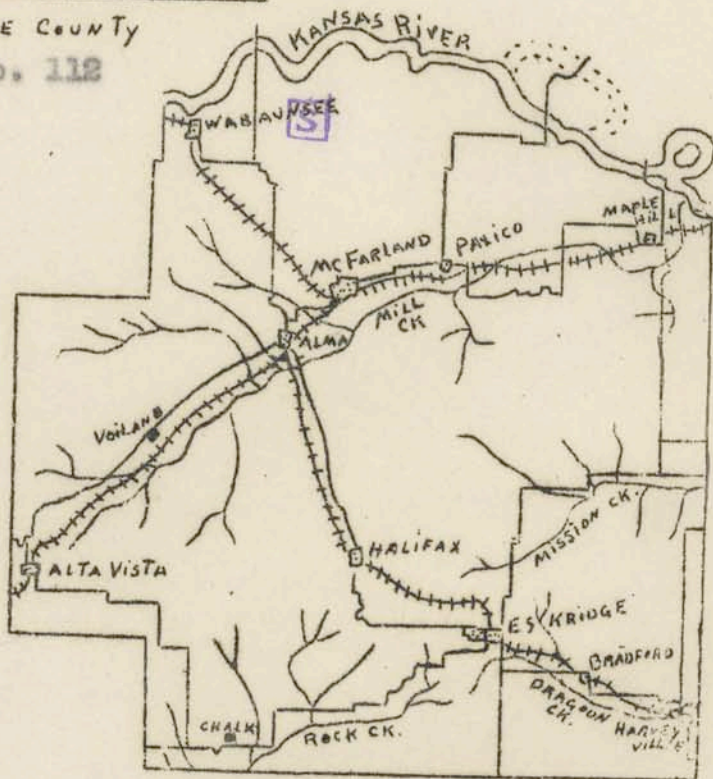
MORACEAE

*Morus rubra* L.

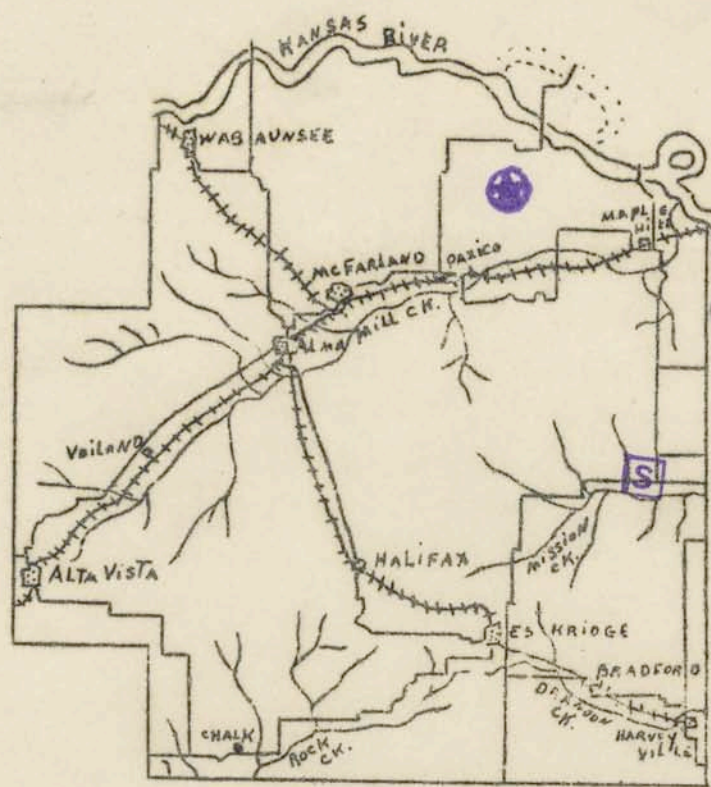
WABAUNSEE COUNTY

Map No. 112

*Morus alba* L.



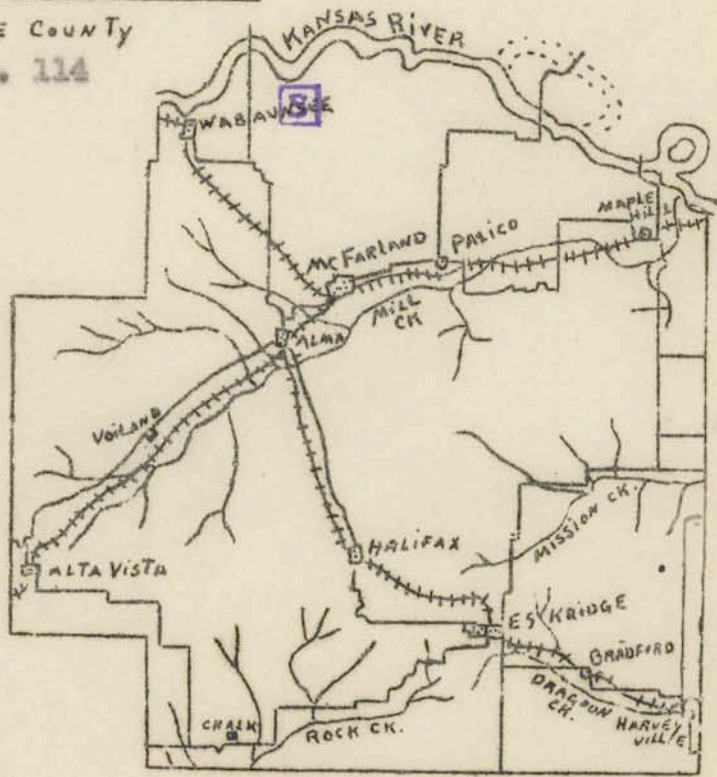
WABAUNSEE COUNTY  
Map No. 113



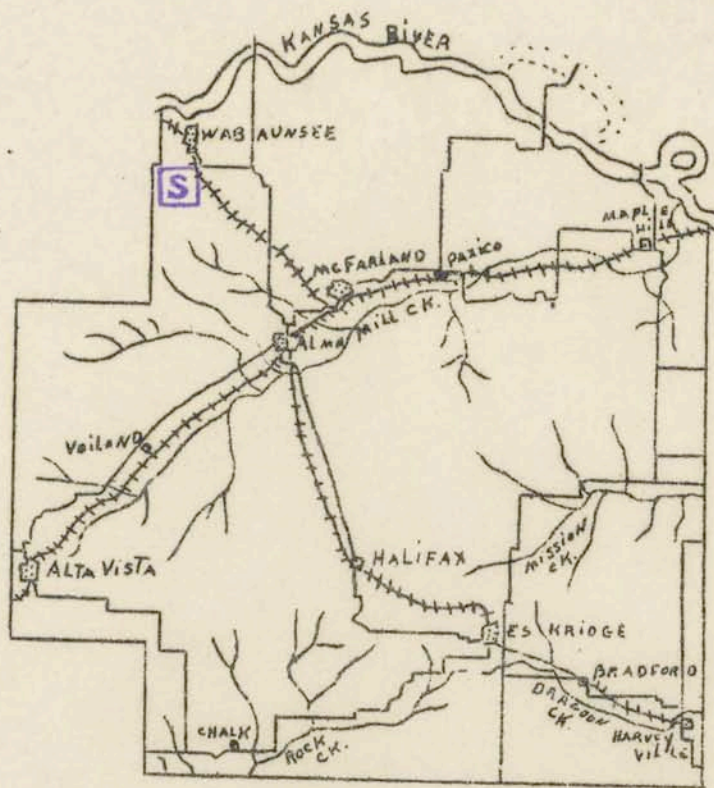
MORACEAE  
*Cannabis sativa* L.

WABAUNSEE County  
 Map No. 114

*Humulus lupulus* L.

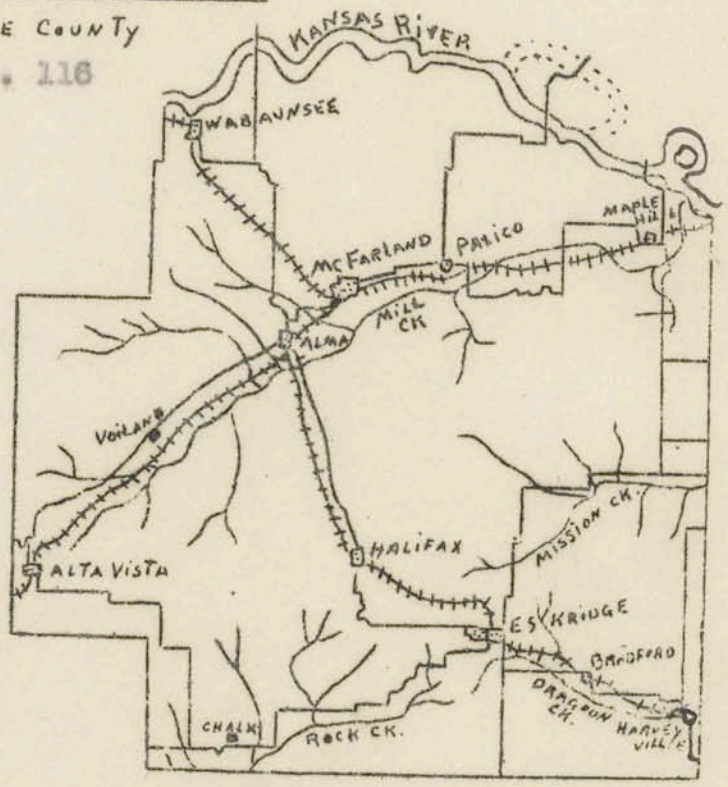


WABAUNSEE County  
 Map No. 115

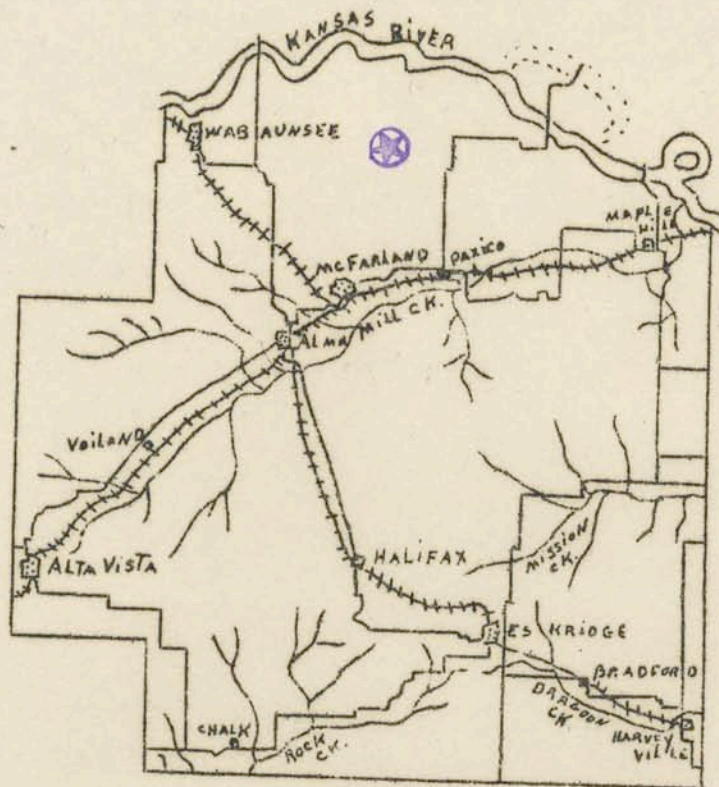


MORACEAE  
*Toxicaria pomiferum* Raf.

WABAUNSEE COUNTY  
 Map No. 116



WABAUNSEE COUNTY



URTICACEAE

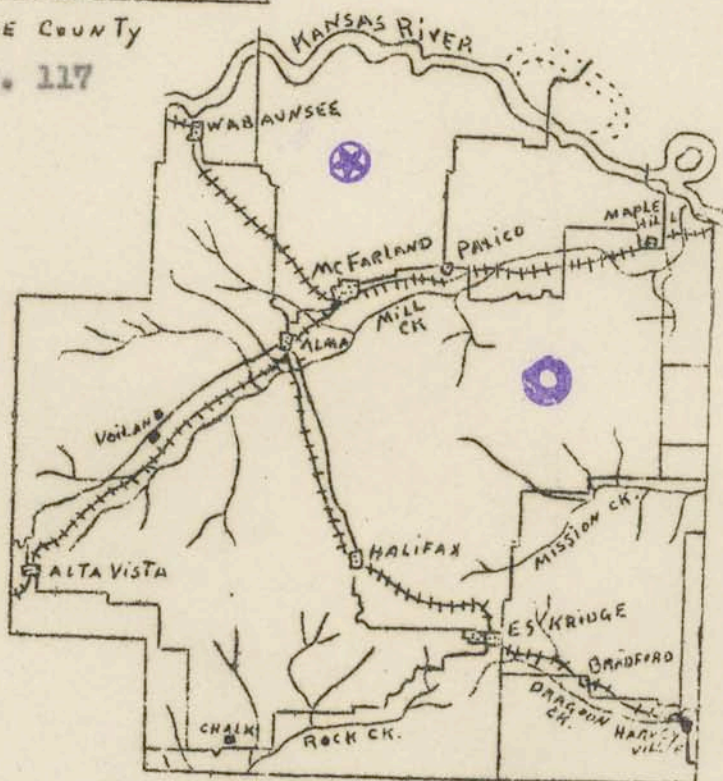
*Parietaria pennsylvanica*

Muhl.

WABAUNSEE COUNTY

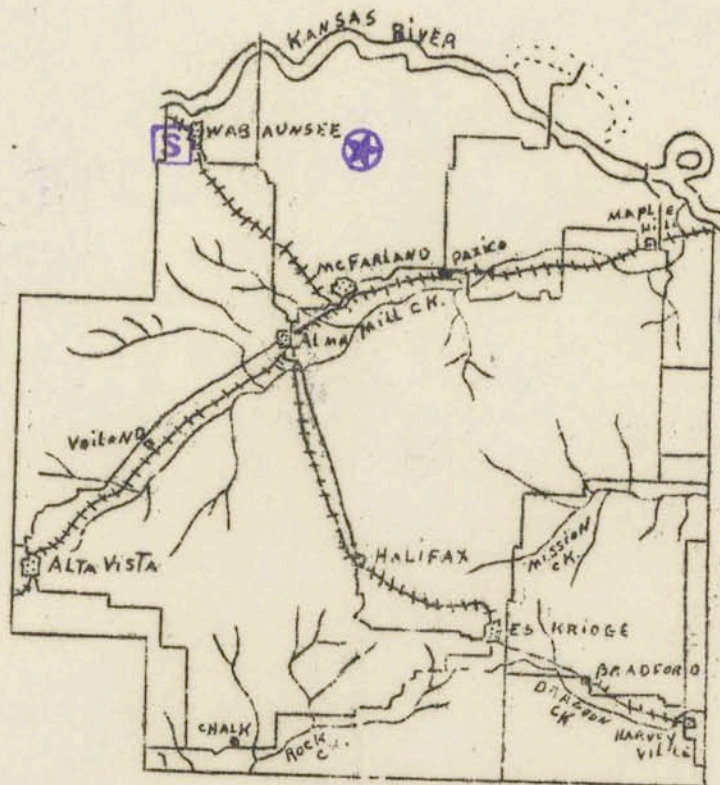
Map No. 117

*Urtica gracilis* Ait.



WABAUNSEE COUNTY  
Map No. 118



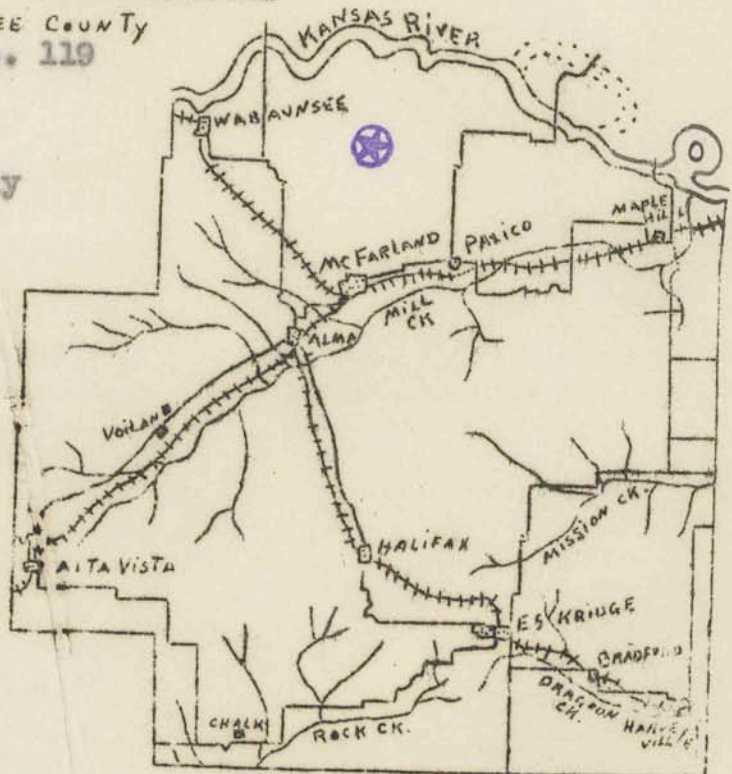


URTICACEAE

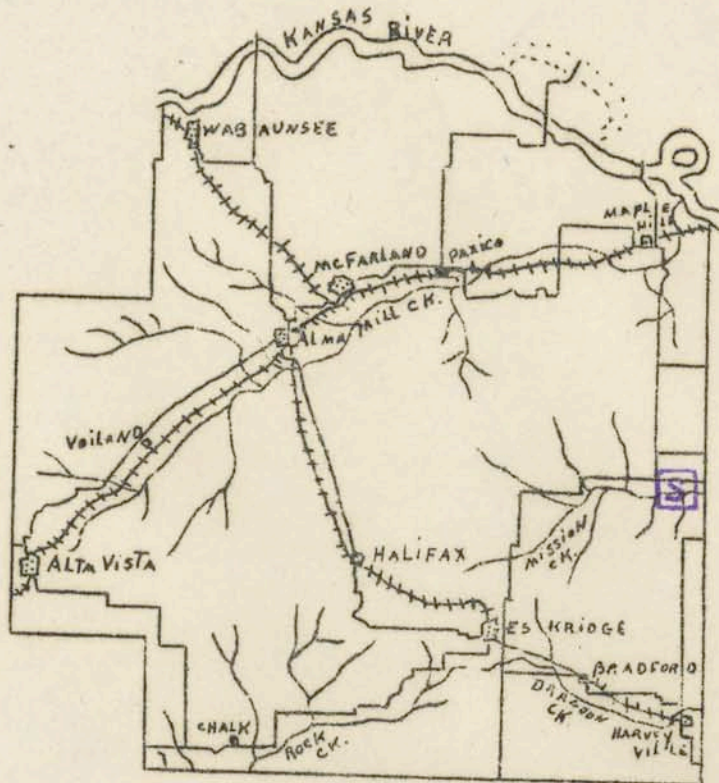
*Celtis occidentalis* L.

WABAUNSEE COUNTY  
Map No. 119

*Pilea pumila* (L.) Gray



WABAUNSEE COUNTY  
Map No. 120

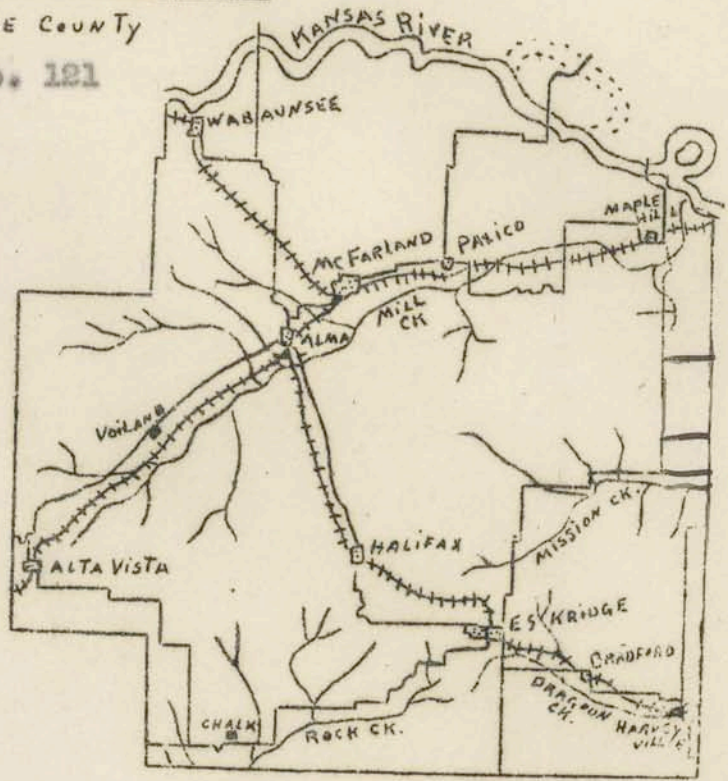


GERANIACEAE

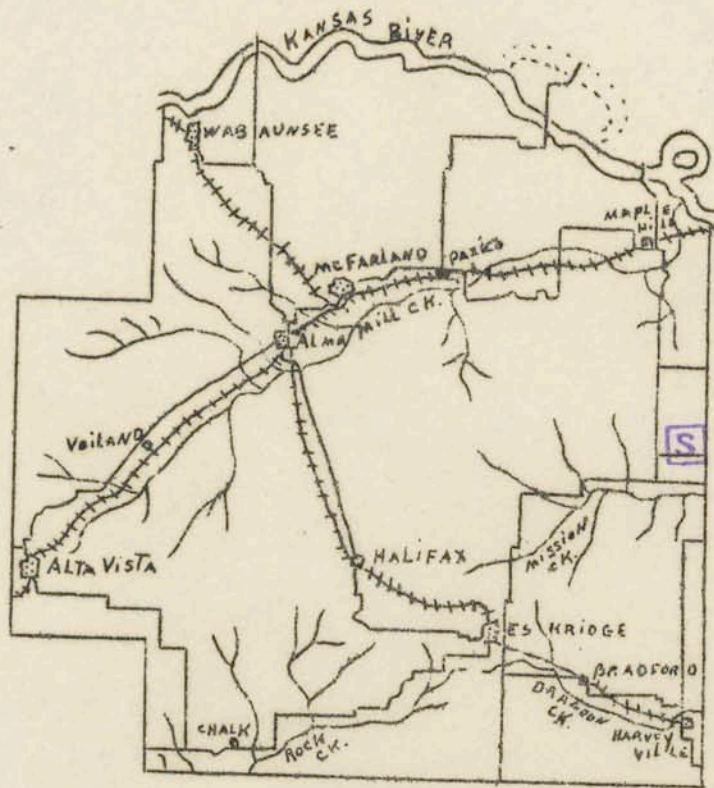
*Geranium carolinianum* L.

WABAUNSEE COUNTY

Map No. 121



WABAUNSEE COUNTY

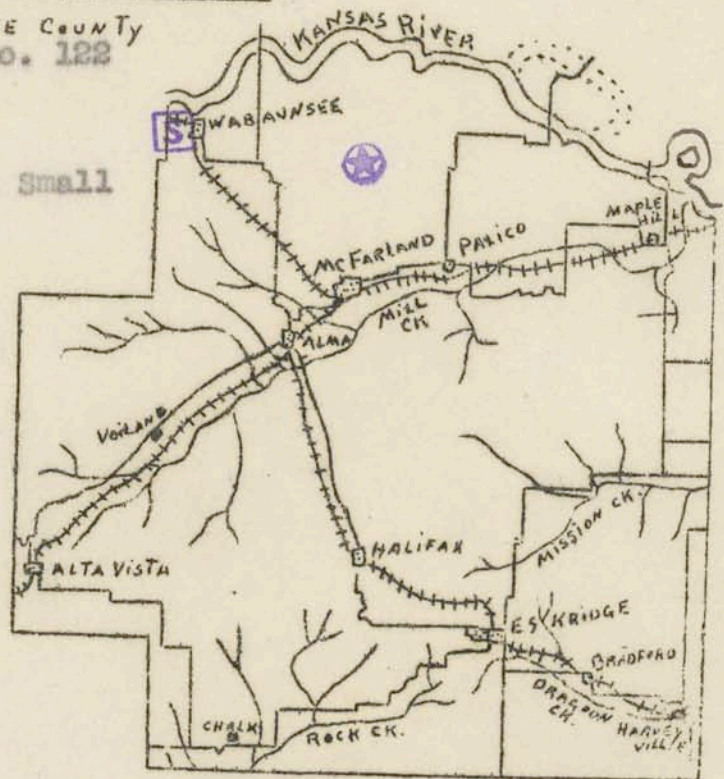


OXALIDACEAE

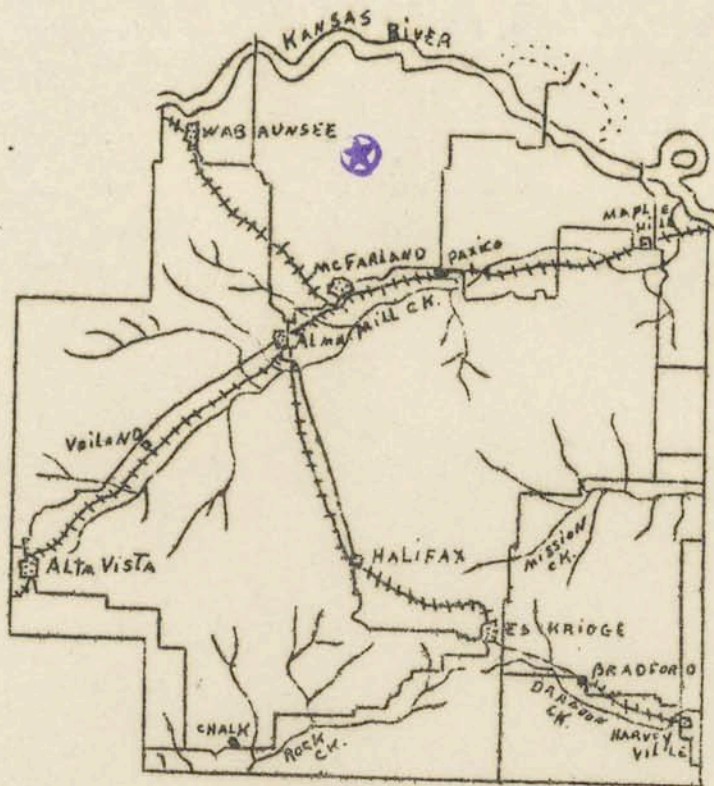
*Xanthoxalis cymosa* Small.

WABAUNSEE COUNTY  
Map No. 122

*Oxalis violaceae* (L.) Small



WABAUNSEE COUNTY  
Map No. 123



OXALIDACEAE

*Xanthoxylis corniculata*

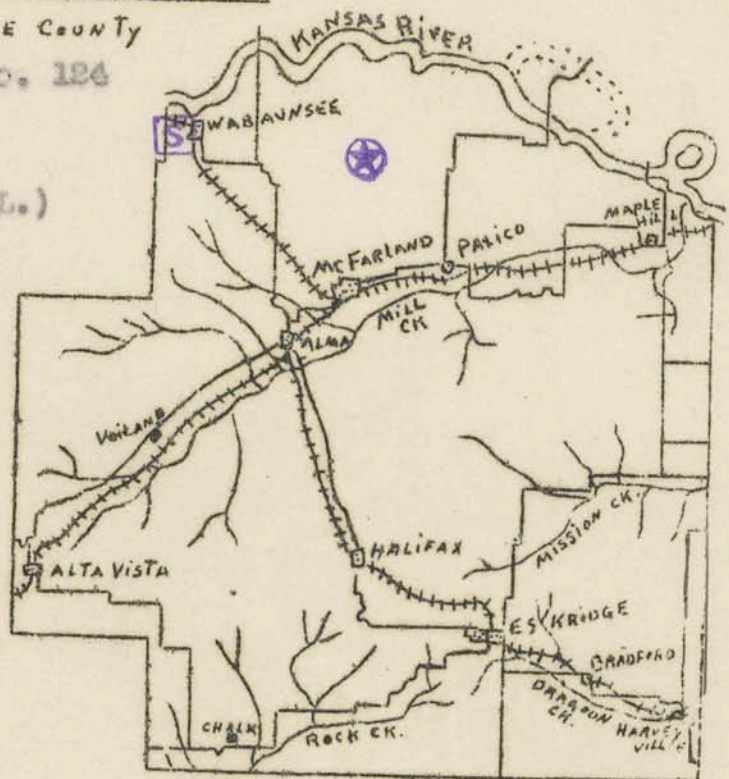
(L.) Small

WABAUNSEE COUNTY

Map No. 124

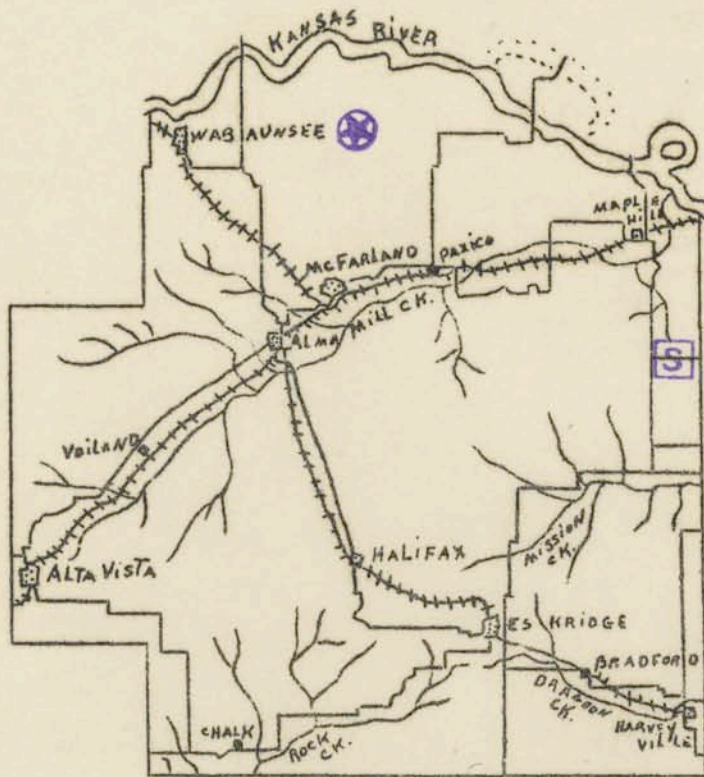
*Xanthoxylis stricta* (L.)

Small



WABAUNSEE COUNTY

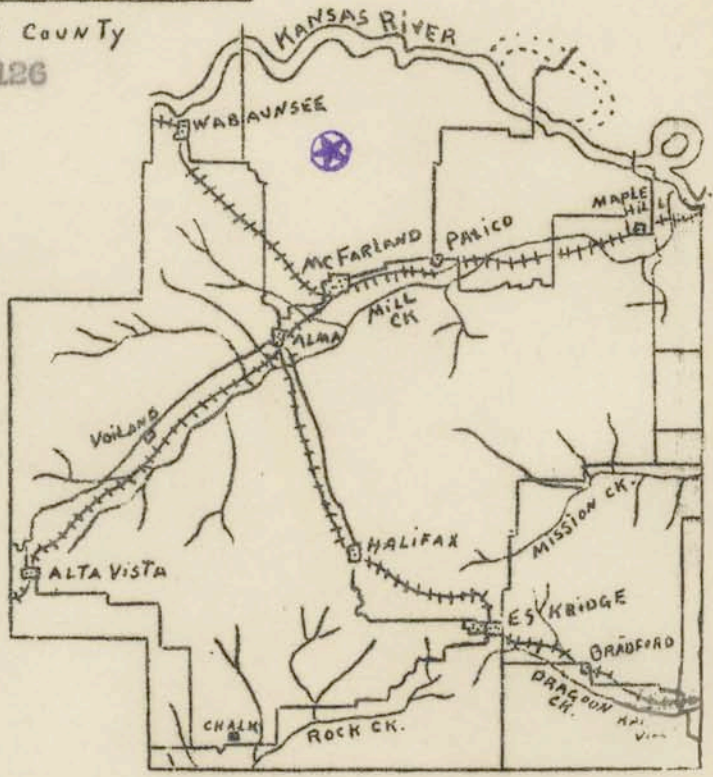
Map No. 125



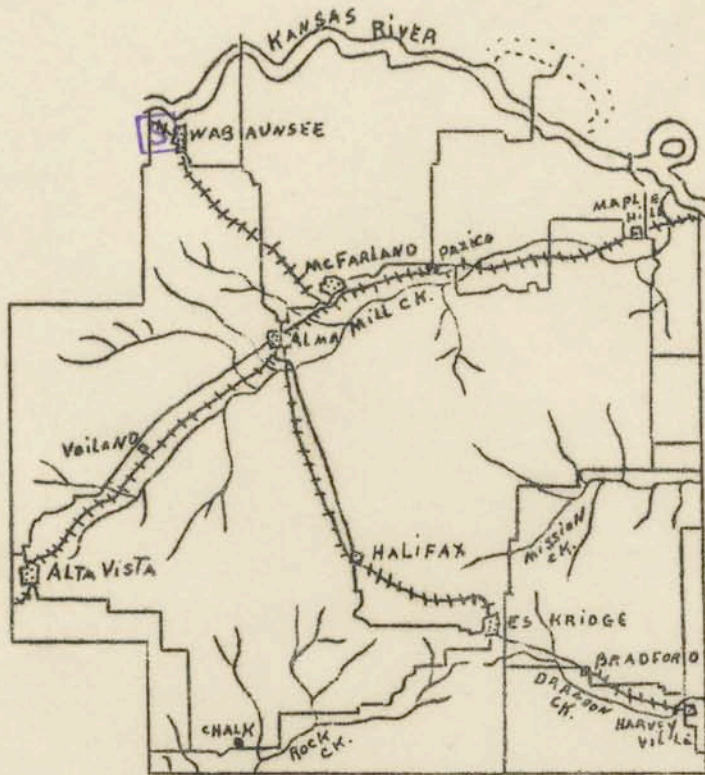
LINACEAE  
*Cathartolinum sulcatum*  
 (Ridd.) Small

WABAUNSEE COUNTY  
 Map No. 126

BALSAMINACEAE  
*Impatiens pallida* Nutt.



WABAUNSEE COUNTY  
 Map No. 127



RUTACEAE

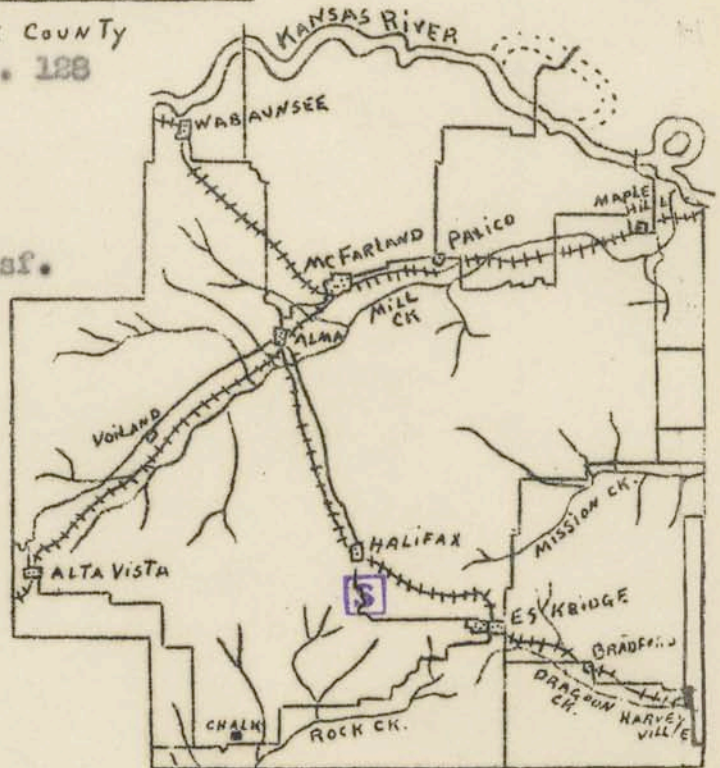
*Xanthoxylum americanum*

Mill.

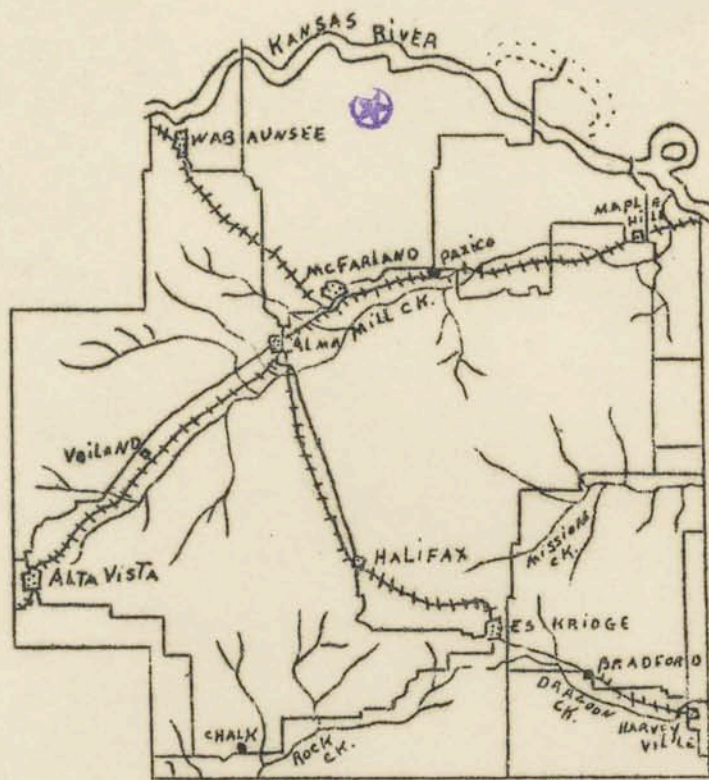
WABAUNSEE COUNTY  
Map No. 128

SIMARUBACEAE

*Ailanthus glandulosa* Desf.



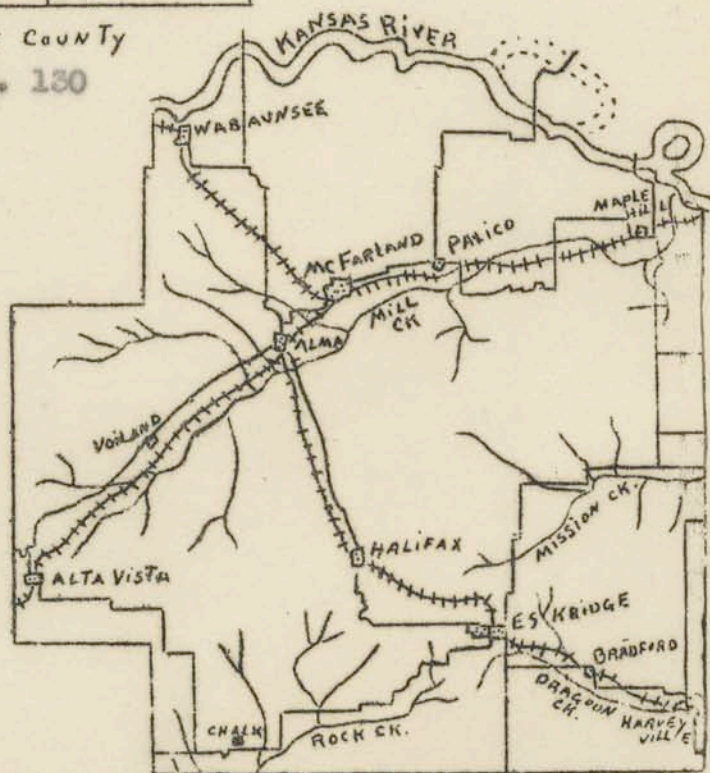
WABAUNSEE COUNTY  
Map No. 129



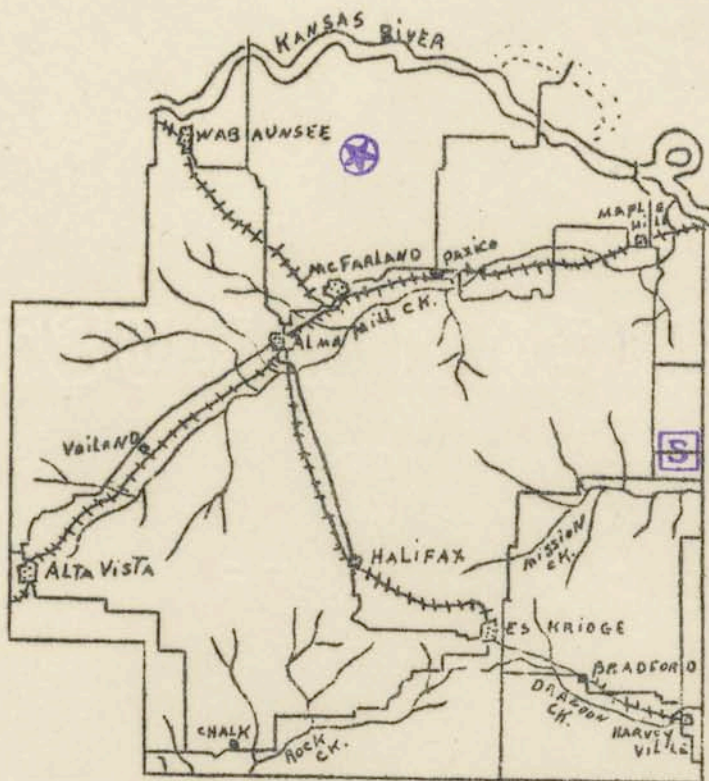
POLYGALACEAE

*Polygala verticillata* L.

WABAUNSEE COUNTY  
Map No. 130



WABAUNSEE COUNTY



EUPHORBIACEAE

*Tithymalopsis corollata*

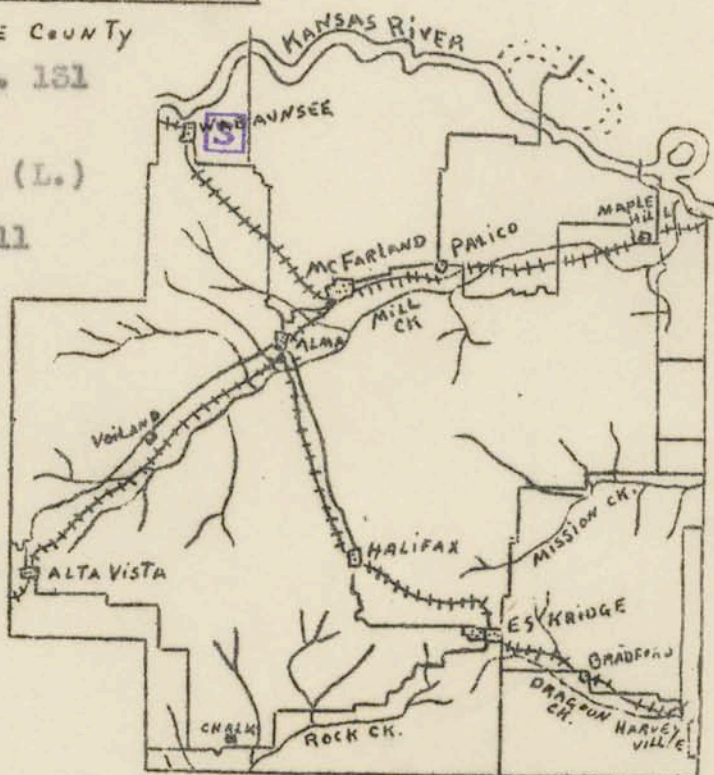
(L.) Kl. & Garcke

WABAUNSEE COUNTY

Map No. 131

*Tithymalis cyparissias* (L.)

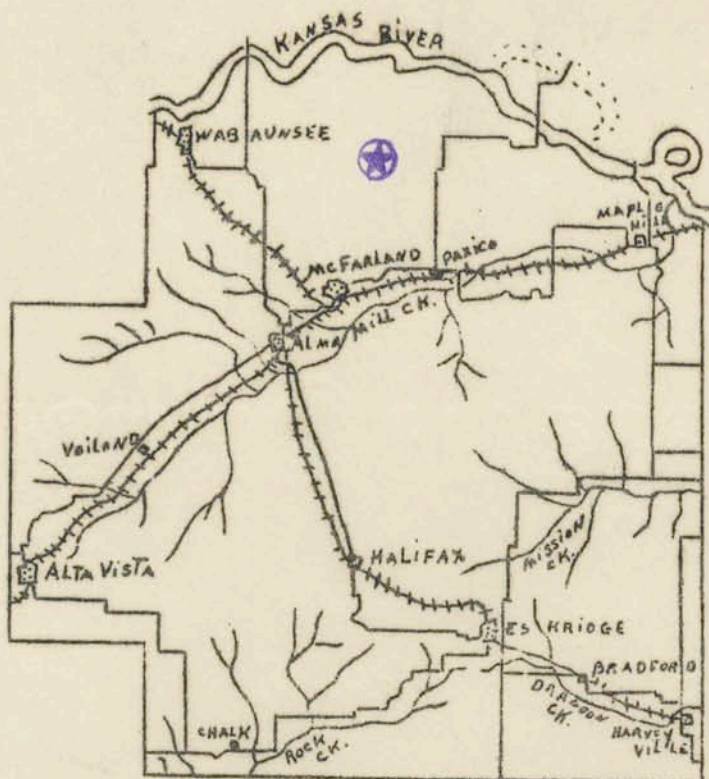
HILL



WABAUNSEE COUNTY

Map No. 132





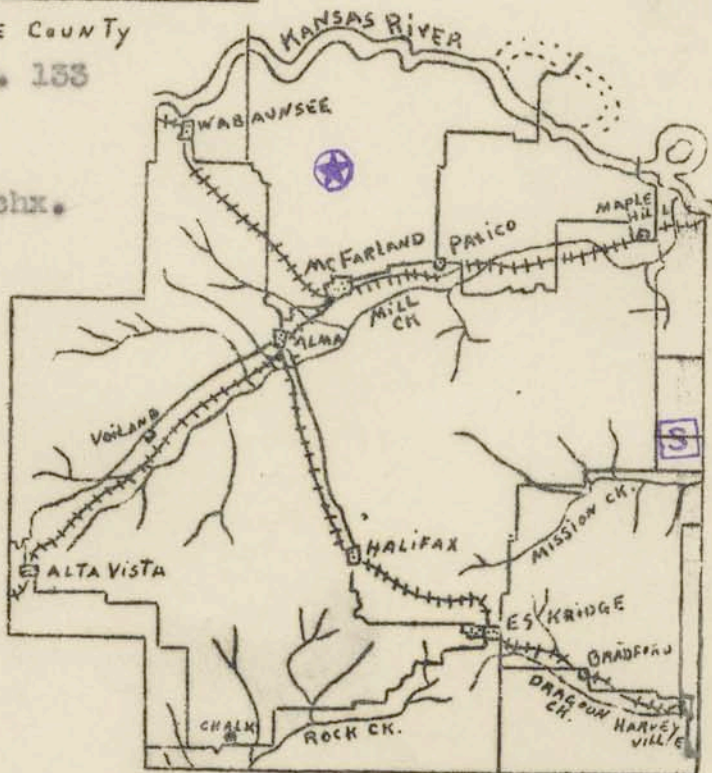
EUPHORBIACEAE

*Croton capitatus* Michx.

WABAUNSEE COUNTY

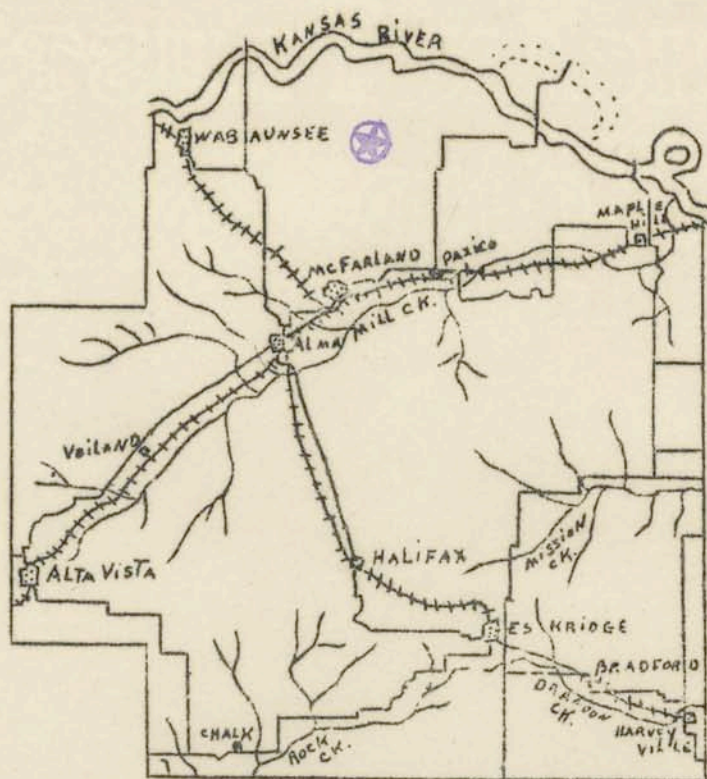
Map No. 133

*Croton monathogynus* Michx.



WABAUNSEE COUNTY

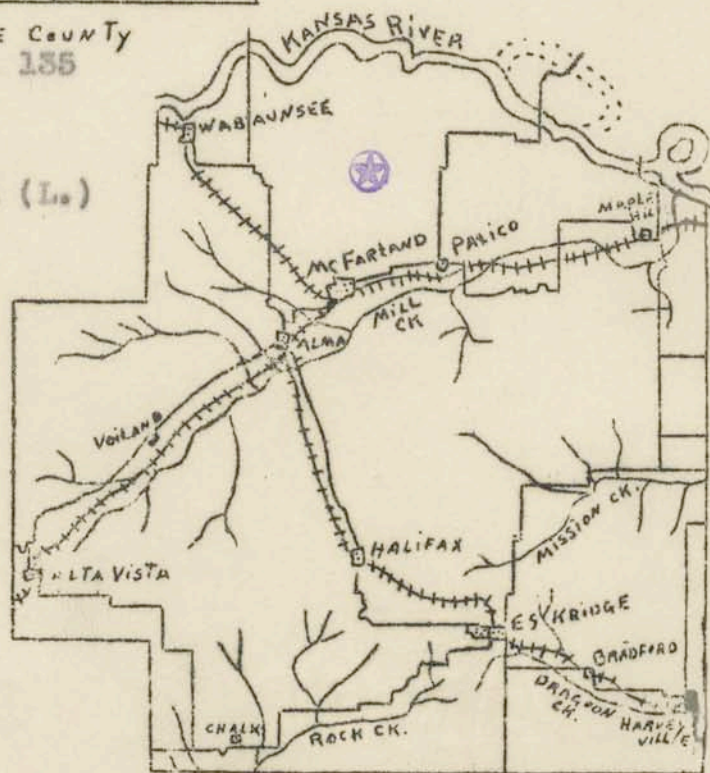
Map No. 134



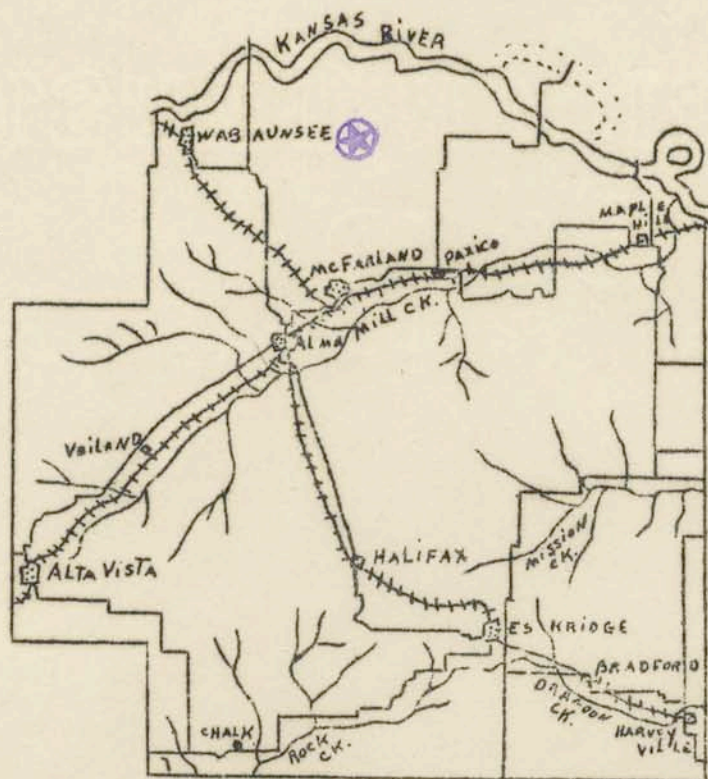
EUPHORBIACEAE  
*Poinsettia dentata*  
 (Michx.) Small

WABAUNSEE COUNTY  
 Map No. 135

*Poinsettia heterophylla* (L.)  
 Kl. & Garcke



WABAUNSEE COUNTY  
 Map No. 136

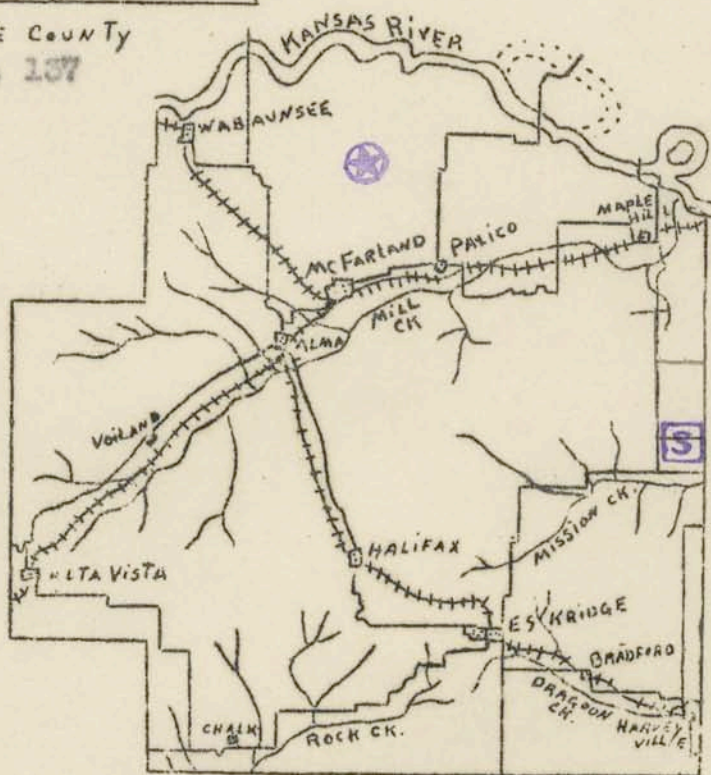


EUPHORBIACEAE

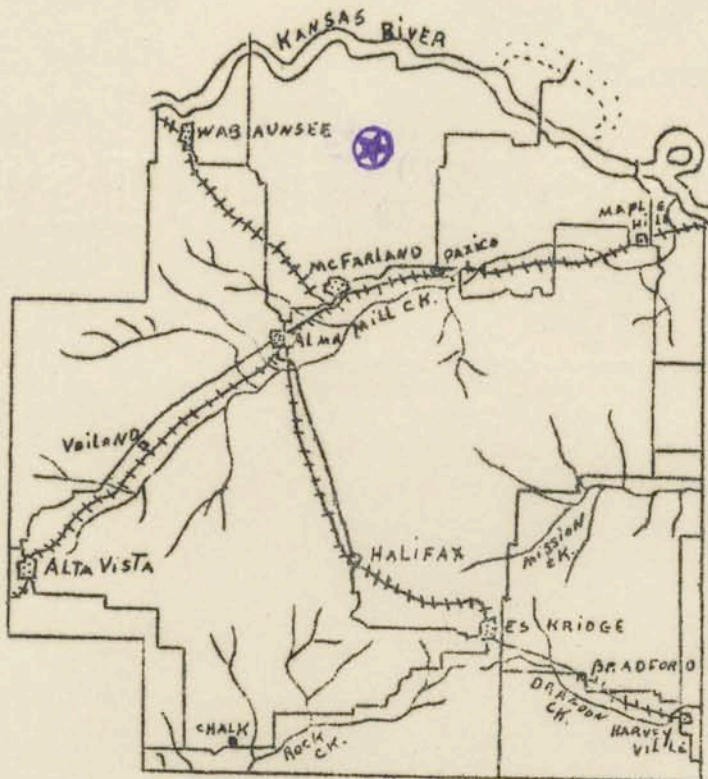
*Euphorbia dictyosperma*

WABAUNSEE COUNTY  
Map No. 137

*Euphorbia nutans*



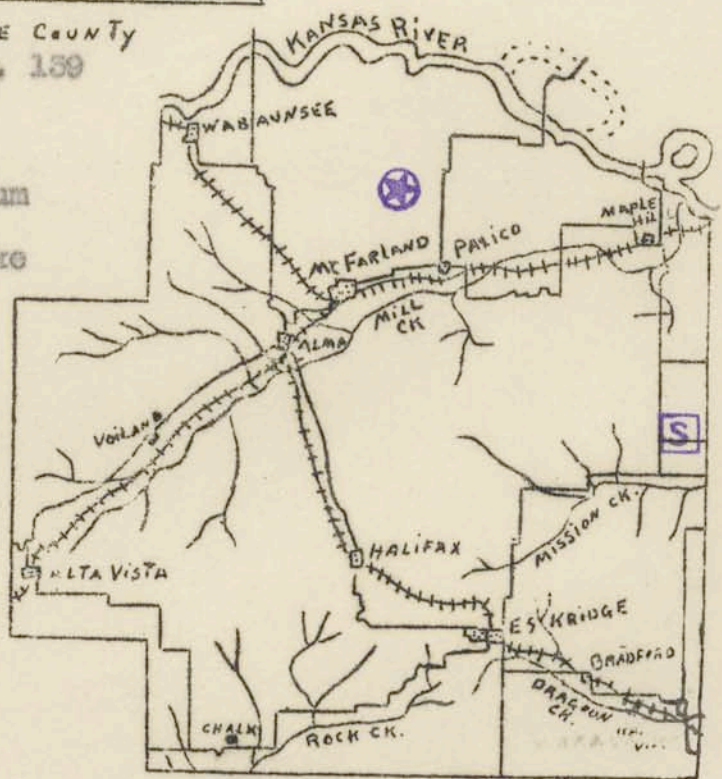
WABAUNSEE COUNTY  
Map No. 138



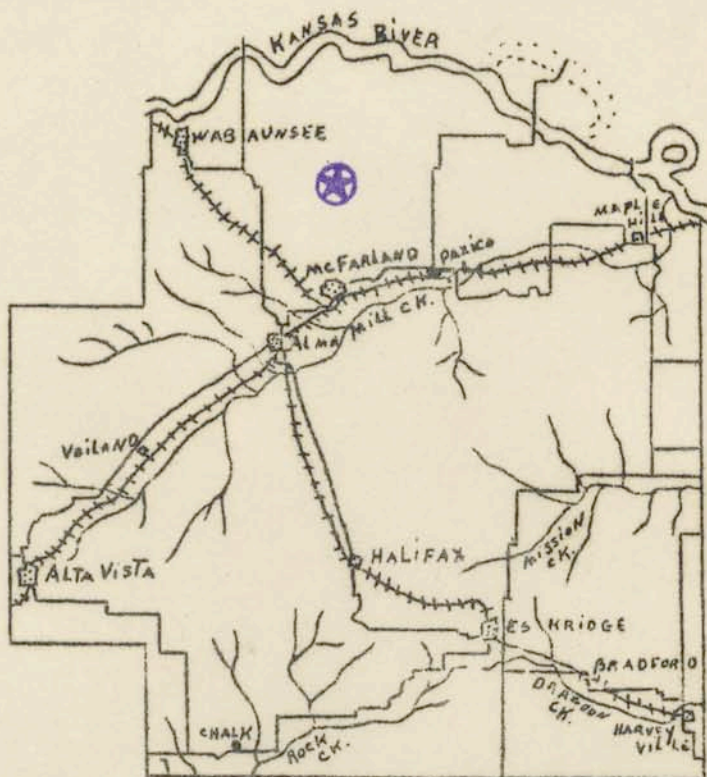
EUPHORBIACEAE  
*Euphorbia strictospora*  
 (Engelm.)

WABAUNSEE COUNTY  
 Map No. 139

*Dichrophyllum marginatum*  
 (Pursh.) Kl. & Garcke



WABAUNSEE COUNTY  
 Map No. 140



EUPHORBIACEAE

*Chamaesyce maculata* (L.)

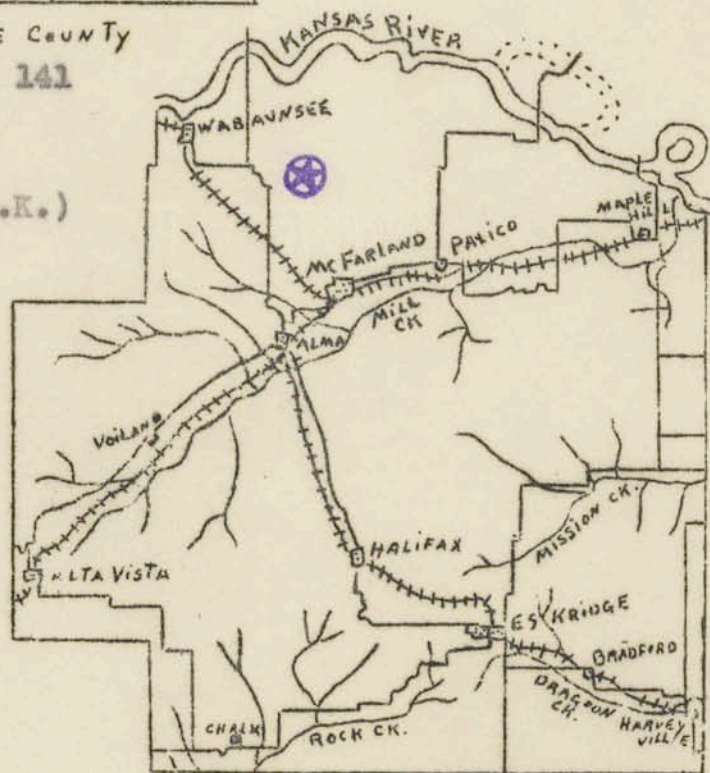
Small

WABAUNSEE COUNTY

Map No. 141

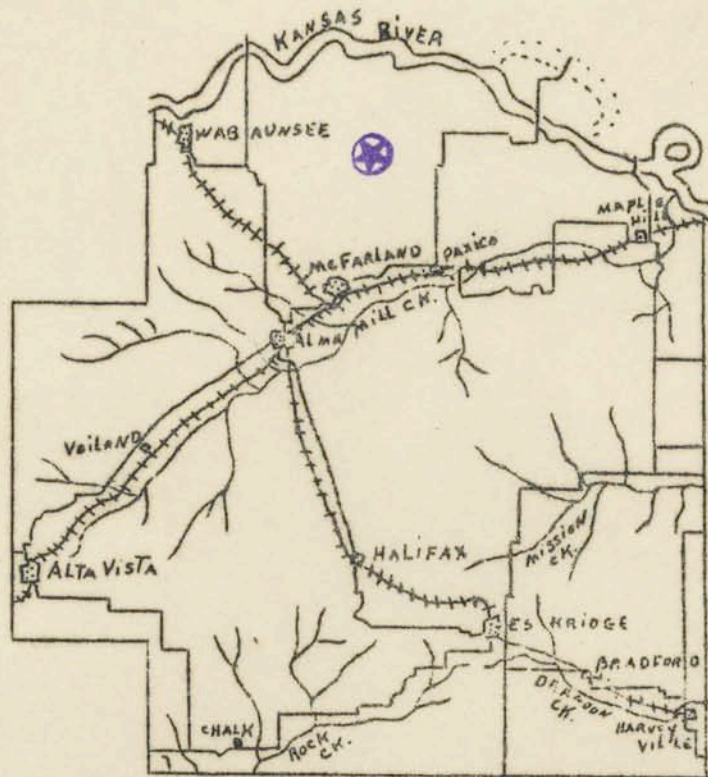
*Chamaesyce serpens* (H.B.K.)

Small



WABAUNSEE COUNTY

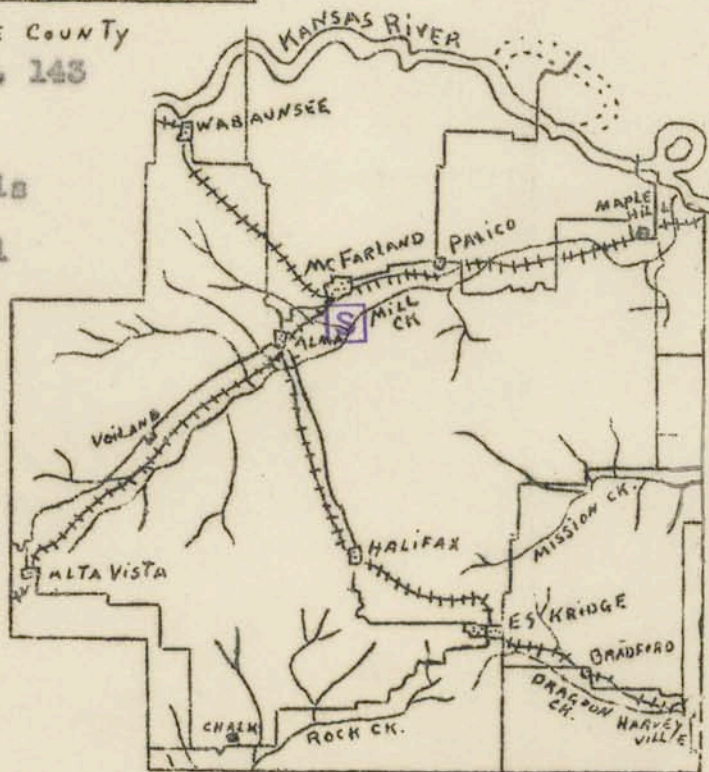
Map No. 142



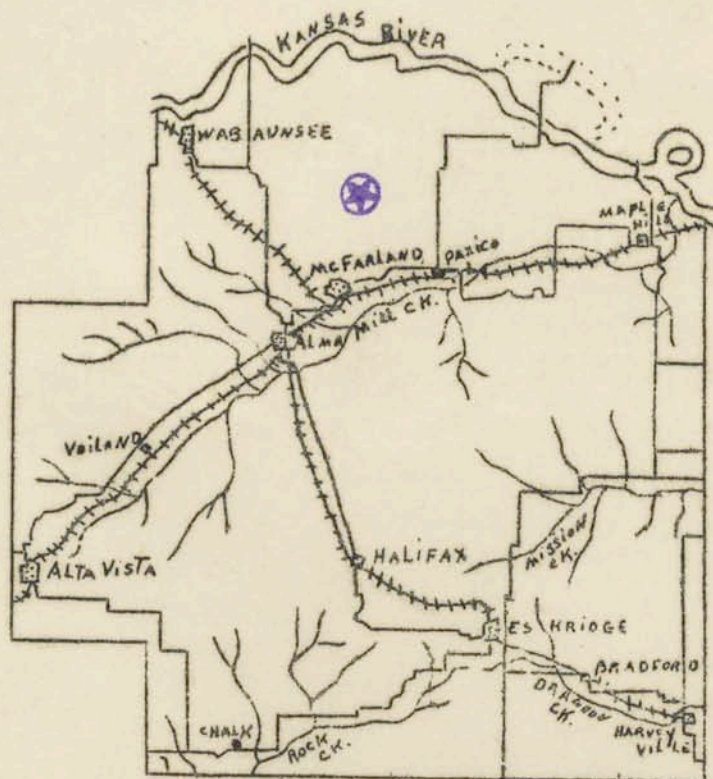
WABAUNSEE COUNTY  
Map No. 143

EUPHORBIACEAE  
*Chamaesyce zygophylloides*  
(Boiss.) Small

*Tithymalis missouriensis*  
(Norton) Small



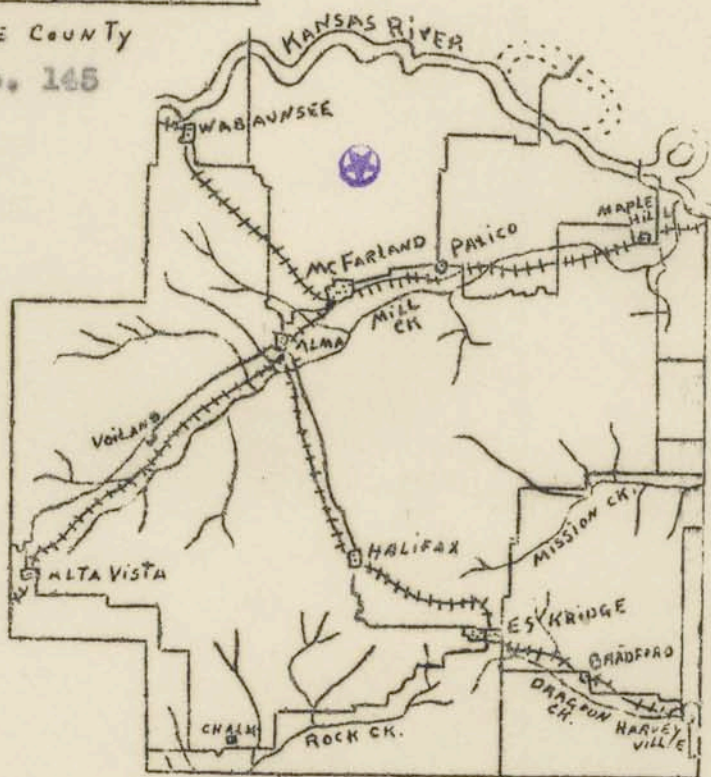
WABAUNSEE COUNTY  
Map No. 144



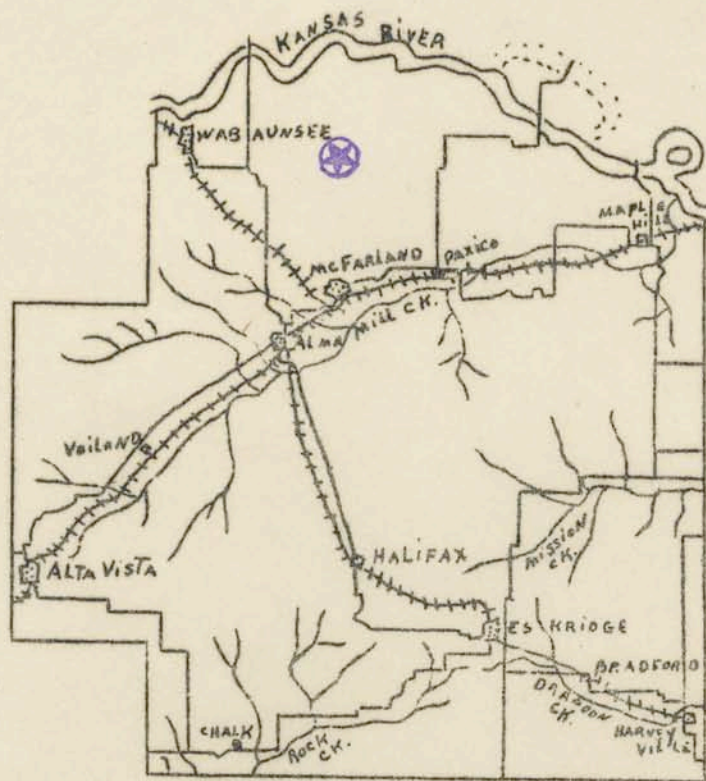
EUPHORBIACEAE  
*Acalypha ostryaefolia*  
 Ridd.

WABAUNSEE COUNTY  
 Map No. 145

*Acalypha virginica* L.



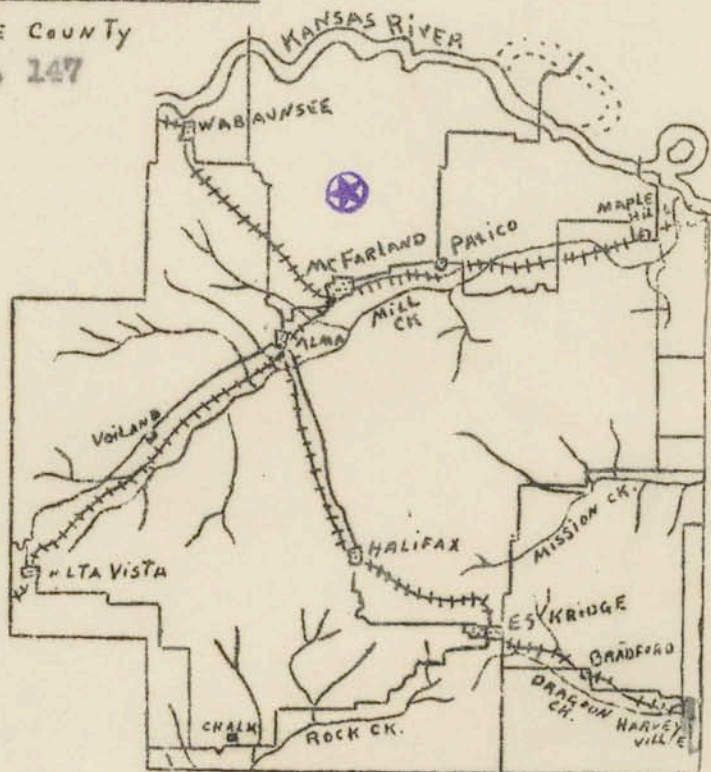
WABAUNSEE COUNTY  
 Map No. 146



EUPHORBIACEAE  
*Zygophyllum hexagonum*  
 (Nutt.) Small

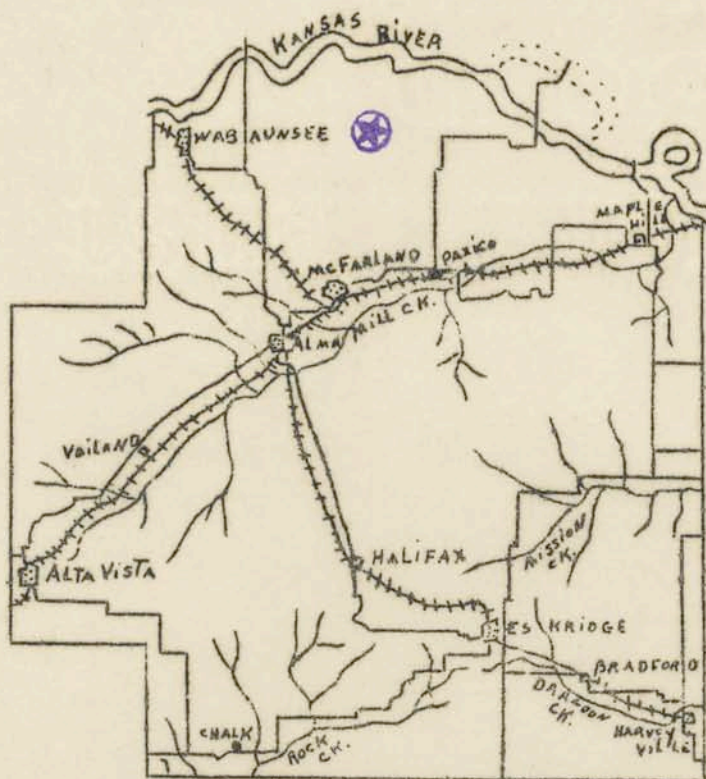
WABAUNSEE COUNTY  
 Map No. 147

*Tragia ramosa* Cav.



WABAUNSEE COUNTY  
 Map No. 148

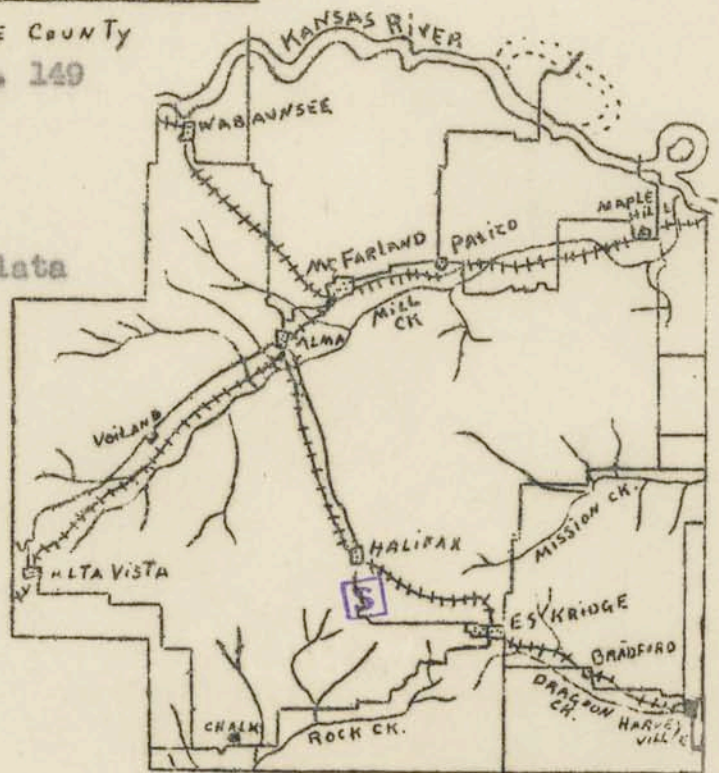




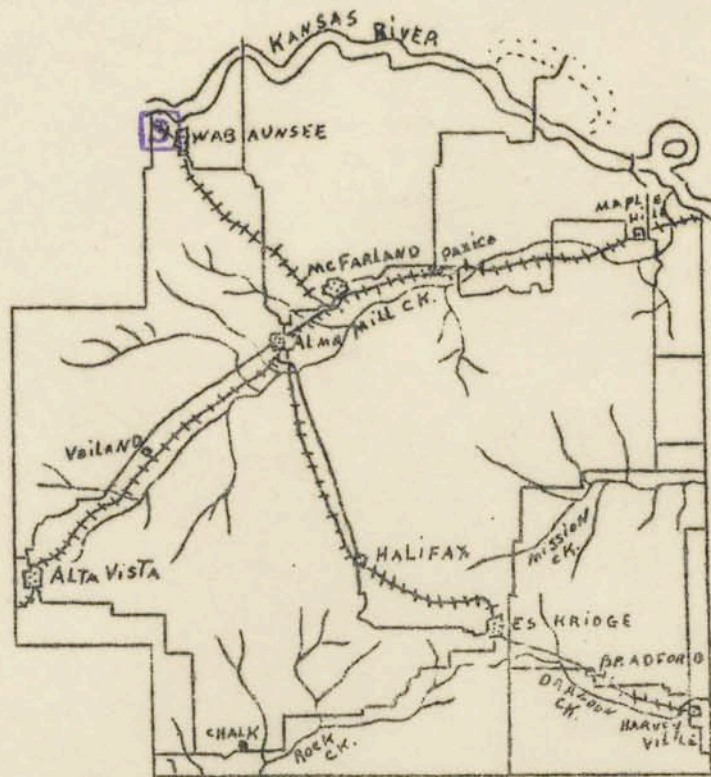
GUTTIFERACEAE  
*Hypericum cistifolium*  
 Lam.

WABAUNSEE COUNTY  
 Map No. 149

VIOLACEAE  
*Viola palmata* L. cucullata  
 Gray



WABAUNSEE COUNTY  
 Map No. 150



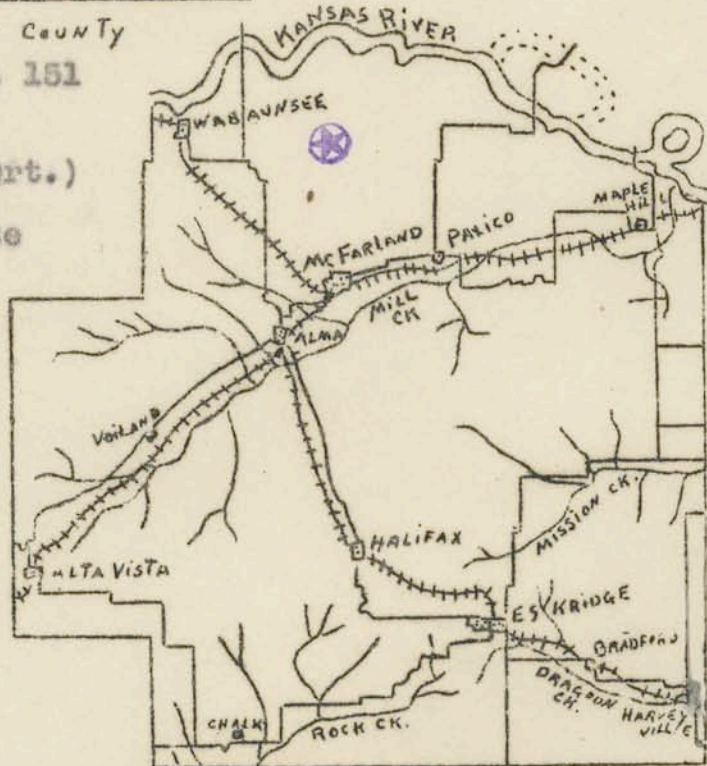
VIOLACEAE

*Viola rafinesquii* Green

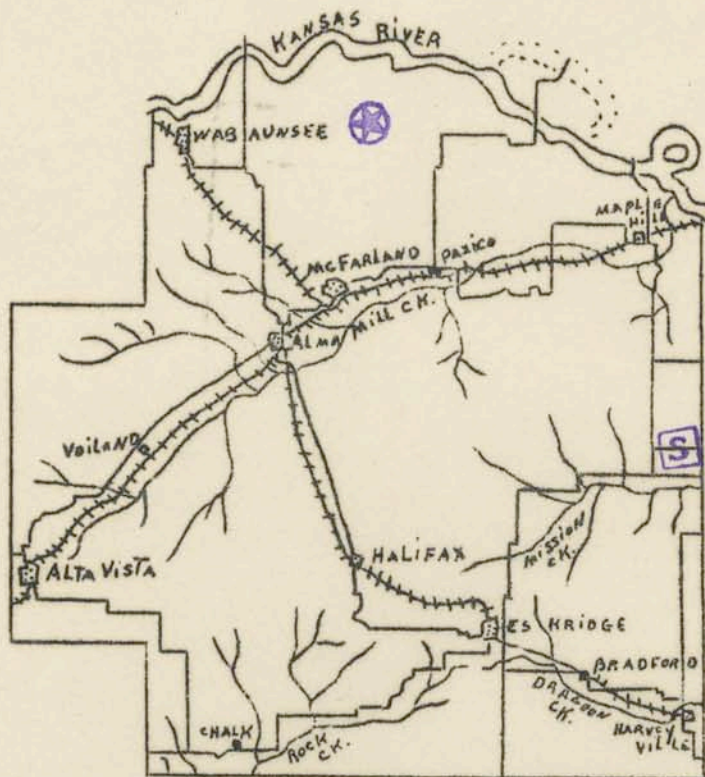
WABAUNSEE COUNTY  
Map No. 151

*Calceolaria alceoides* (Ort.)

Kuntze



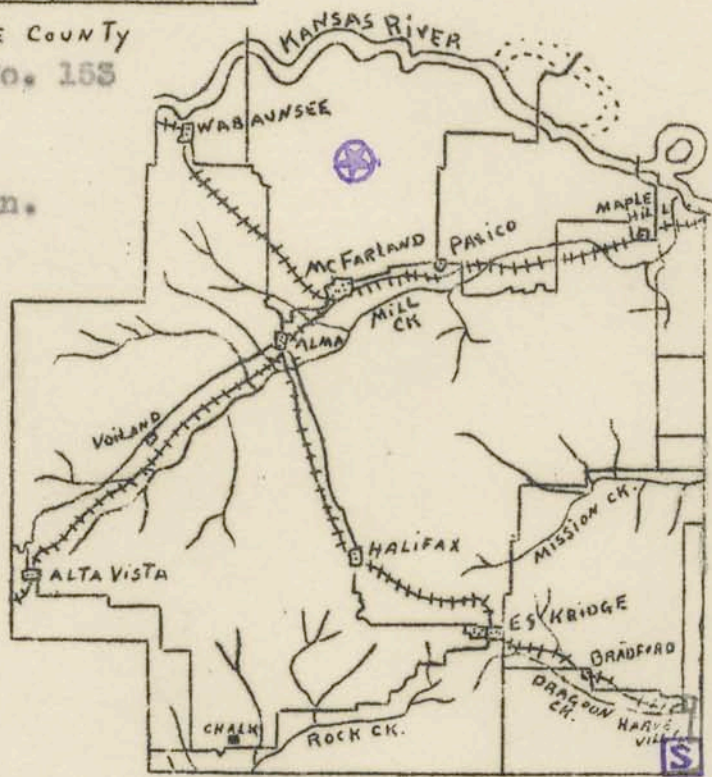
WABAUNSEE COUNTY  
Map No. 152



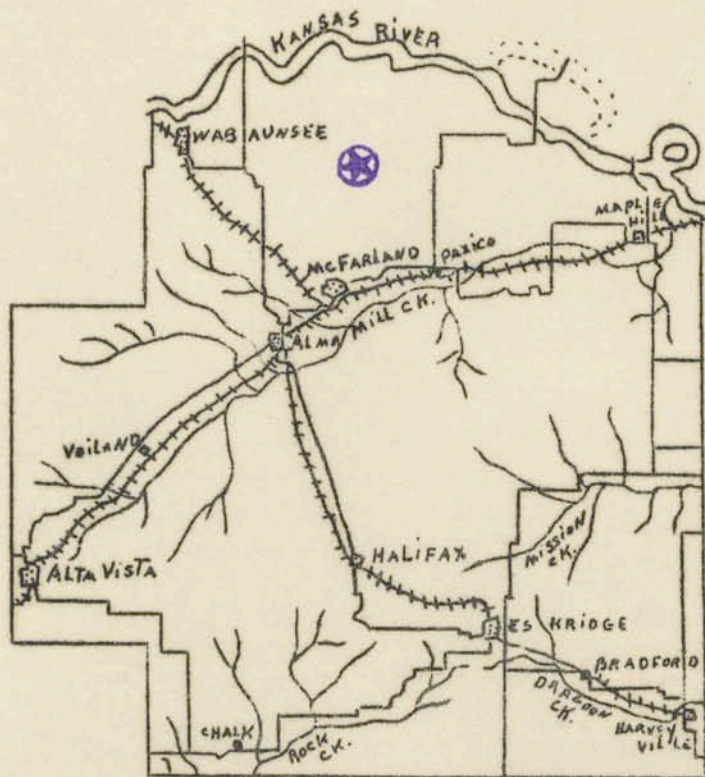
VIOLACEAE  
*Viola pedatifida* Don.

WABAUNSEE COUNTY  
 Map No. 153

*Viola eriocarpa* Schwein.



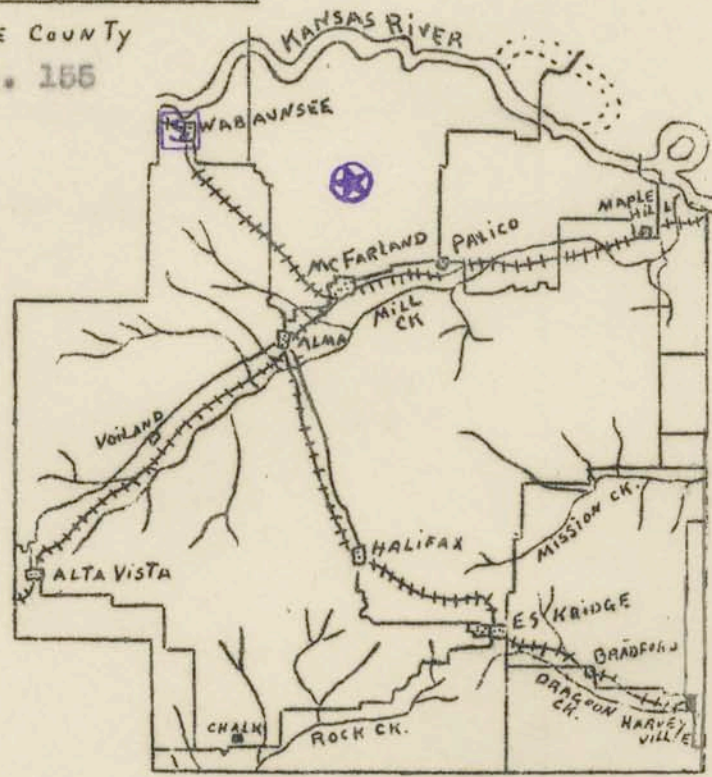
WABAUNSEE COUNTY  
 Map No. 154



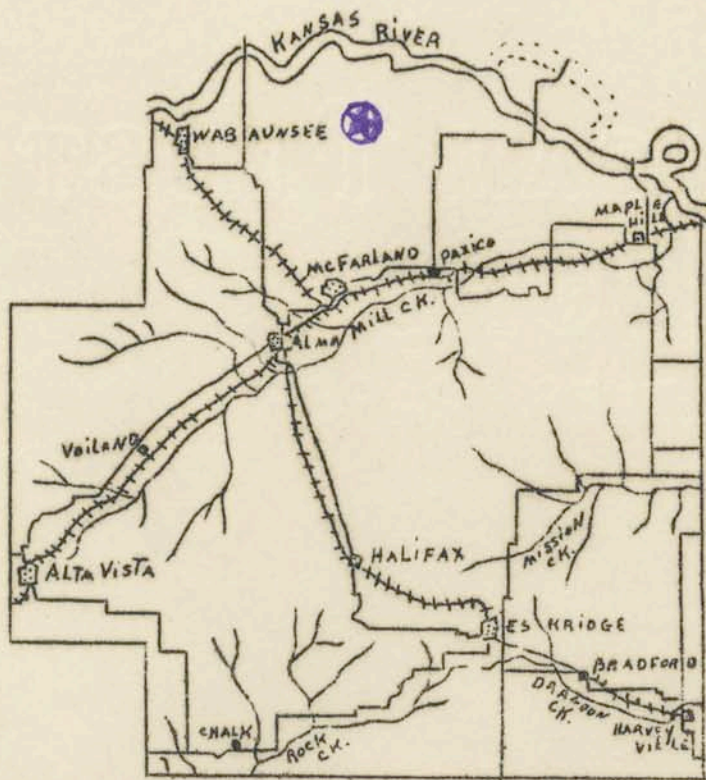
VIOLACEAE  
*Viola papilionaceae*  
 Pursh.

WABAUNSEE COUNTY  
 Map No. 155

*Viola palmata* L.



WABAUNSEE COUNTY  
 Map No. 156

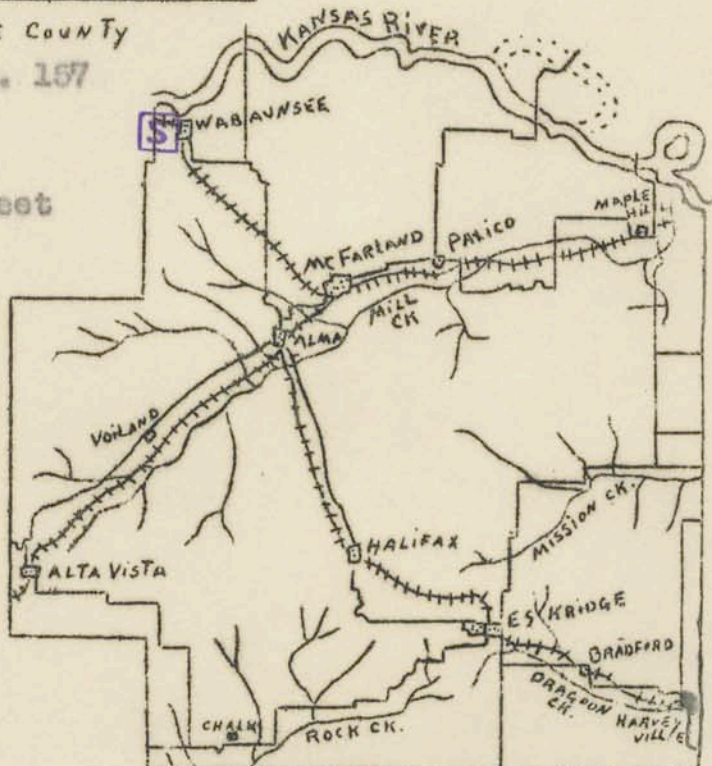


PAPAVERACEAE

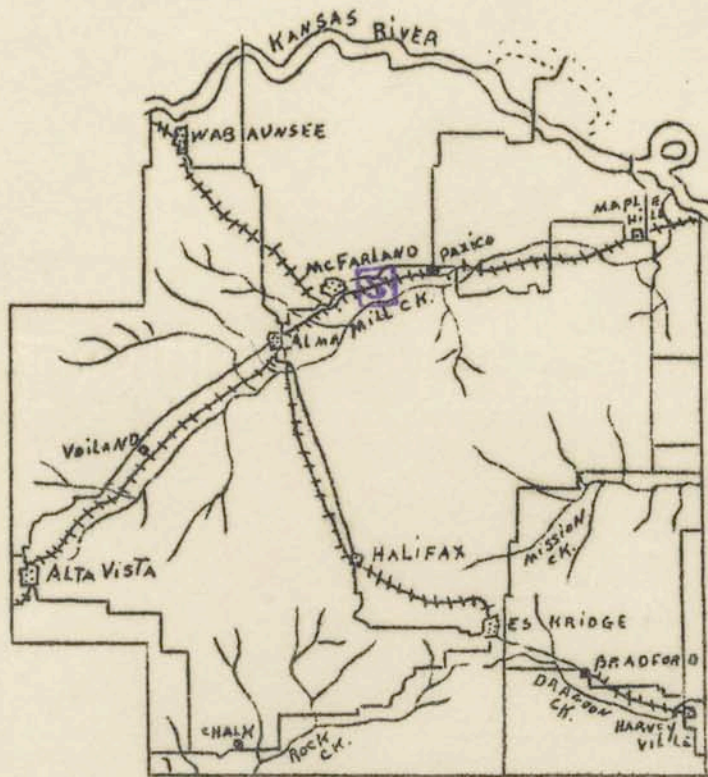
*Argemone alba* Lestib.

WABAUNSEE COUNTY  
Map No. 157

*Argemone intermedia* Sweet  
(probably)



WABAUNSEE COUNTY  
Map No. 158



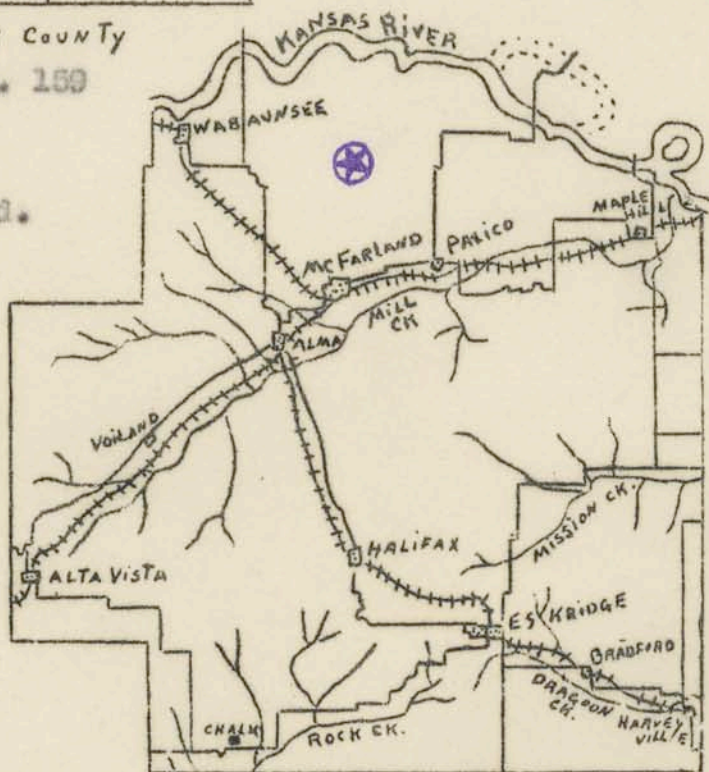
BRASSICACEAE

*Thlaspi arvense* L.

WABAUNSEE COUNTY

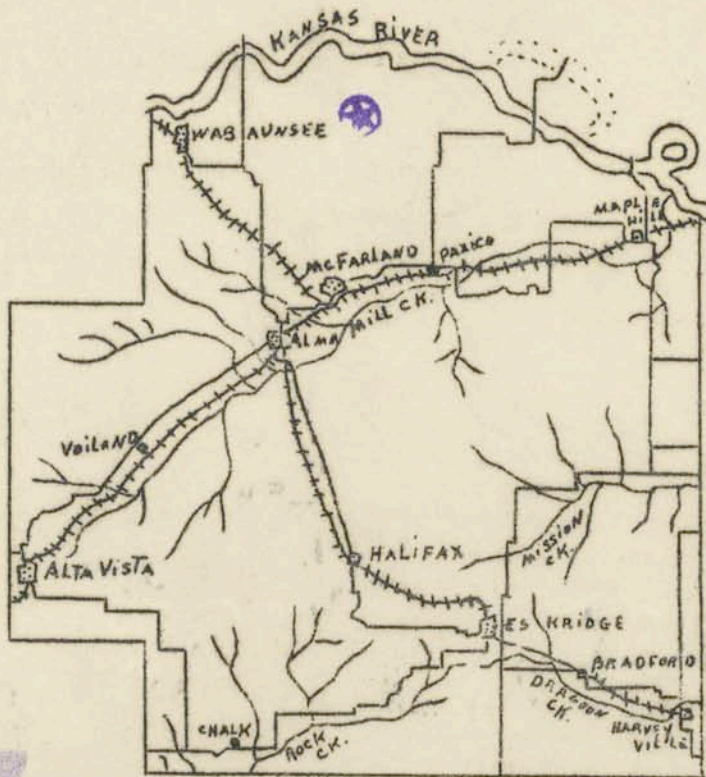
Map No. 159

*Lepidium apetalum* Willd.



WABAUNSEE COUNTY

Map No. 160



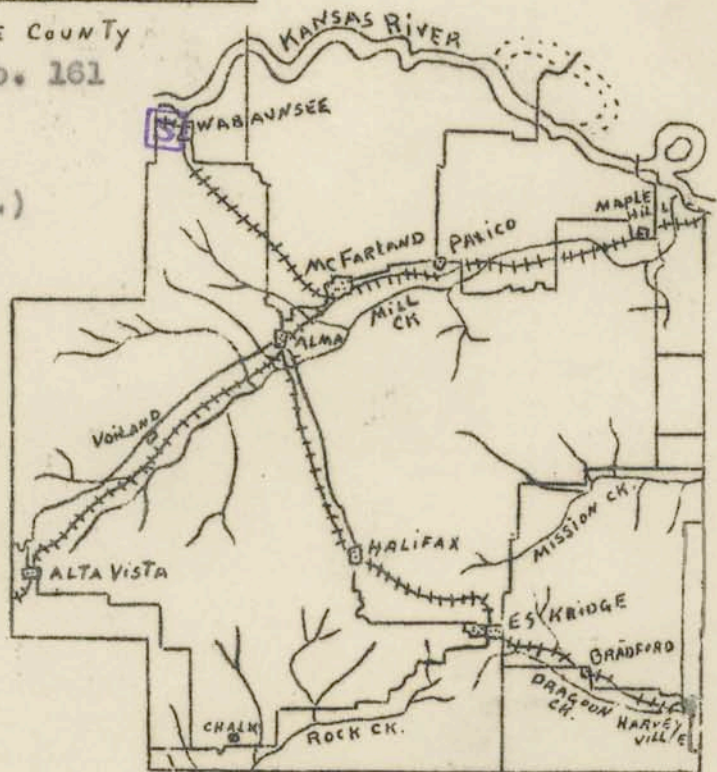
BRASSICACEAE

*Arabis canadensis* L.

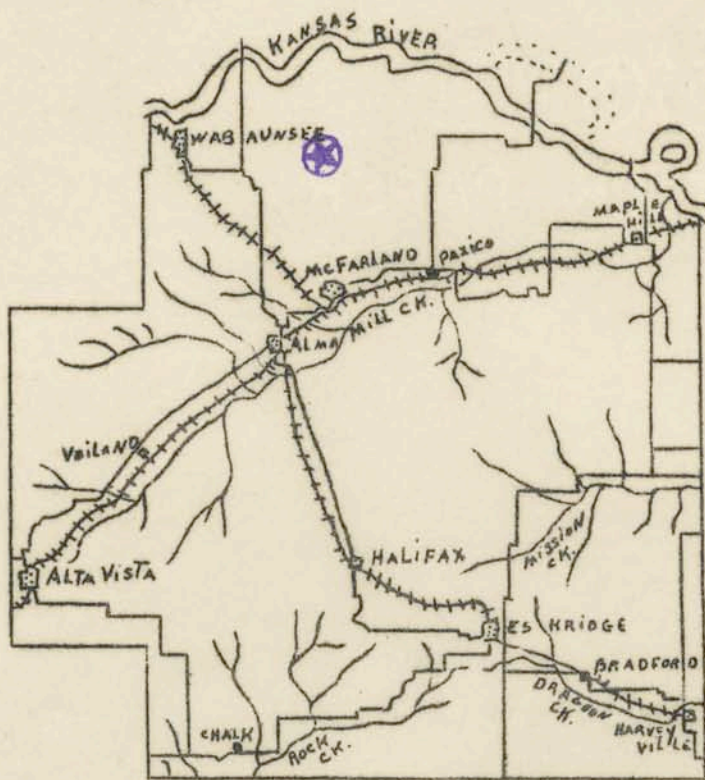
WABAUNSEE COUNTY  
Map No. 161

*Radicula sinuata* (Nutt.)

Greene



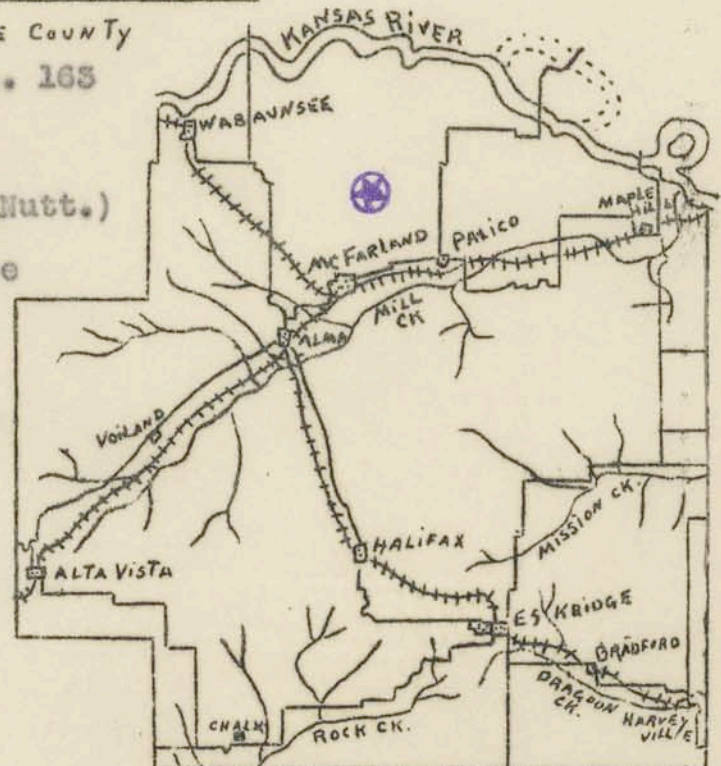
WABAUNSEE COUNTY  
Map No. 162



BRASSICACEAE  
*Radicula palustris* (L.)  
 Moench

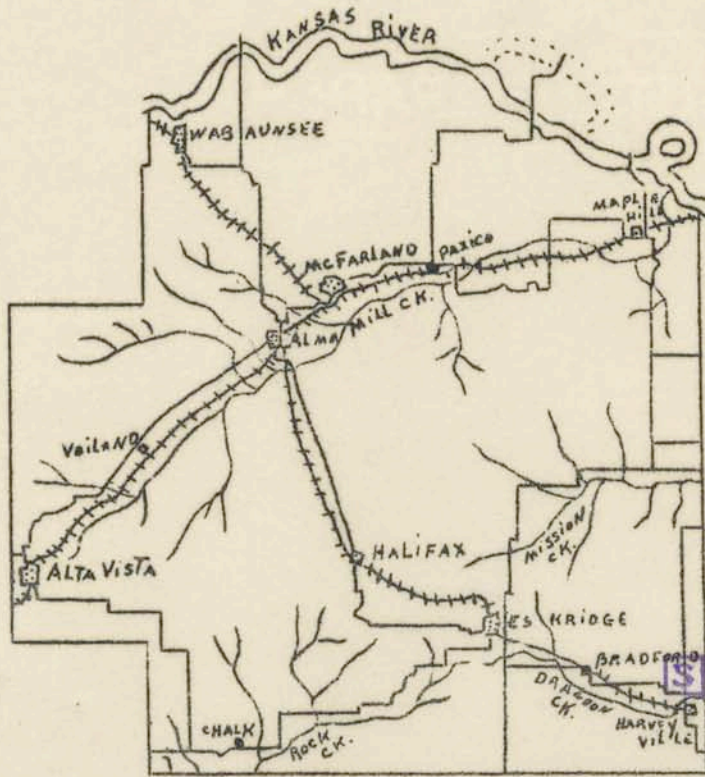
WABAUNSEE COUNTY  
 Map No. 163

*Radicula sessiliflora* (Nutt.)  
 Greene



WABAUNSEE COUNTY  
 Map No. 164





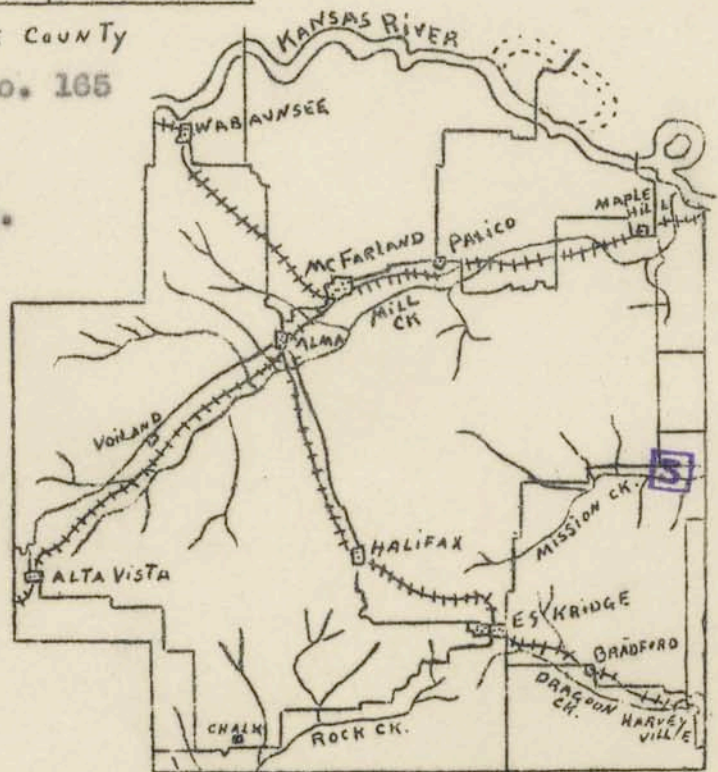
BRASSICACEAE

*Alliaria alliaria* Britton

WABAUNSEE COUNTY

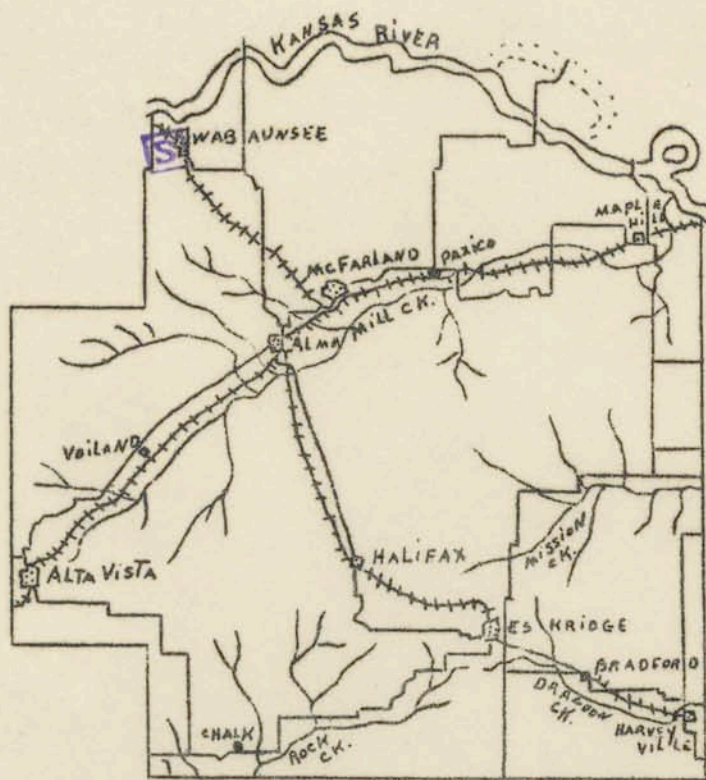
Map No. 165

*Dentaria laciniata* Muhl.



WABAUNSEE COUNTY

Map No. 166

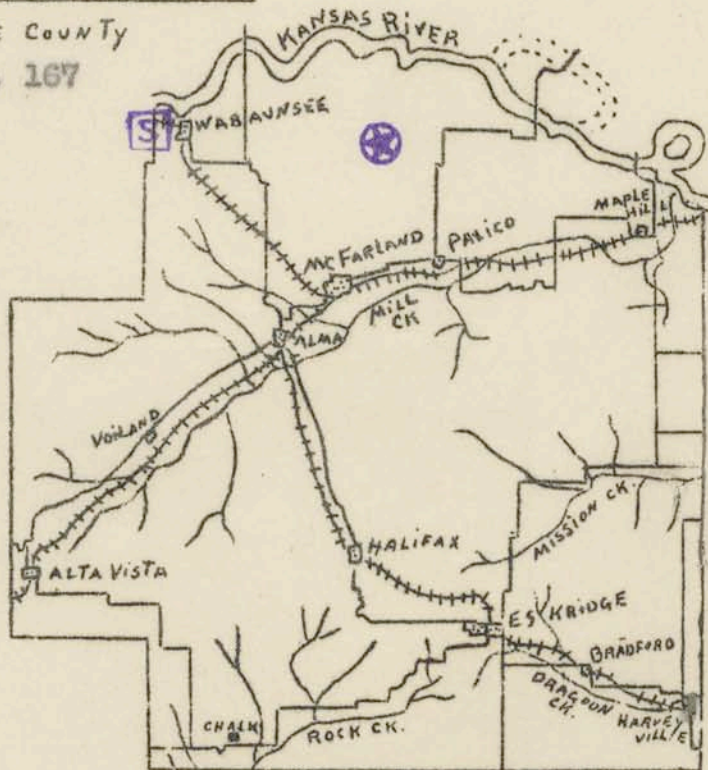


BRASSICACEAE

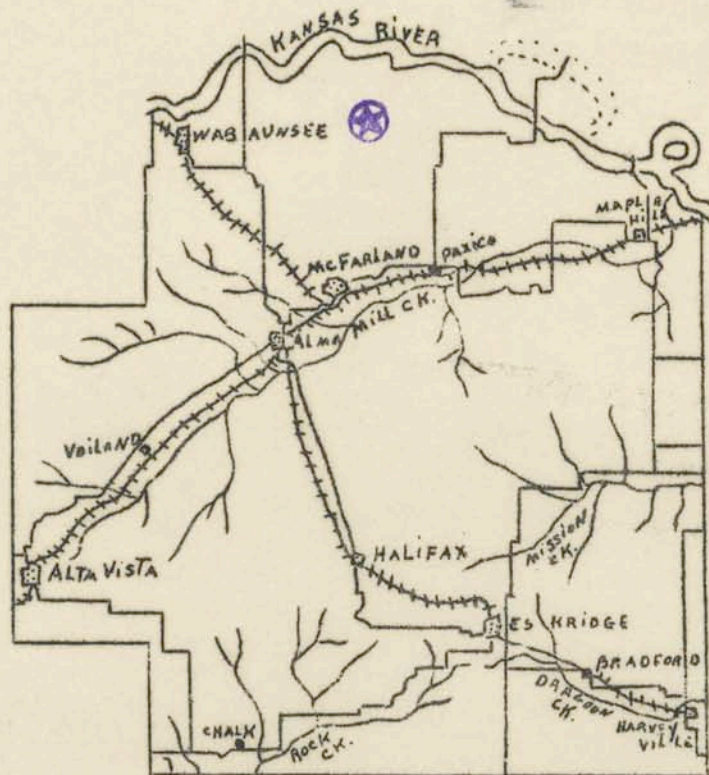
*Draba caroliniana* Walt.

WABAUNSEE COUNTY  
Map No. 167

*Draba cuneifolia* Nutt.



WABAUNSEE COUNTY  
Map No. 168

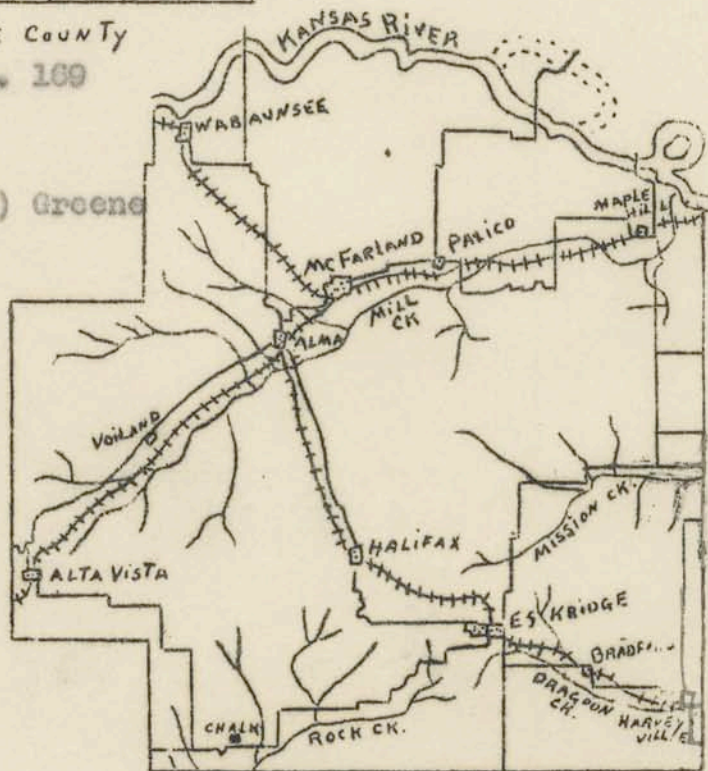


BRASSICACEAE

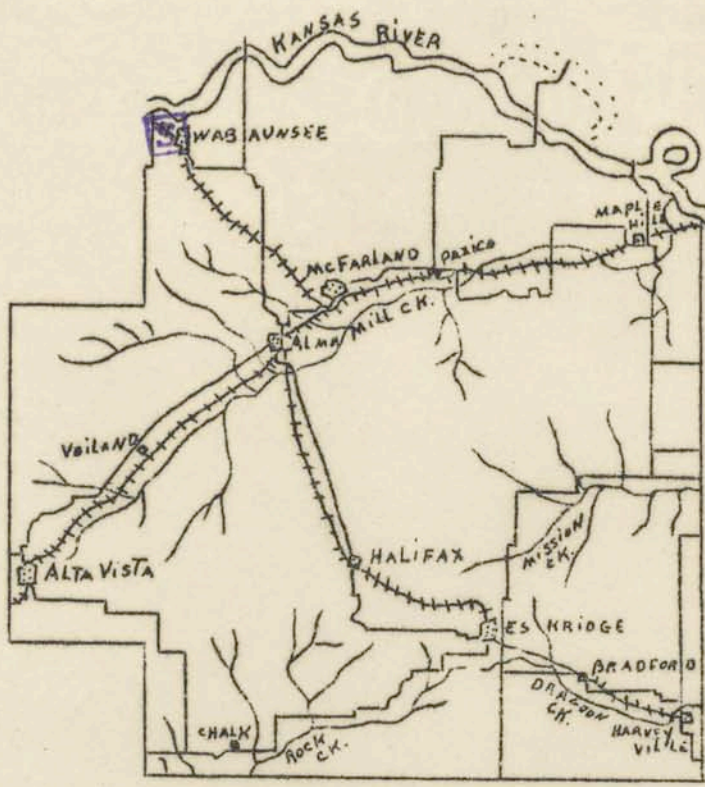
*Sophia atrovirens* (?)

WABAUNSEE COUNTY  
Map No. 169

*Sophia incisa* (Engelm.) Greene



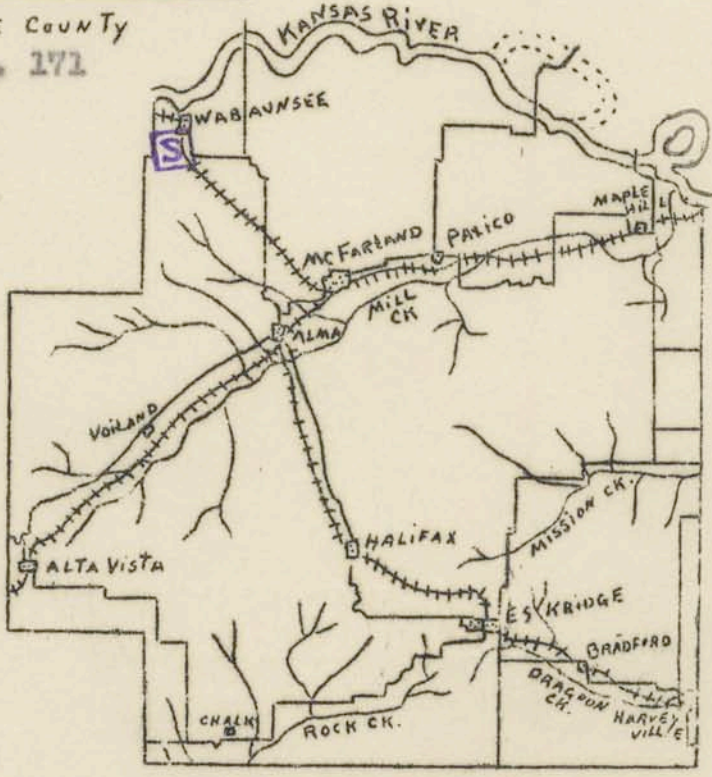
WABAUNSEE COUNTY  
Map No. 170



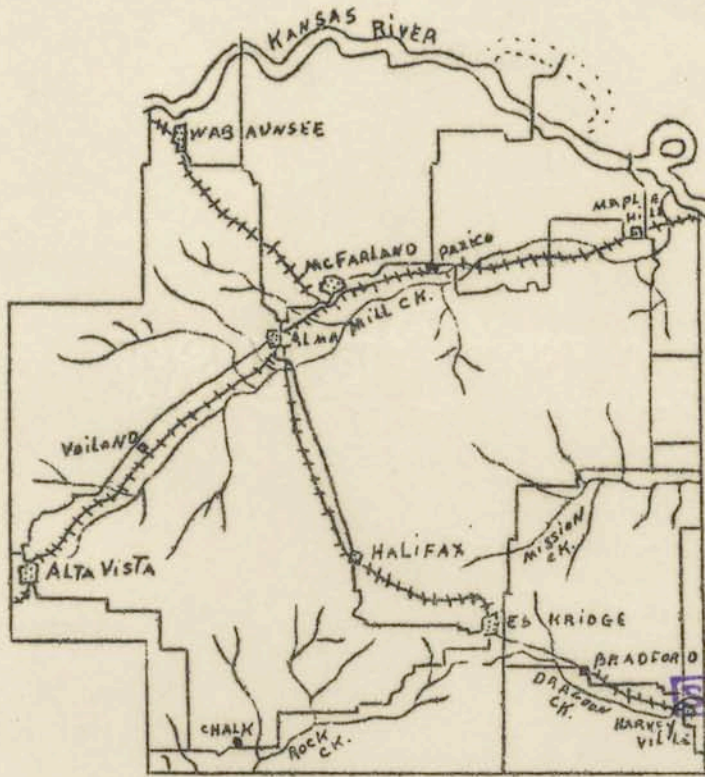
BRASSICACEAE  
*Bursa bursa-pastoris*  
 (L.) Britton

WABAUNSEE COUNTY  
 Map No. 171

*Sophia pinnata* (Walt.)  
 Howell



WABAUNSEE COUNTY  
 Map No. 172



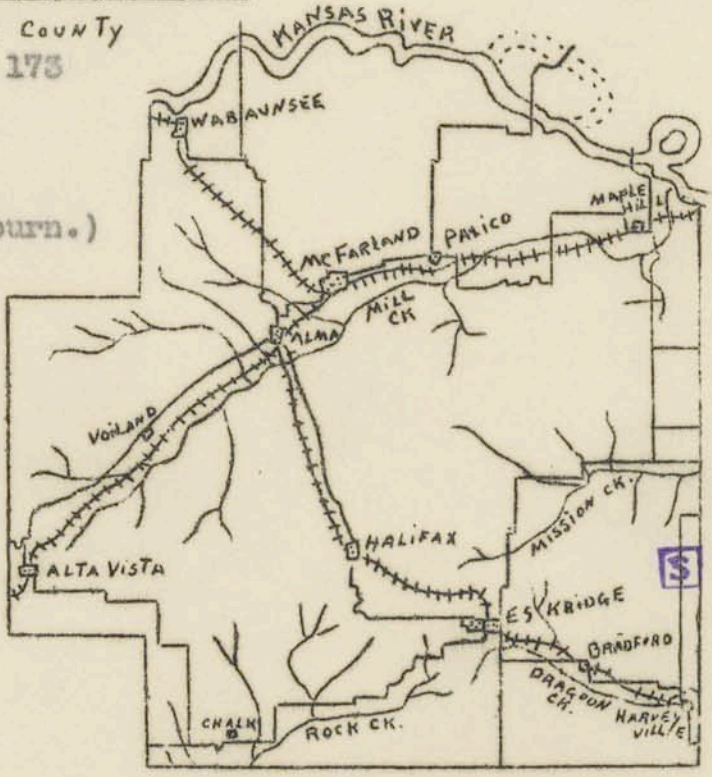
BRASSICACEAE

*Brassica caepesttris* L.

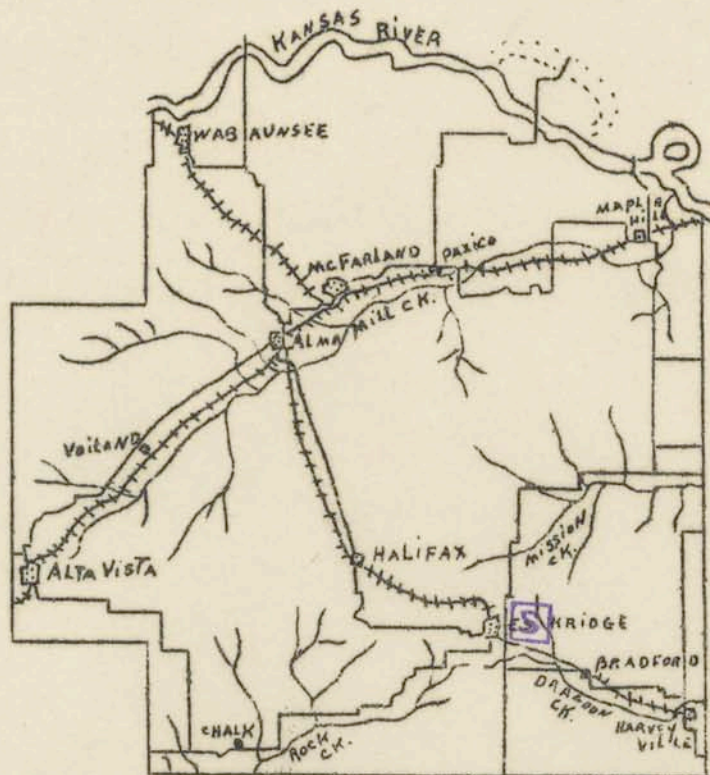
WABAUNSEE COUNTY  
Map No. 173

*Lepidium virginicum* (Tourn.)

L.



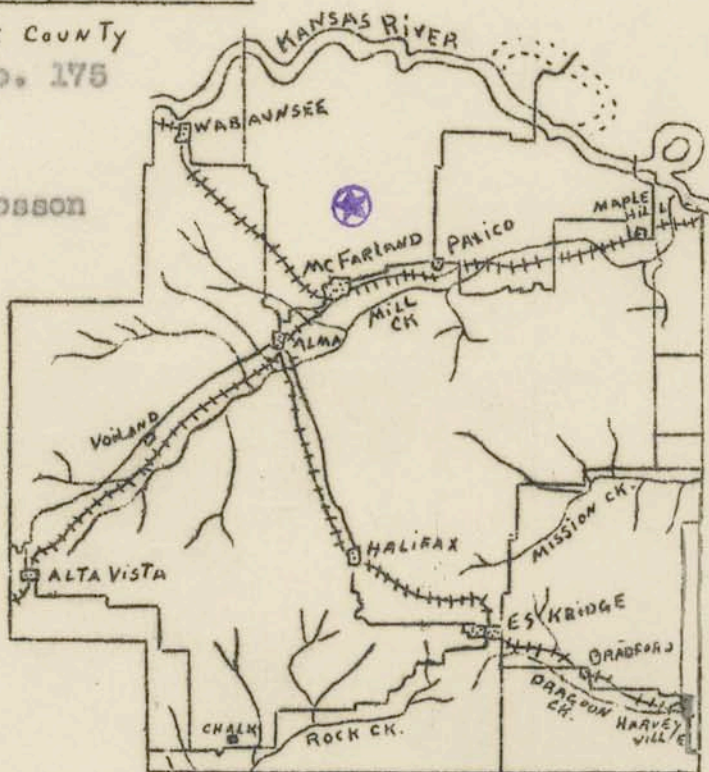
WABAUNSEE COUNTY  
Map No. 174



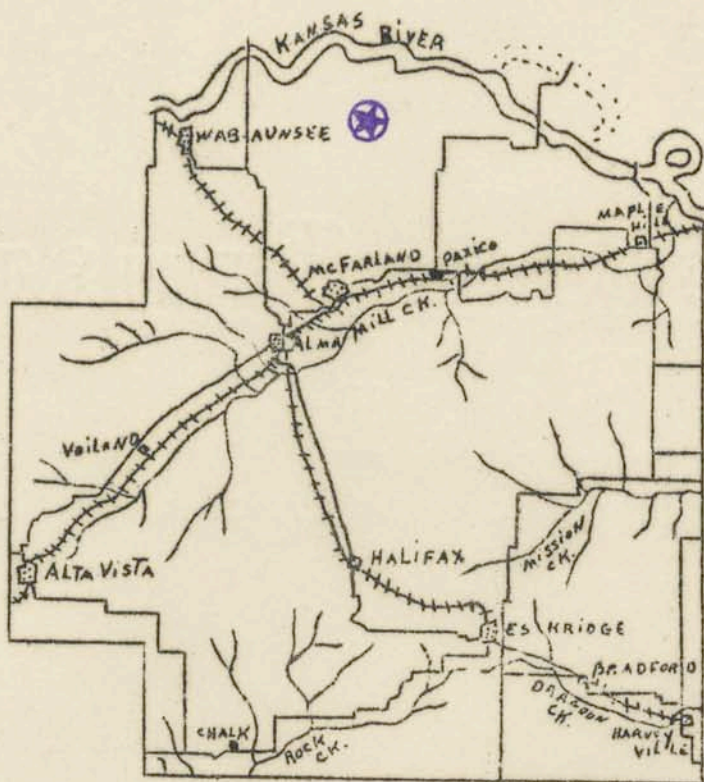
BRASSICACEAE  
*Brassica nigra* (L.)  
 Koch

WABAUNSEE COUNTY  
 Map No. 175

*Brassica juncea* (L.) Cosson

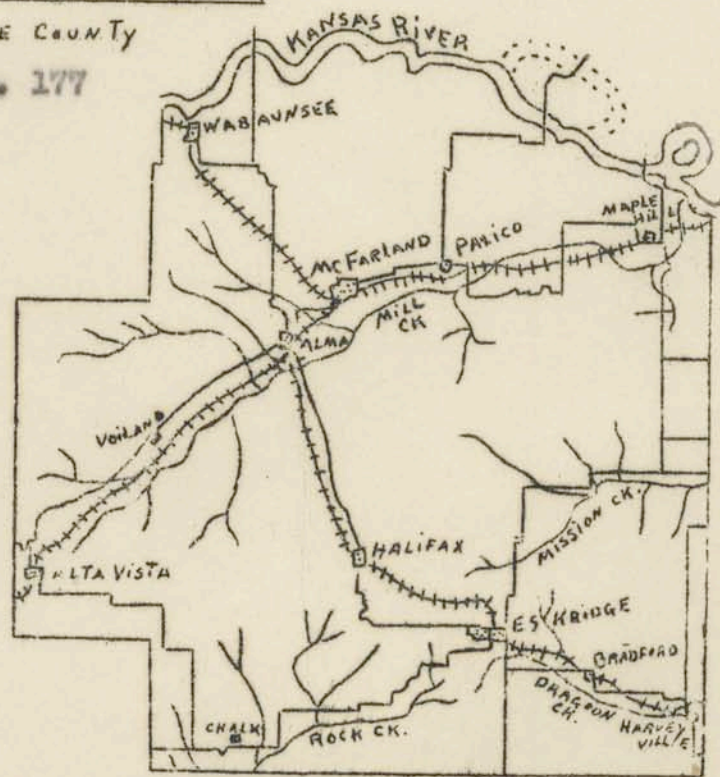


WABAUNSEE COUNTY  
 Map No. 176

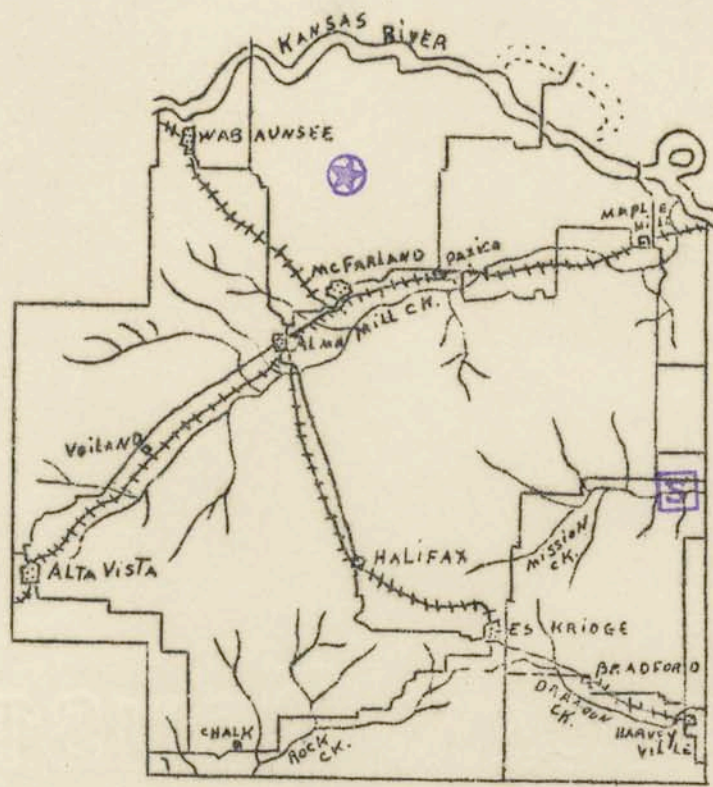


BRASSICACEAE  
*Erysimum officinale*  
 (L.) Scop.

WABAUNSEE COUNTY  
 Map No. 177



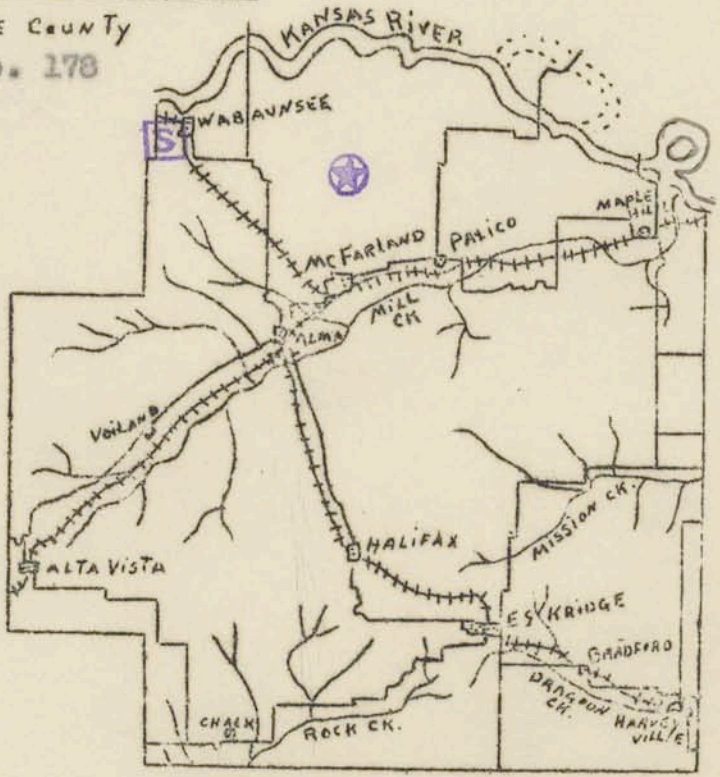
WABAUNSEE COUNTY



CARYOPHYLLACEAE  
*Saponaria officinalis* L.

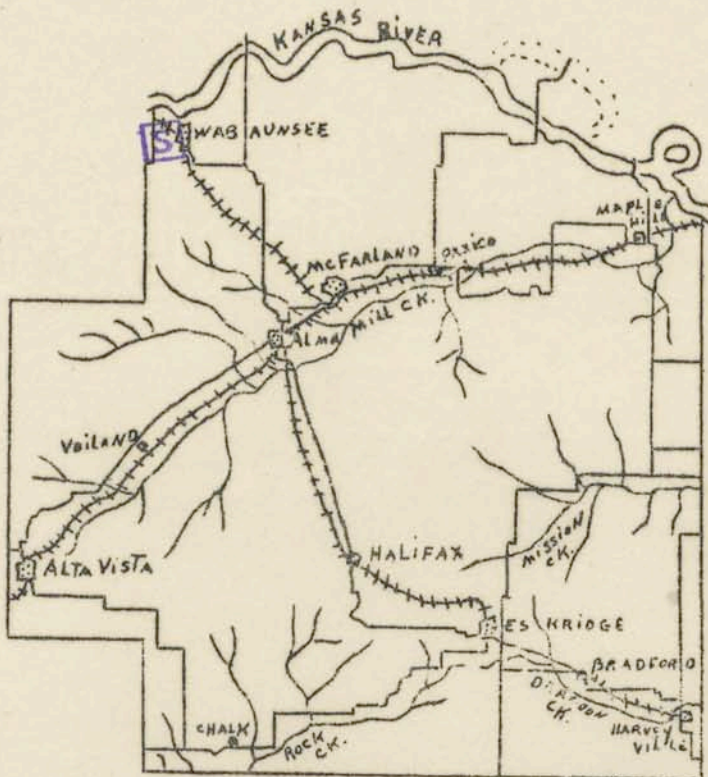
WABAUNSEE COUNTY  
 Map No. 178

*Silene antirrhina* L.



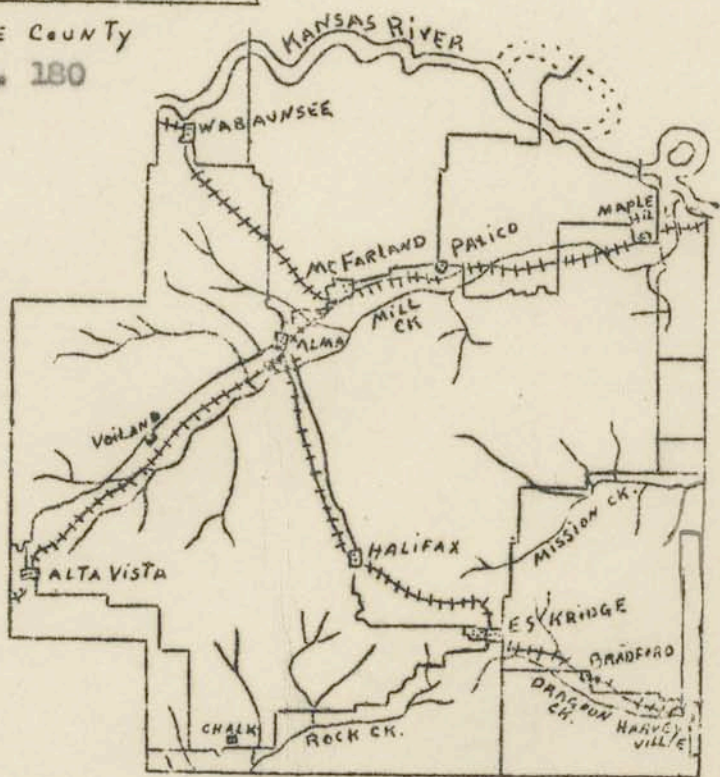
WABAUNSEE COUNTY  
 Map No. 179



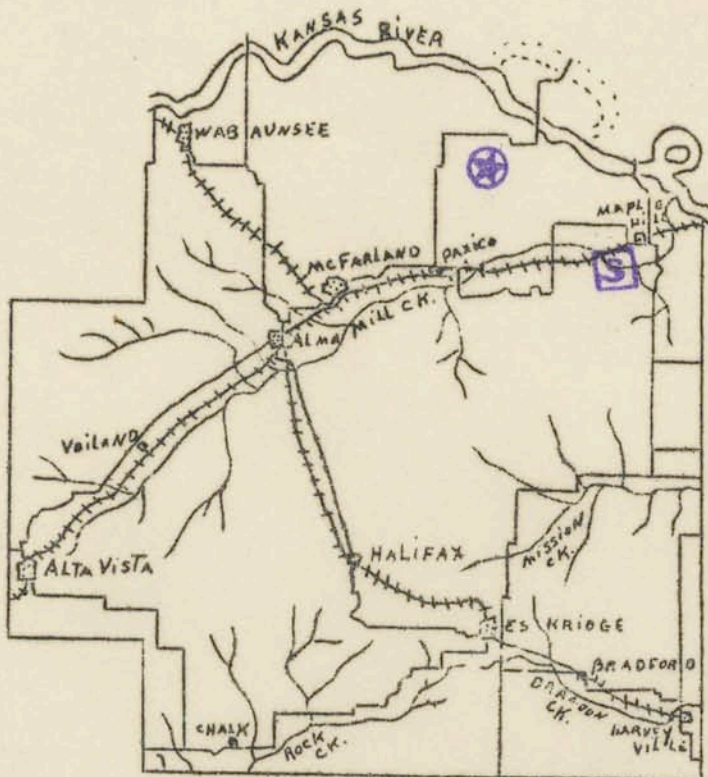


CARYOPHYLLACEAE  
*Gerastium brachypodum*  
 Engelm.

WABAUNSEE COUNTY  
 Map No. 180



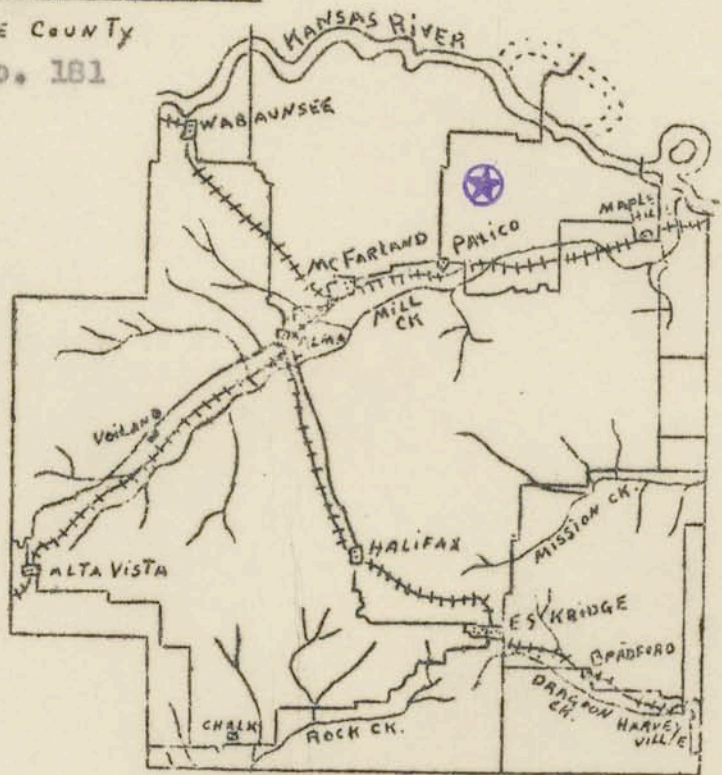
WABAUNSEE COUNTY



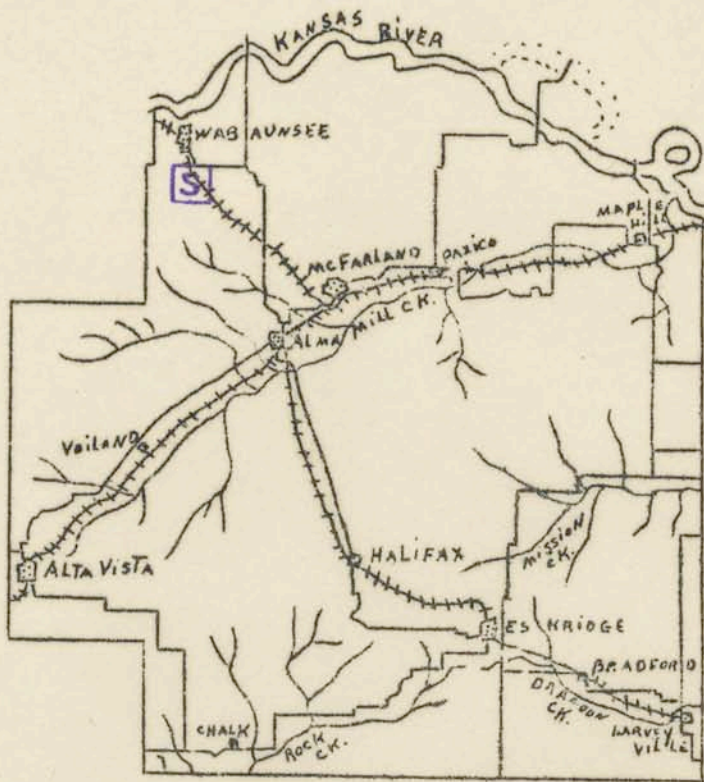
CARYOPHYLLACEAE  
*Silene stellata* (L.)  
 Ait.

WABAUNSEE COUNTY  
 Map No. 181

PORTULACACEAE  
*Portulaca oleraceae* L.



WABAUNSEE COUNTY  
 Map No. 182



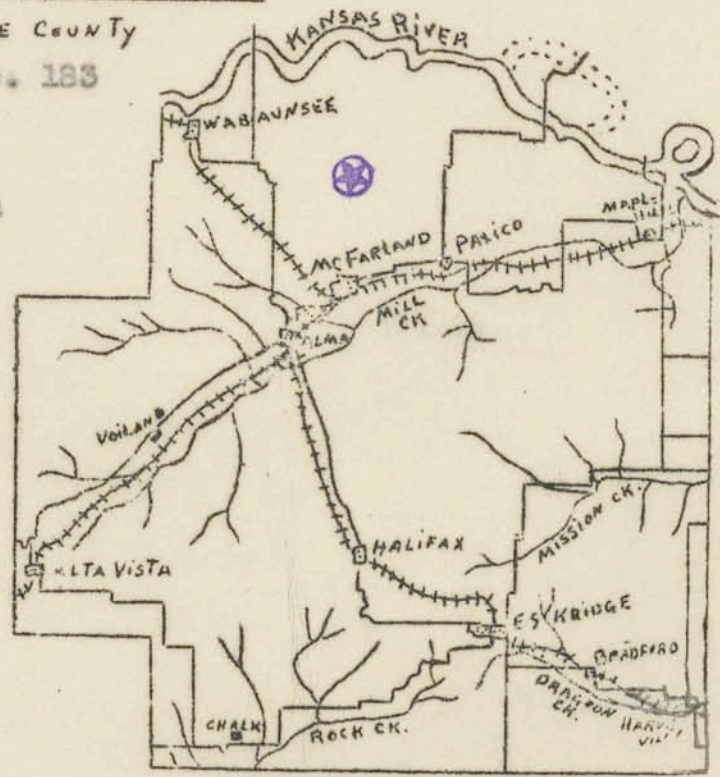
SALICACEAE

*Populus sargentii* Dode

WABAUNSEE COUNTY

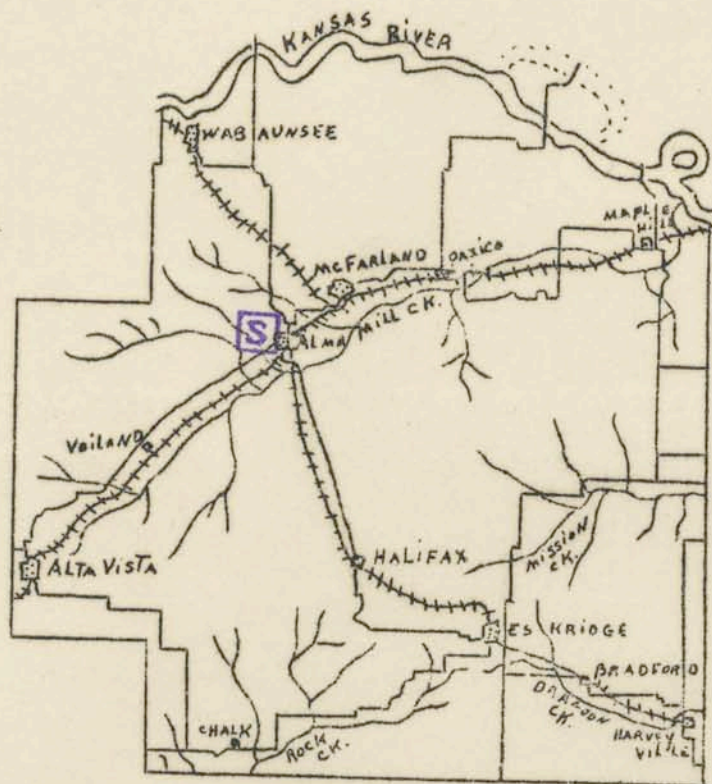
Map No. 183

*Populus deltoides* Marsh



WABAUNSEE COUNTY

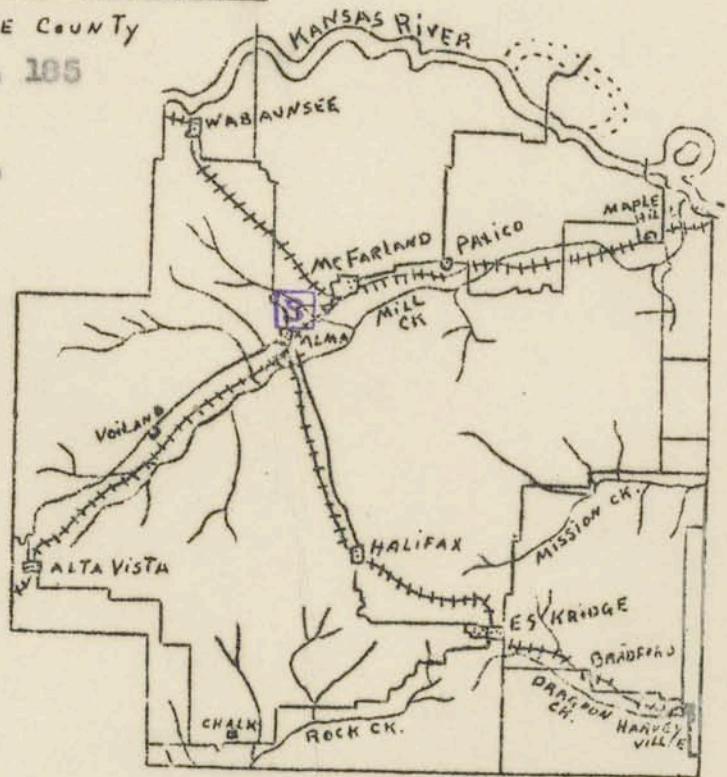
Map No. 184



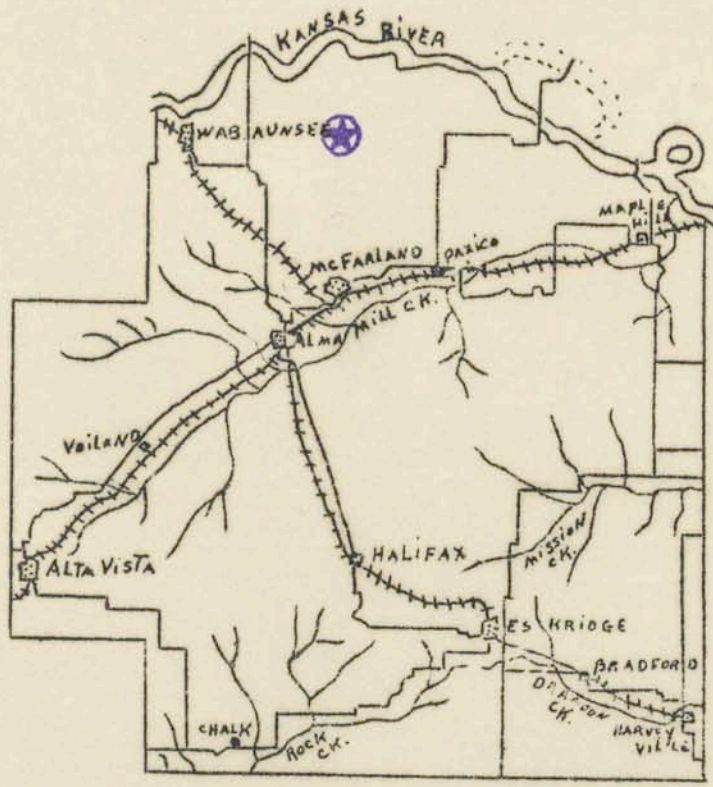
**SALICACEAE**  
*Populus alba L.*

WABAUNSEE COUNTY  
 Map No. 185

*Populus italica Moench.*



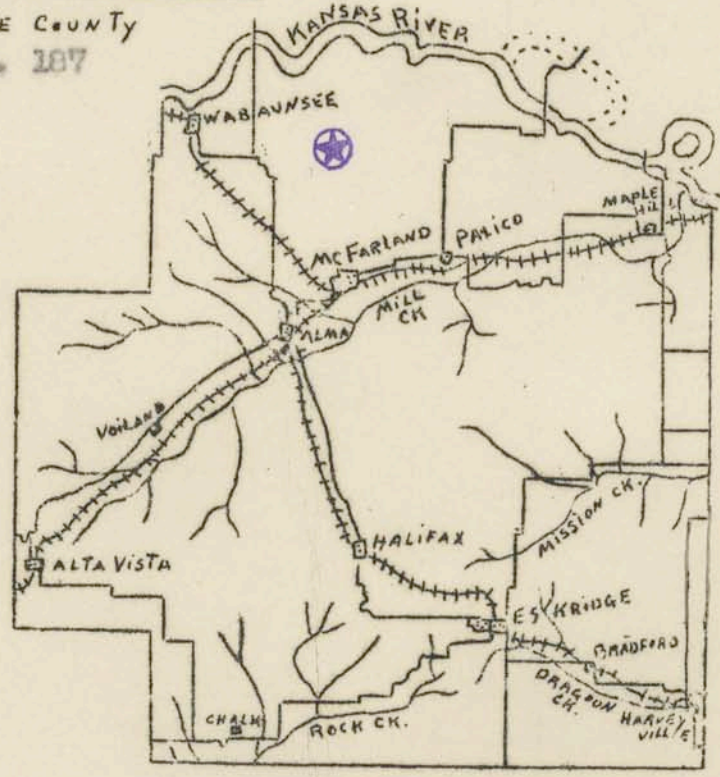
WABAUNSEE COUNTY  
 Map No. 186



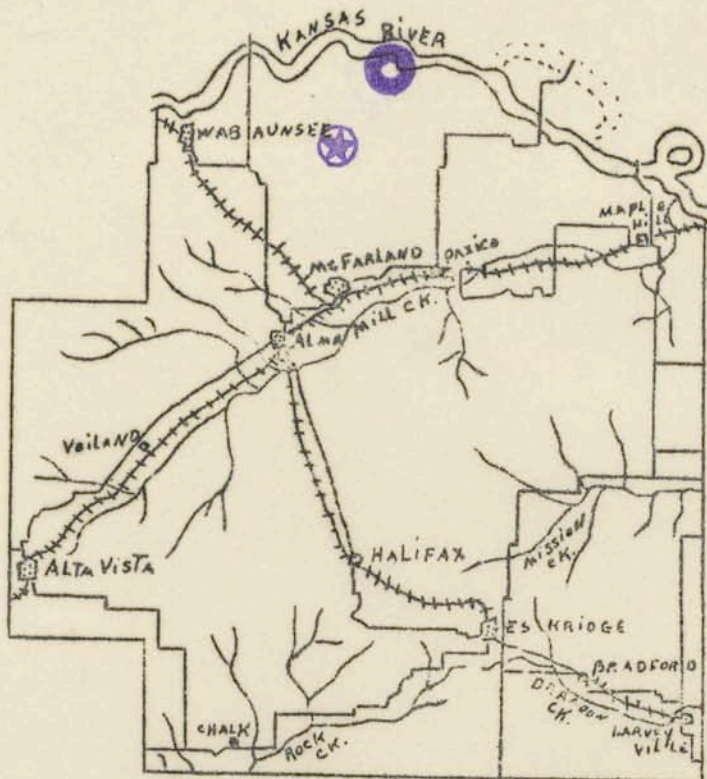
SALICACEAE  
*Salix amygdaloides*  
 Anders.

WABAUNSEE COUNTY  
 Map No. 187

*Salix cordata* Muhl.



WABAUNSEE COUNTY  
 Map No. 188



SALICACEAE

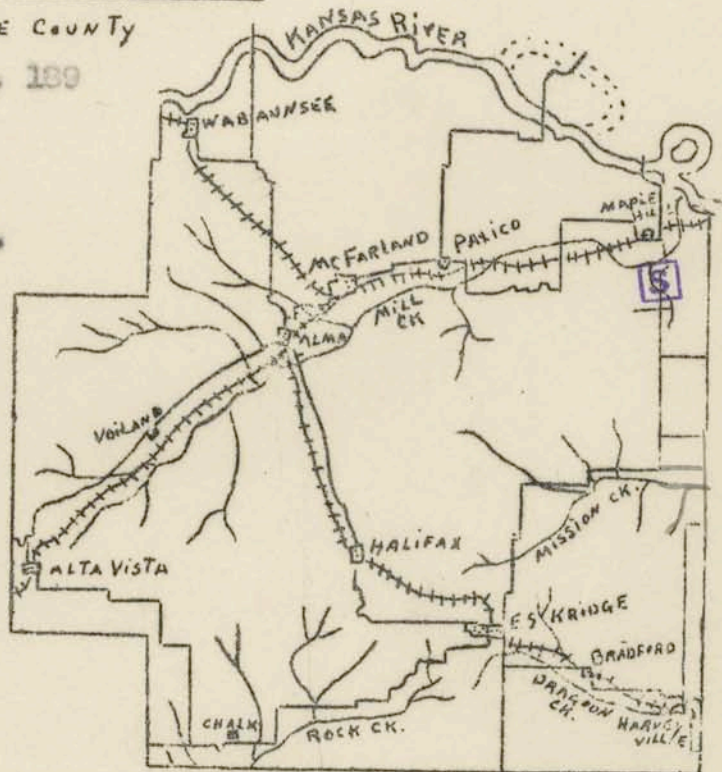
*Salix longifolia* Muhl.

WABAUNSEE COUNTY

Map No. 189

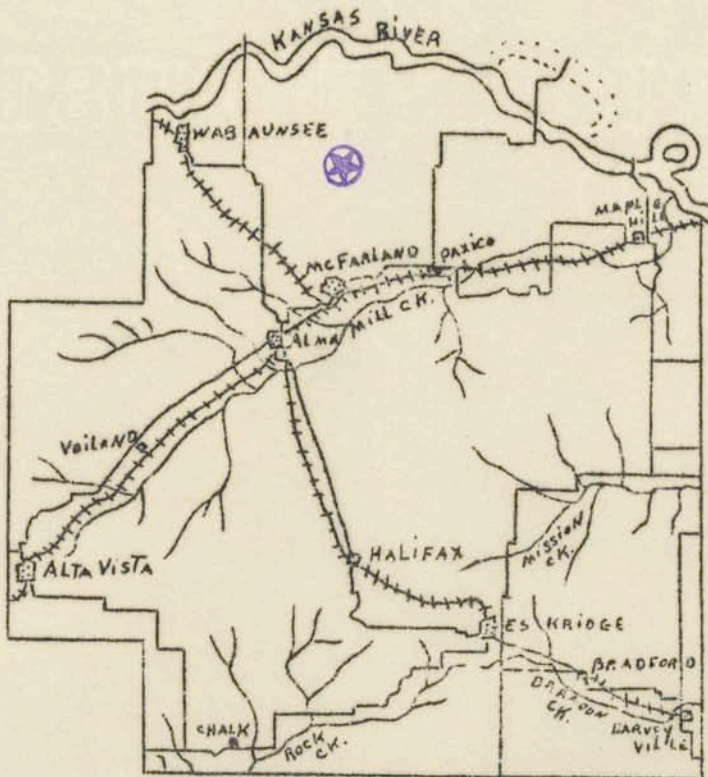
PHYTOLACCACEAE

*Phytolacca americana* L.



WABAUNSEE COUNTY

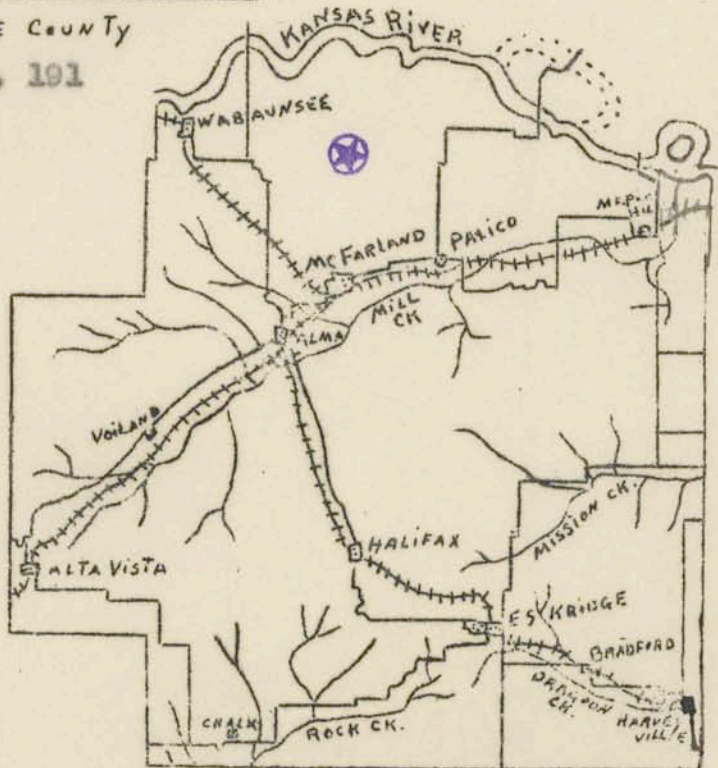
Map No. 190



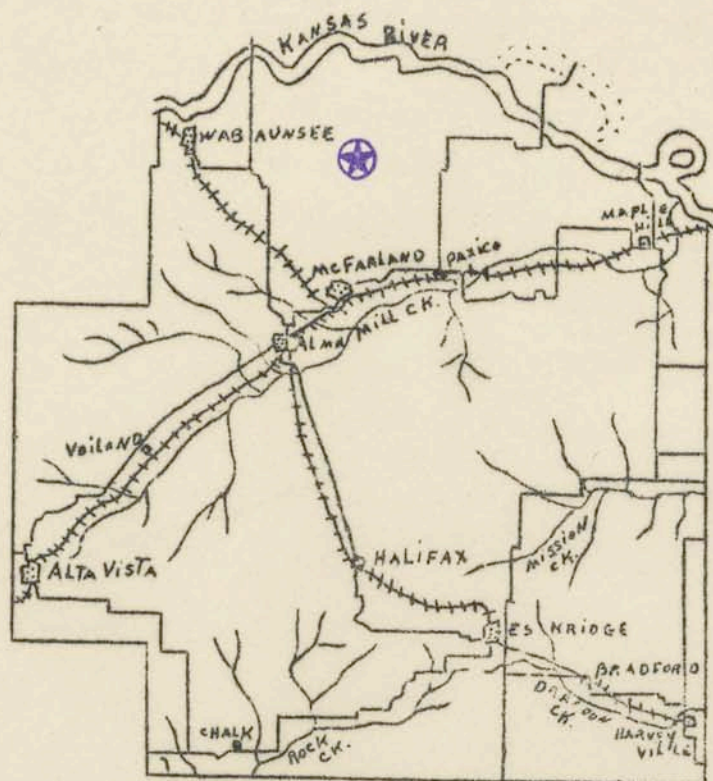
AMARANTHIACEAE  
*Amaranthus retroflexus*  
 L.

WABAUNSEE COUNTY  
 Map No. 191

*Amaranthus spinosus* L.



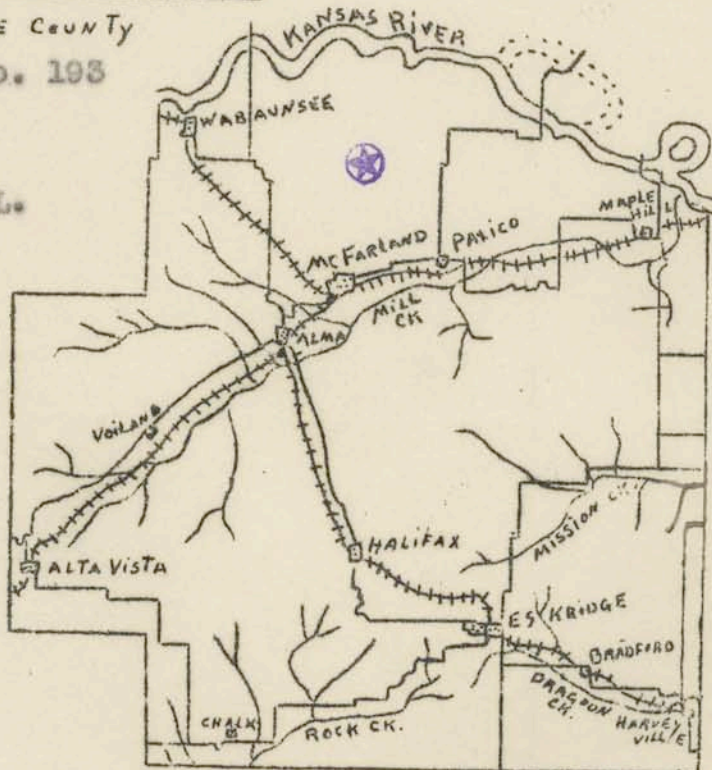
WABAUNSEE COUNTY  
 Map No. 192



AMARANTHACEAE  
*Amaranthus blitoides*  
 S. Wats.

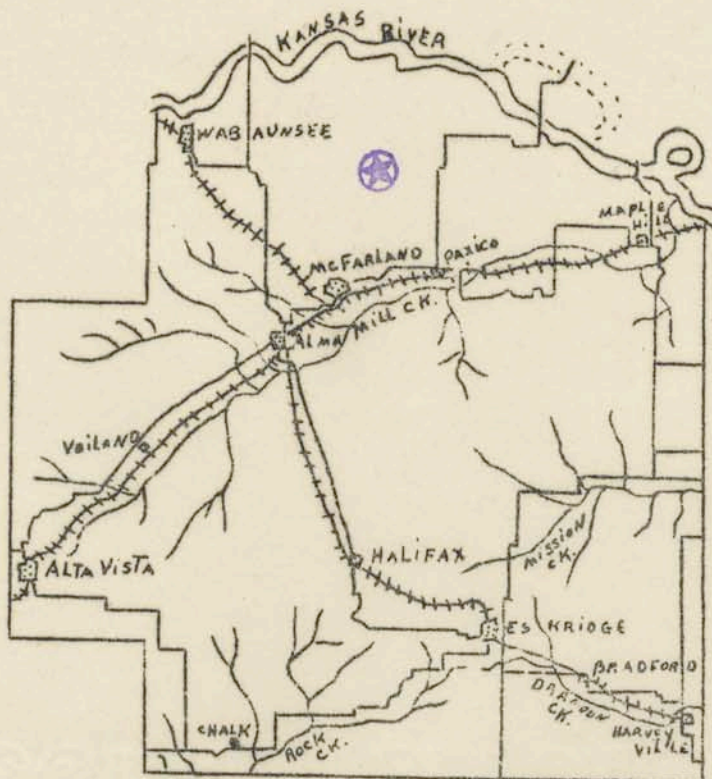
WABAUNSEE COUNTY  
 Map No. 193

*Amaranthus graecizans* L.



WABAUNSEE COUNTY  
 Map No. 194

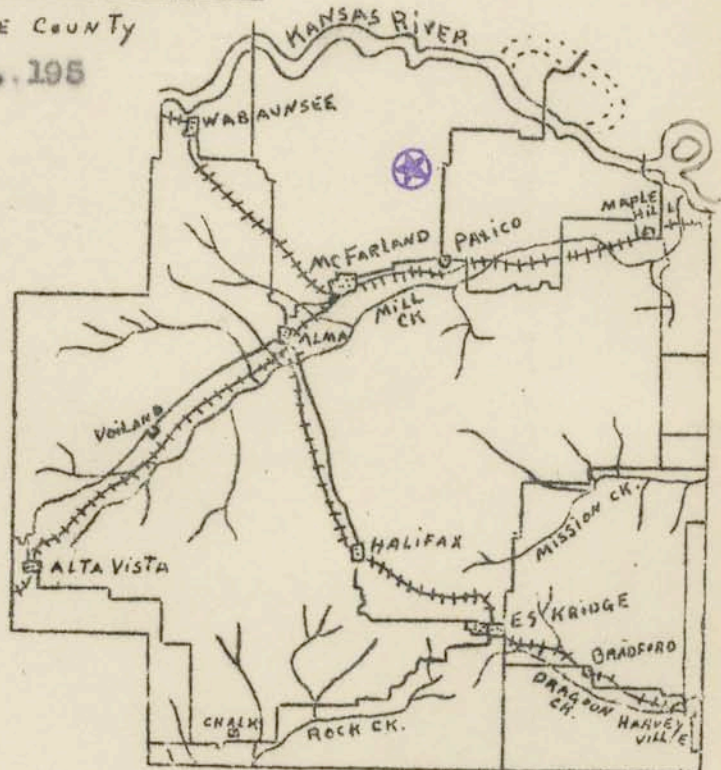




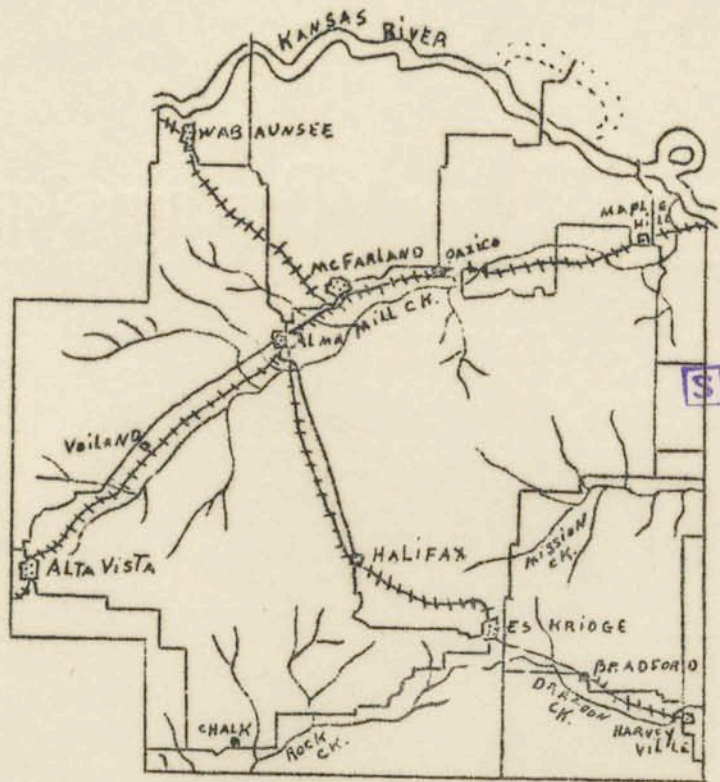
AMARANTHACEAE  
*Acrida tamariscina*  
 (Nutt.) Wood

WABAUNSEE COUNTY  
 Map No. 195

CHENOPODIACEAE  
*Monolepsis nuttalliana*  
 (R & S) Wats.



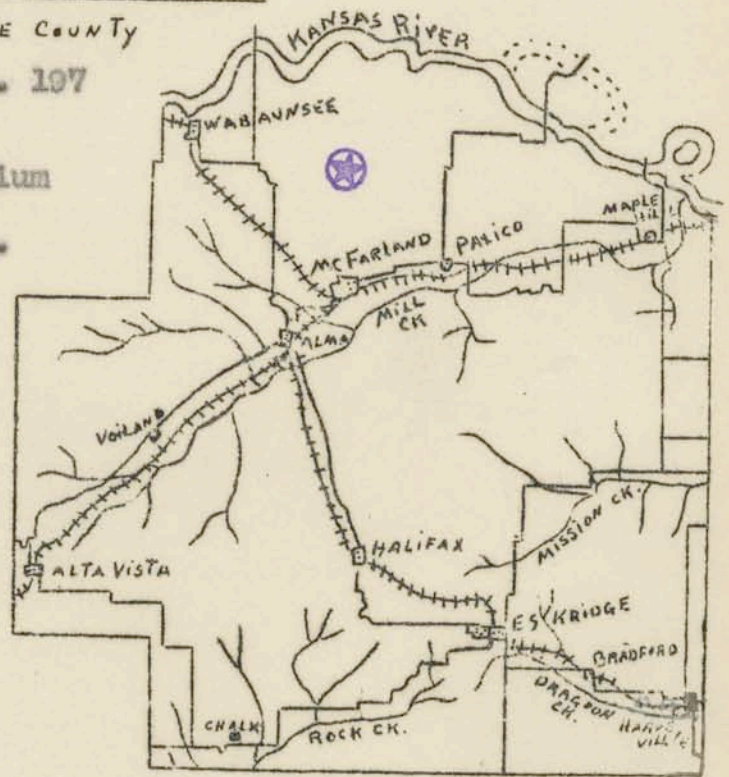
WABAUNSEE COUNTY  
 Map No. 196



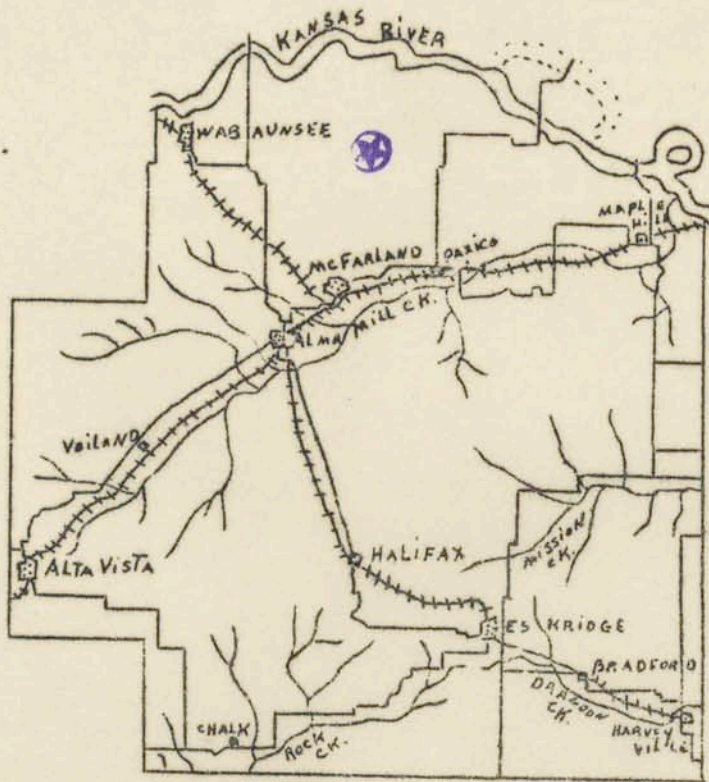
CHENOPODIACEAE  
*Chenopodium album* L.

WABAUNSEE COUNTY  
 Map No. 197

*Cycloloma atriplicifolium*  
 (Spreng.) Coult.



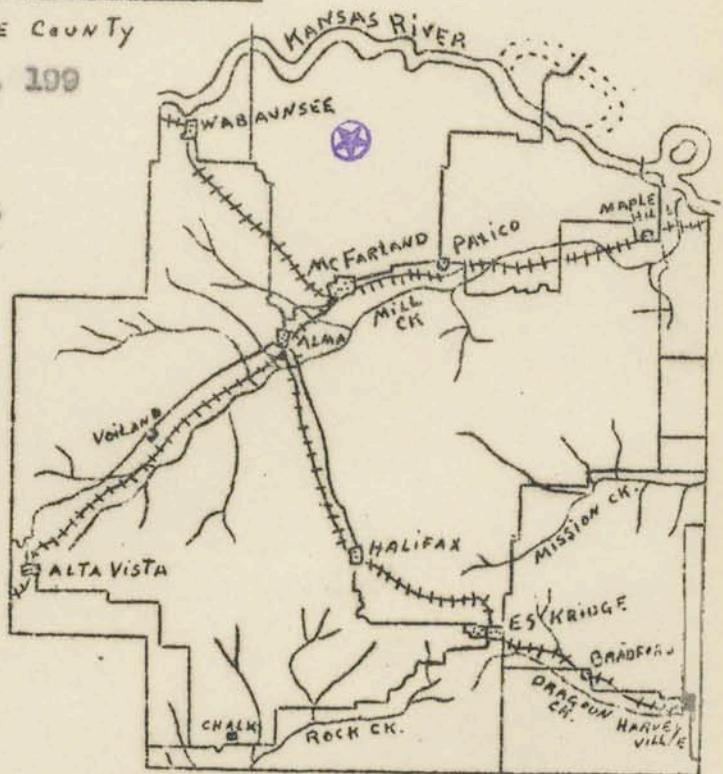
WABAUNSEE COUNTY  
 Map No. 198



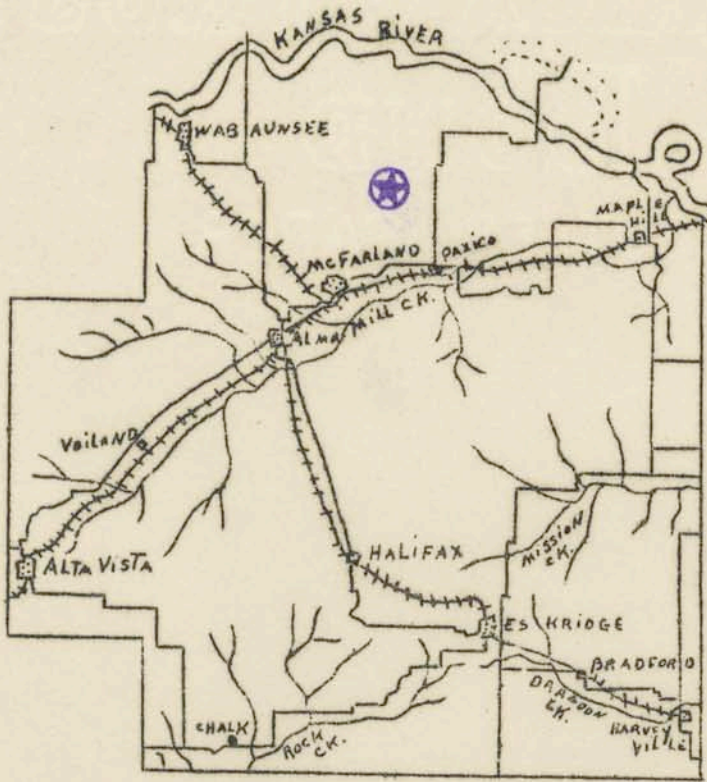
CHENOPODIACEAE  
*Chenopodium boscianum*  
 Moq.

WABAUNSEE COUNTY  
 Map No. 199

*Chenopodium hybridum* L.



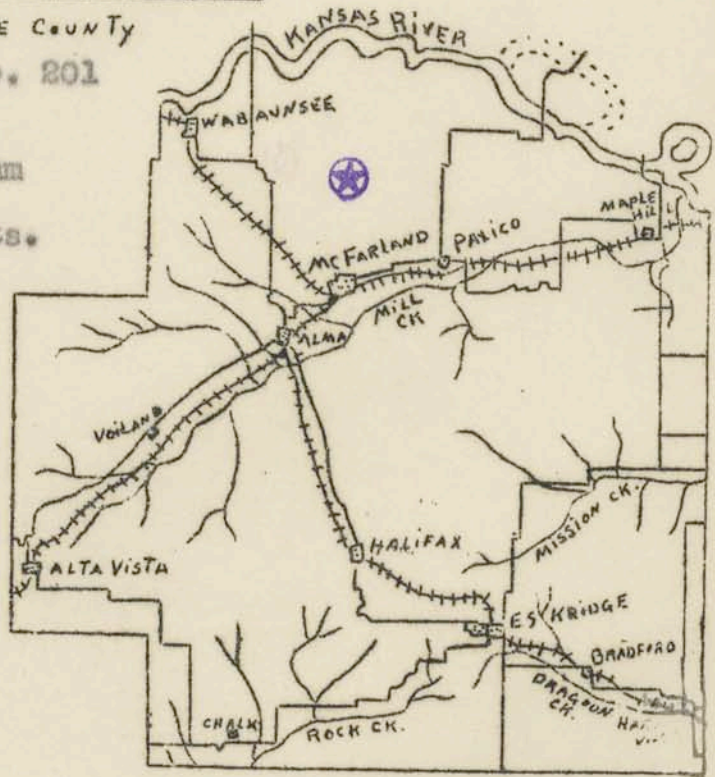
WABAUNSEE COUNTY  
 Map No. 200



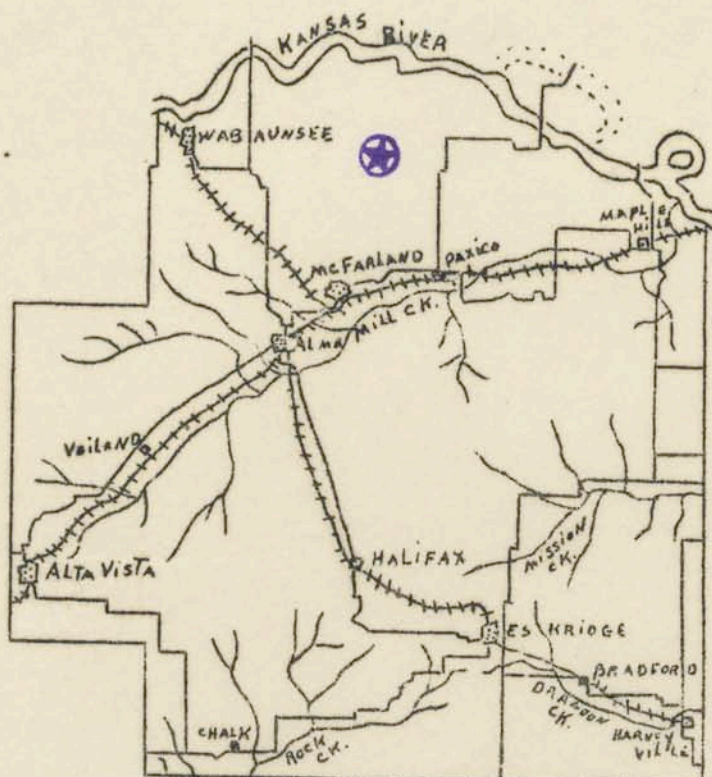
CHENOPODIACEAE  
*Chenopodium leptophyllum*  
 (Moq.) Nutt.

WABAUNSEE COUNTY  
 Map No. 201

*Chenopodium leptophyllum*  
*subglabrum* S. Wats.



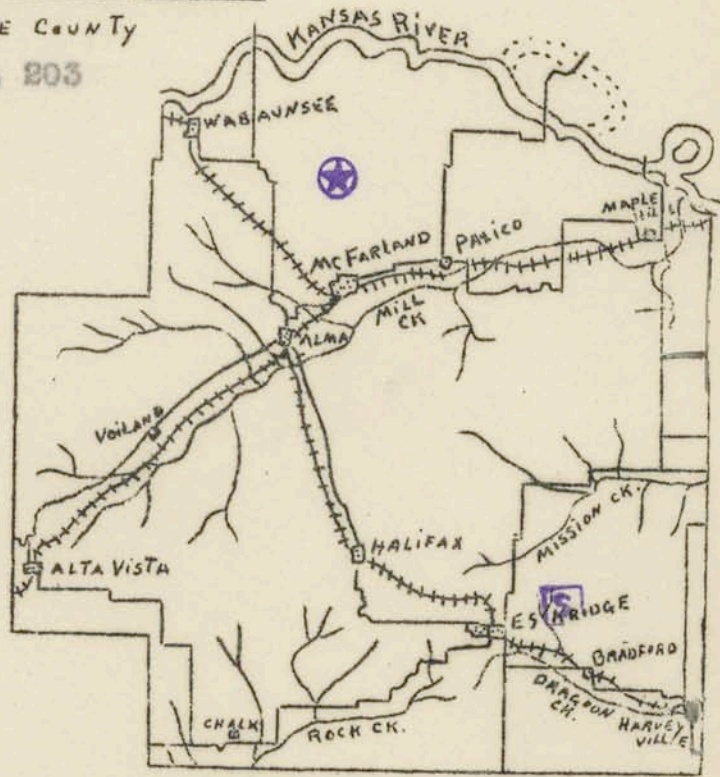
WABAUNSEE COUNTY  
 Map No. 202



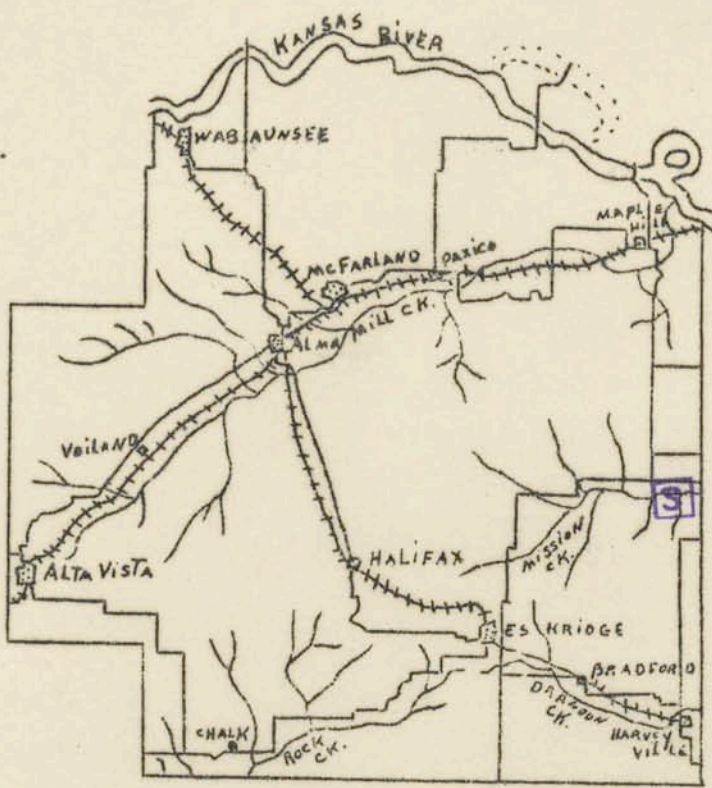
POLYGONACEAE  
*Rumex acetosella* L.

WABAUNSEE COUNTY  
 Map No. 203

*Rumex altissimus* Wood



WABAUNSEE COUNTY  
 Map No. 204

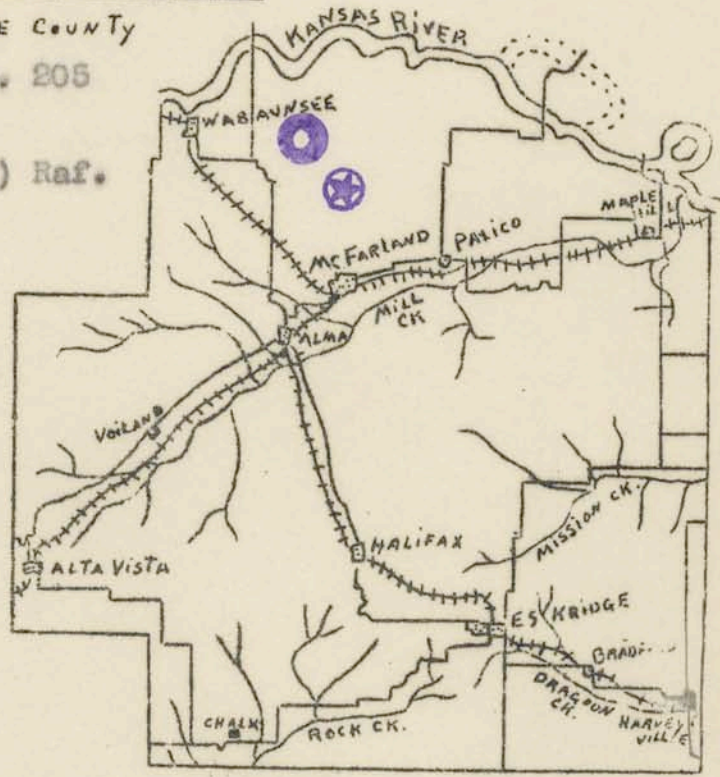


POLYGONACEAE  
*Rumex Britannica* L.

WABAUNSEE COUNTY

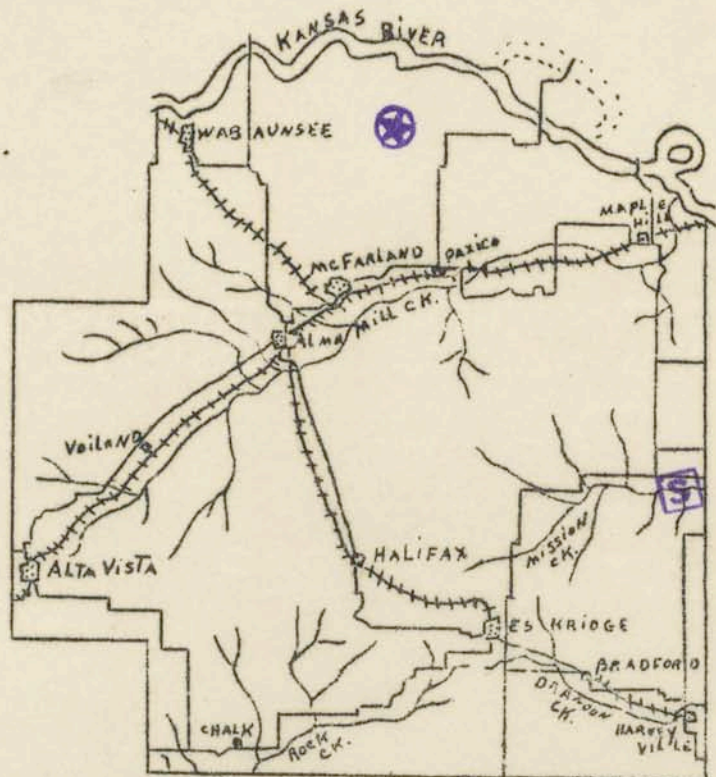
Map No. 206

*Tovara virginianum* (L.) Raf.



WABAUNSEE COUNTY

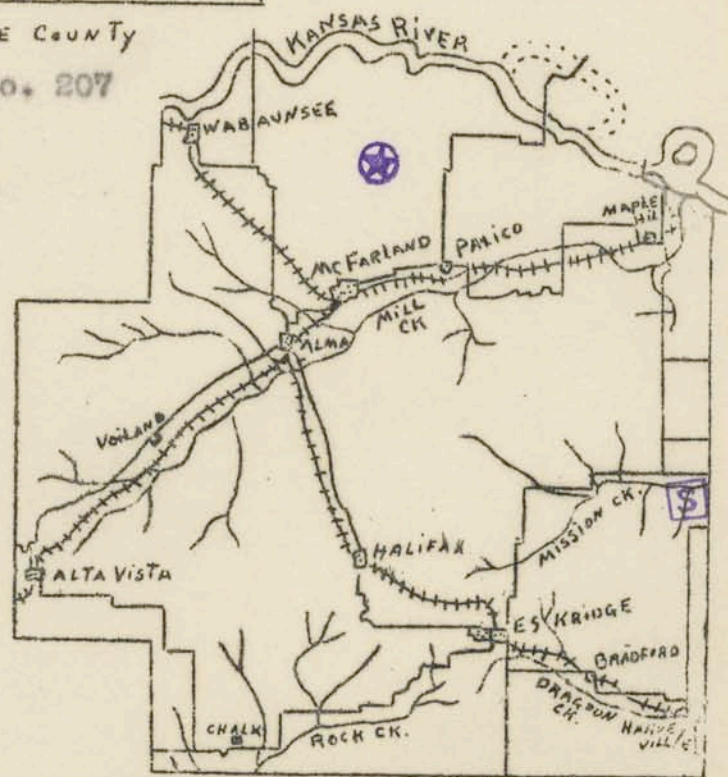
Map No. 206



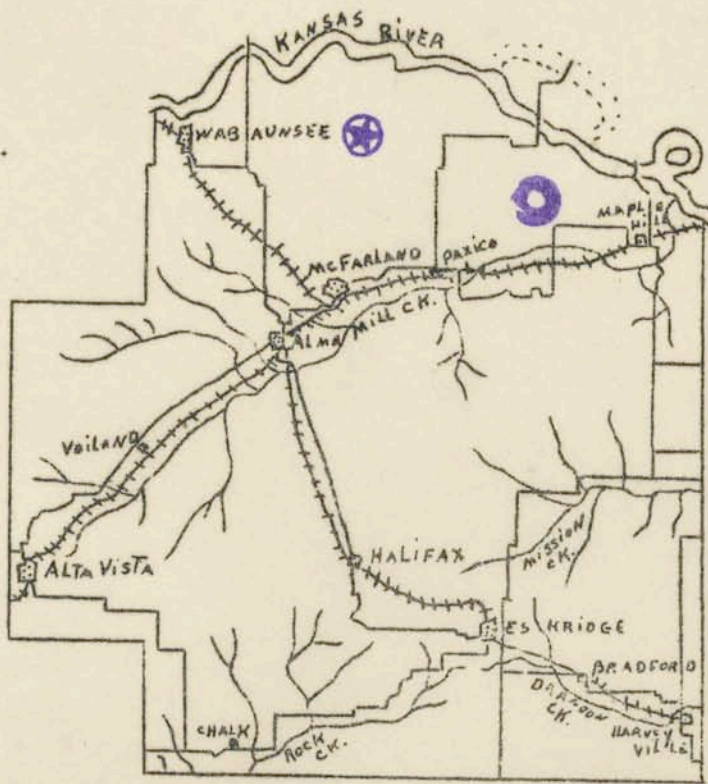
POLYGONACEAE  
*Rumex crispus* L.

WABAUNSEE COUNTY  
 Map No. 207

*Polygonum aviculare* L.



WABAUNSEE COUNTY  
 Map No. 208



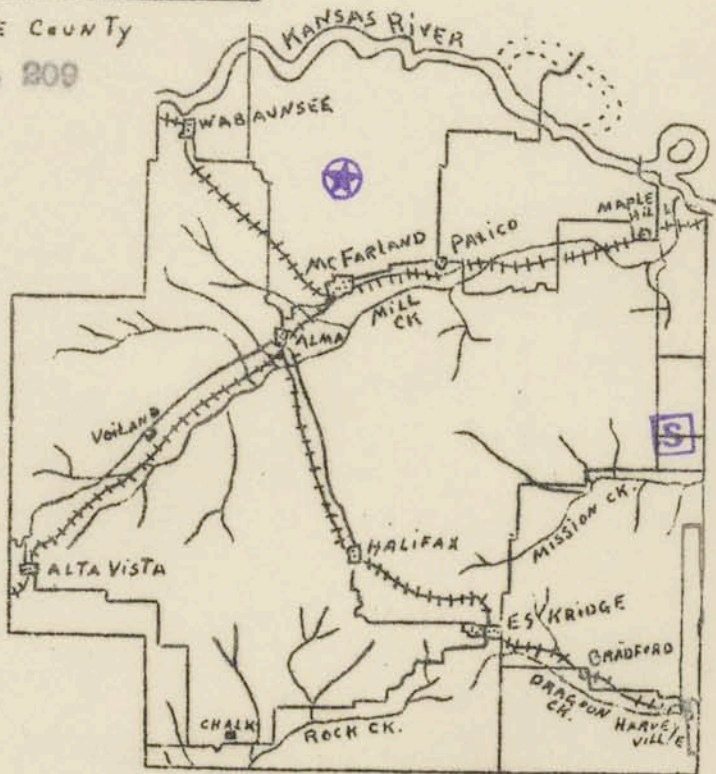
POLYGONACEAE

*Polygonum erectum* L.

WABAUNSEE COUNTY

Map No. 209

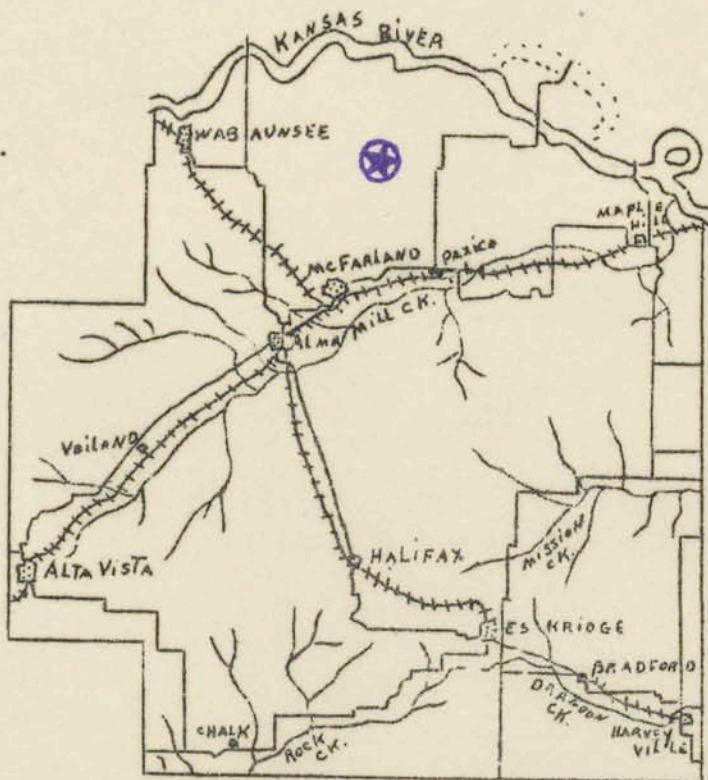
*Polygonum tenue* Michx.



WABAUNSEE COUNTY

Map No. 210

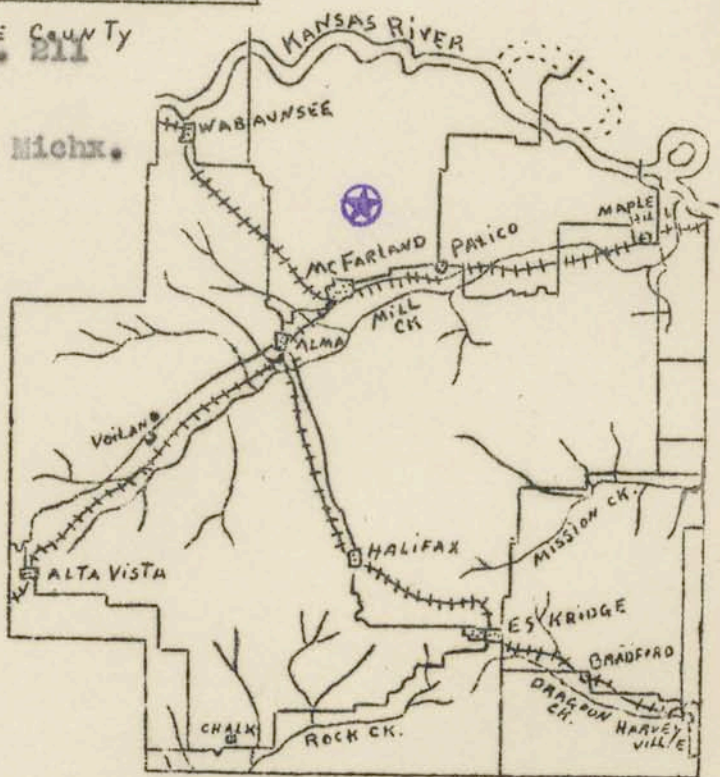




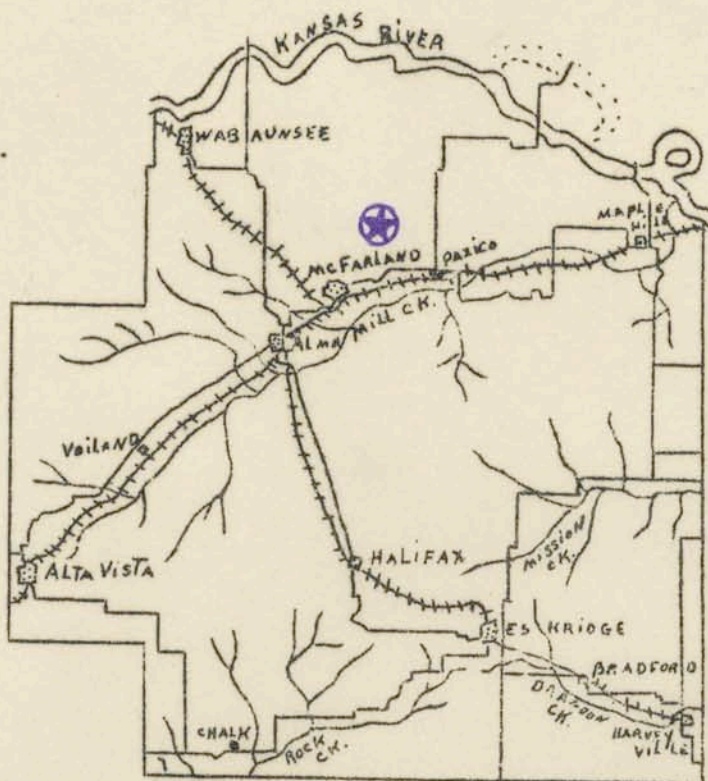
POLYGONACEAE  
*Polygonum littorale*  
 Link.

WABAUNSEE COUNTY  
 Map No. 211

*Polygonum ramosissimum* Michx.



WABAUNSEE COUNTY  
 Map No. 212



POLYGONACEAE

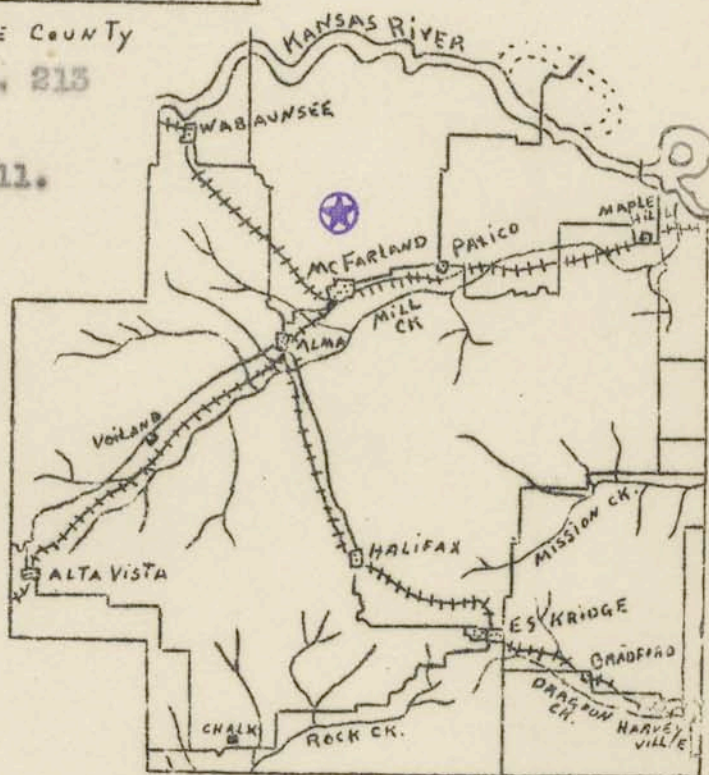
*Persicaria pericaria*

(L.) Small

WABAUNSEE COUNTY

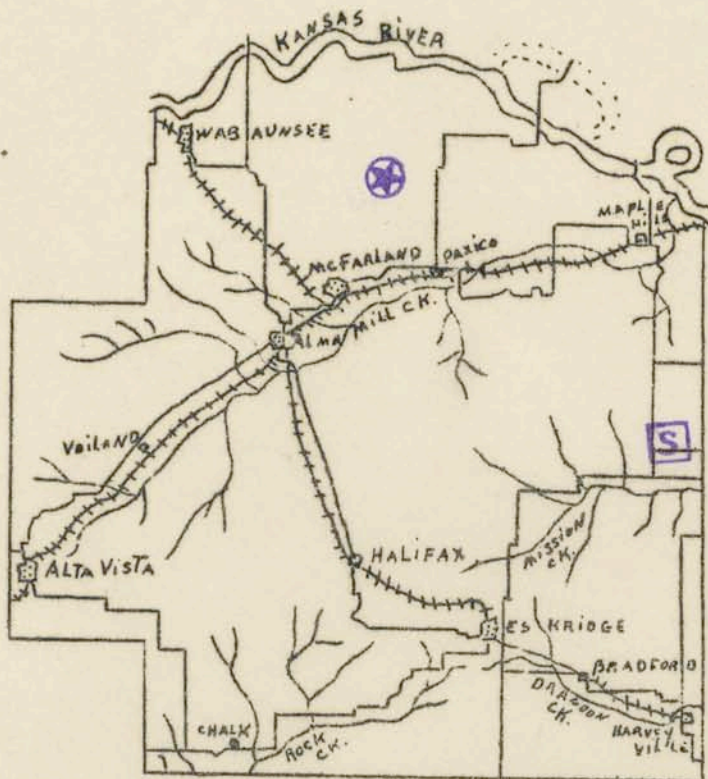
Map No. 213

*Persicaria punctatum* Ell.



WABAUNSEE COUNTY

Map No. 214



POLYGONACEAE

*Persicaria lepathifolia*

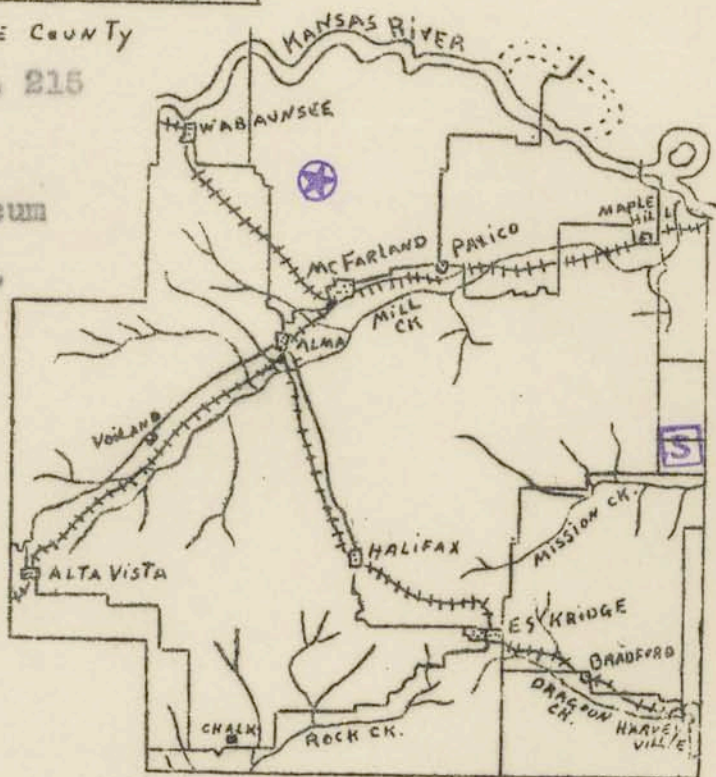
(L.) S.F. Gray

WABAUNSEE COUNTY

Map No. 215

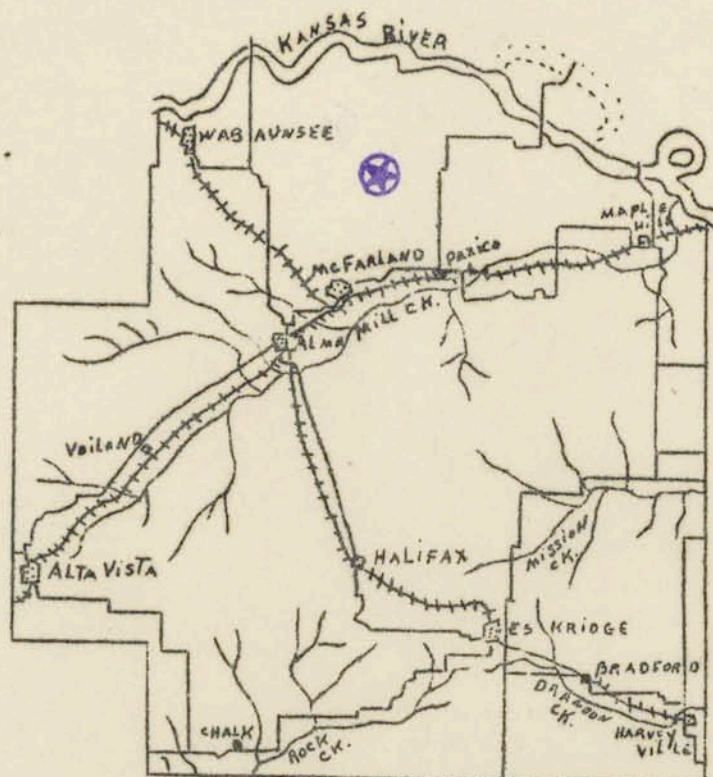
*Persicaria pennsylvanicum*

(L.) Small.



WABAUNSEE COUNTY

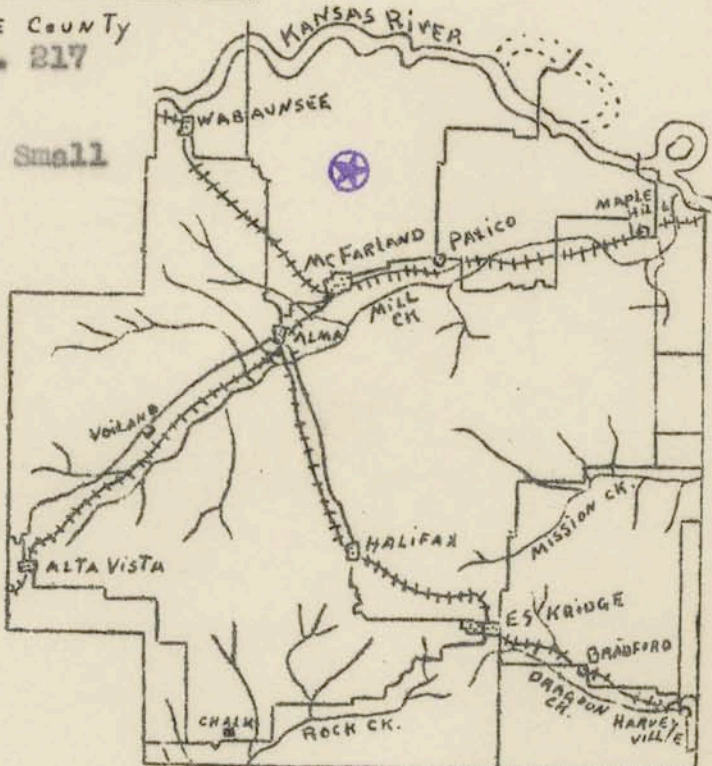
Map No. 216



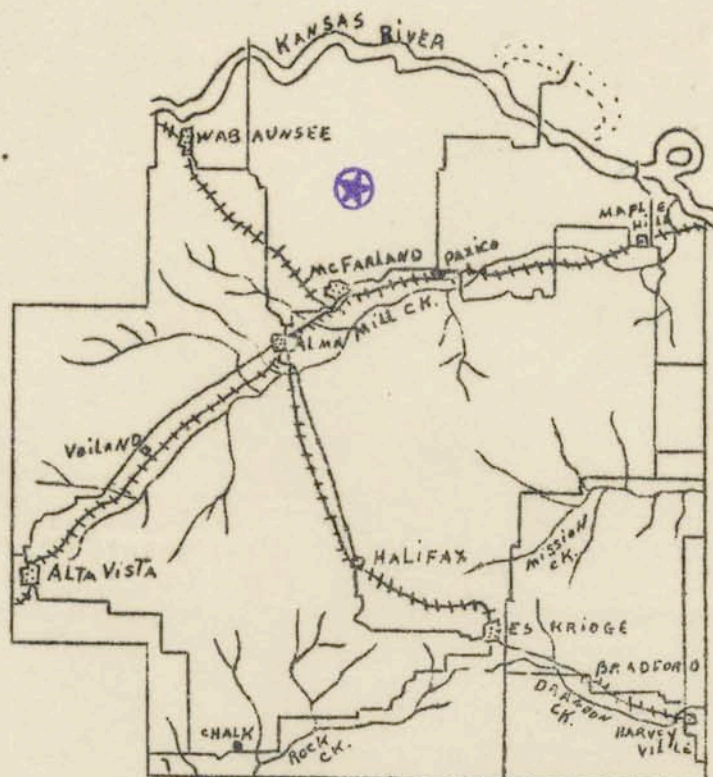
POLYGONACEAE  
*Persicaria mühlenbergii*  
 (S.Wats.) Small

WABAUNSEE COUNTY  
 Map No. 217

*Tinaria scandens* (L.) Small



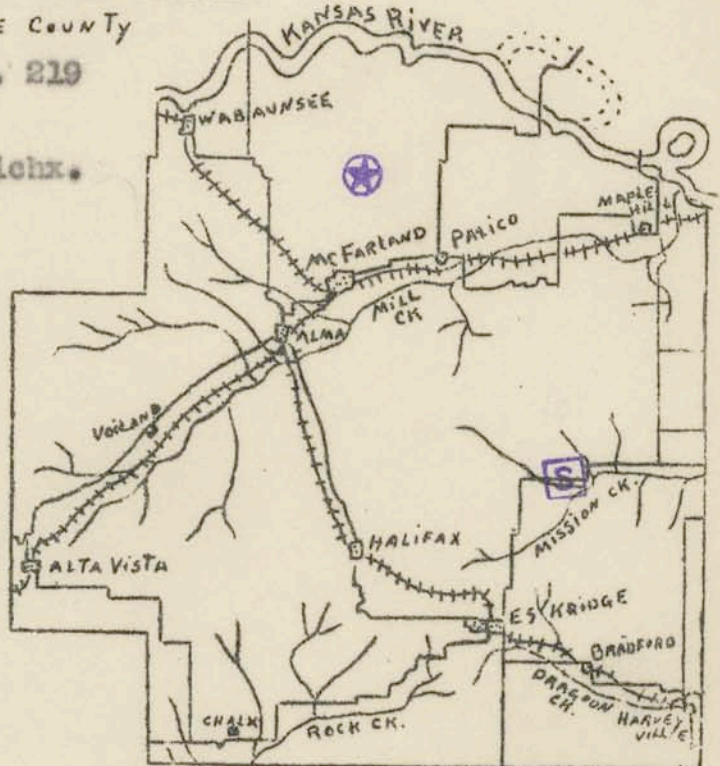
WABAUNSEE COUNTY  
 Map No. 218



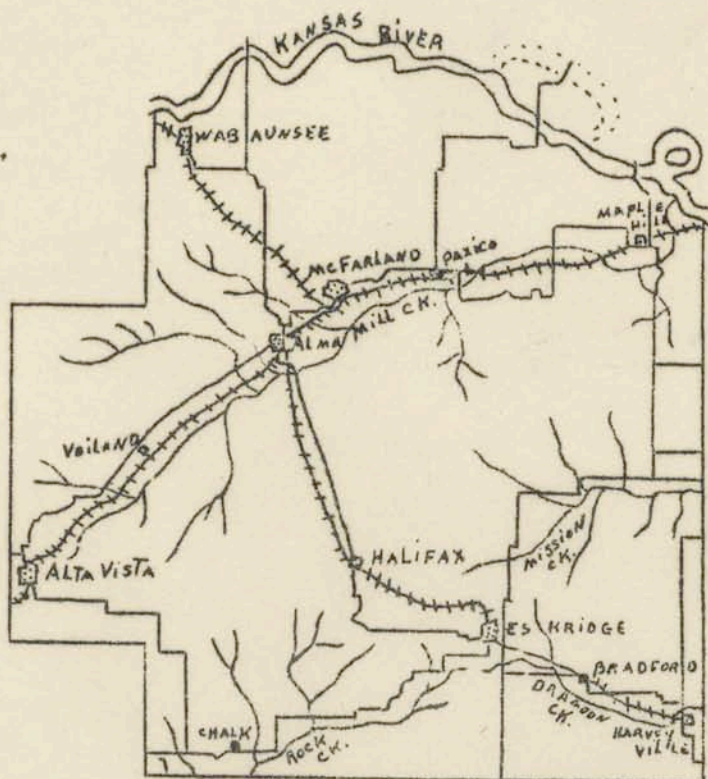
NYCTAGINACEAE  
*Allionia albida* Walt.

WABAUNSEE COUNTY  
 Map No. 219

*Allionia nyctagineus* Michx.

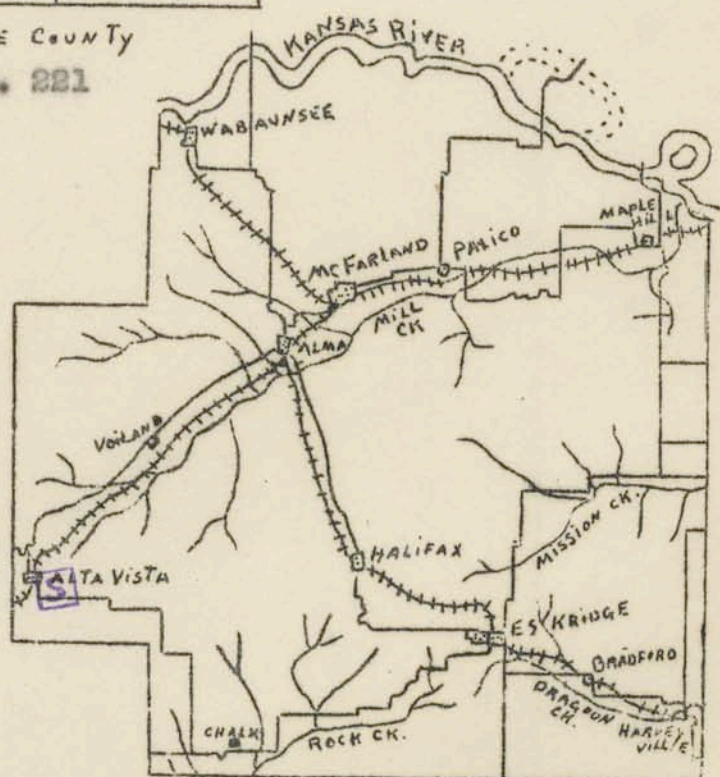


WABAUNSEE COUNTY  
 Map No. 220

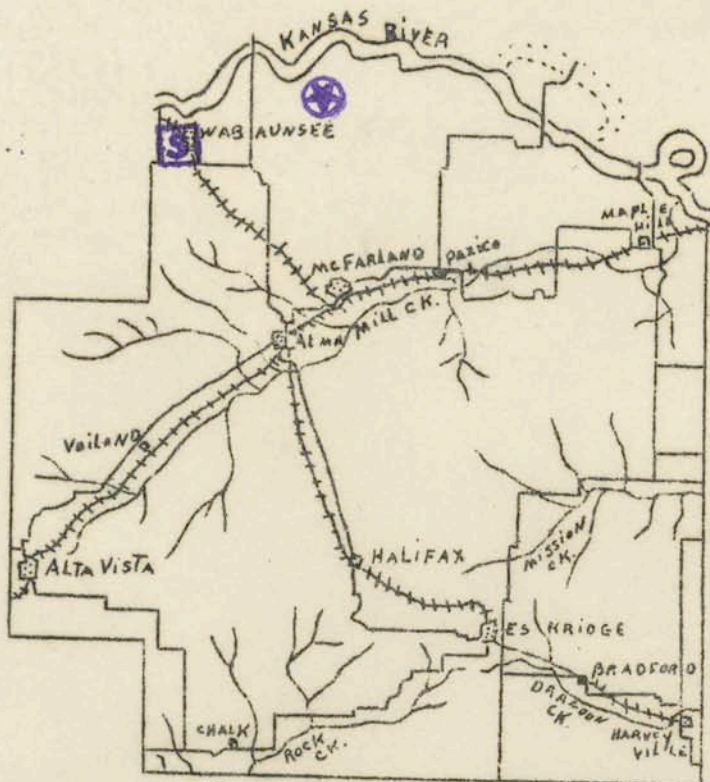


NYCTAGINACEAE  
*Allionia linearis*  
 Pursh.

WABAUNSEE COUNTY  
 Map No. 221



WABAUNSEE COUNTY



PRIMULACEAE

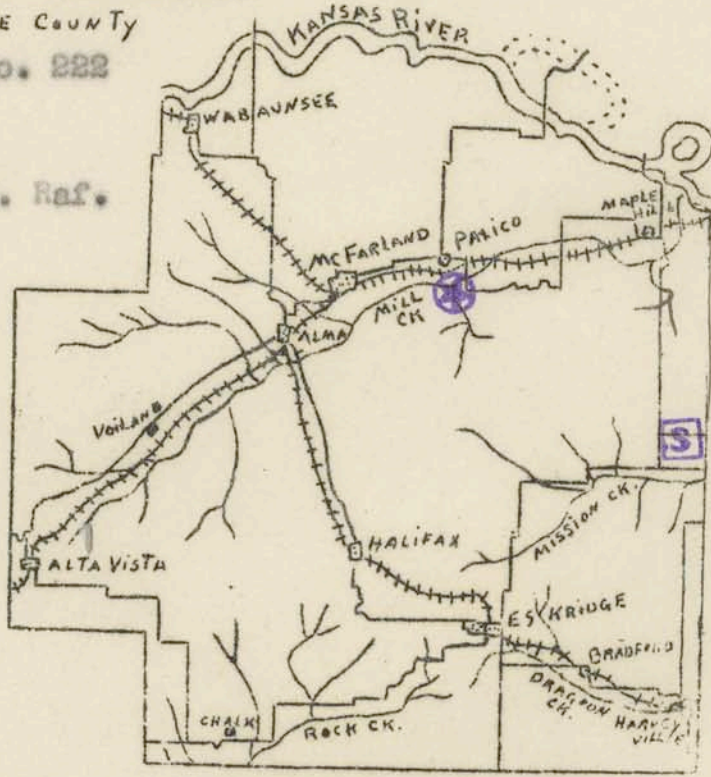
*Androsace occidentalis*

Pursh.

WABAUNSEE COUNTY

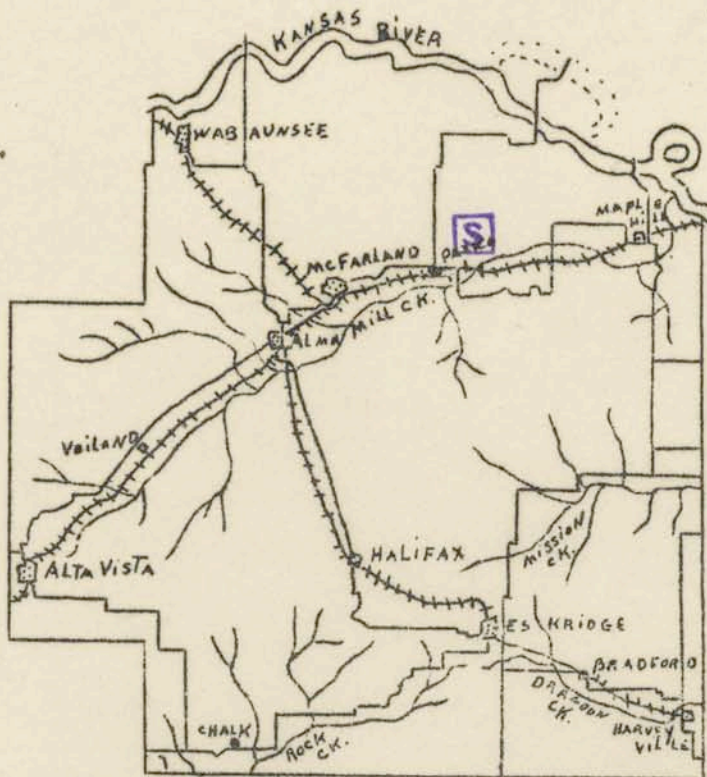
Map No. 222

*Steironema ciliatum* L. Raf.



WABAUNSEE COUNTY

Map No. 223



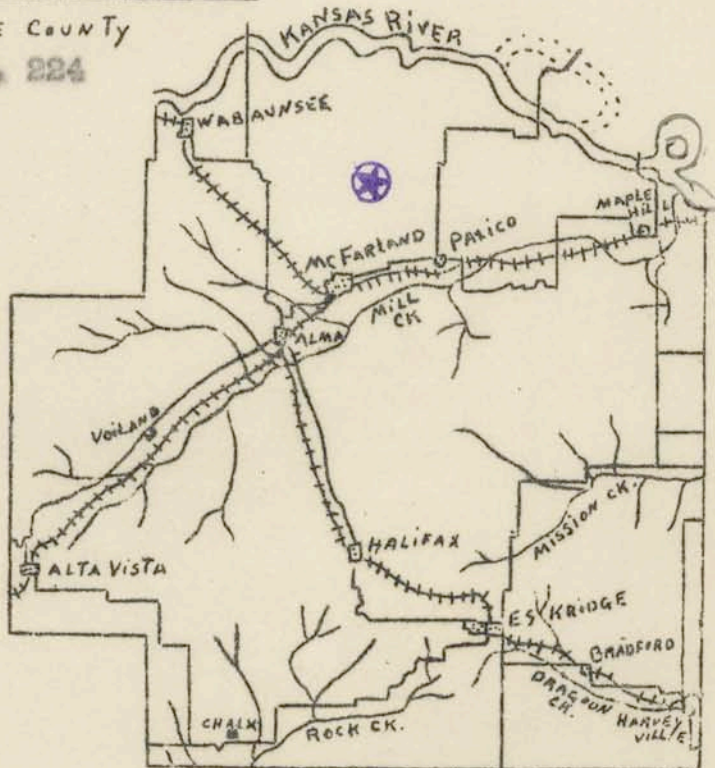
PLANTAGINACEAE

*Plantago lanceolata* L.

WABAUNSEE COUNTY

Map No. 224

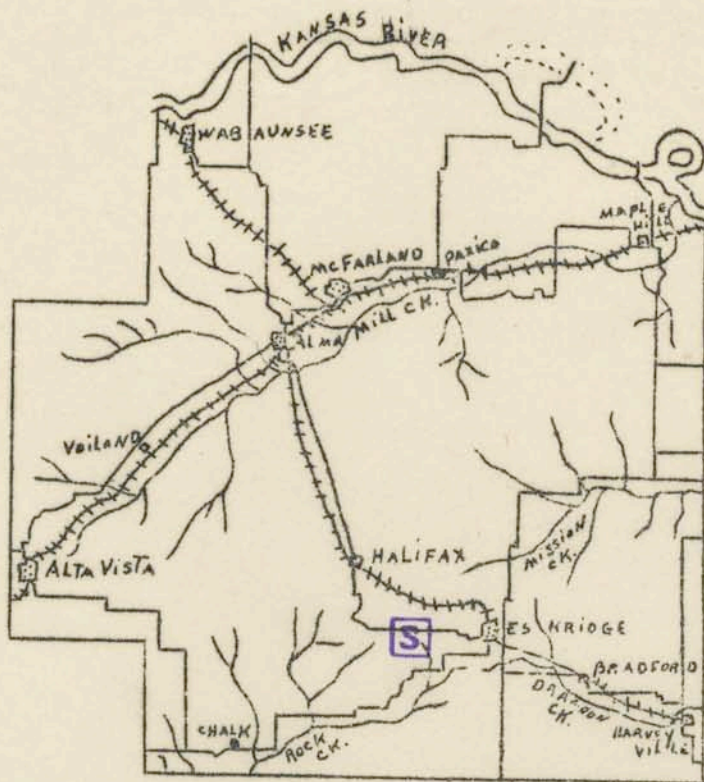
*Plantago rugellii* Don.



WABAUNSEE COUNTY

Map No. 225

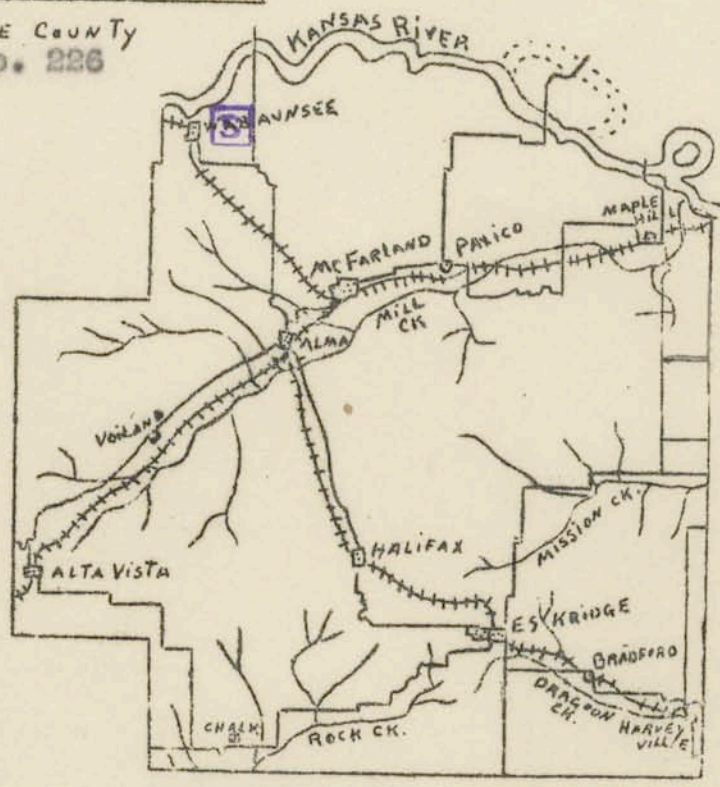




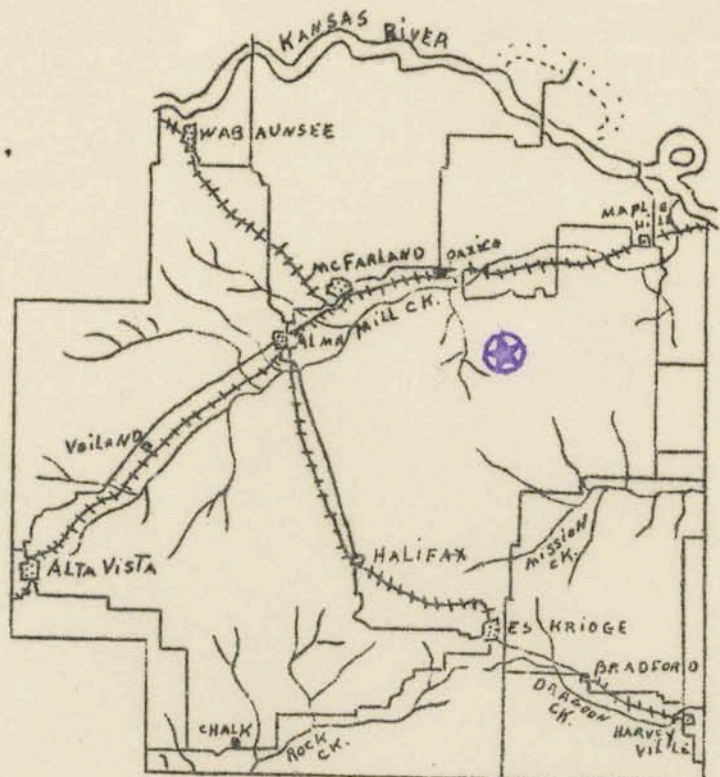
PLANTAGINACEAE  
*Plantago virginica* L.

WABAUNSEE COUNTY  
 Map No. 226

*Plantago media* L.



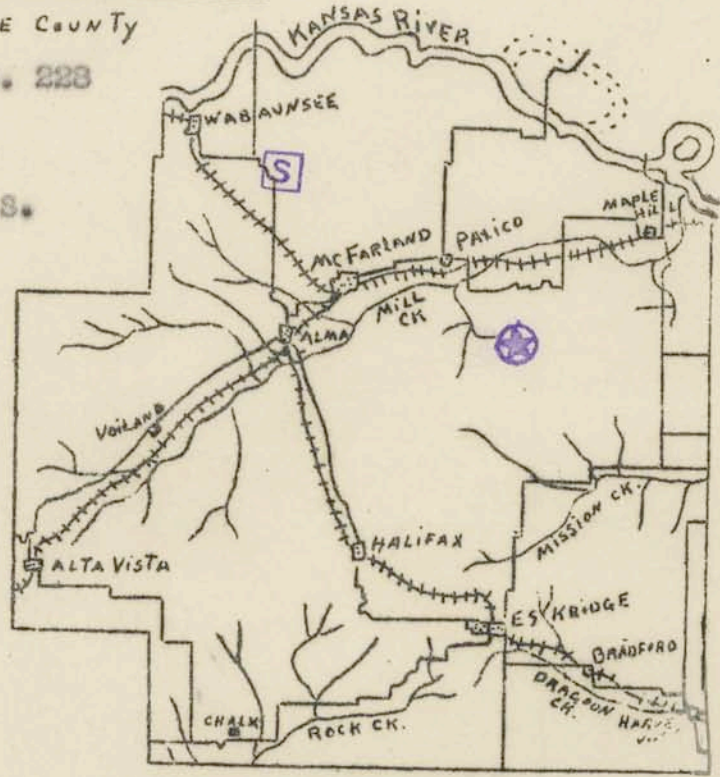
WABAUNSEE COUNTY  
 Map No. 227



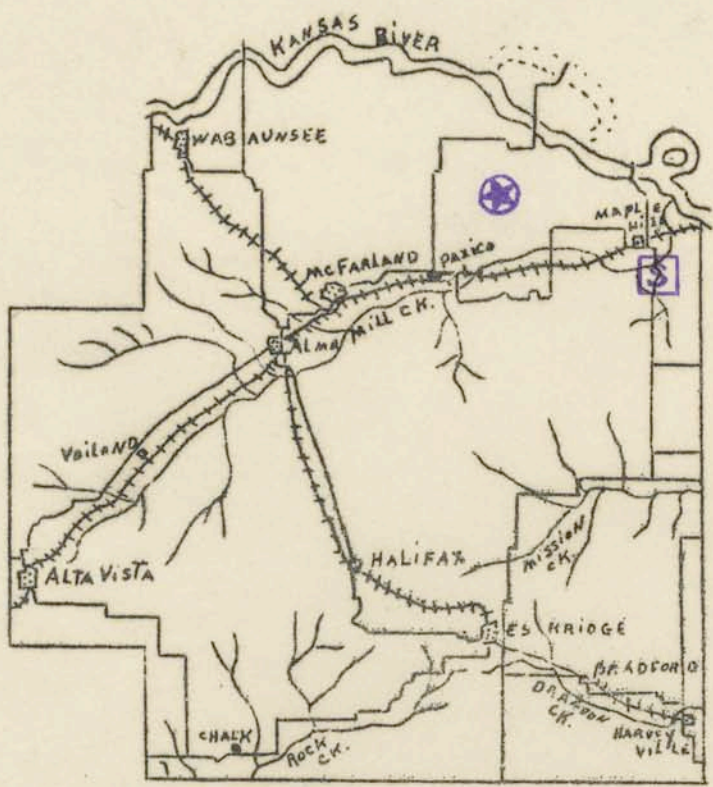
PLANTAGINACEAE  
*Plantago aristata*  
 Michx.

WABAUNSEE COUNTY  
 Map No. 228

*Plantago purshii* R. & S.



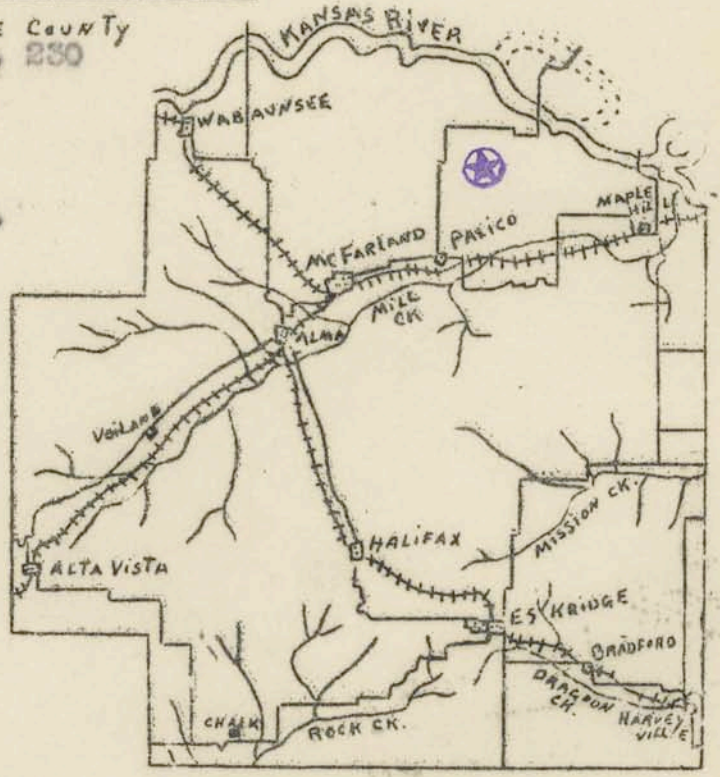
WABAUNSEE COUNTY  
 Map No. 229



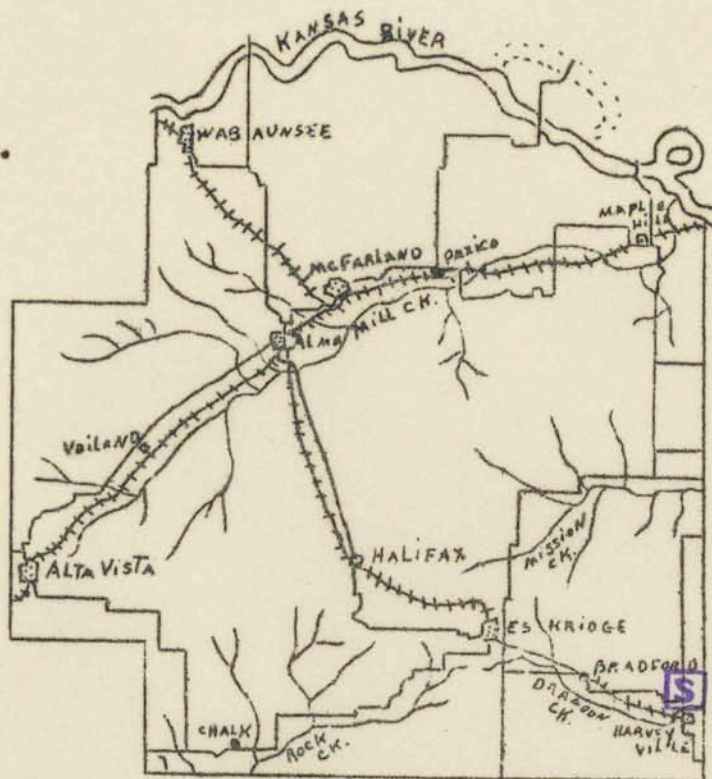
CONVOLVULACEAE  
*Convolvulus sepium* L.

WABAUNSEE COUNTY  
 Map No. 230

*Evolvulus pilosus* Nutt.



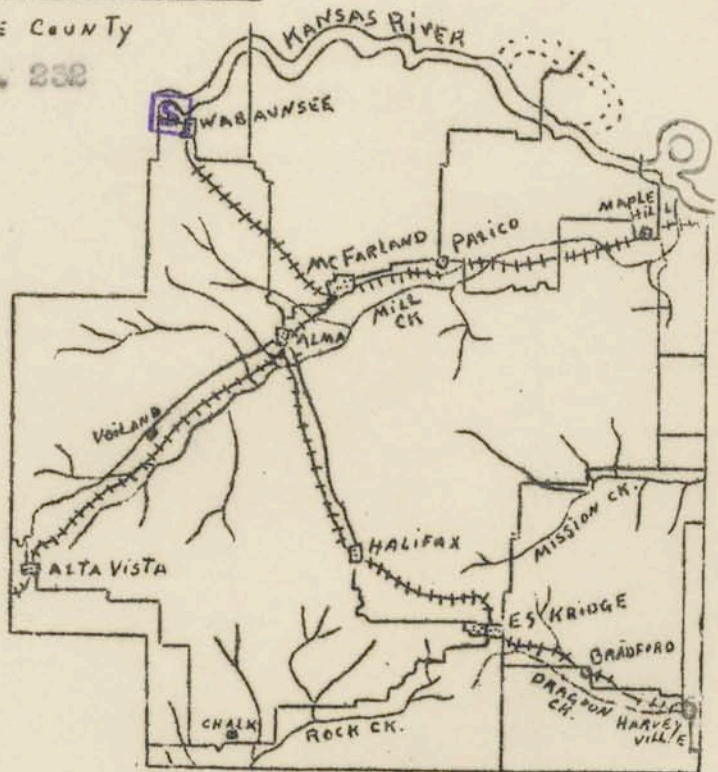
WABAUNSEE COUNTY  
 Map No. 231



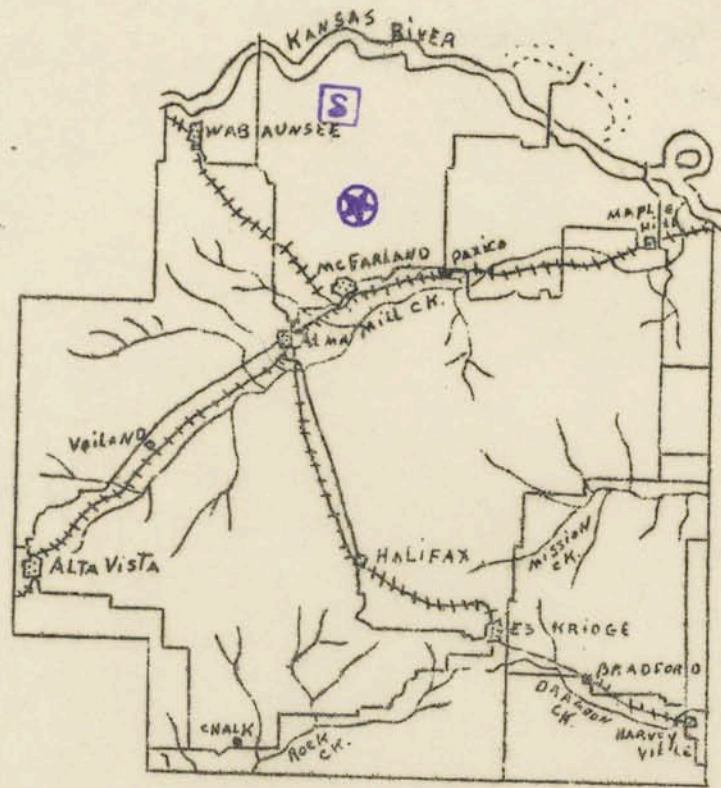
POLEMONIACEAE  
*Phlox divaricata* L.

WABAUNSEE COUNTY  
 Map No. 232

CONVOLVULACEAE  
*Convolvulus repens* L.



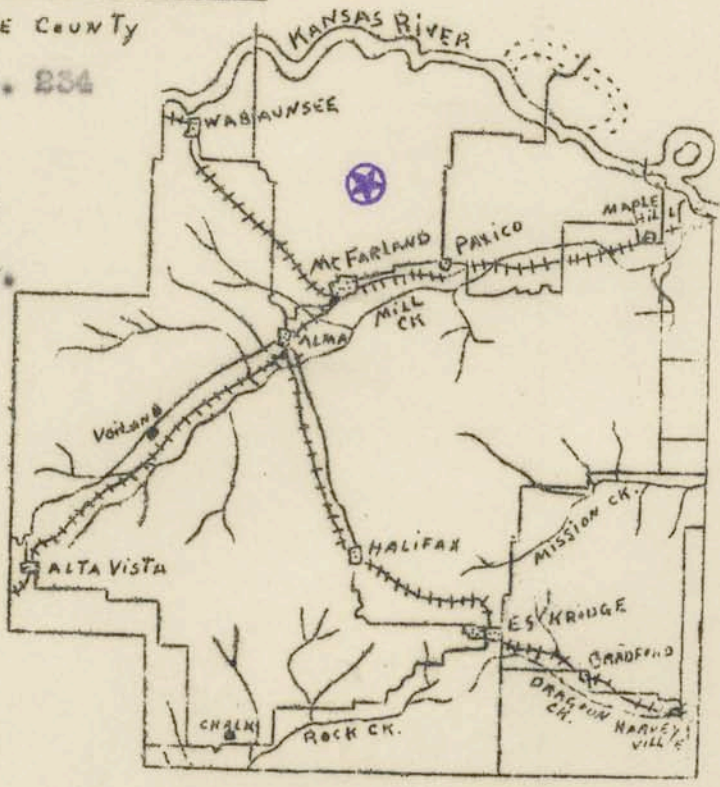
WABAUNSEE COUNTY  
 Map No. 233



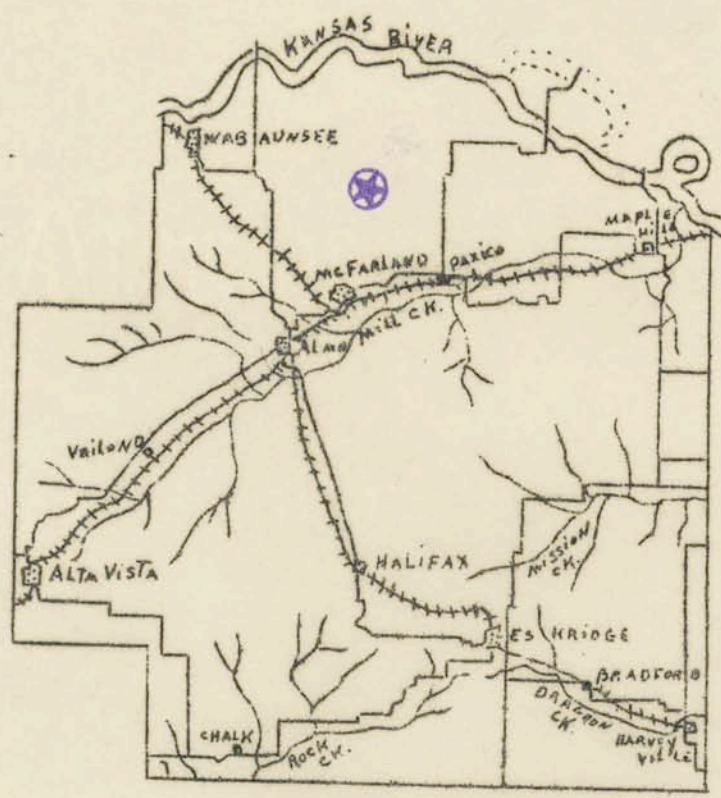
CONVOLVULACEAE  
*Ipomoea hederacea* Jacq.

WABAUNSEE COUNTY  
 Map No. 234

*Ipomoea pandurata* (L.)  
 G.F.W. Mey.



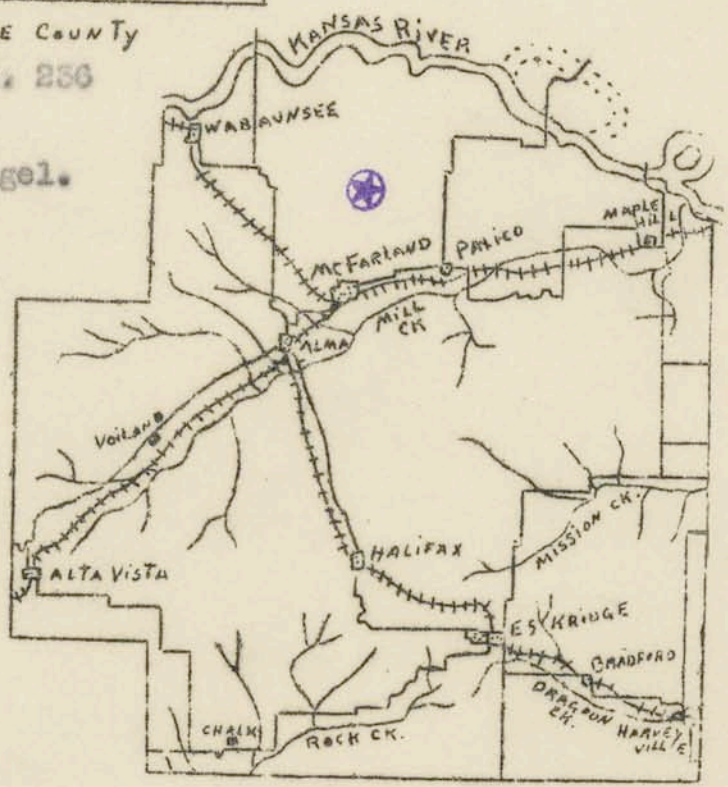
WABAUNSEE COUNTY  
 Map No. 235



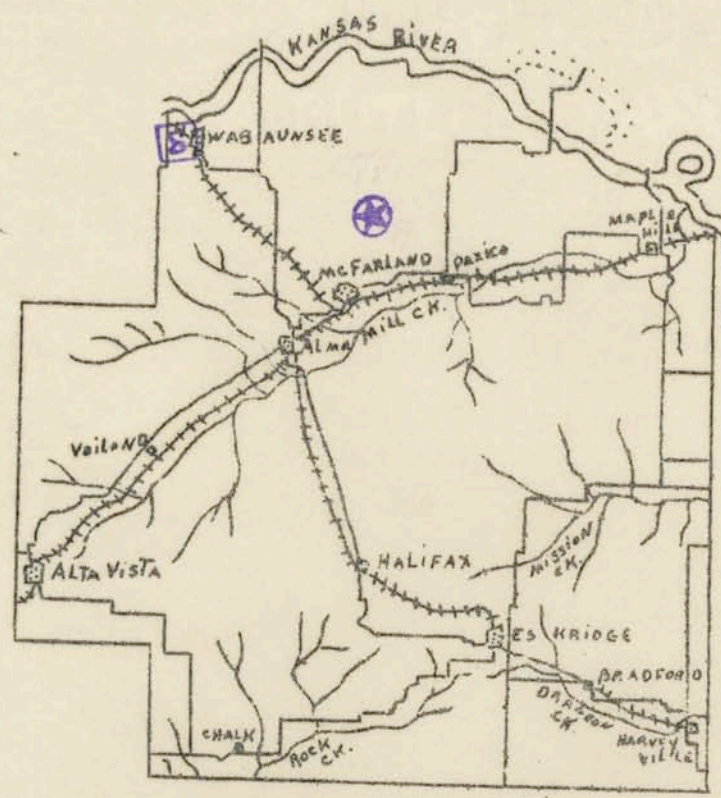
CONVOLVULACEAE  
*Ipomoea purpurea* (L.)  
 Roth.

WABAUNSEE COUNTY  
 Map No. 236

*Cuscuta polygonorum* Engel.



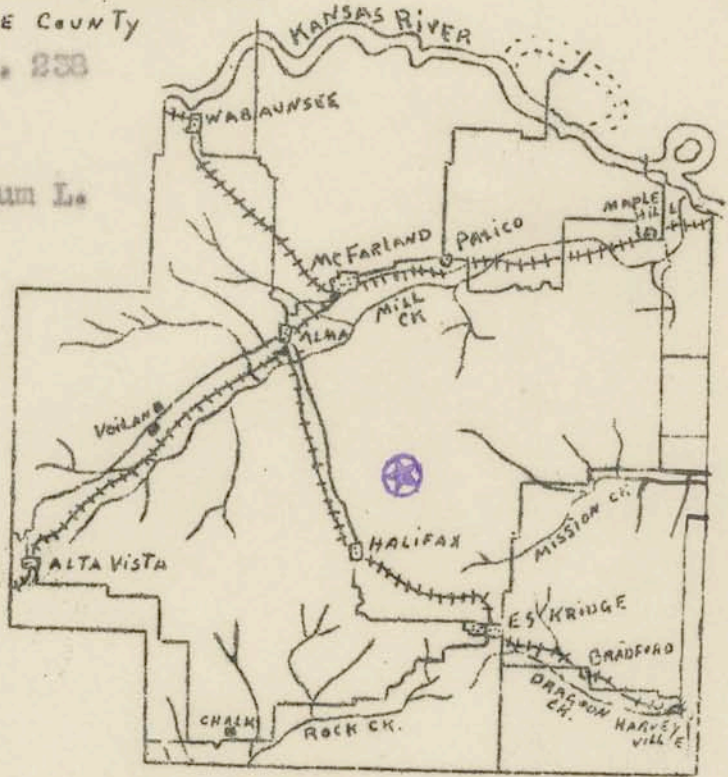
WABAUNSEE COUNTY  
 Map No. 237



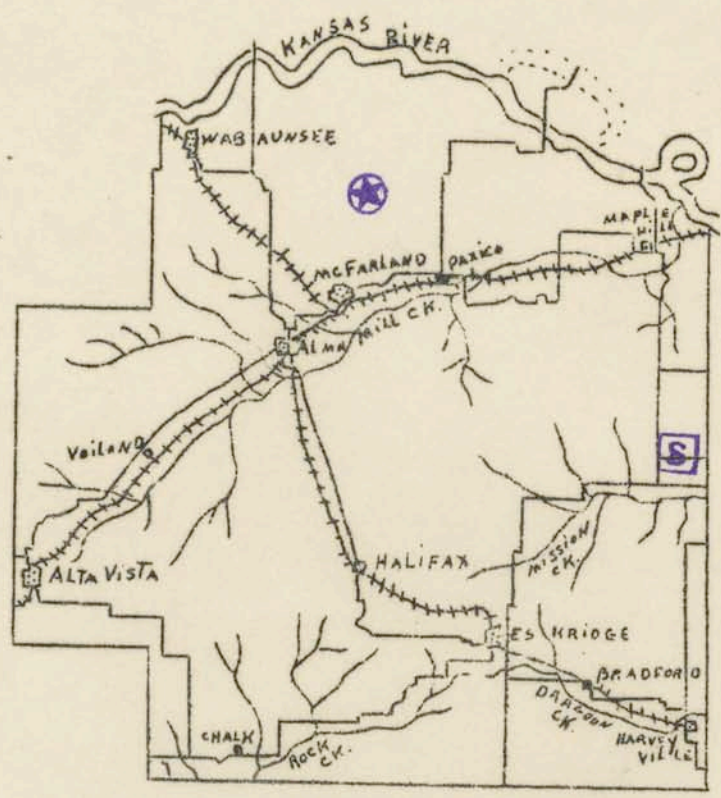
HYDROPHYLLACEAE  
*Nyctelea nyctelea* (L.)  
 Britton

WABAUNSEE COUNTY  
 Map No. 238

*Hydrophyllum virginianum* L.



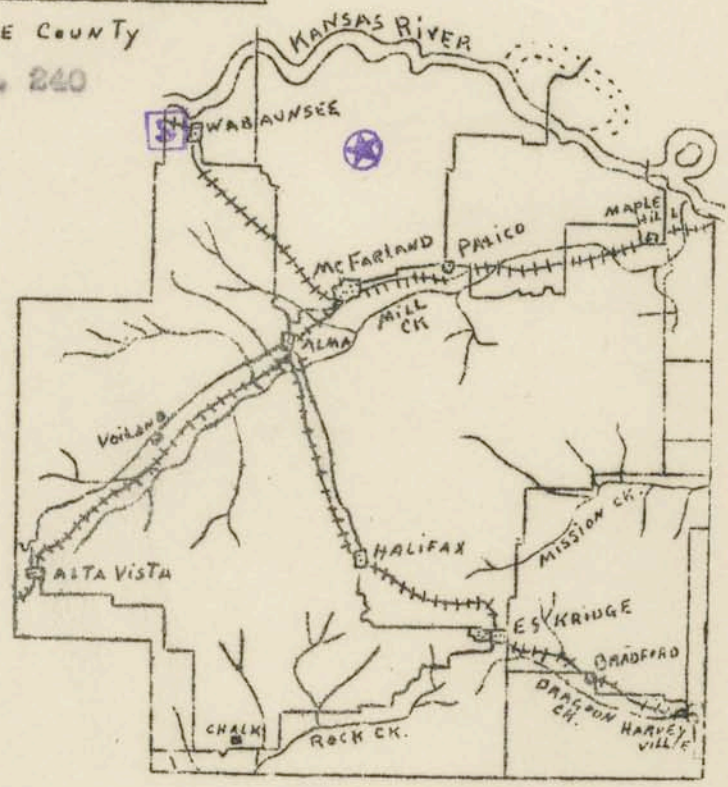
WABAUNSEE COUNTY  
 Map No. 239



BORAGINACEAE  
*Lithospermum linearifolium* Goldie.

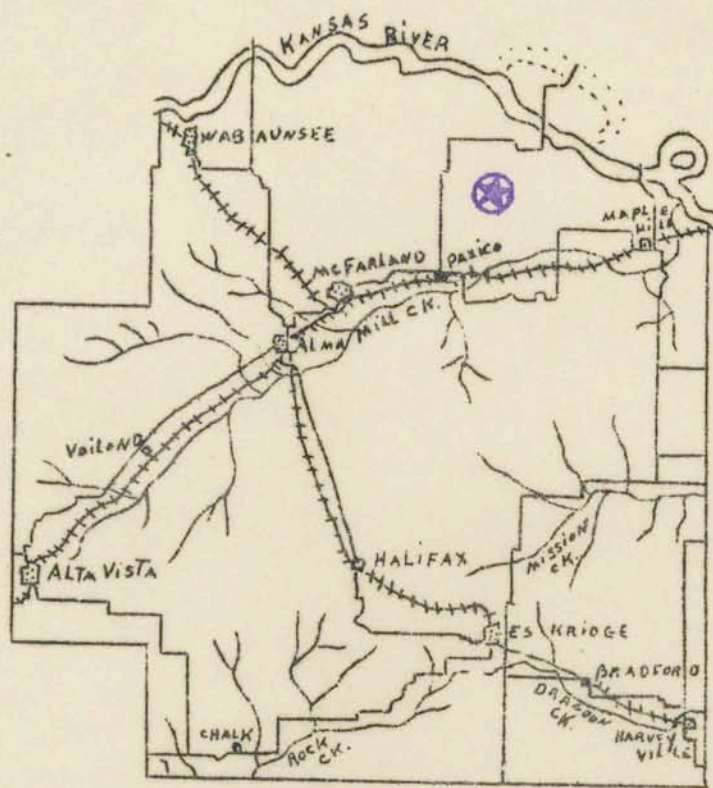
WABAUNSEE COUNTY  
 Map No. 240

*Onosmodium occidentale*  
 Mackenzie



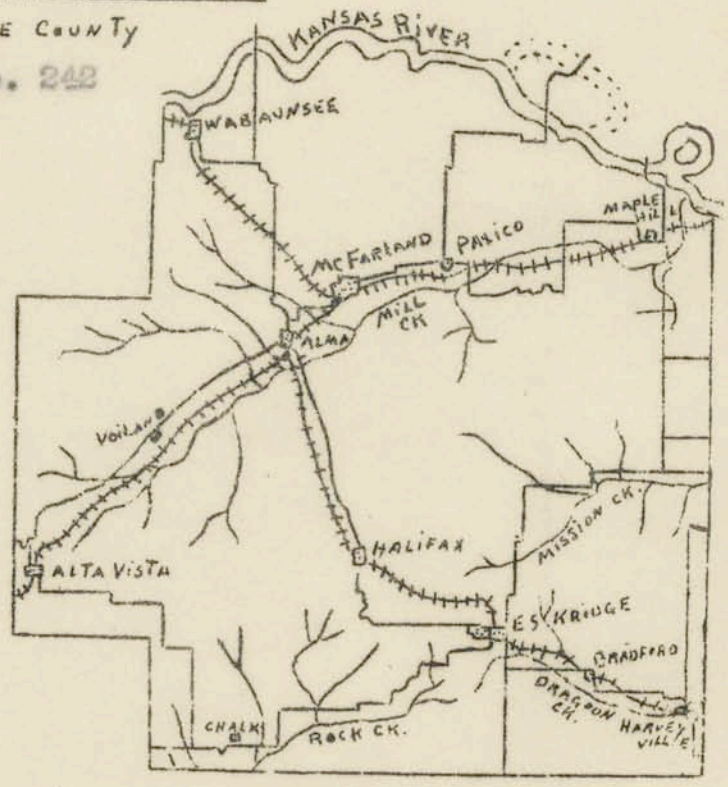
WABAUNSEE COUNTY  
 Map No. 241



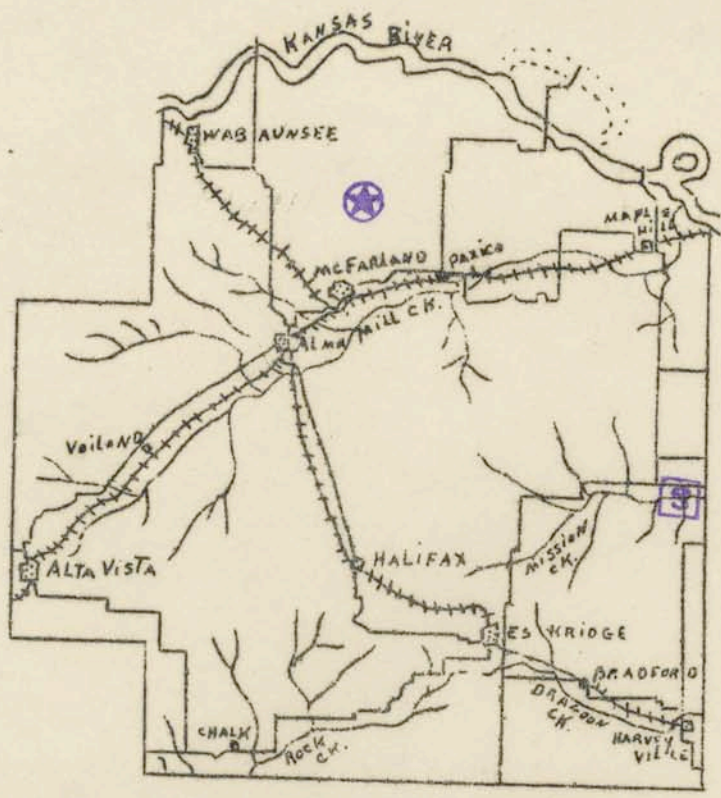


BORAGINACEAE  
*Lappula virginiana*  
 (L.) Greene

WABAUNSEE COUNTY  
 Map No. 242



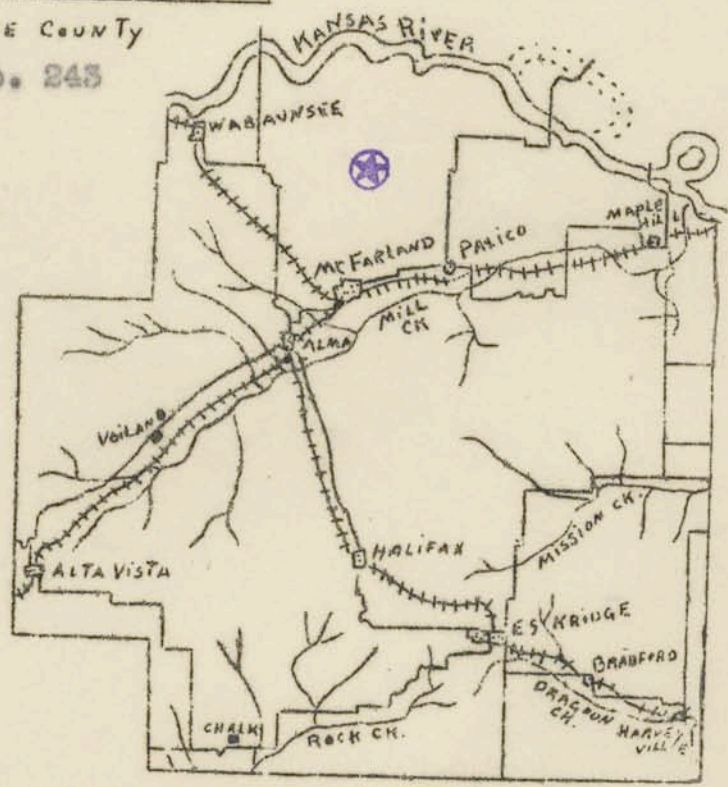
WABAUNSEE COUNTY



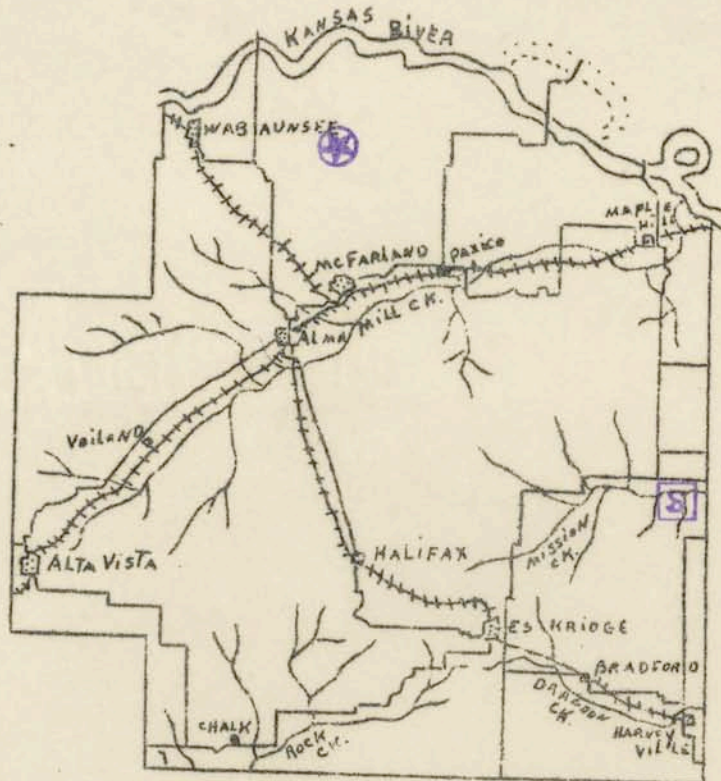
SOLANACEAE  
*Solanum rostratum*  
 Dunal.

WABAUNSEE COUNTY  
 Map No. 243

*Solanum nigrum* L.



WABAUNSEE COUNTY  
 Map No. 244

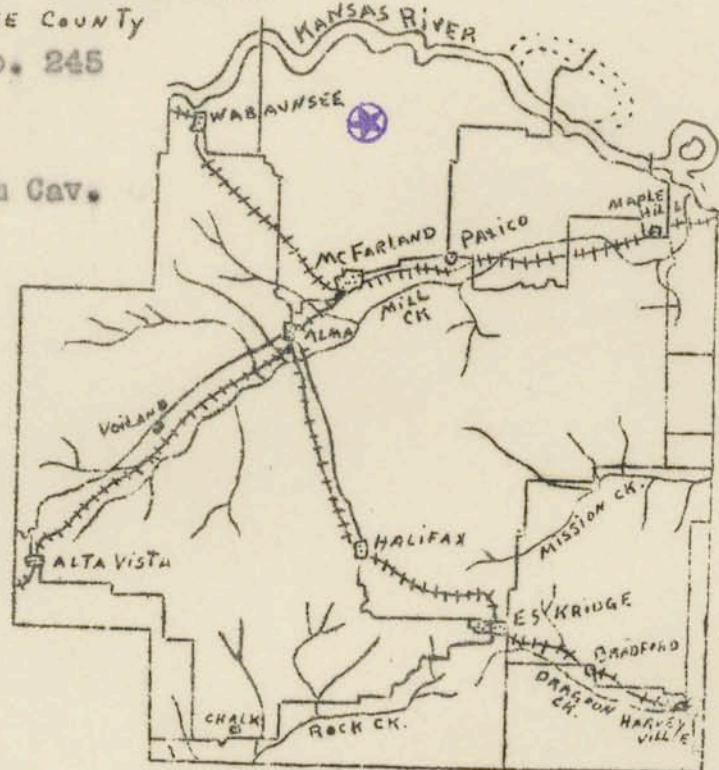


SOLANACEAE

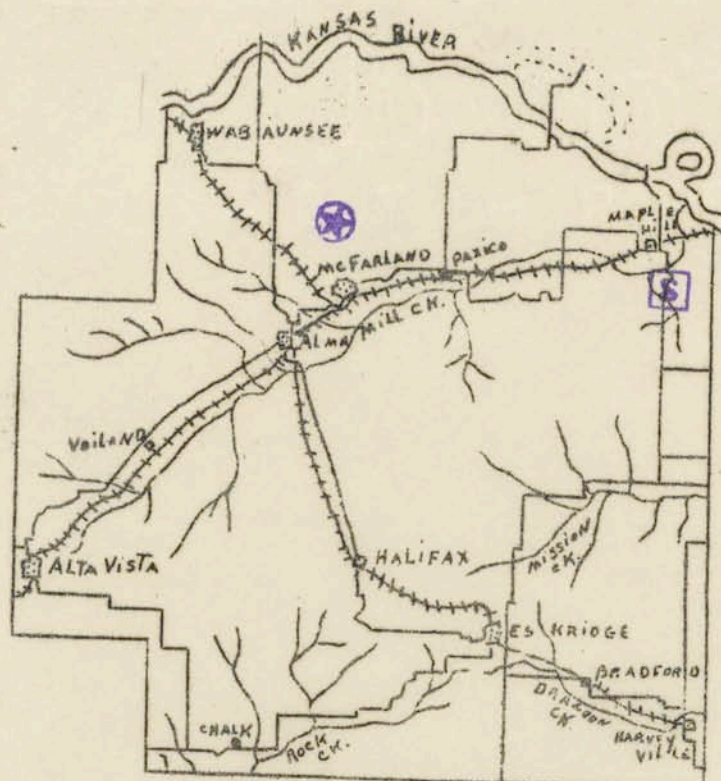
*Solanum carolinense* L.

WABAUNSEE COUNTY  
Map No. 245

*Solanum elaeagnifolium* Cav.



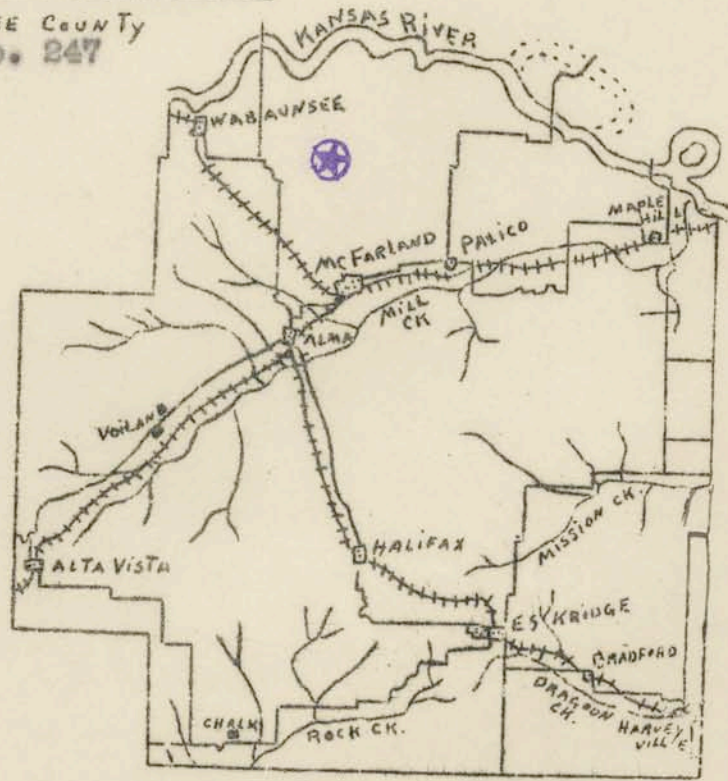
WABAUNSEE COUNTY  
Map No. 246



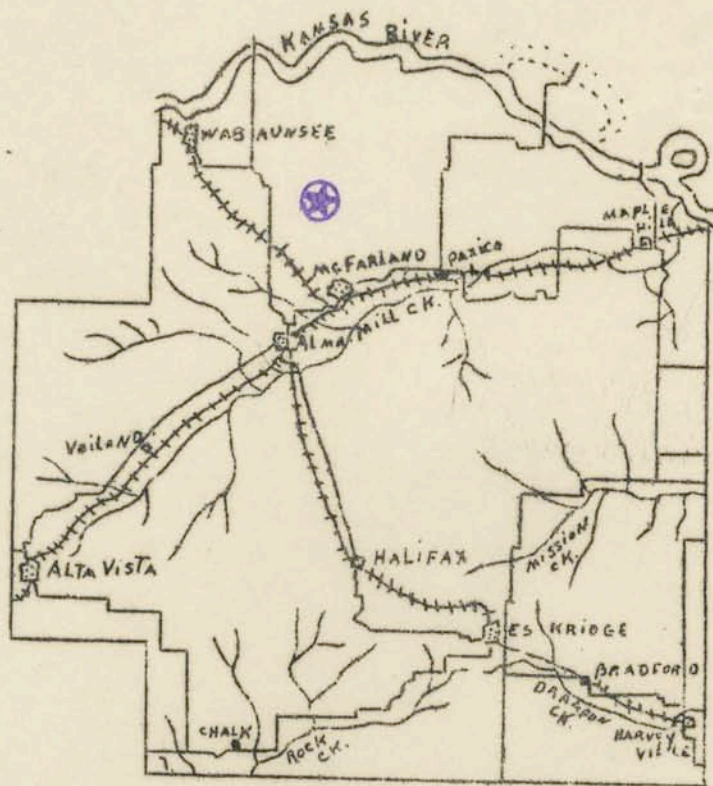
SOLANACEAE  
*Datura stramonium* L.

WABAUNSEE COUNTY  
 Map No. 247

*Datura tatula* L.



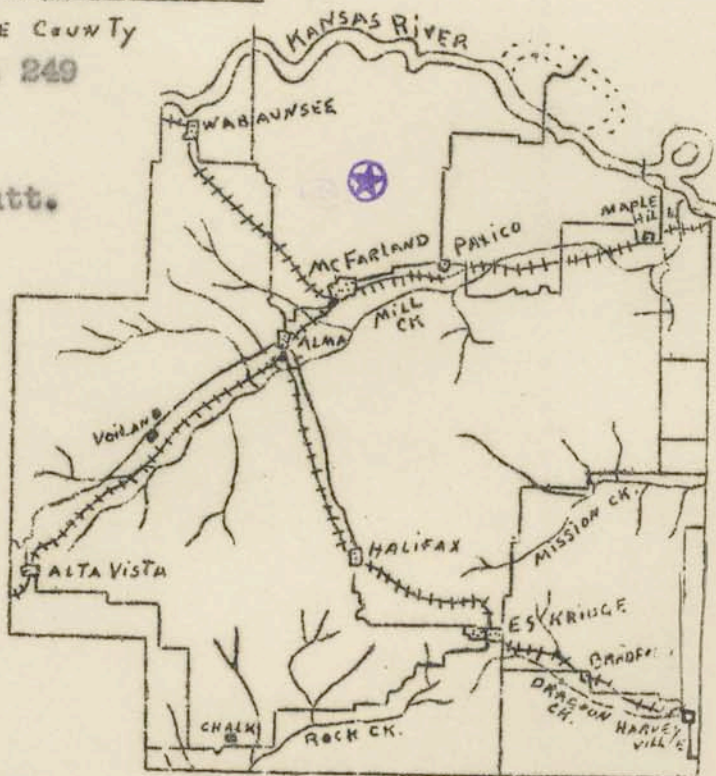
WABAUNSEE COUNTY  
 Map No. 248



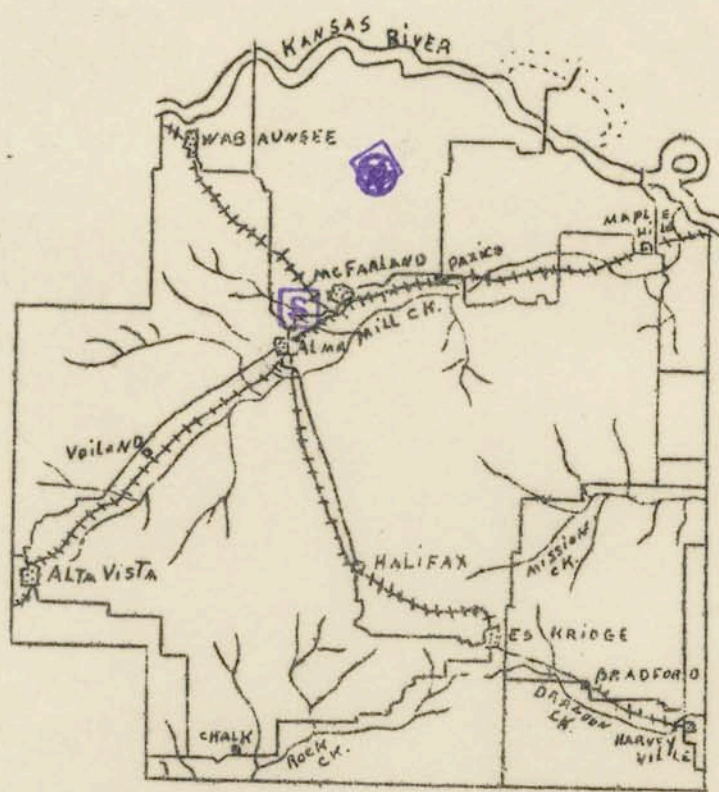
SOLANACEAE  
*Physalis heterophylla*  
 Nees

WABAUNSEE COUNTY  
 Map No. 249

*Physalis longifolia* Nutt.



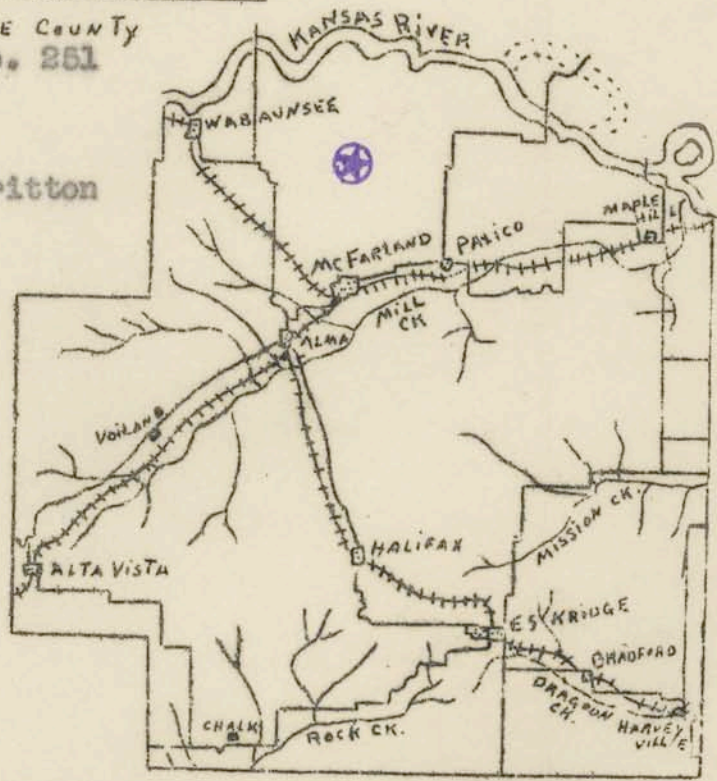
WABAUNSEE COUNTY  
 Map No. 250



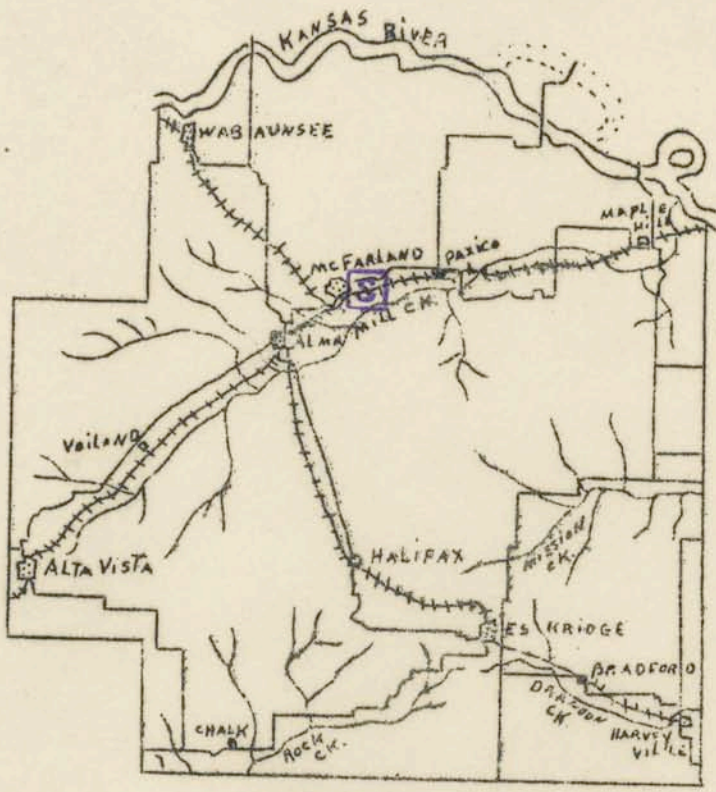
OLEACEAE  
*Fraxinus pennsylvanica*  
 Marsh.

WABAUNSEE COUNTY  
 Map No. 251

*Fraxinus campestris* Britton

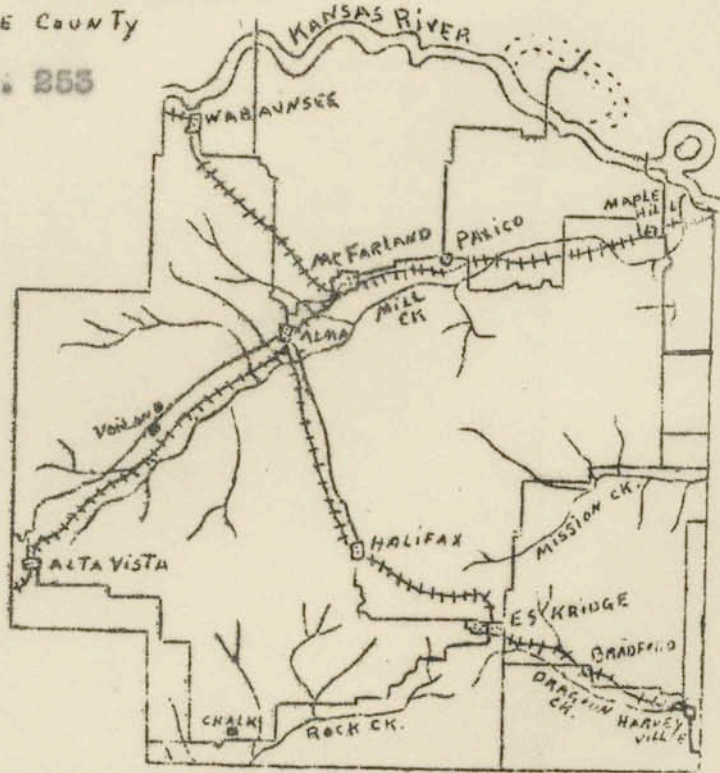


WABAUNSEE COUNTY  
 Map No. 252

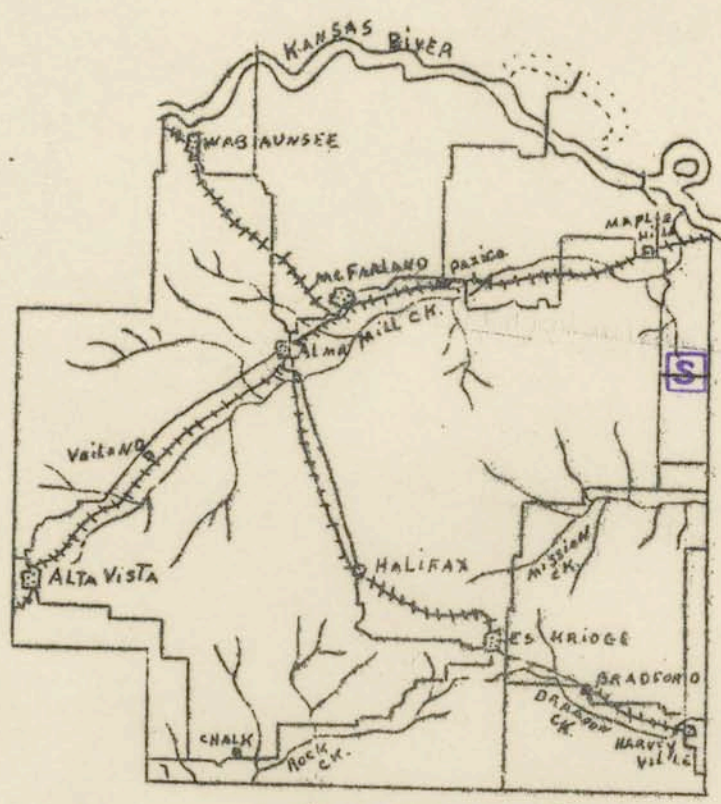


OLEACEAE  
*Fraxinus americana* L.

WABAUNSEE COUNTY  
 Map No. 253



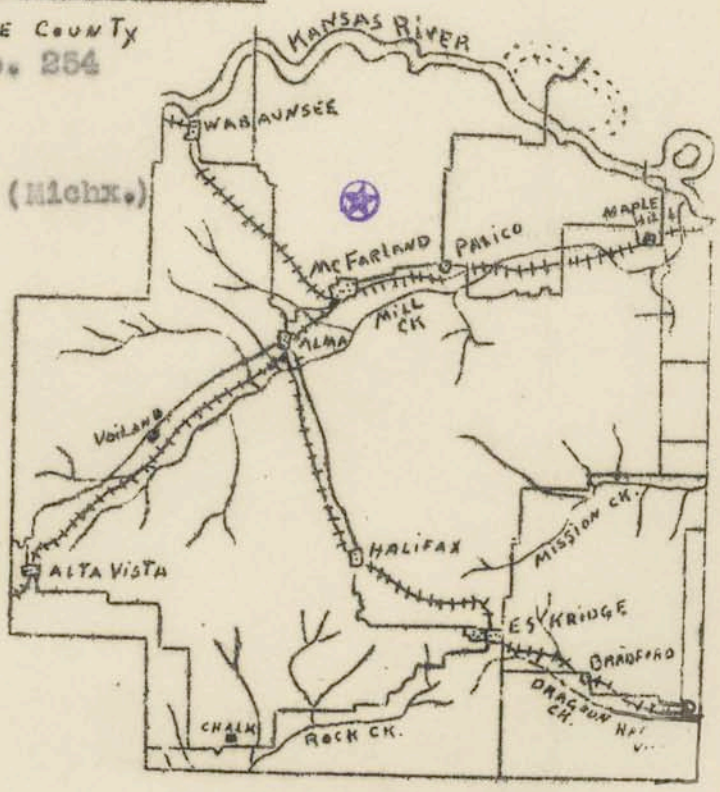
WABAUNSEE COUNTY



GENTIANACEAE  
*Centaurium texense*  
 (Griseb.)

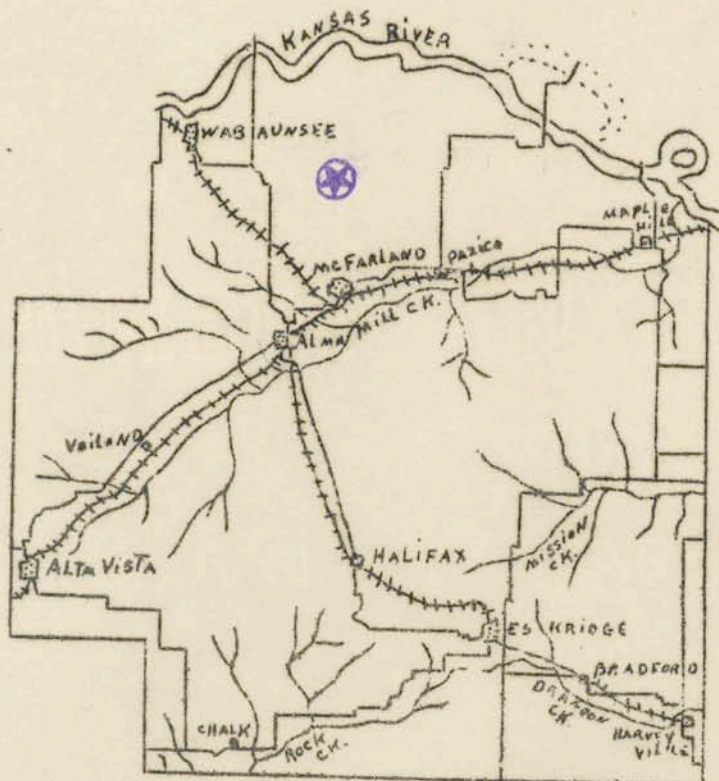
WABAUNSEE COUNTY  
 Map No. 254

*Dasystephana puberula* (Michx.)  
 Small



WABAUNSEE COUNTY  
 Map No. 256

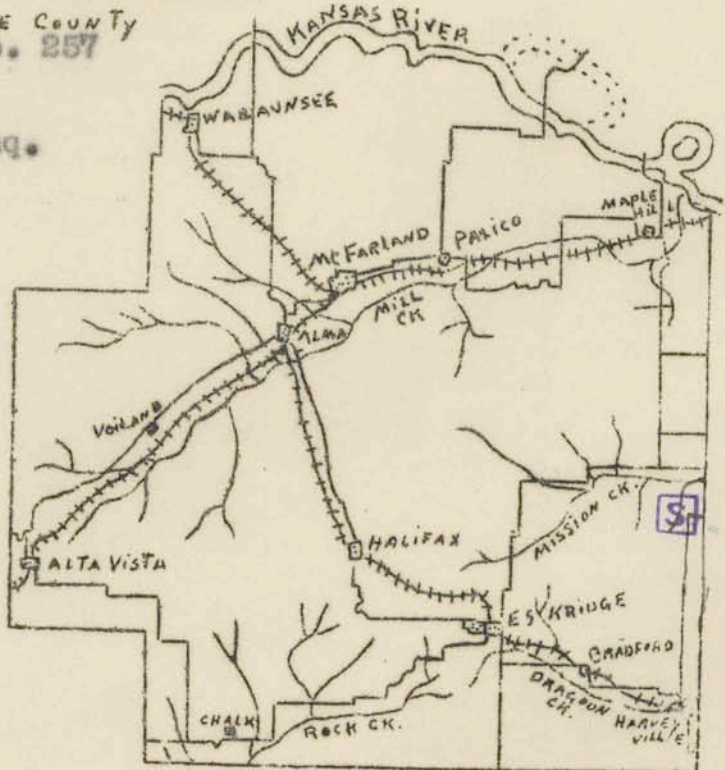




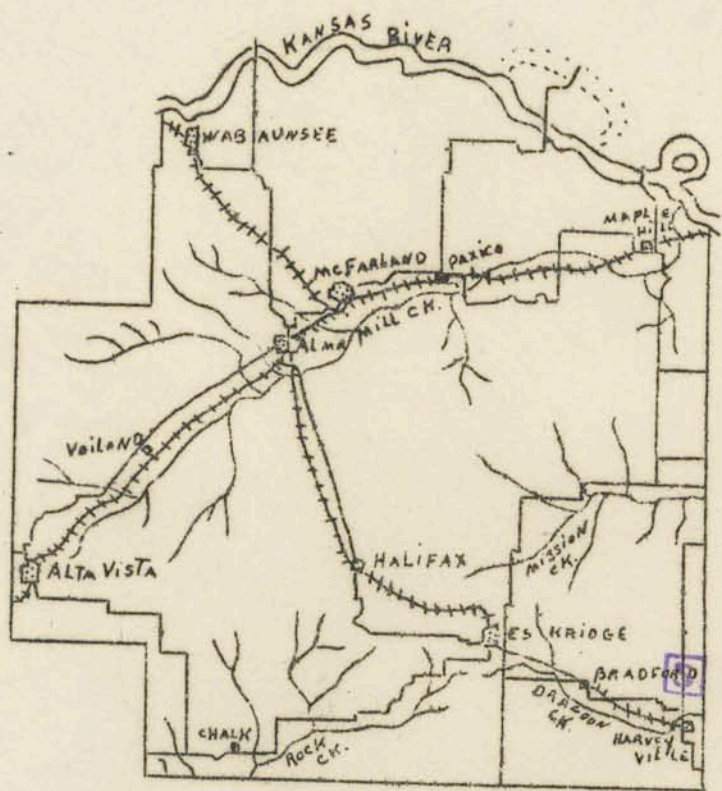
APOCYNACEAE  
*Apocynum cannabinum* L.

WABAUNSEE COUNTY  
 Map No. 257

*Apocynum sibiricum* Jacq.



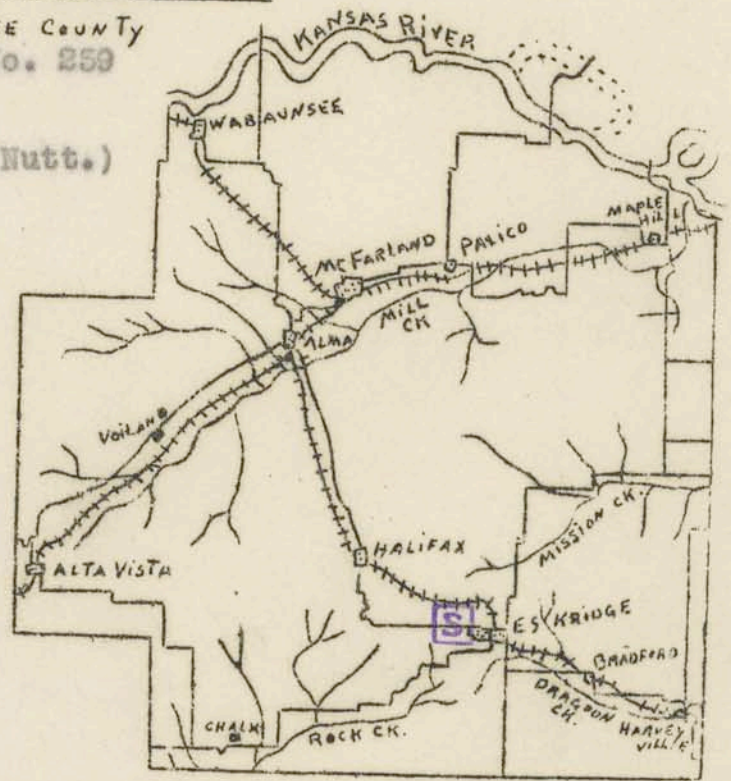
WABAUNSEE COUNTY  
 Map No. 258



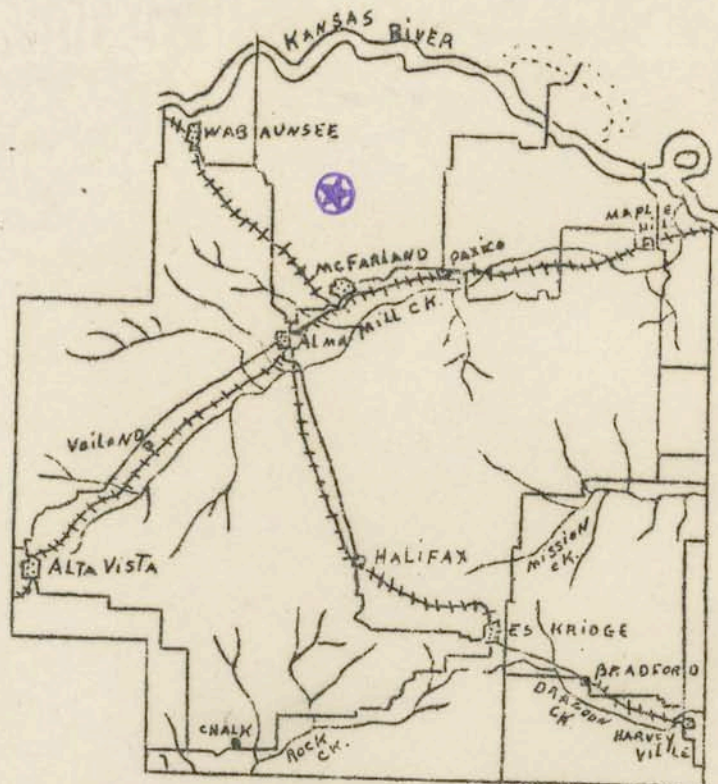
ASCLEPIADACEAE  
*Acerates angustifolia*  
 (Nutt.) Dec.

WABAUNSEE COUNTY  
 Map No. 259

*Acerates lanuginosa* (Nutt.)  
 Dec.



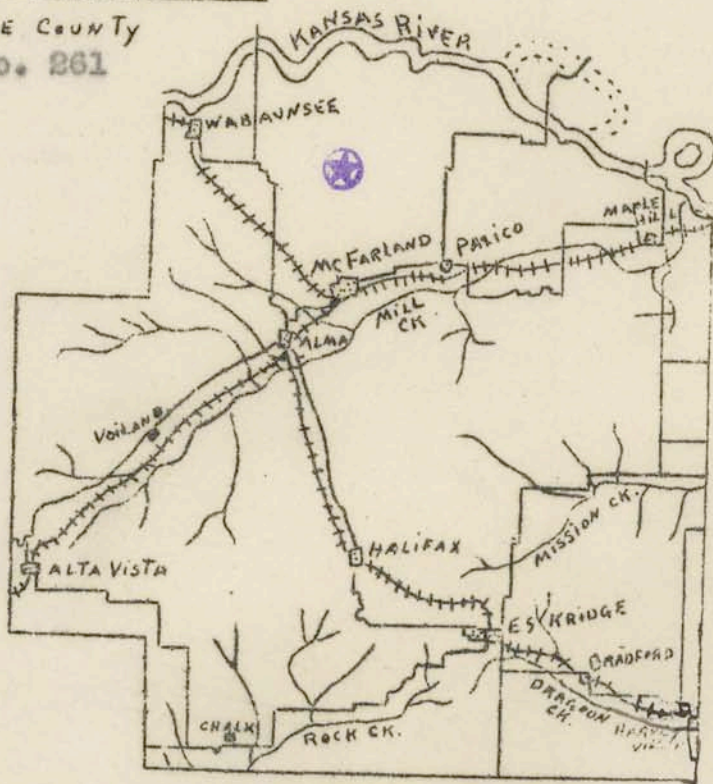
WABAUNSEE COUNTY  
 Map No. 260



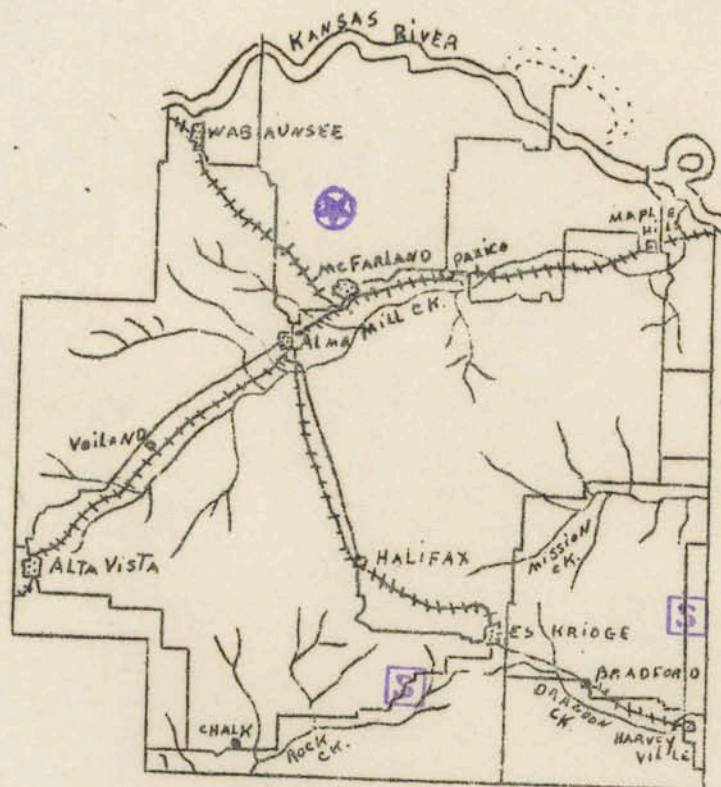
ASCLEPIADACEAE  
*Asclepias sullivantii*  
 Engelm.

WABAUNSEE COUNTY  
 Map No. 261

*Asclepias syriaca* L.



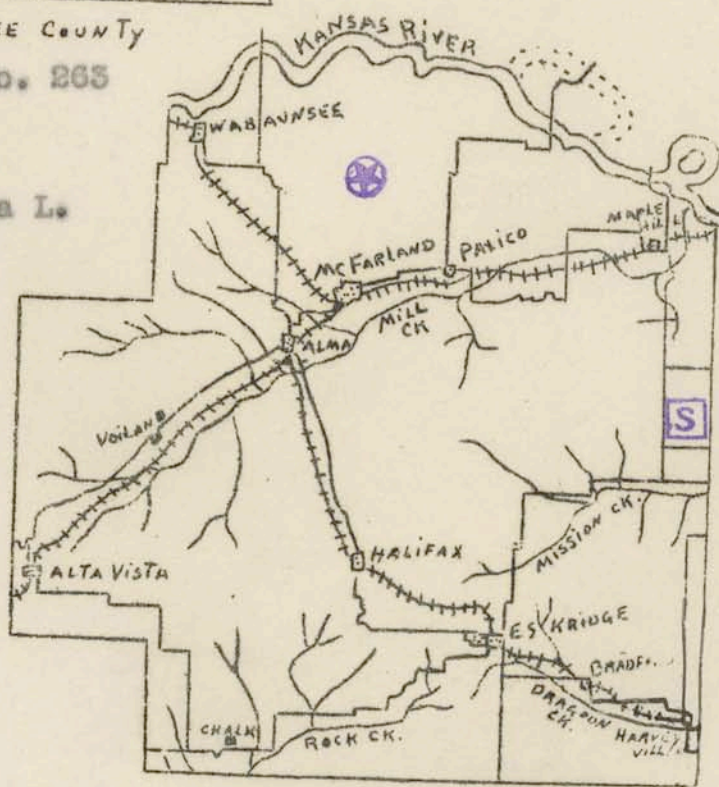
WABAUNSEE COUNTY  
 Map No. 262



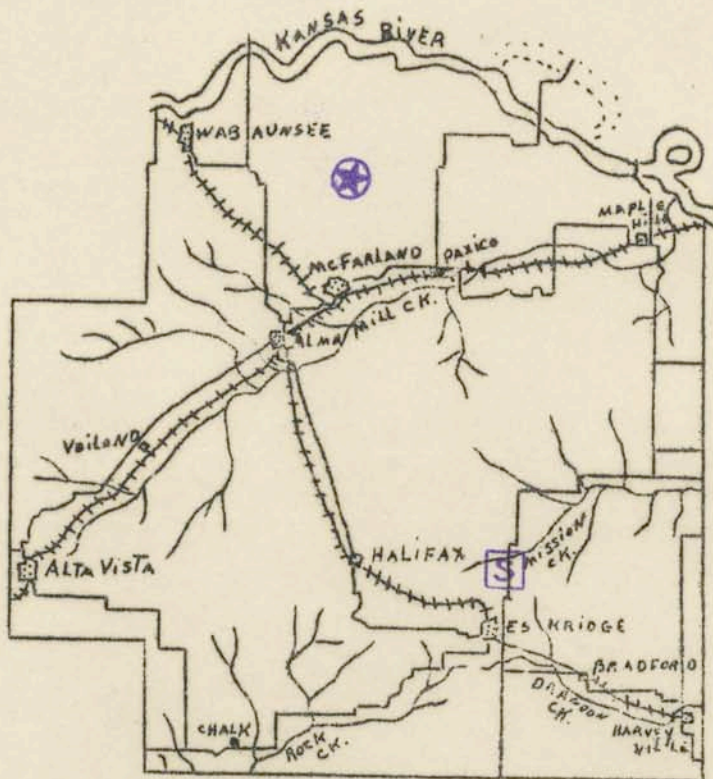
ASCLEPIADACEAE  
*Asclepias tuberosa* L.

WABAUNSEE COUNTY  
 Map No. 263

*Asclepias verticillata* L.

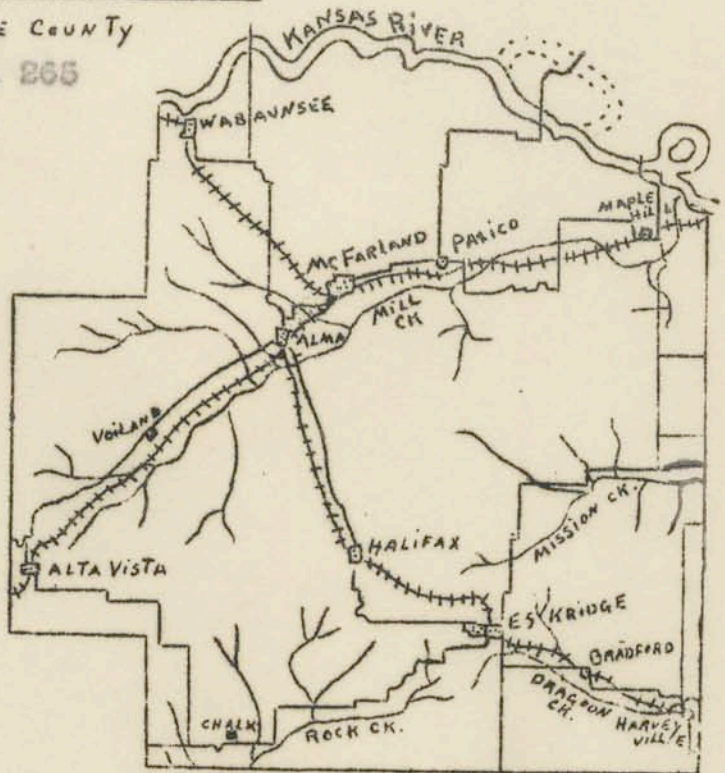


WABAUNSEE COUNTY  
 Map No. 264

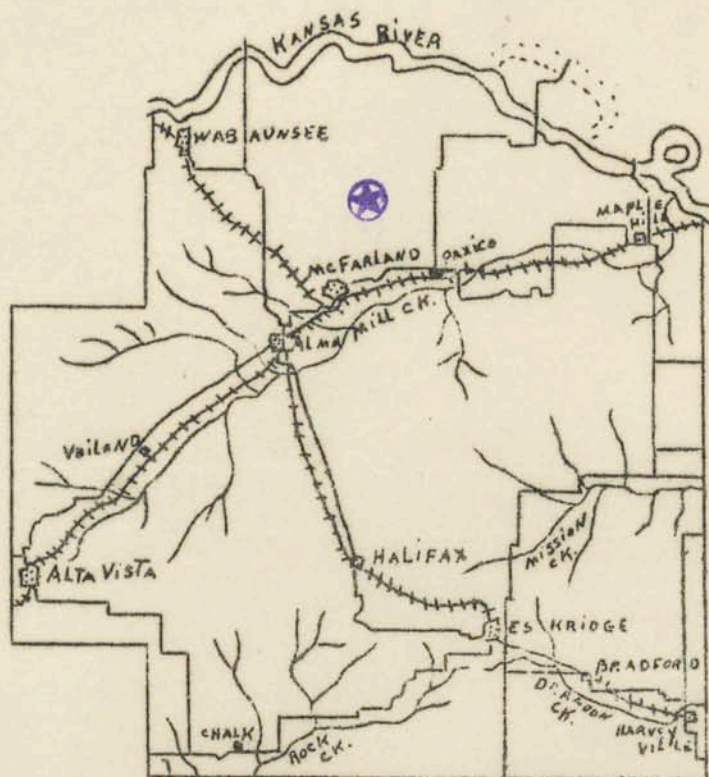


ASCLEPIADACEAE  
*Asclepiodora viridis*  
 (Walt.) A. Gray

WABAUNSEE COUNTY  
 Map No. 265



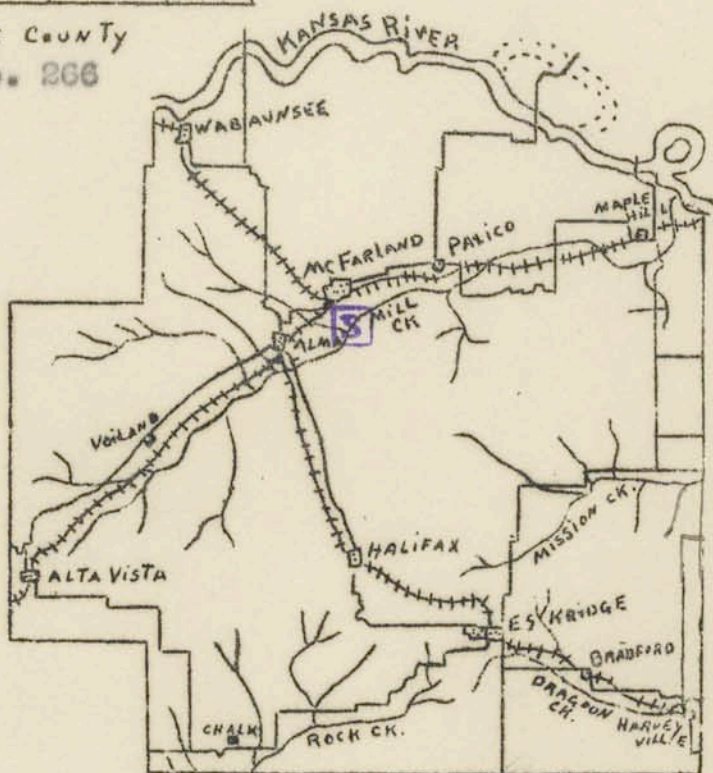
WABAUNSEE COUNTY



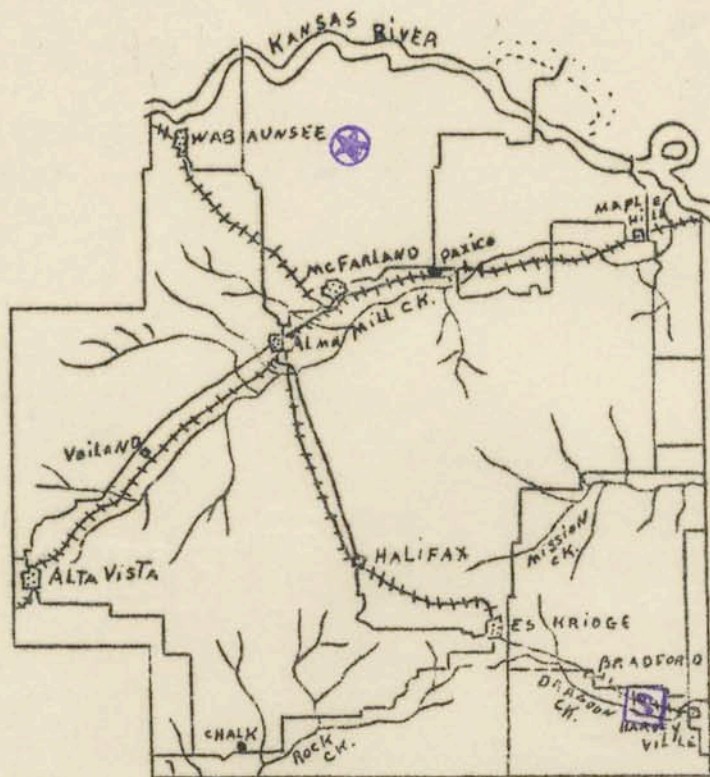
SCROPHULARIACEAE  
*Mimulus ringens* L.

WABAUNSEE COUNTY  
 Map No. 266

*Mimulus geyeri* Torr.



WABAUNSEE COUNTY  
 Map No. 267

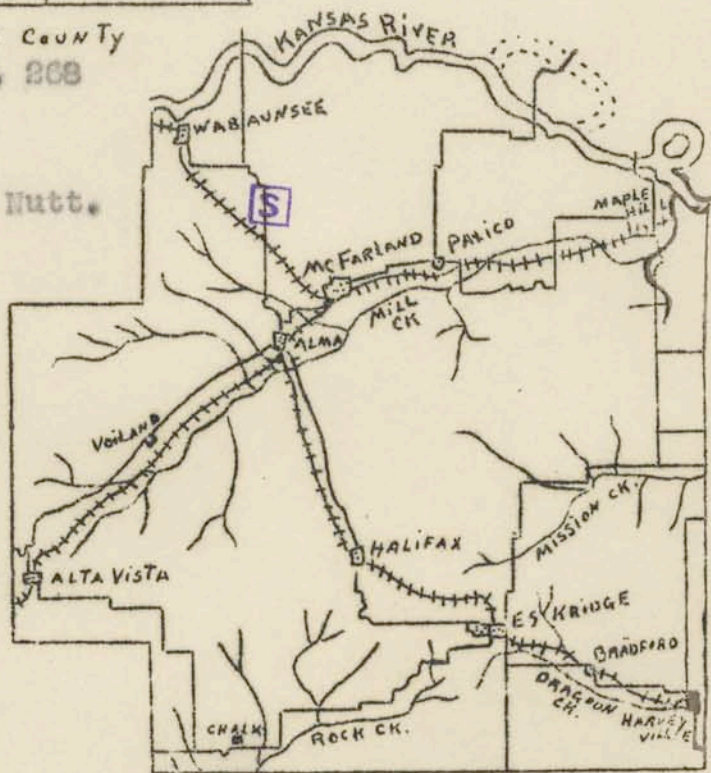


SCROPHULARIACEAE

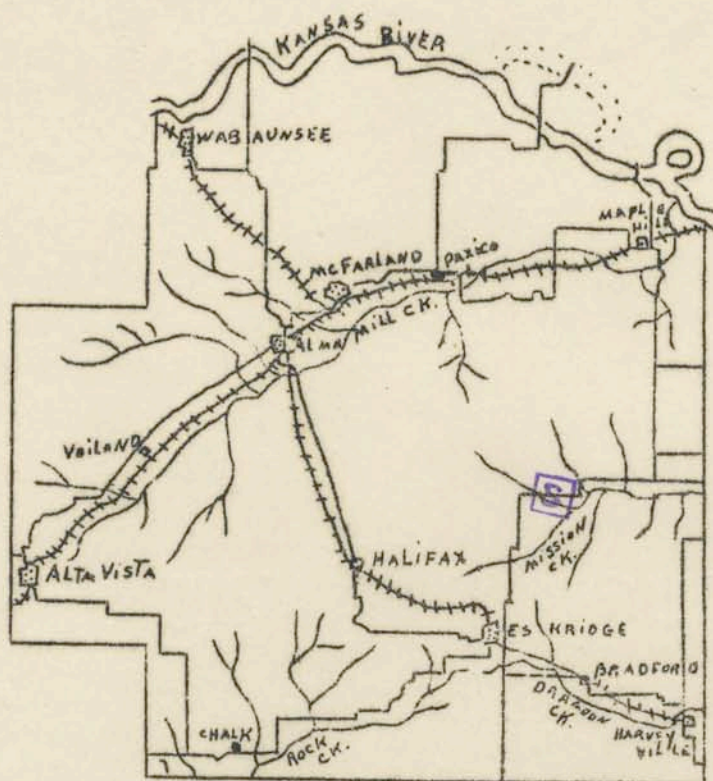
*Pentstemon cobaea* Nutt.

WABAUNSEE COUNTY  
Map No. 268

*Pentstemon grandiflorus* Nutt.



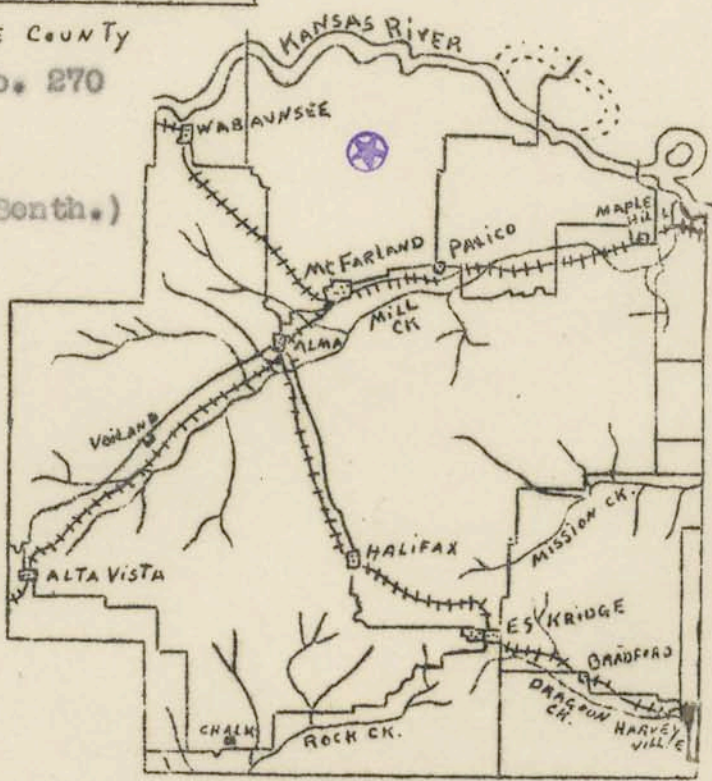
WABAUNSEE COUNTY  
Map No. 269



SCROPHULARIACEAE  
*Verbascum thapsus*  
 (Tourn.) L.

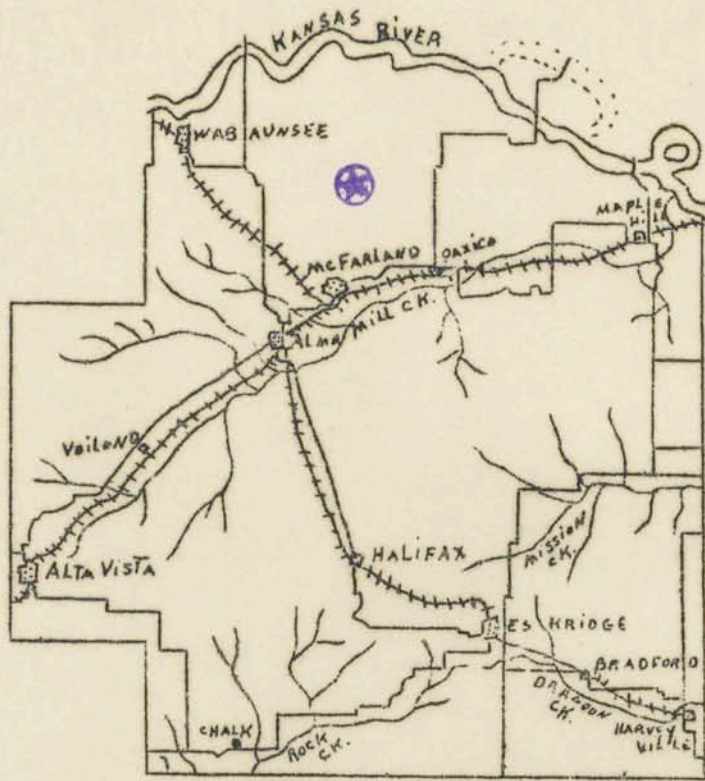
WABAUNSEE COUNTY  
 Map No. 270

*Otophylla densiflora* (Benth.)  
 Small



WABAUNSEE COUNTY  
 Map No. 271

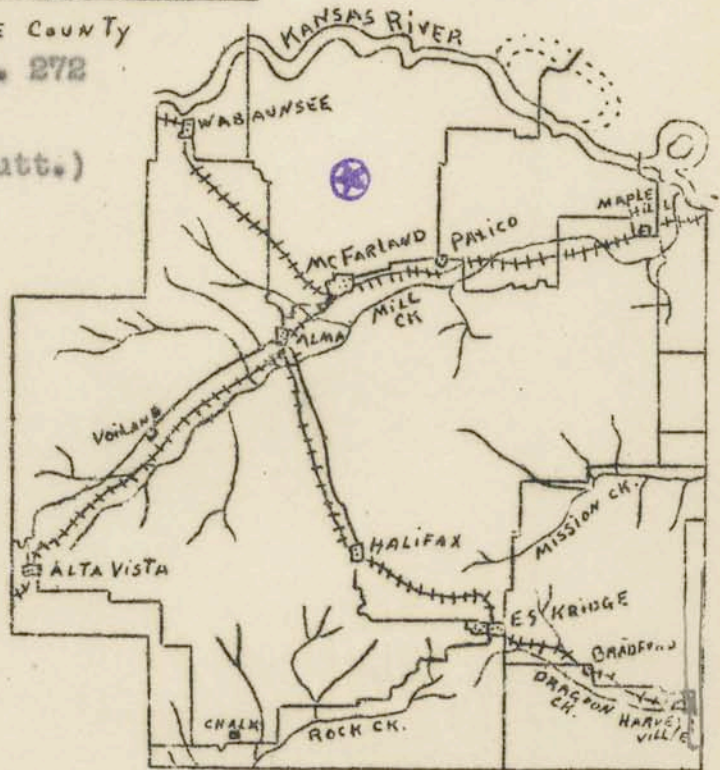




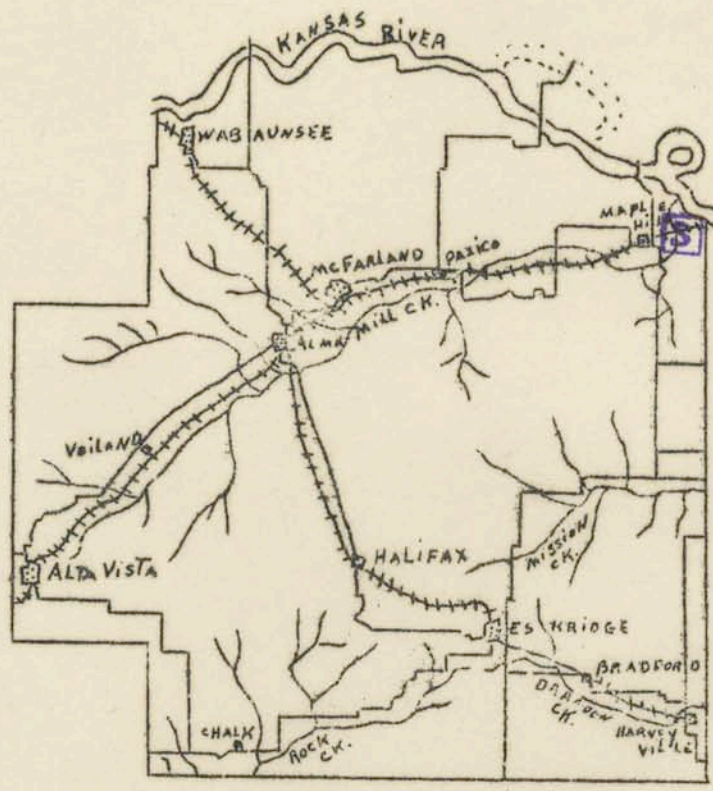
SCROPHULARIACEAE  
*Scrophularia marylandica*  
 L.

WABAUNSEE COUNTY  
 Map No. 272

*Azolla macrophylla* (Nutt.)  
 Kuntze



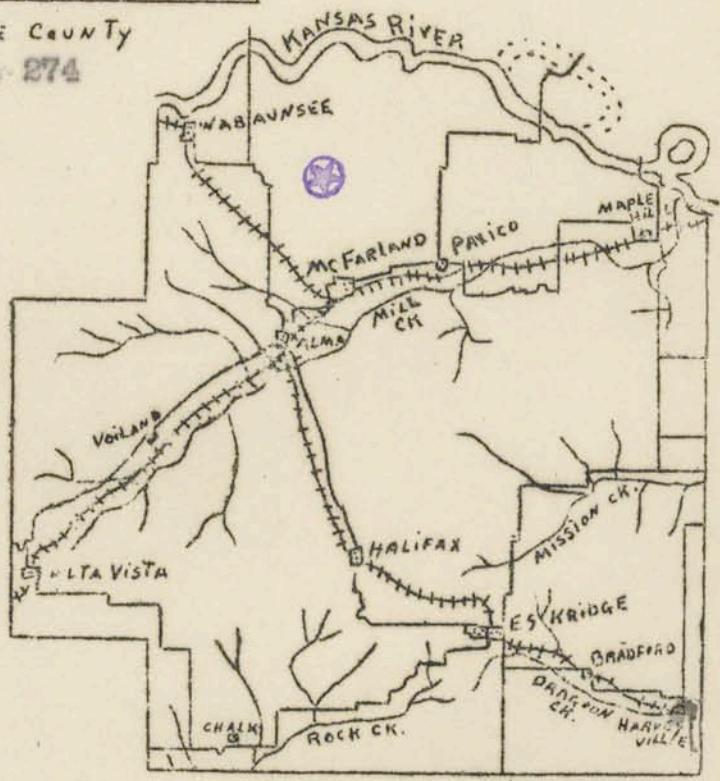
WABAUNSEE COUNTY  
 Map No. 273



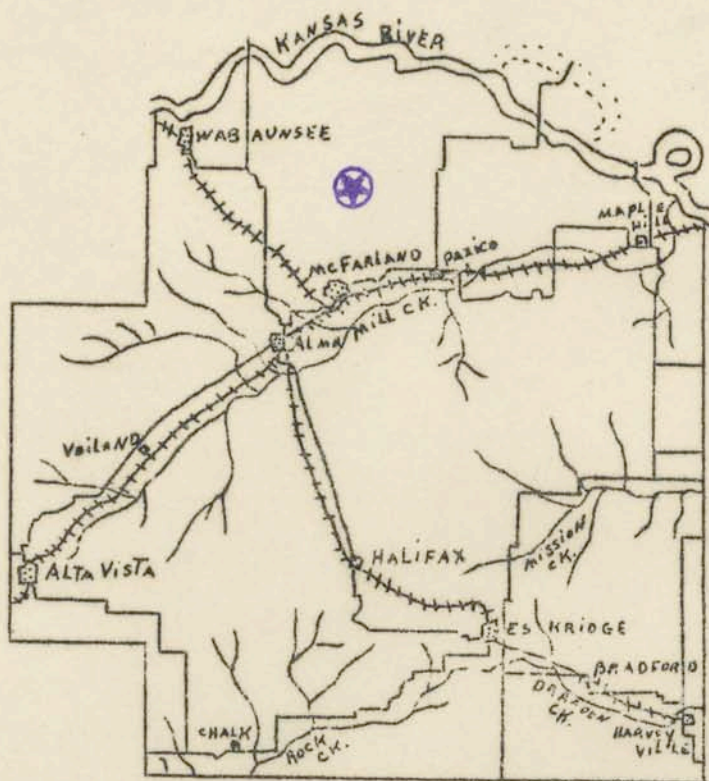
**BIGNONIACEAE**  
*Catalpa speciosa* Warder.

WABAUNSEE COUNTY  
 Map No. 274

**LENTIBULARIACEAE**  
*Thalesia uniflora* L.



WABAUNSEE COUNTY  
 Map No. 275



ACANTHACEAE

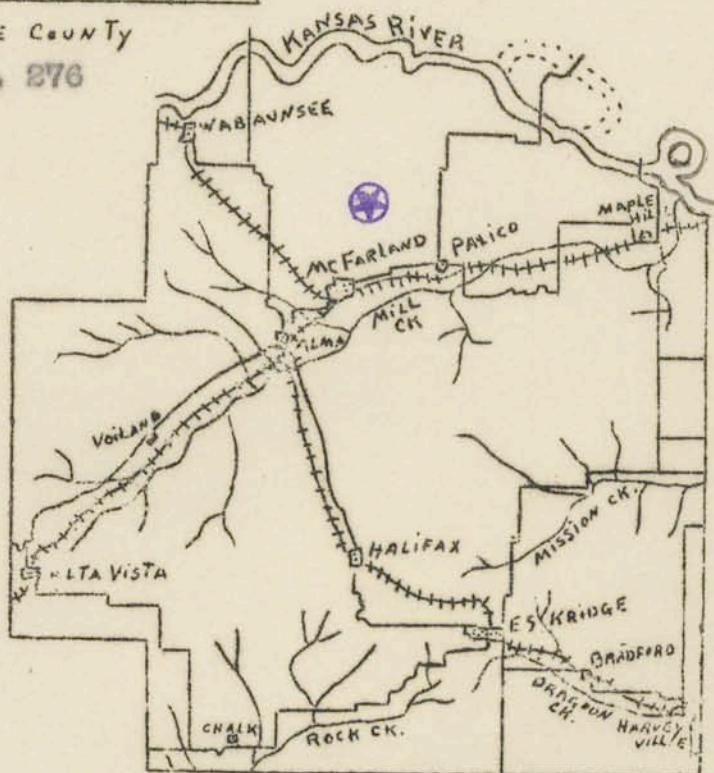
*Phryma leptostachya*

L.

WABAUNSEE COUNTY

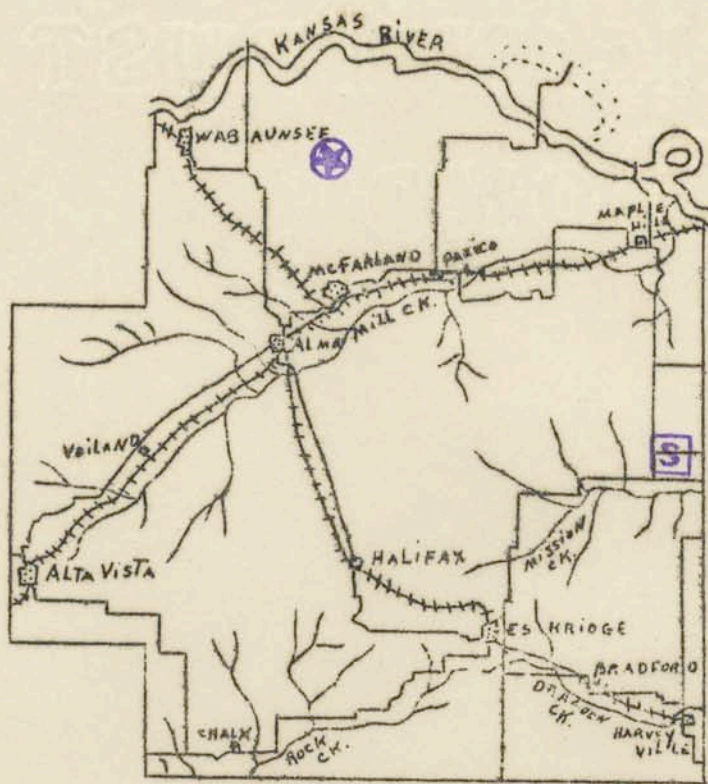
Map No. 276

*Ruellia strepens* L.



WABAUNSEE COUNTY

Map No. 277

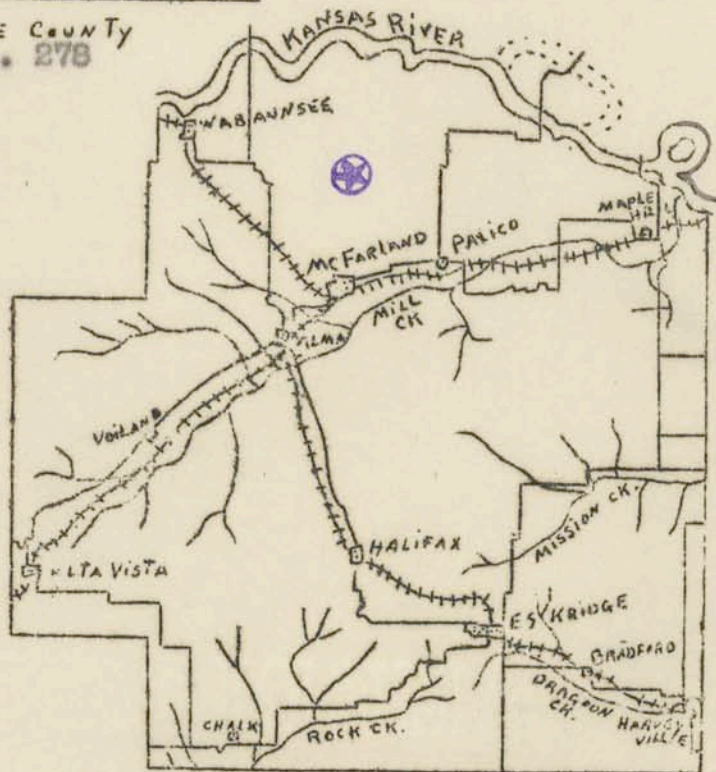


ACANTHACEAE

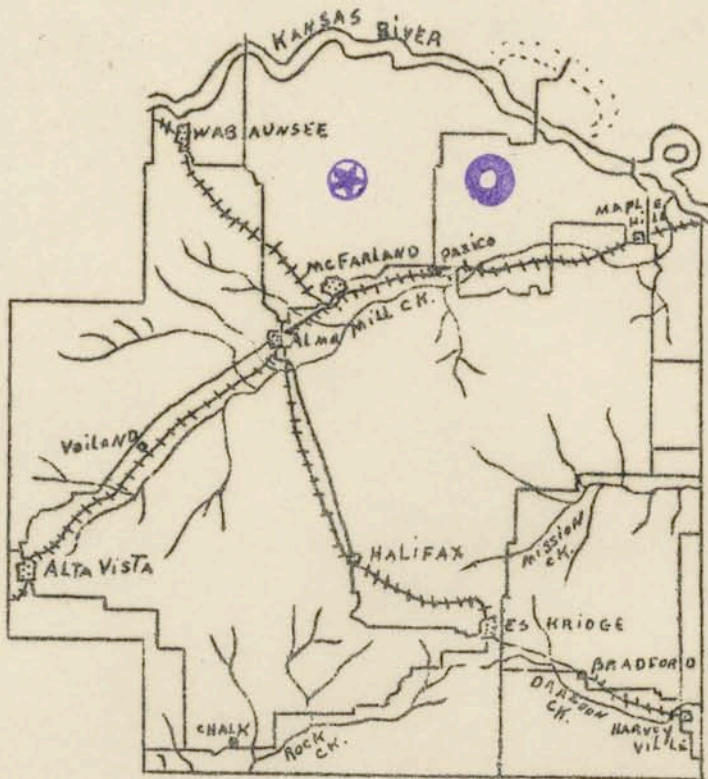
*Ruellia ciliosa* Pursh.

WABAUNSEE COUNTY  
Map No. 278

*Dianthera americana* L.



WABAUNSEE COUNTY  
Map No. 279



VERBENACEAE

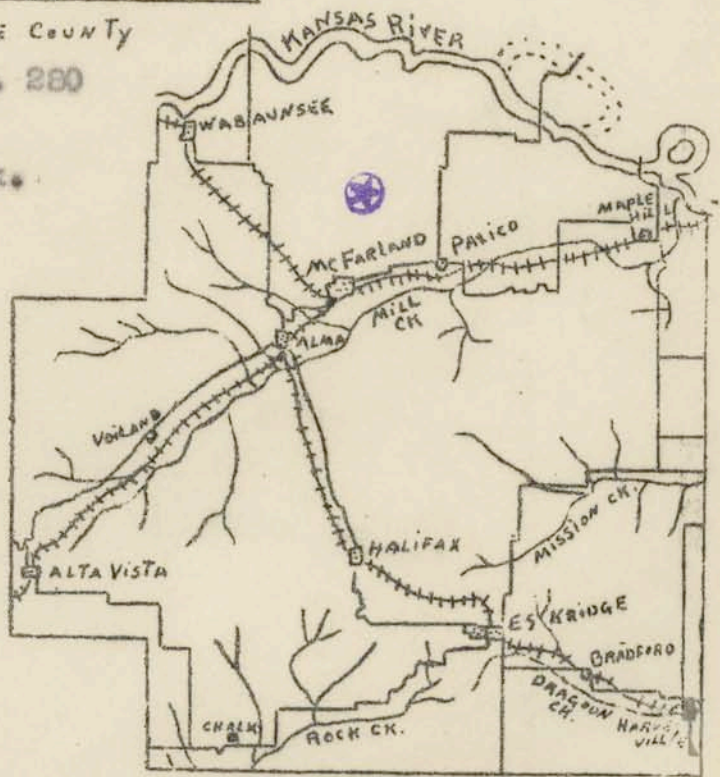
*Verbena angustifolia*

Michx.

WABAUNSEE COUNTY

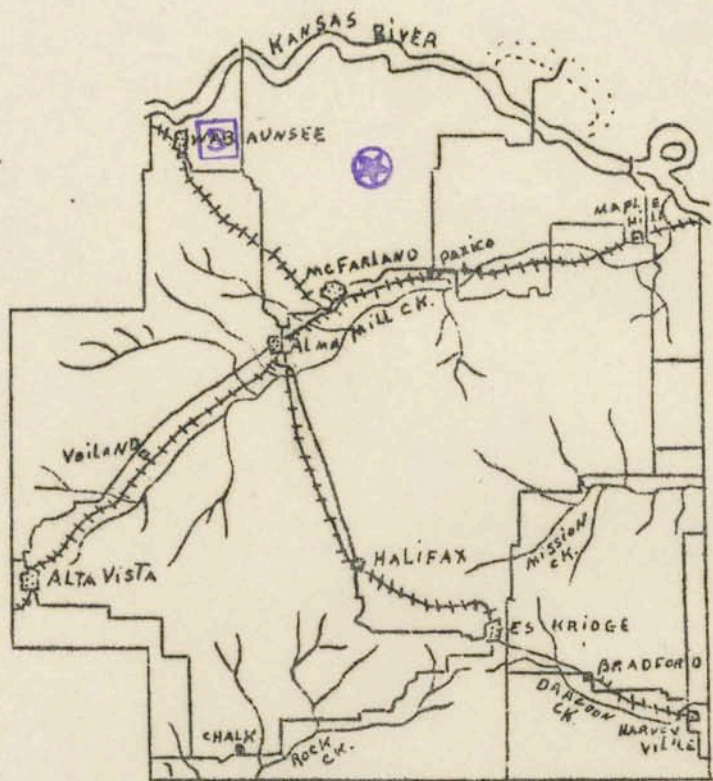
Map No. 280

*Verbena bracteosa* Michx.



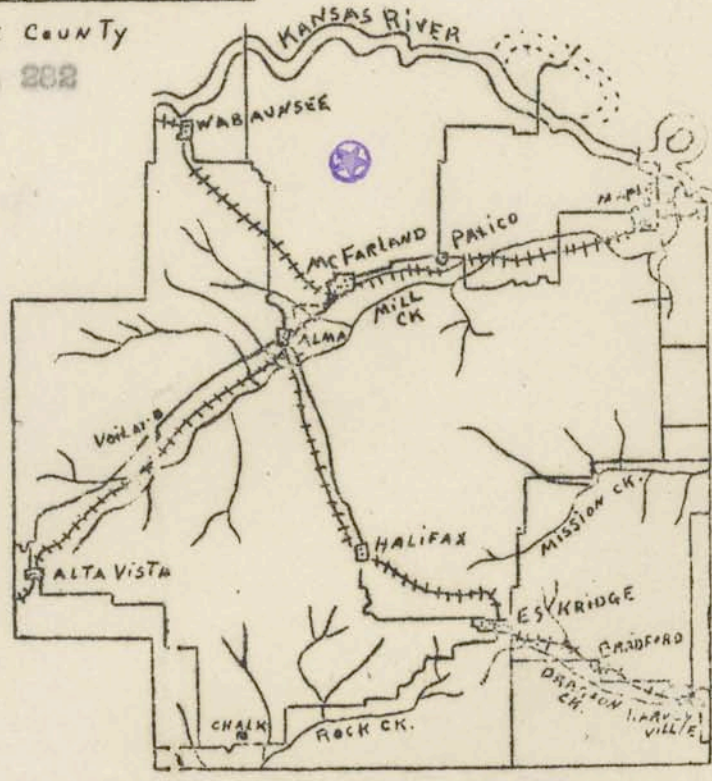
WABAUNSEE COUNTY

Map No. 281

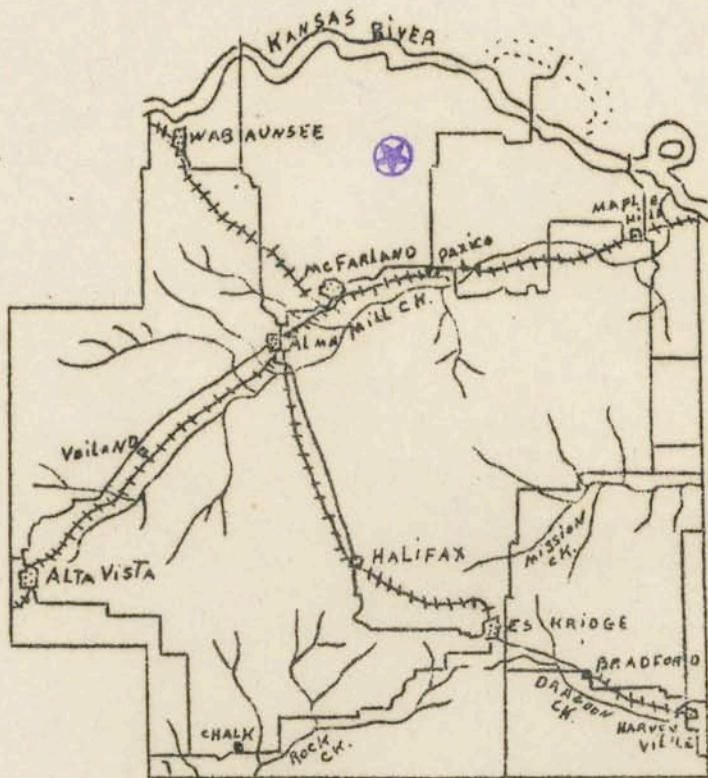


VERBENACEAE  
*Verbena canadensis* (L.)  
 Britton

WABAUNSEE COUNTY  
 Map No. 282



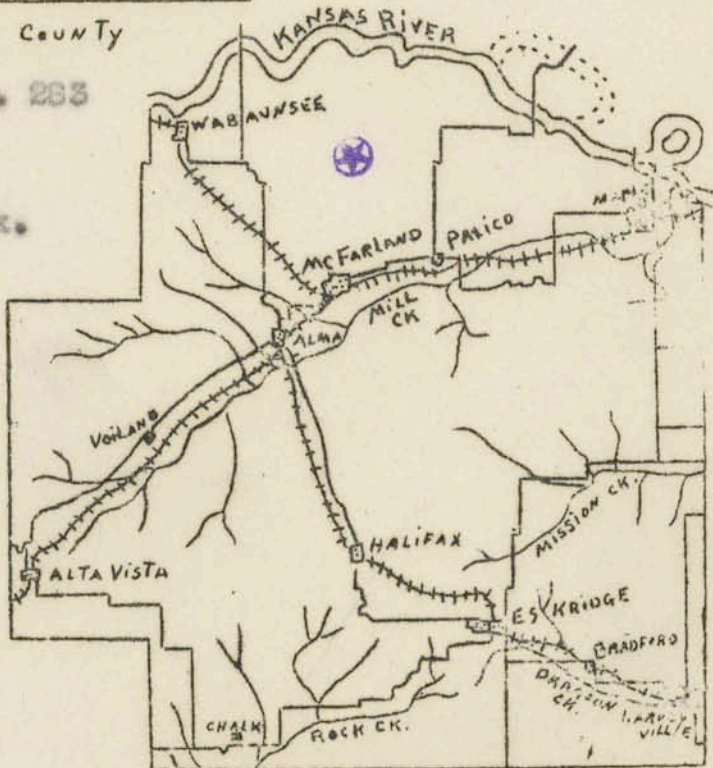
WABAUNSEE COUNTY



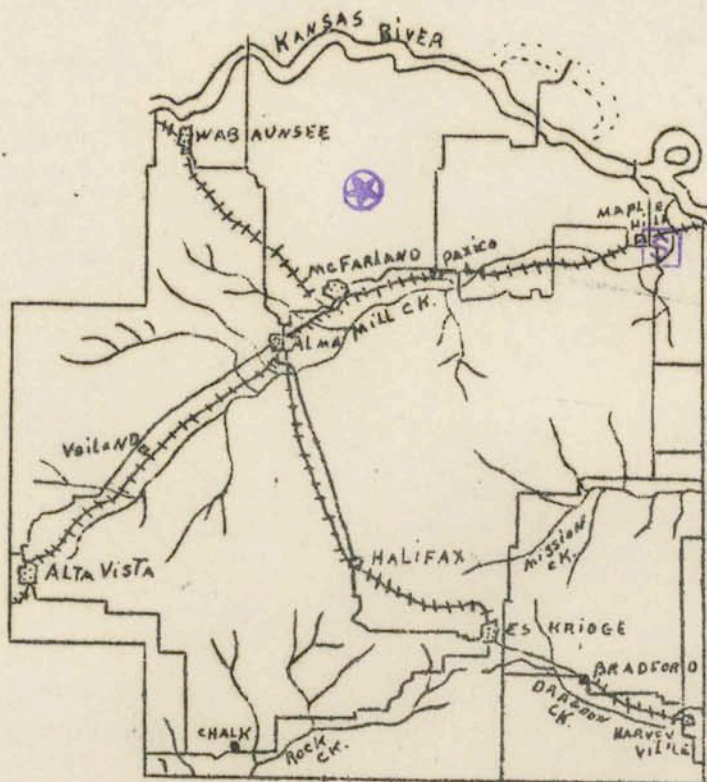
VERBENACEAE  
*Verbena hastata* L.

WABAUNSEE COUNTY  
 Map No. 283

*Verbena lanceolata* Michx.



WABAUNSEE COUNTY  
 Map No. 284



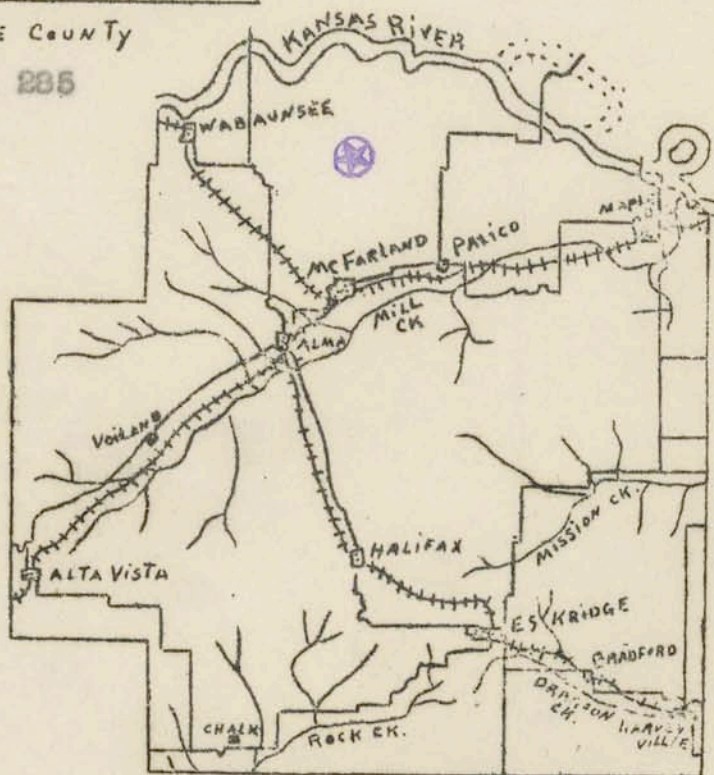
VERBENACEAE

*Verbena stricta* Vent.

WABAUNSEE COUNTY

Map No. 285

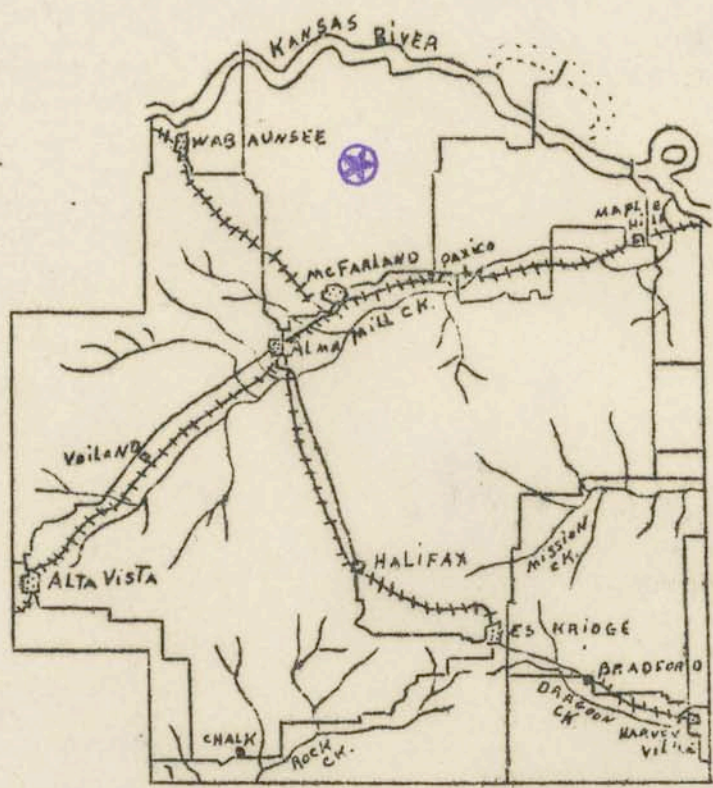
*Verbena urticifolia* L.



WABAUNSEE COUNTY

Map No. 286

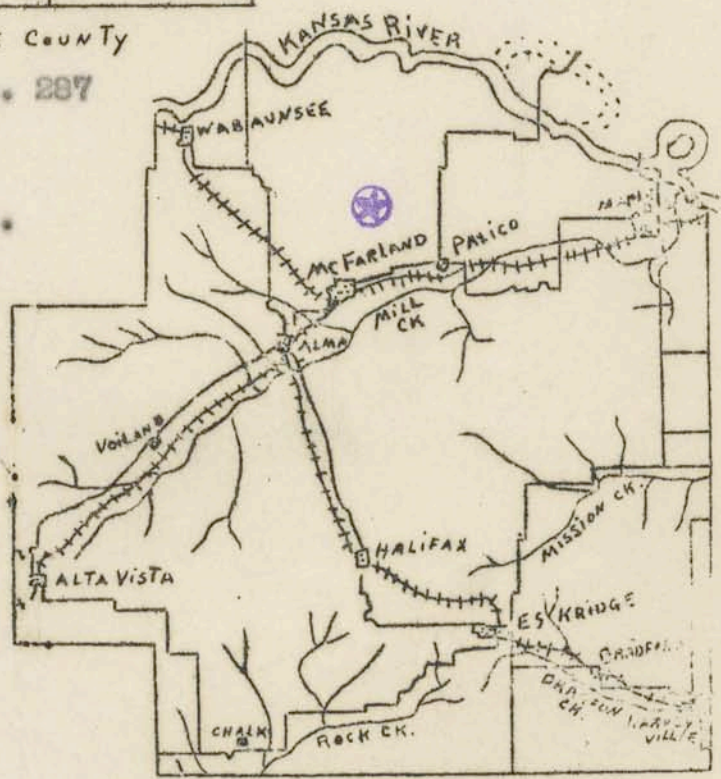




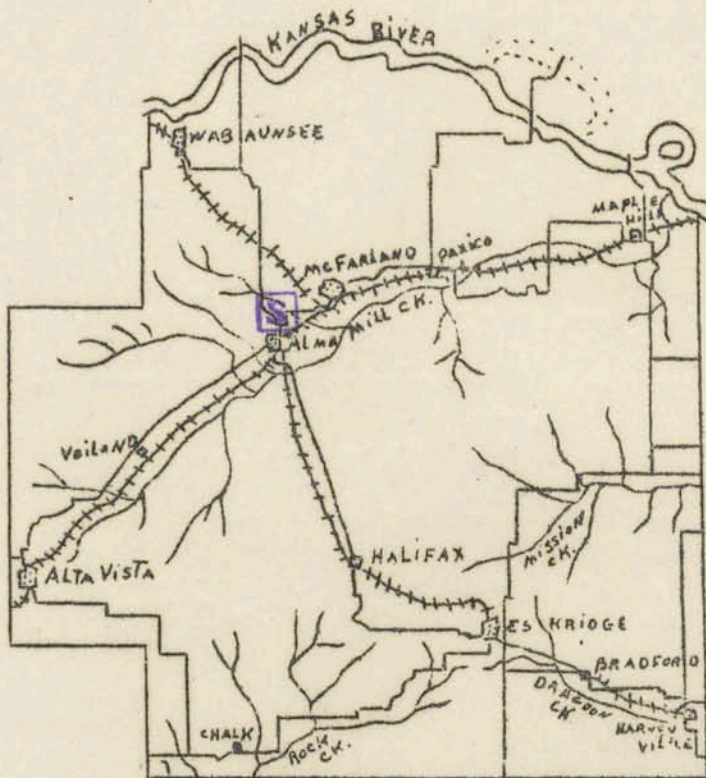
VERBENACEAE  
*Lippia cuneifolia* (Torr.)  
 Steud.

WABAUNSEE COUNTY  
 Map No. 287

*Lippia lanceolata* Michx.



WABAUNSEE COUNTY  
 Map No. 288



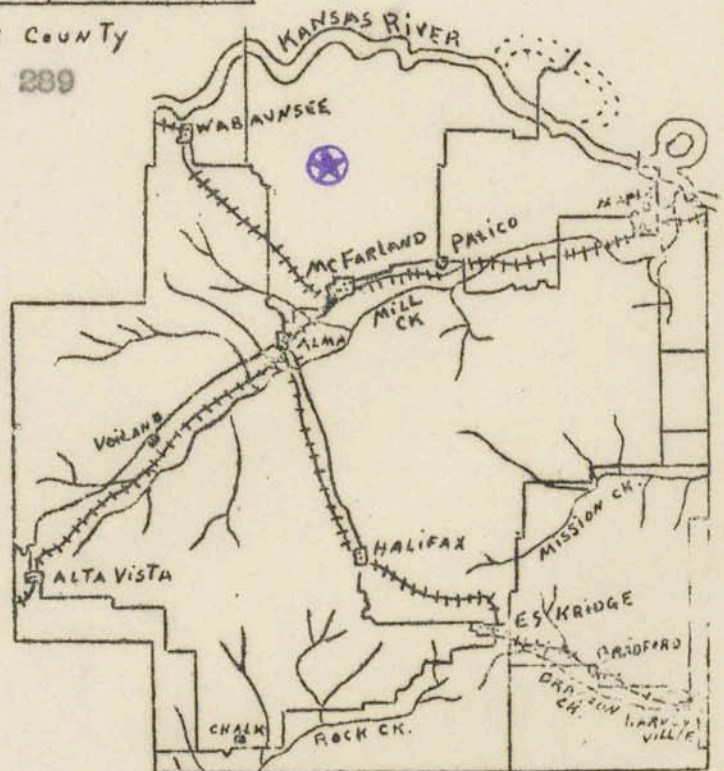
LABIATAE

*Leonurus cardiaca* L.

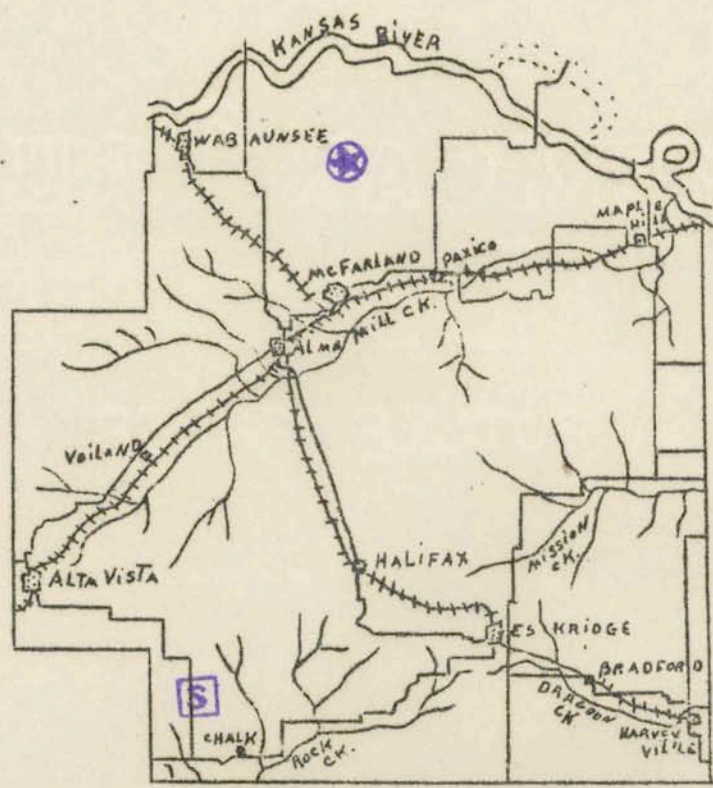
WABAUNSEE COUNTY  
Map No. 289

*Mentha canadensis* (L.)

Briquet



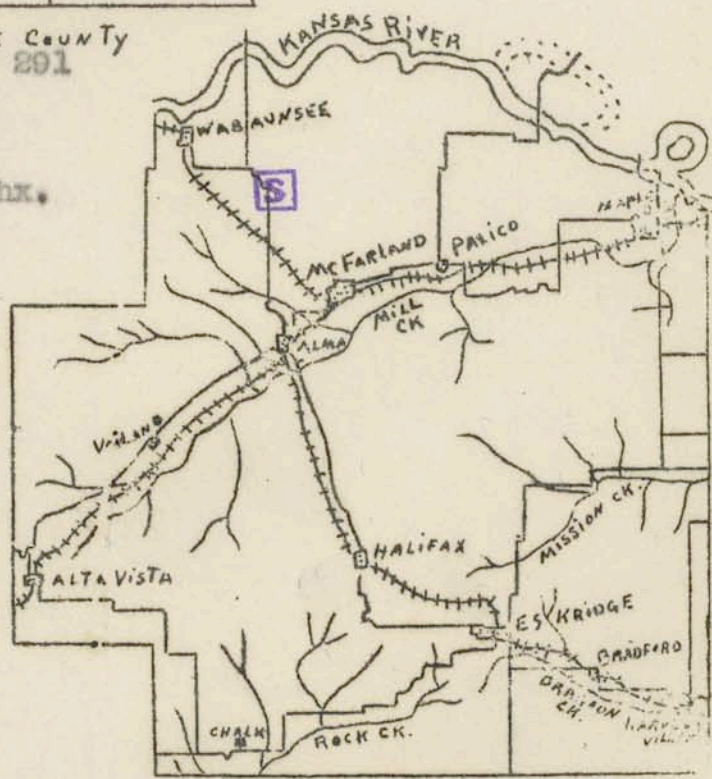
WABAUNSEE COUNTY  
Map No. 290



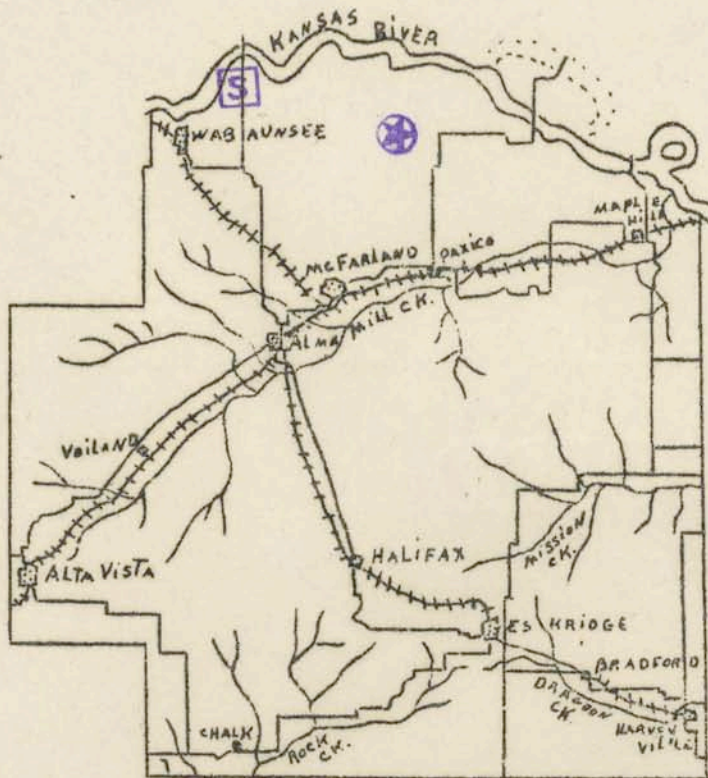
LABIATAE  
*Lycopus americanus* Muhl.

WABAUNSEE COUNTY  
 Map No. 291

*Scutellaria parvula* Michx.



WABAUNSEE COUNTY  
 Map No. 292

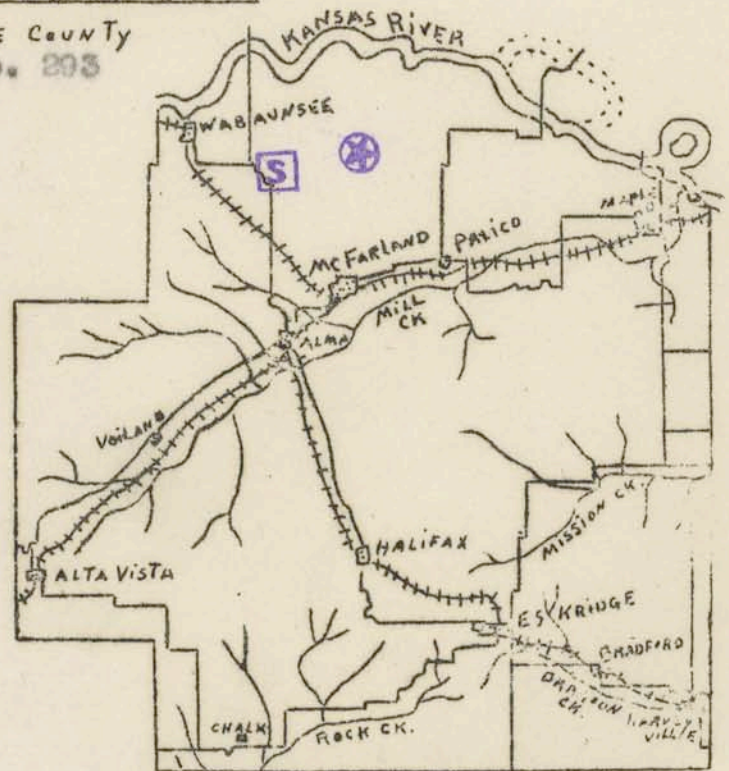


LABIATAE

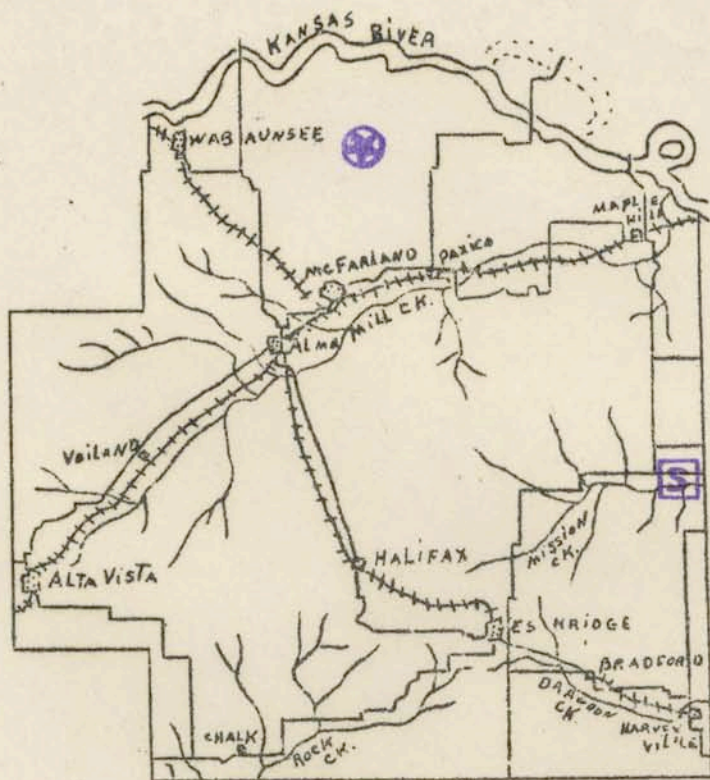
*Nepeta cataria* L.

WABAUNSEE COUNTY  
Map No. 293

*Hedeoma hispida* Pursh.



WABAUNSEE COUNTY  
Map No. 294



LARIATAE

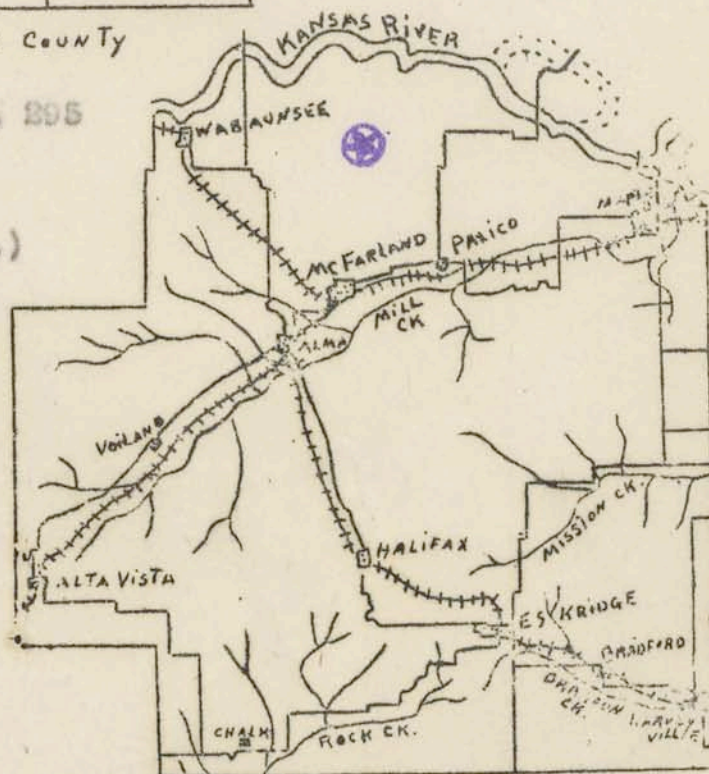
*Monarda fistulosa* L.

WABAUNSEE COUNTY

Map No. 295

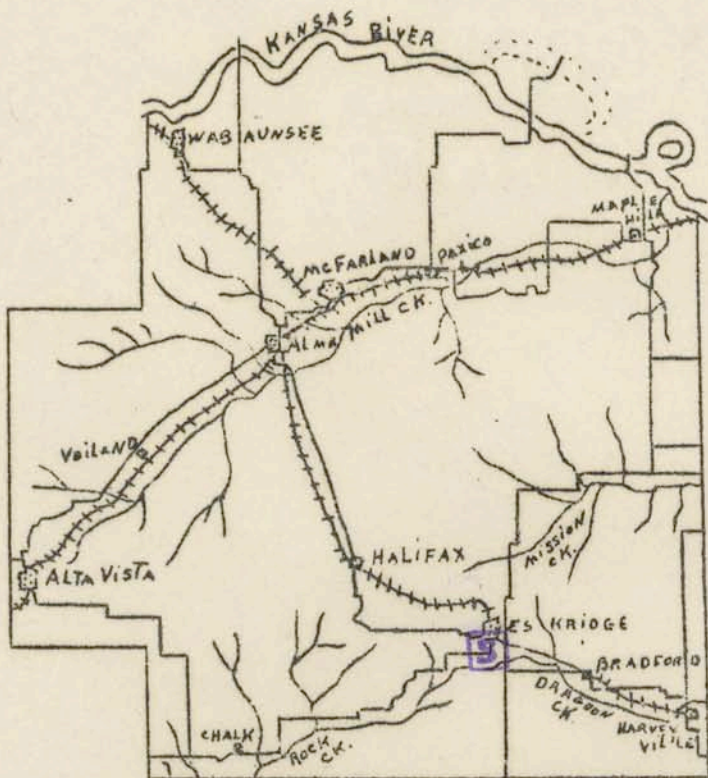
*Agastache nepetoides* (L.)

Kuntze



WABAUNSEE COUNTY

Map No. 296



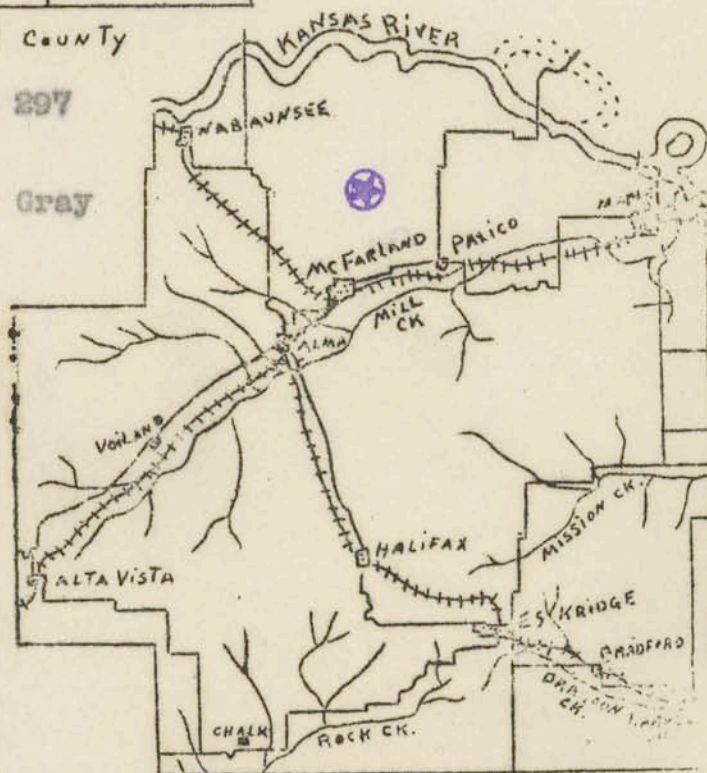
LABIATAE

*Teuerium canadense* L.

WABAUNSEE COUNTY

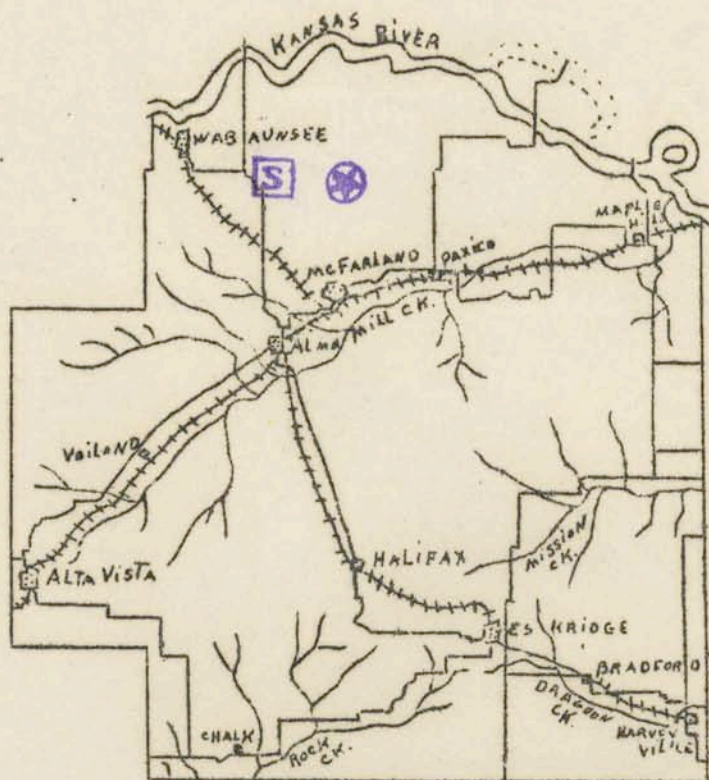
Map No. 297

*Teuerium occidentale* A. Gray



WABAUNSEE COUNTY

Map No. 298



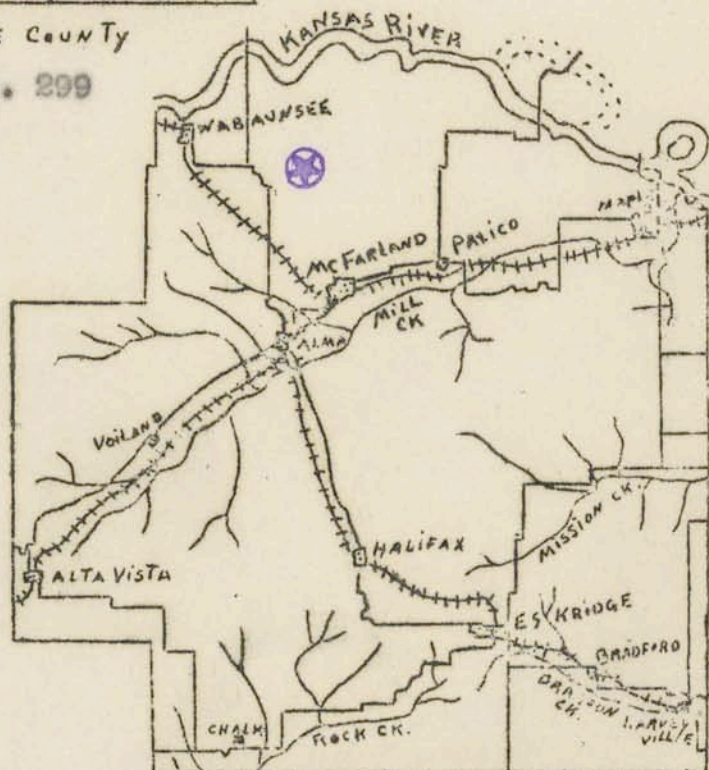
LABIATAE

*Salvia lanceifolia* Poir.

WABAUNSEE COUNTY

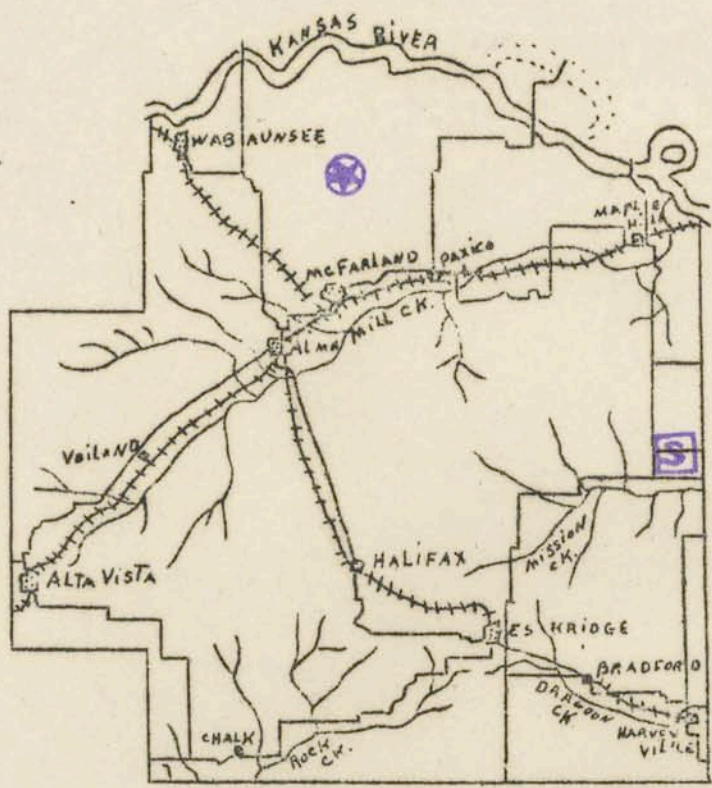
Map No. 299

*Salvia pitcheri* Torr.



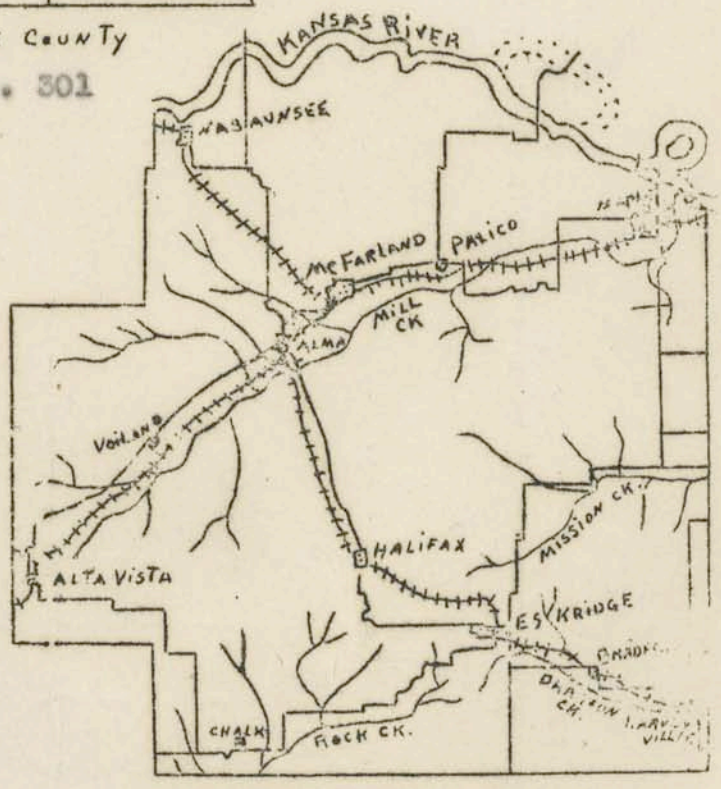
WABAUNSEE COUNTY

Map No. 300



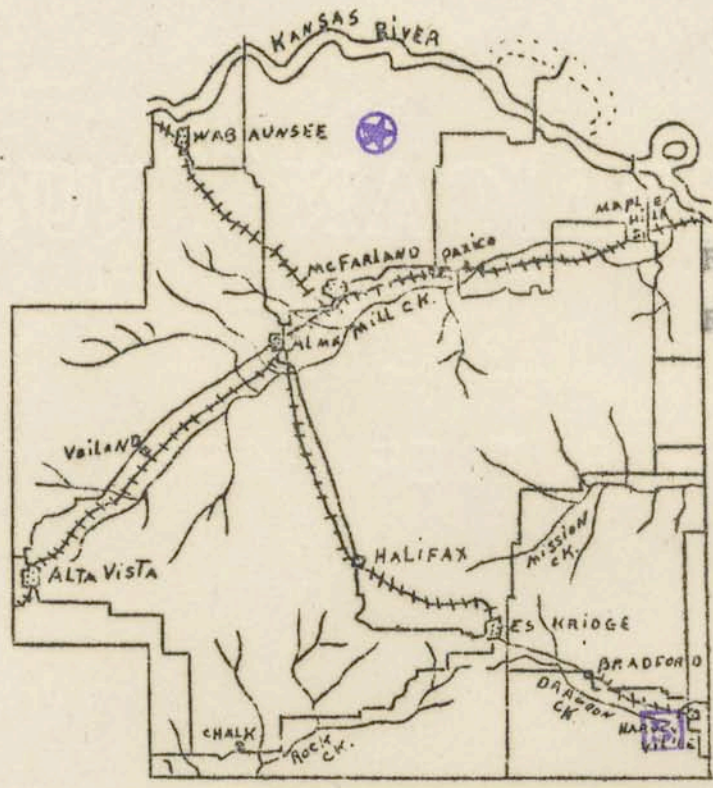
LABIATAE  
*Prunella vulgaris* L.

WABAUNSEE COUNTY  
 Map No. 301



WABAUNSEE COUNTY

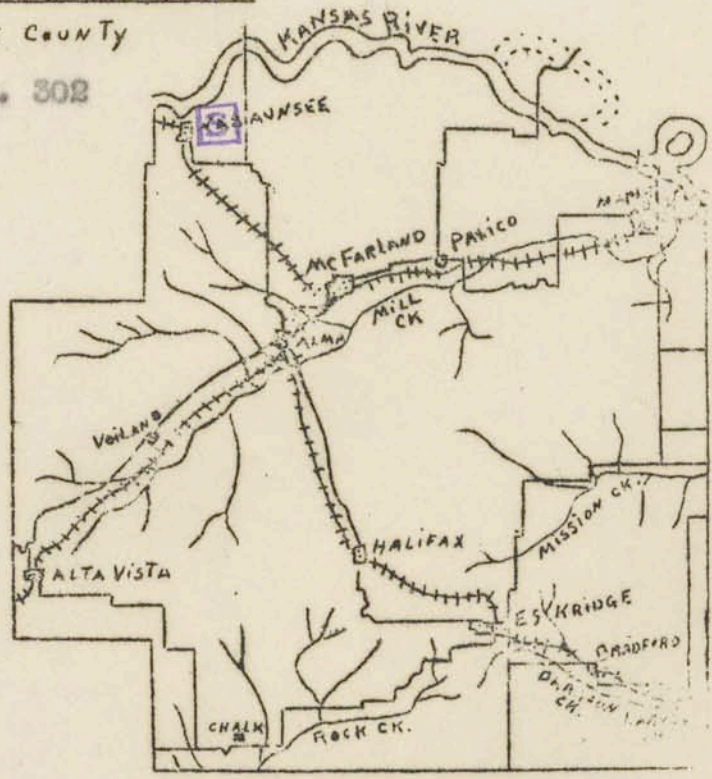




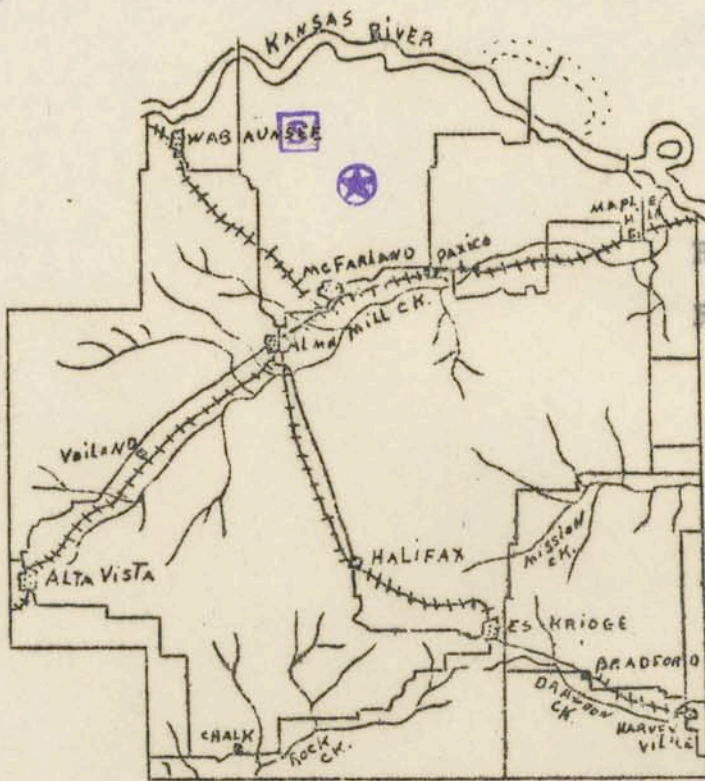
ROSACEAE  
*Rosa arkansana* (?)

WABAUNSEE COUNTY  
 Map No. 302

*Rosa woodsii* Lindl.



WABAUNSEE COUNTY  
 Map No. 303

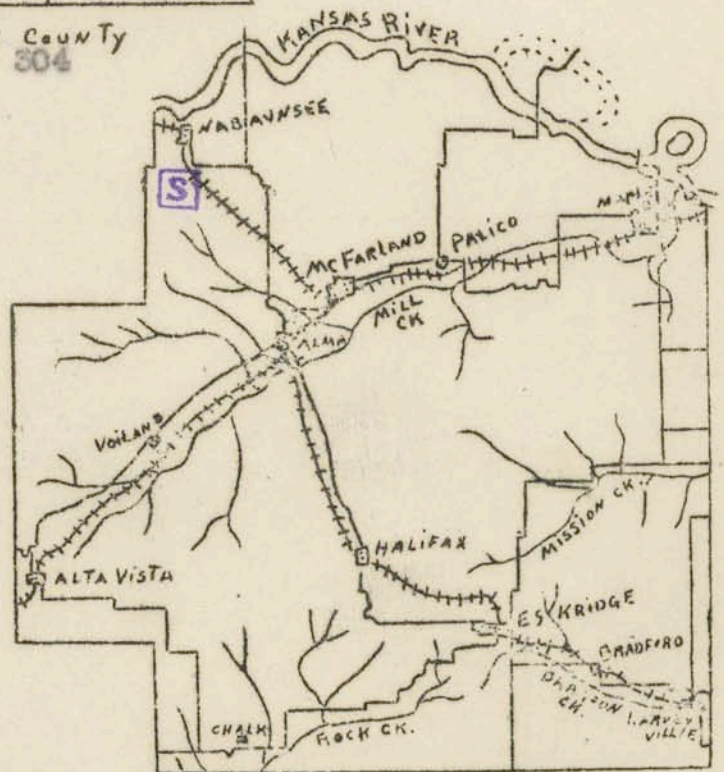


ROSACEAE

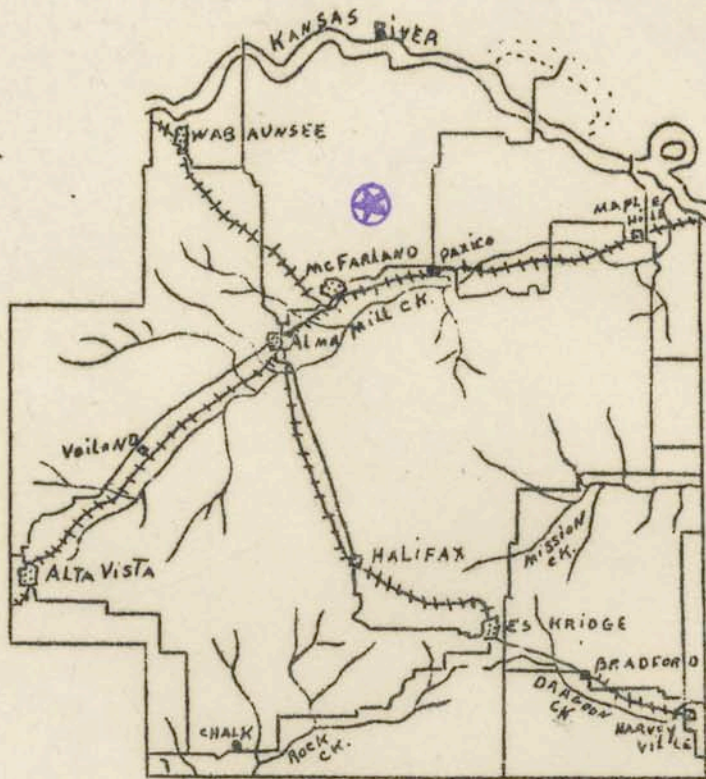
*Rosa pratincola* Greene

WABAUNSEE County  
Map No. 304

*Rosa blanda* Ait.



WABAUNSEE COUNTY  
Map No. 305



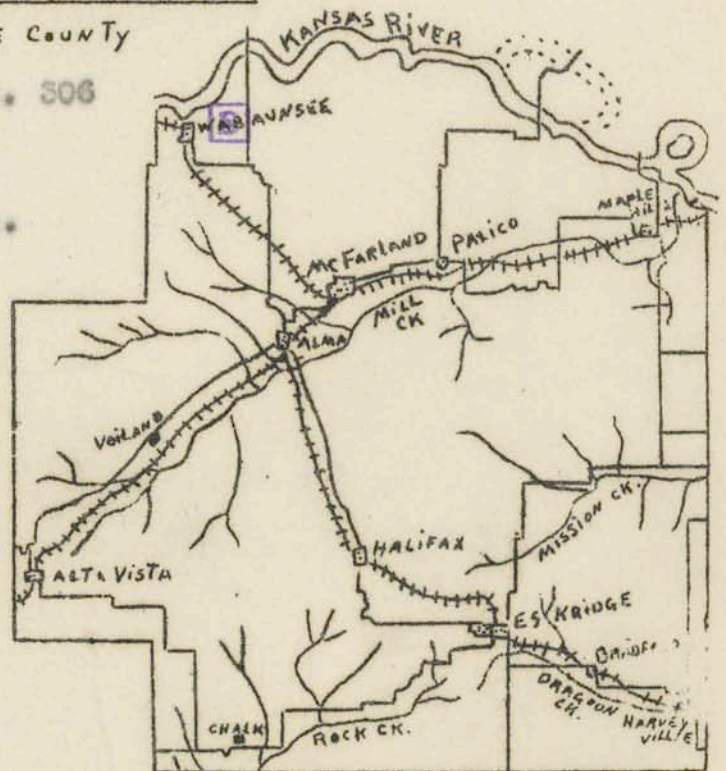
ROSACEAE

*Geum canadense* Jacq.

WABAUNSEE COUNTY

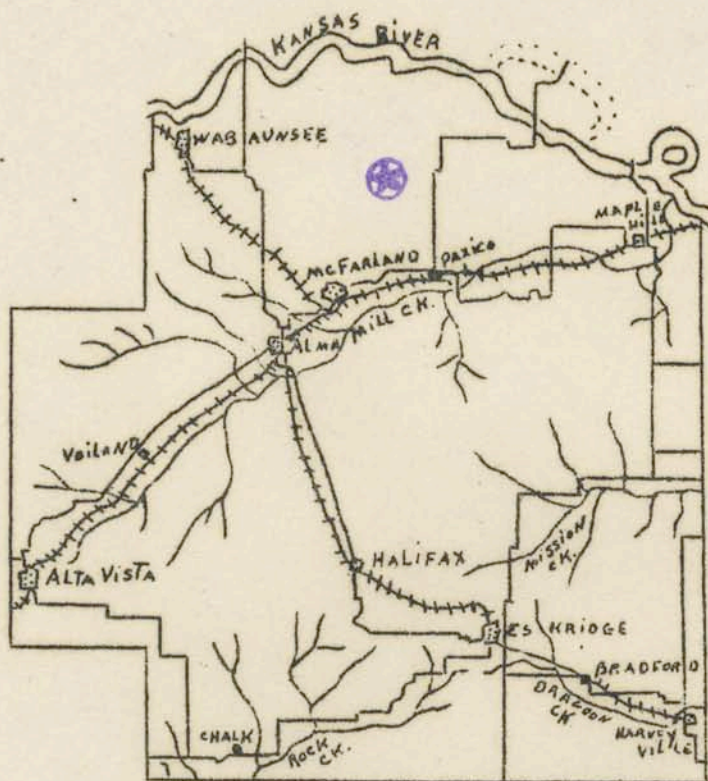
Map No. 306

*Spiraea vanhouttei* Zabel.



WABAUNSEE COUNTY

Map No. 307

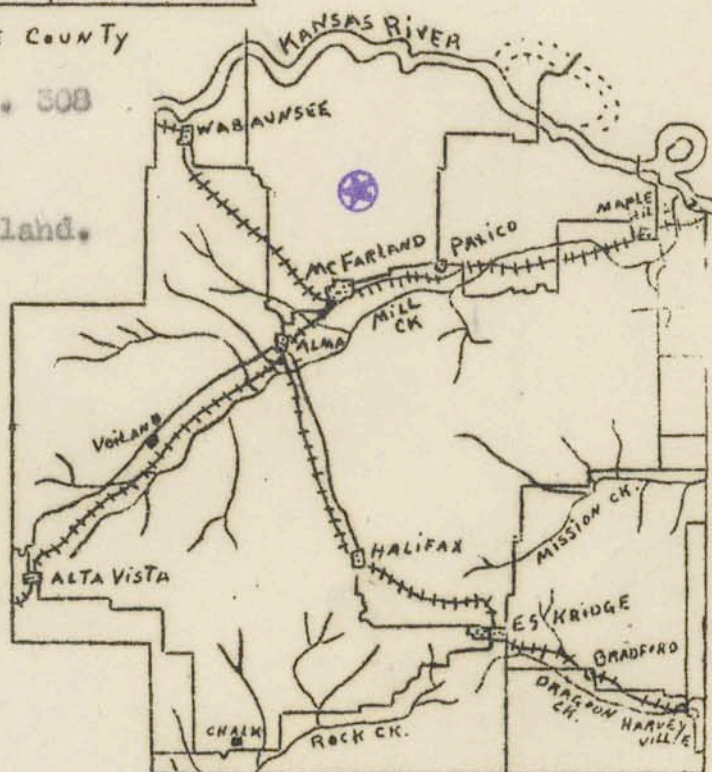


ROSACEAE  
*Agrimonia mollis*  
 (T. & G.) Britton

WABAUNSEE COUNTY

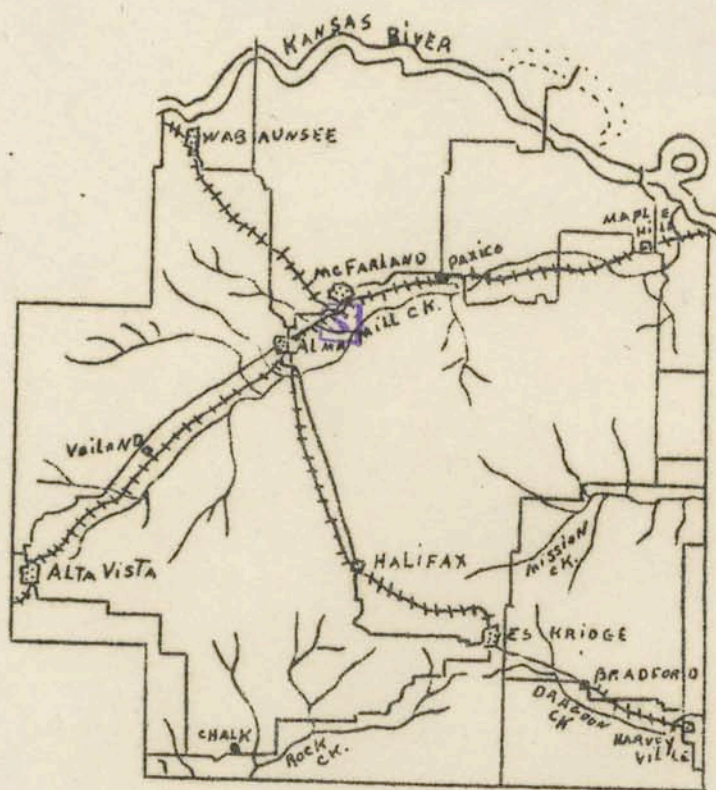
Map No. 308

*Agrimonia parviflora* Soland.



WABAUNSEE COUNTY

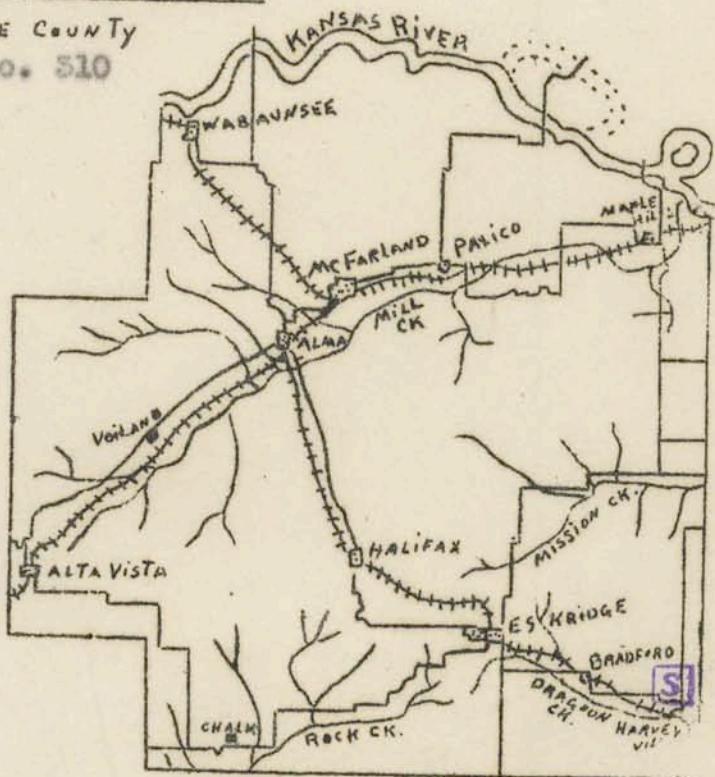
Map No. 309



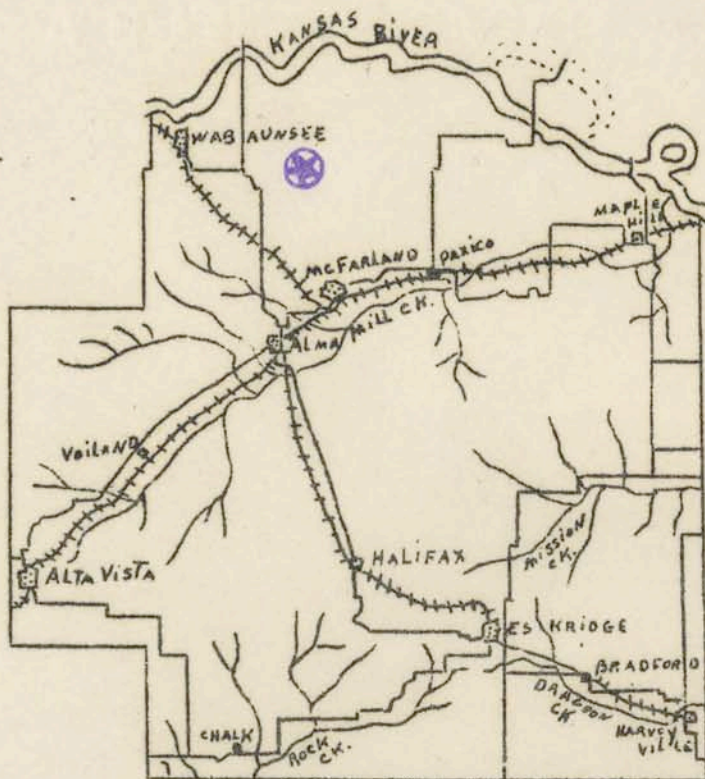
ROSACEAE  
*Fragaria virginiana*  
 Duquesne

WABAUNSEE COUNTY  
 Map No. 310

NALACEAE  
*Crataegus*



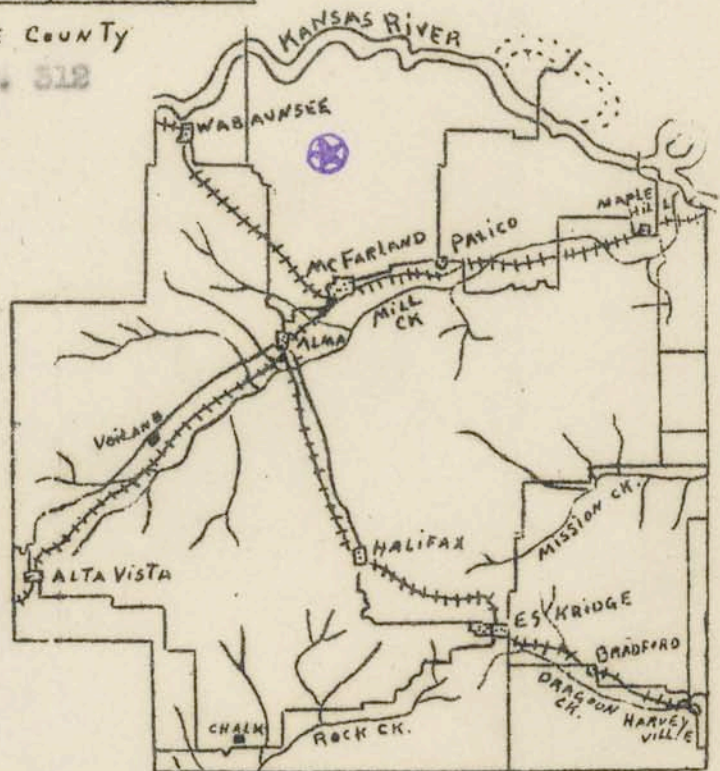
WABAUNSEE COUNTY  
 Map No. 311



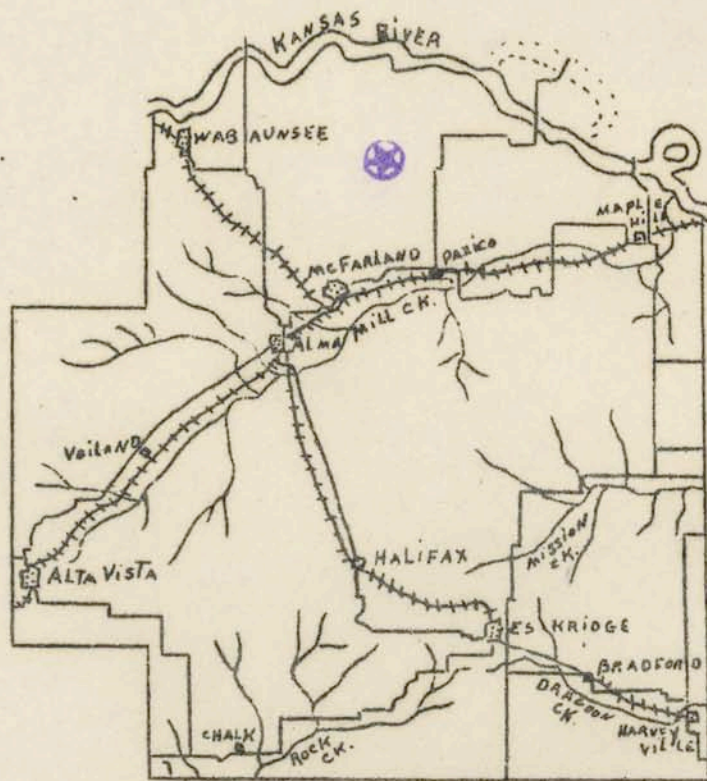
ROSACEAE  
*Rubus canadensis* L.

WABAUNSEE COUNTY  
 Map No. 312

*Rubus occidentalis* L.

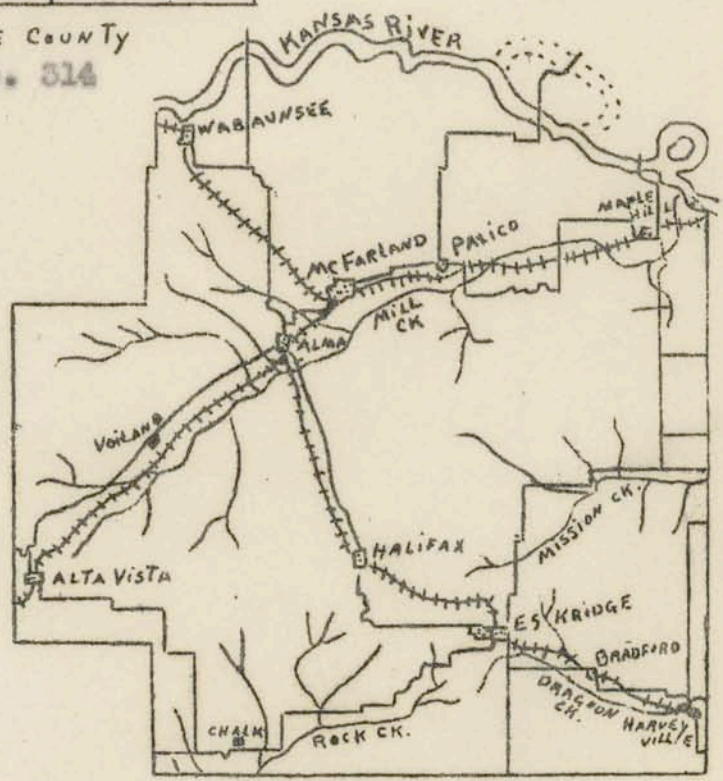


WABAUNSEE COUNTY  
 Map No. 313

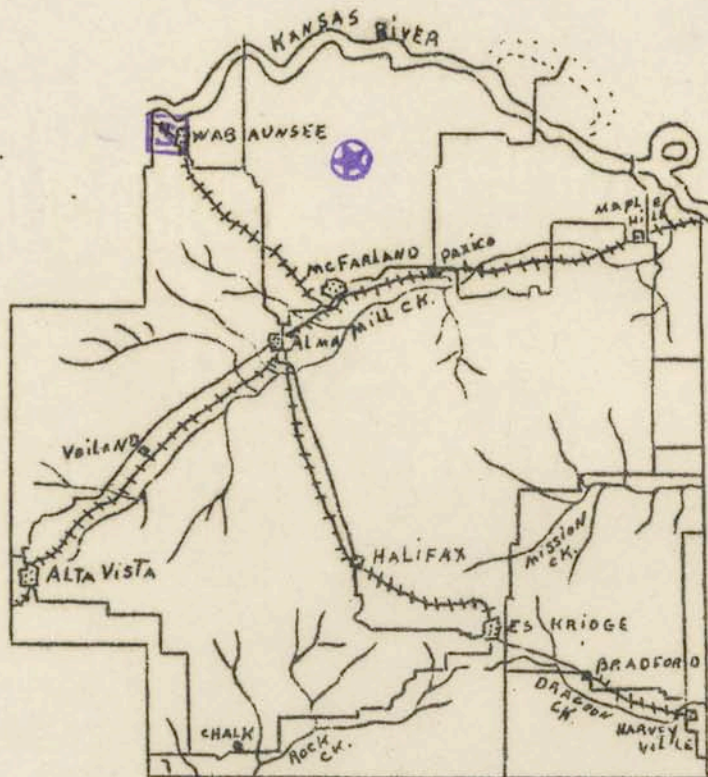


ROSACEAE  
*Rubus Baileyannus*  
 Britton

WABAUNSEE COUNTY  
 Map No. 314



WABAUNSEE COUNTY

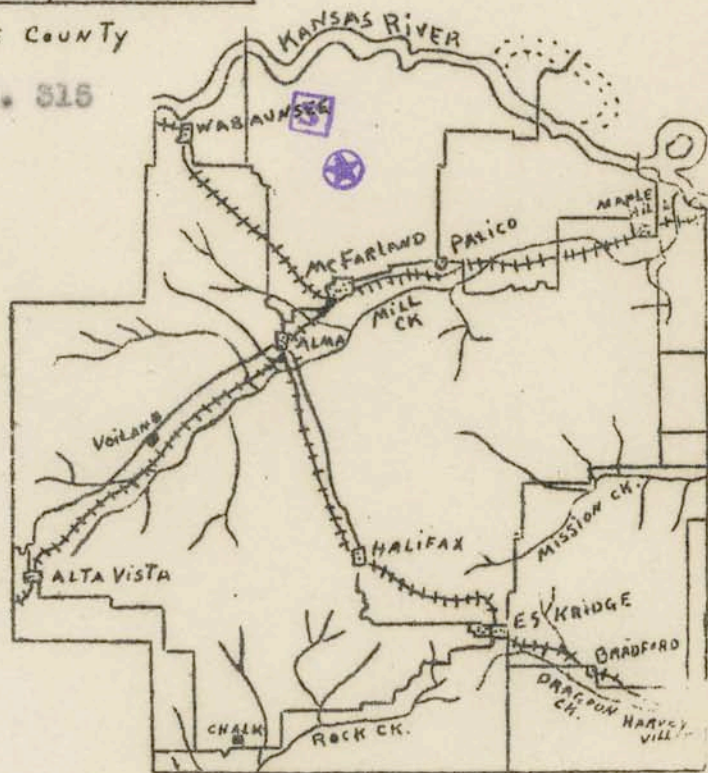


PRUNACEAE  
*Prunus virginiana* (L.)  
 Mill.

WABAUNSEE COUNTY

Map No. 315

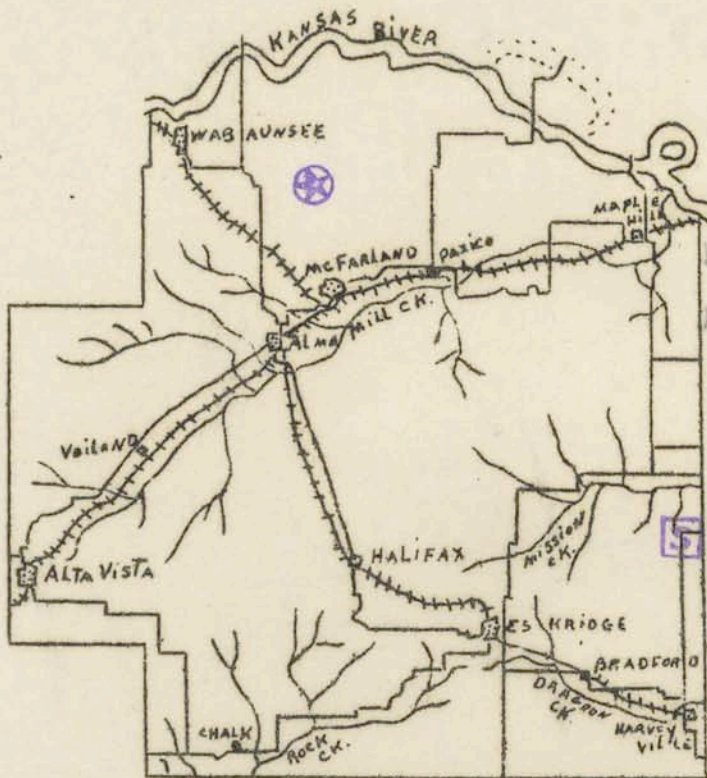
*Prunus americana* Marsh.



WABAUNSEE COUNTY

Map No. 316





MIMOSACEAE

*Morongia uncinata* Willd.

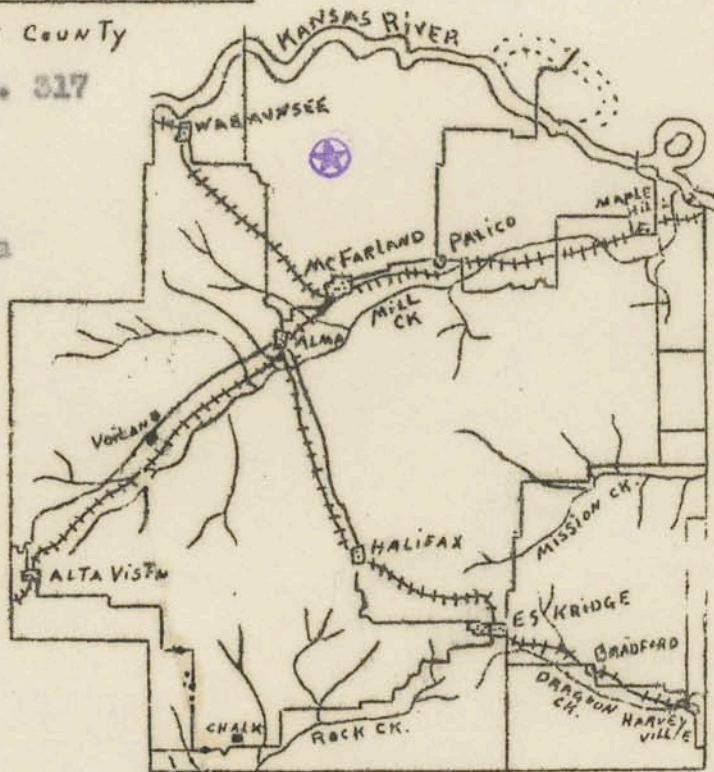
WABAUNSEE COUNTY

Map No. 317

CASSIACEAE

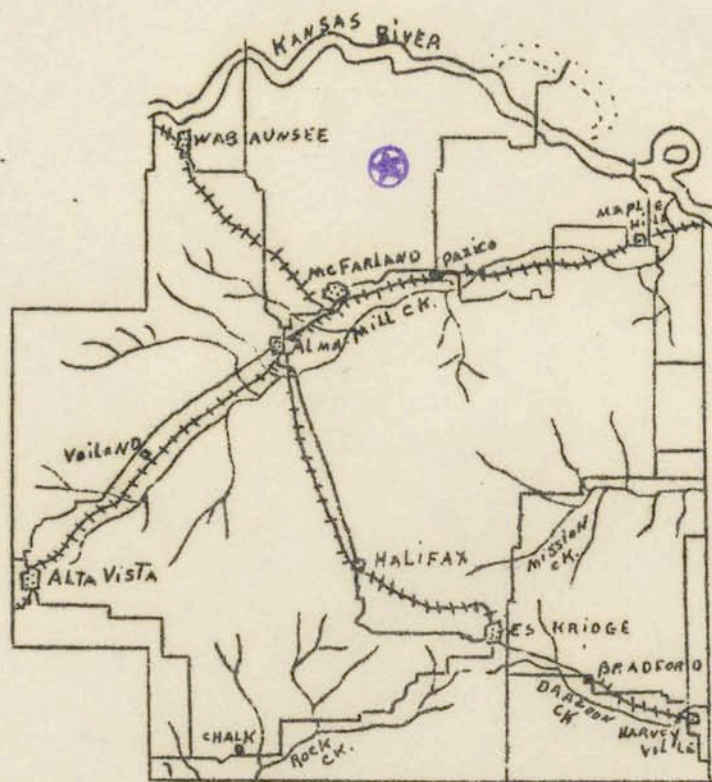
*Chamaecrista fasciculata*

(Michx.) Greene



WABAUNSEE COUNTY

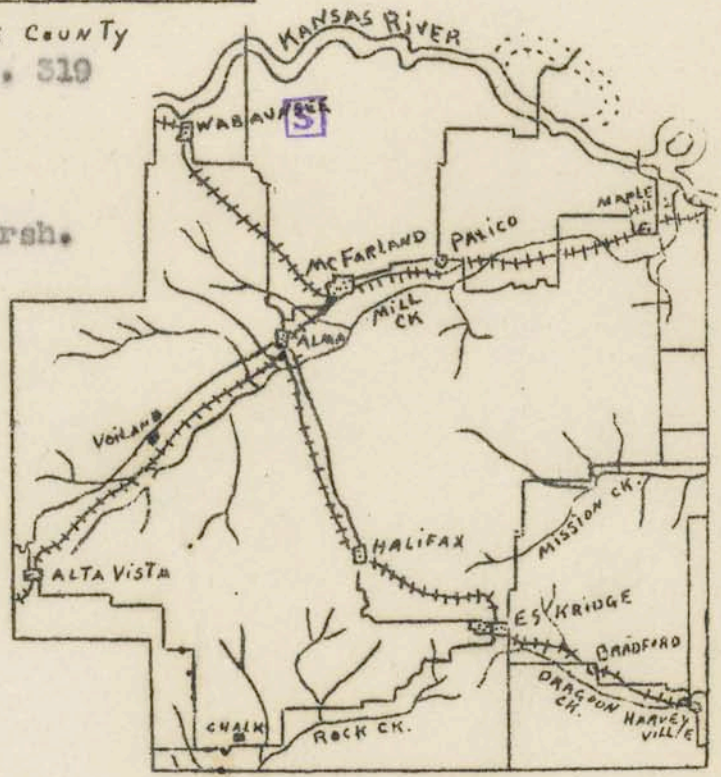
Map No. 318



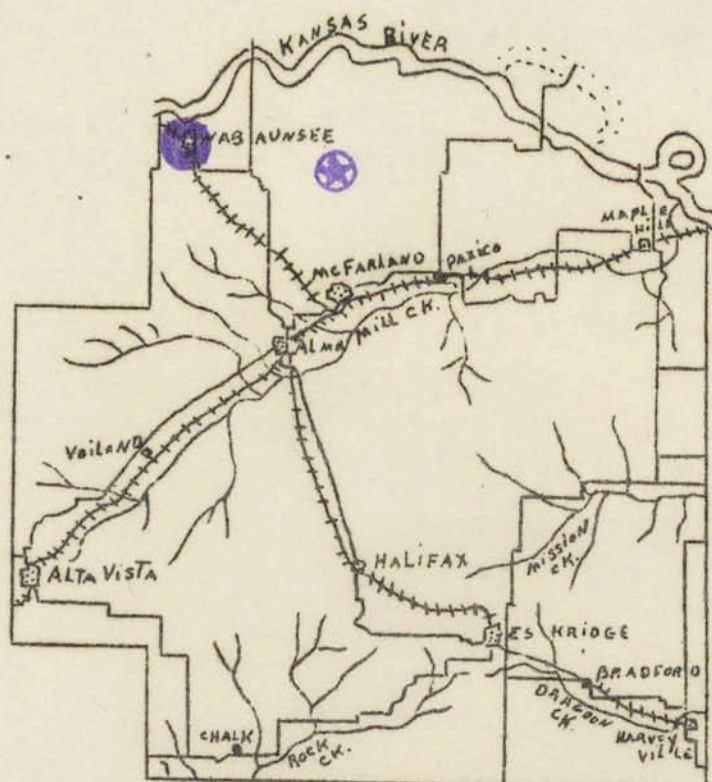
**MIMOSACEAE**  
*Acuan illinoensis*  
 (Michx.) Kuntze

WABAUNSEE COUNTY  
 Map No. 319

**FABACEAE**  
*Glycyrrhiza lepidota* Pursh.



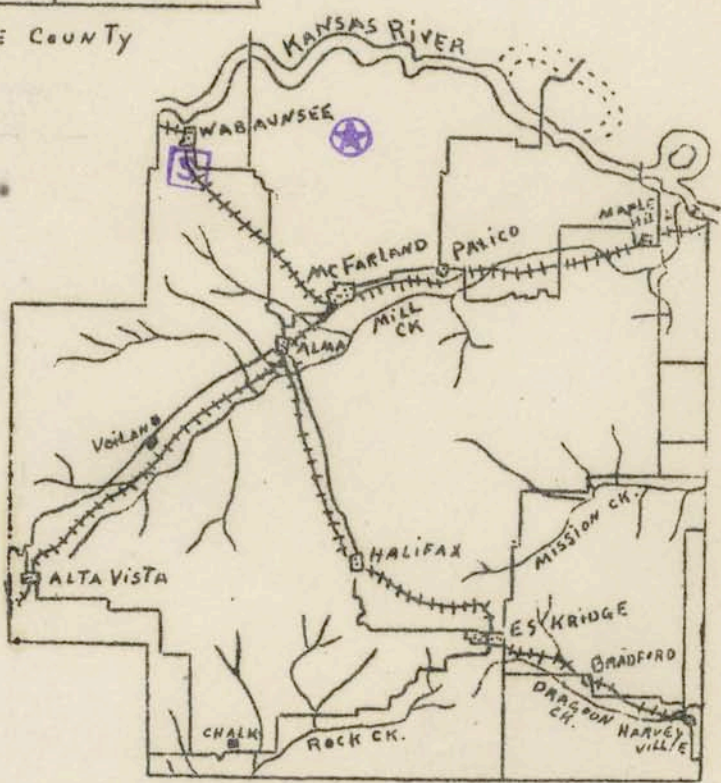
WABAUNSEE COUNTY  
 Map No. 320



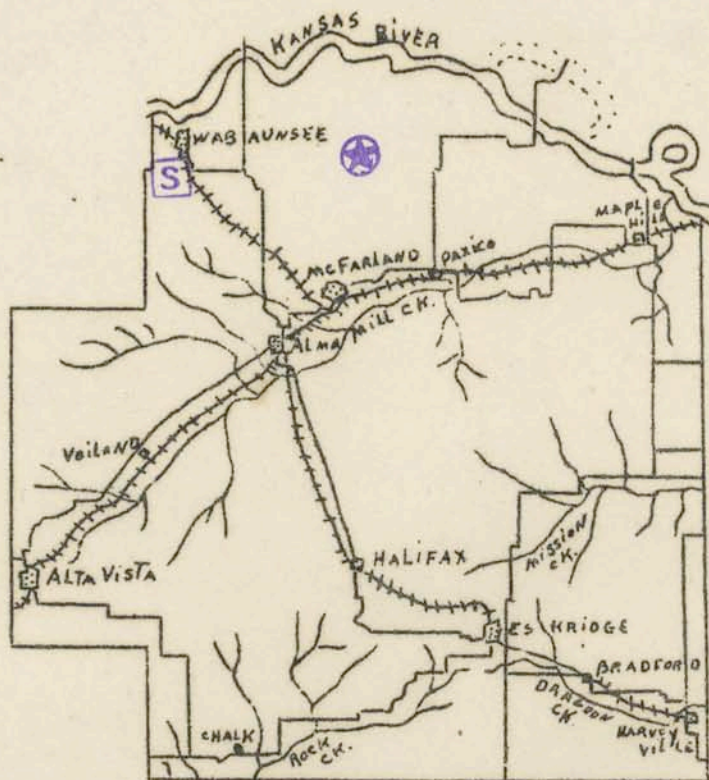
CASSIOPAEAE  
*Gymnocladus dioica*  
 (L.) Koch.

WABAUNSEE COUNTY  
 Map No.

*Gleditsia triacanthos* L.



WABAUNSEE COUNTY  
 Map No. 322



LEGUMINOSAE

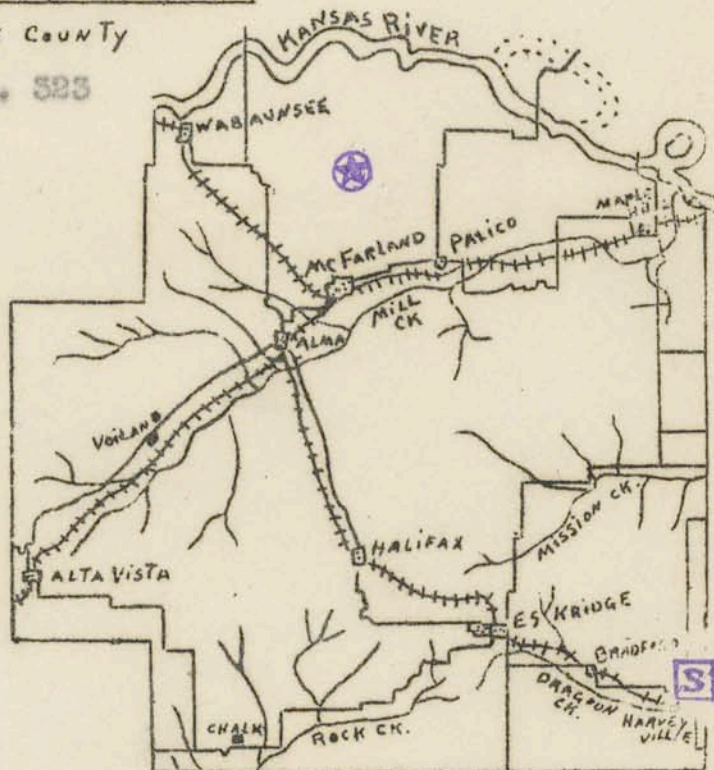
*Robinia pseudacacia* L.

WABAUNSEE COUNTY

Map No. 323

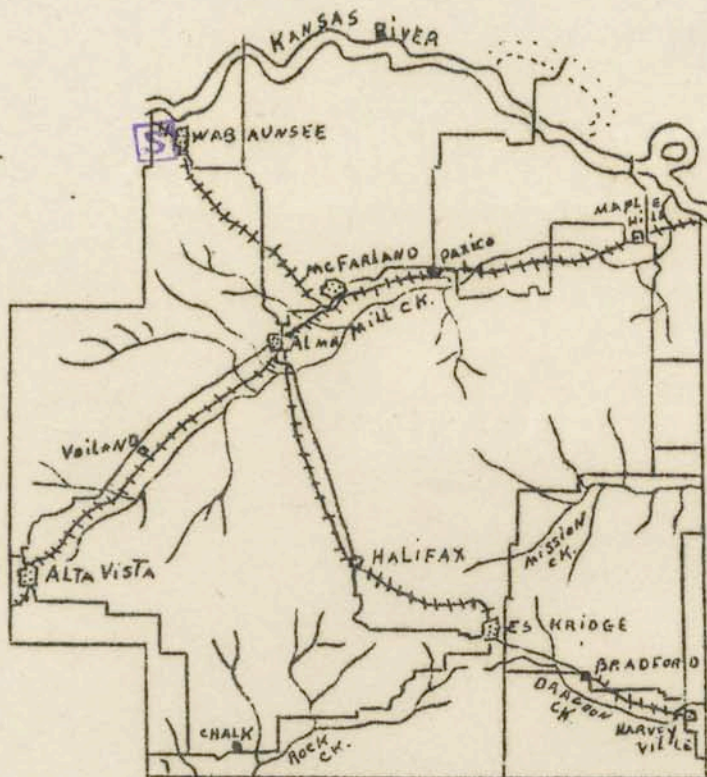
CASSIACEAE

*Cercis canadensis* L.



WABAUNSEE COUNTY

Map No. 324

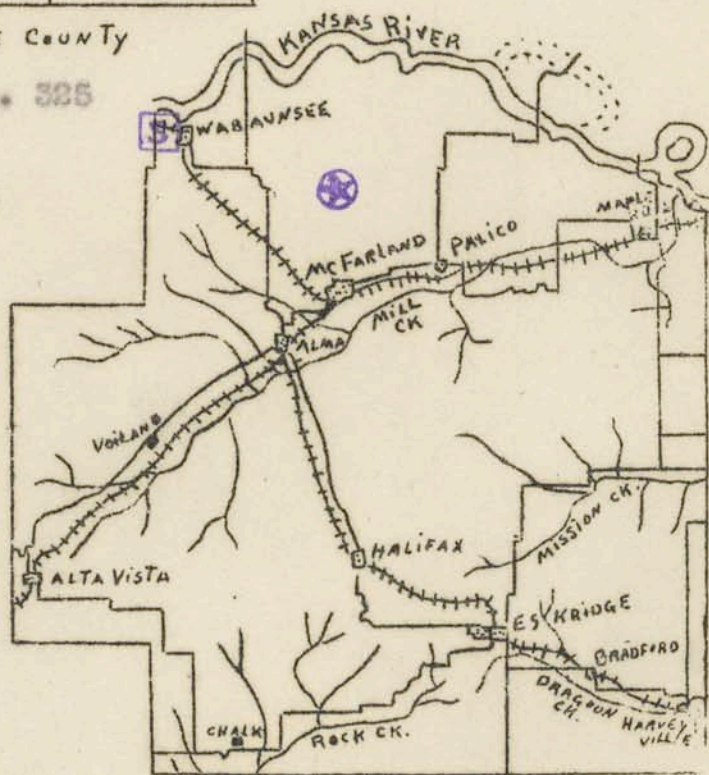


LEGUMINOSAE  
*Geoprumon plattense*  
 (Nutt.) Rydb.

WABAUNSEE COUNTY

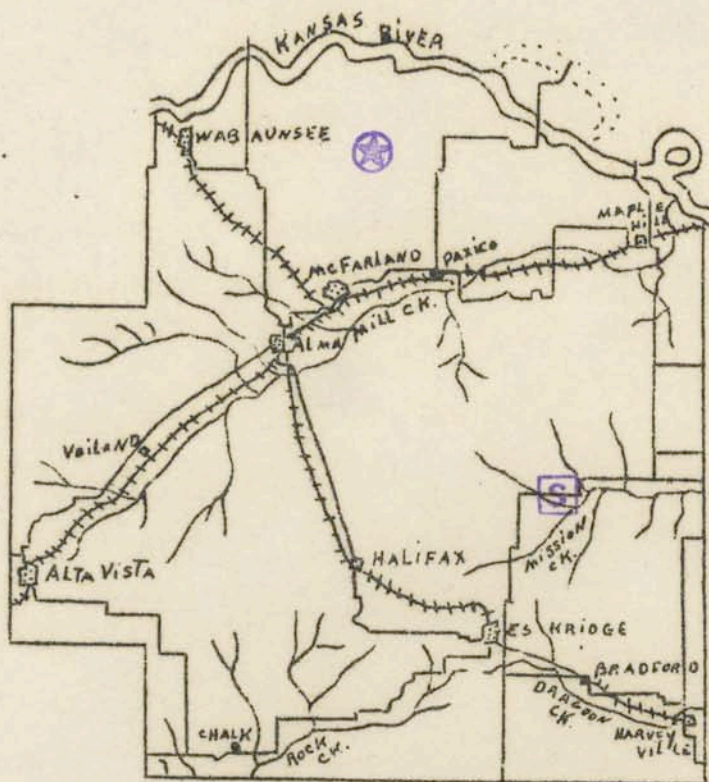
Map No. 325

*Geoprumon crassicarpus*  
 (Nutt.) Rydb.



WABAUNSEE COUNTY

Map No. 326



LEGUMINOSAE

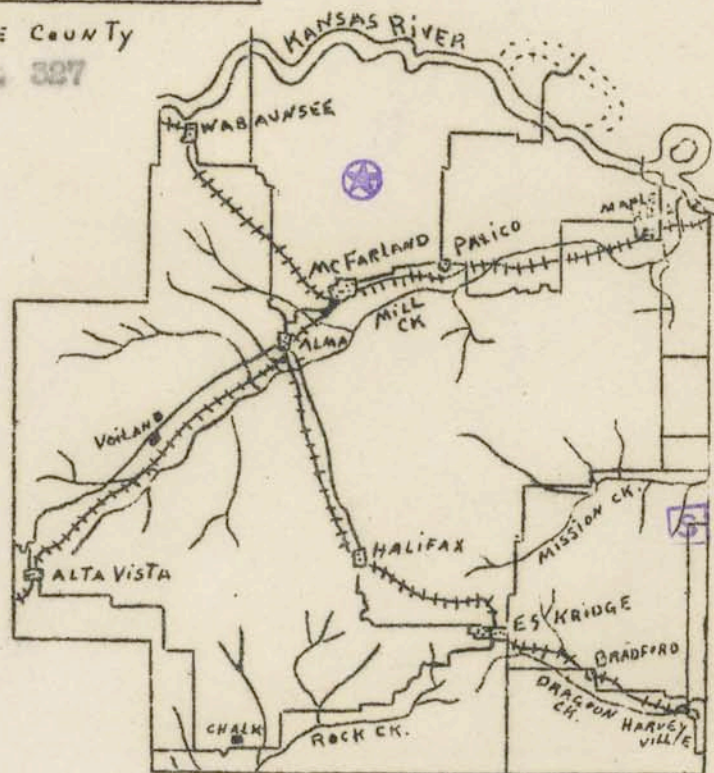
*Melilotus officinalis*

(L.) Lam.

WABAUNSEE COUNTY

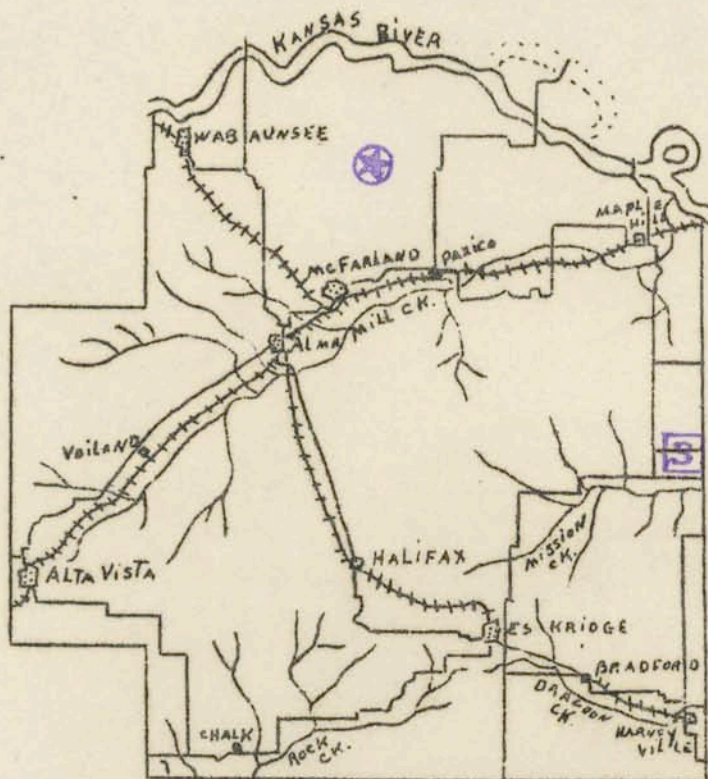
Map No. 327

*Melilotus alba* Desv.



WABAUNSEE COUNTY

Map No. 328



LEGUMINOSAE

*Petalostemum purpureum*

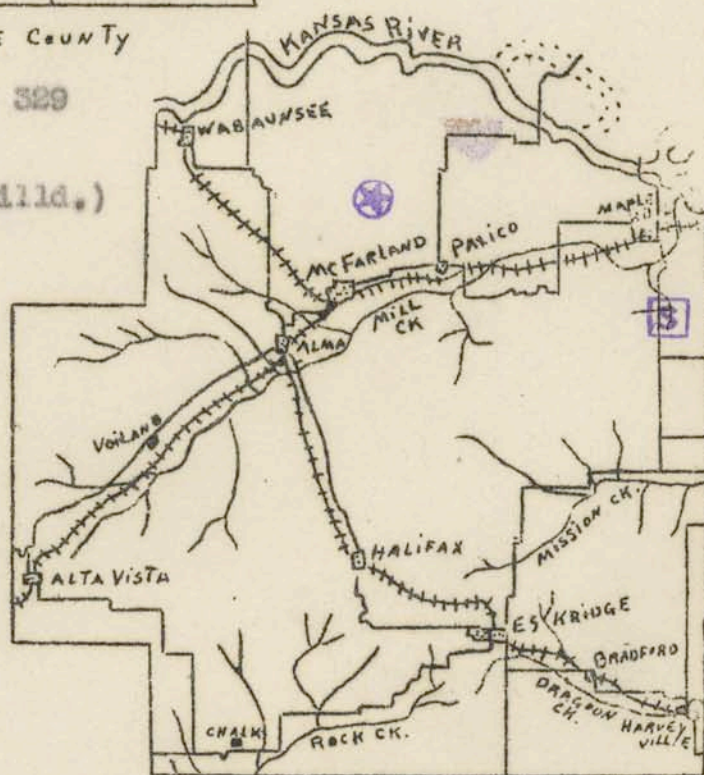
(Vent.) Rydb.

WABAUNSEE COUNTY

Map No. 329

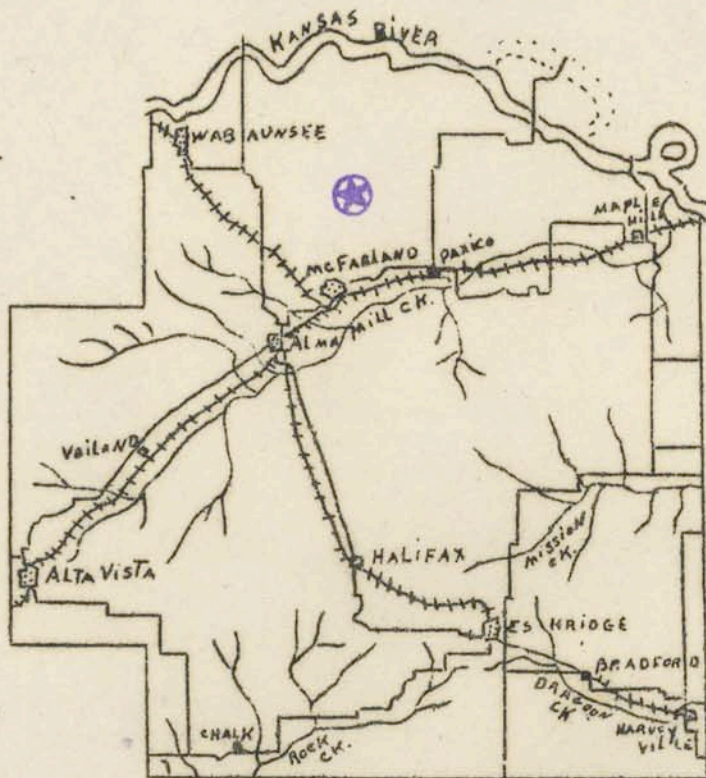
*Petalostemum candidum* (Willd.)

Michx.



WABAUNSEE COUNTY

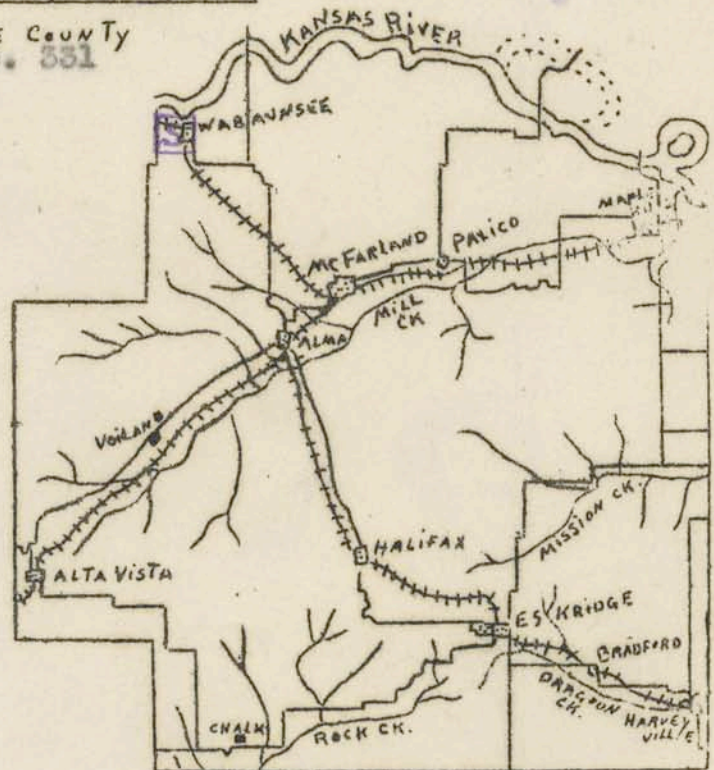
Map No. 330



LEGUMINOSAE  
*Petalostemum multi-  
 florum* Nutt.

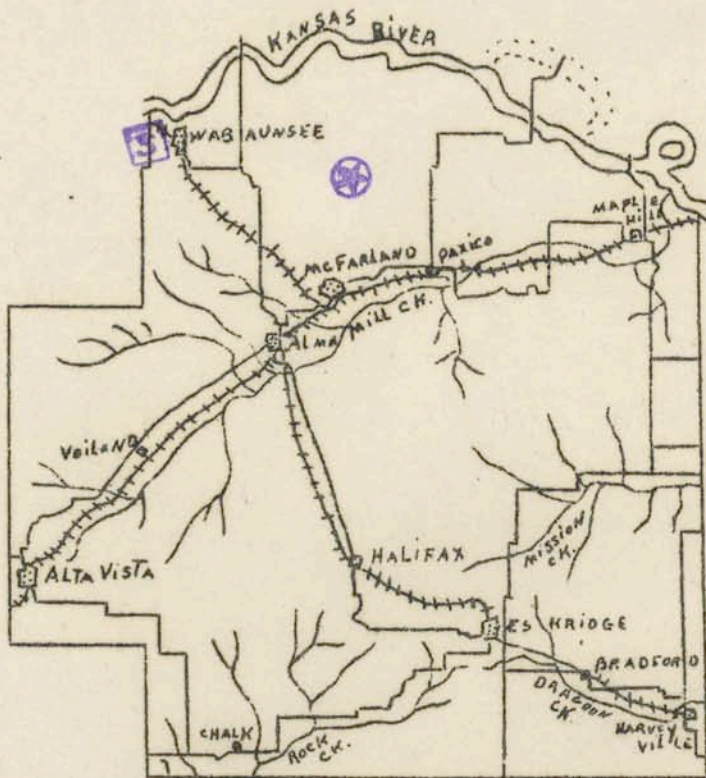
WABAUNSEE COUNTY  
 Map No. 331

*Vicia sparsifolia* Nutt.



WABAUNSEE COUNTY  
 Map No. 332

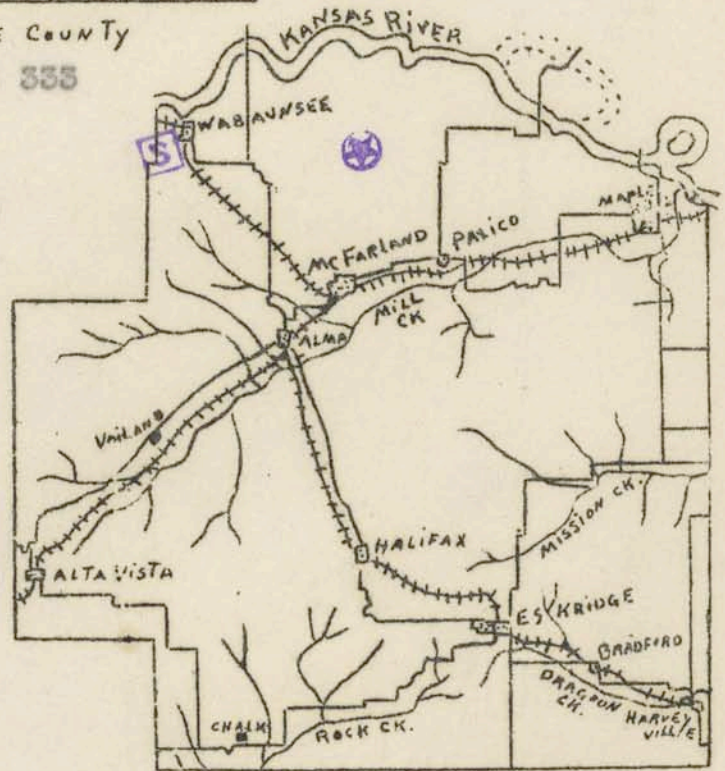




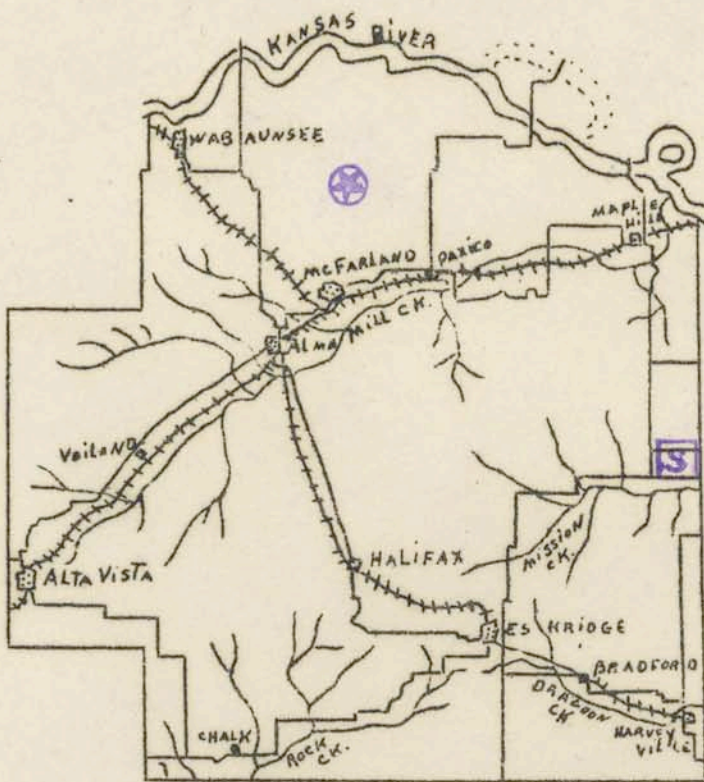
LEGUMINOSAE  
*Baptisia australis*  
 (L.) R. Br.

WABAUNSEE COUNTY  
 Map No. 333

*Baptisia bracteata* Ell.



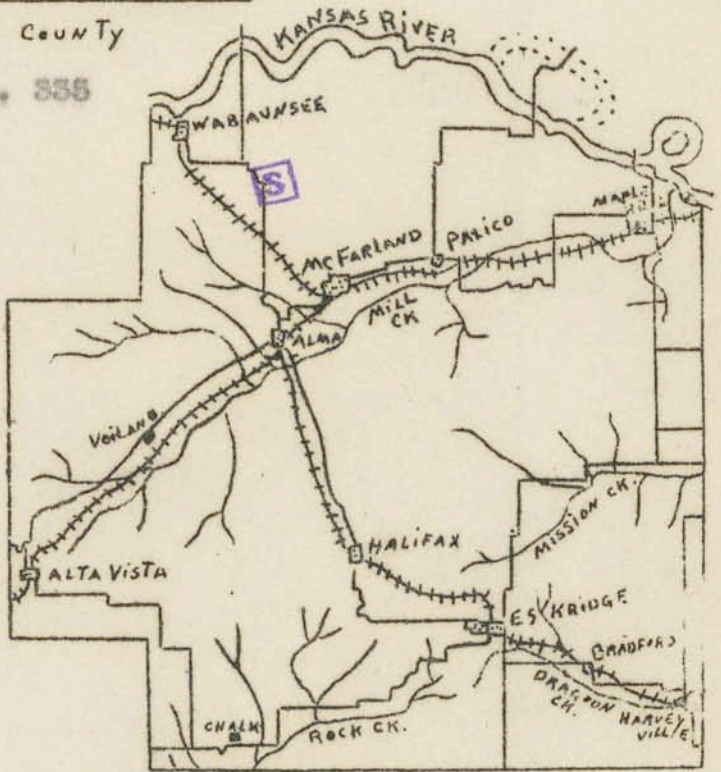
WABAUNSEE COUNTY  
 Map No. 334



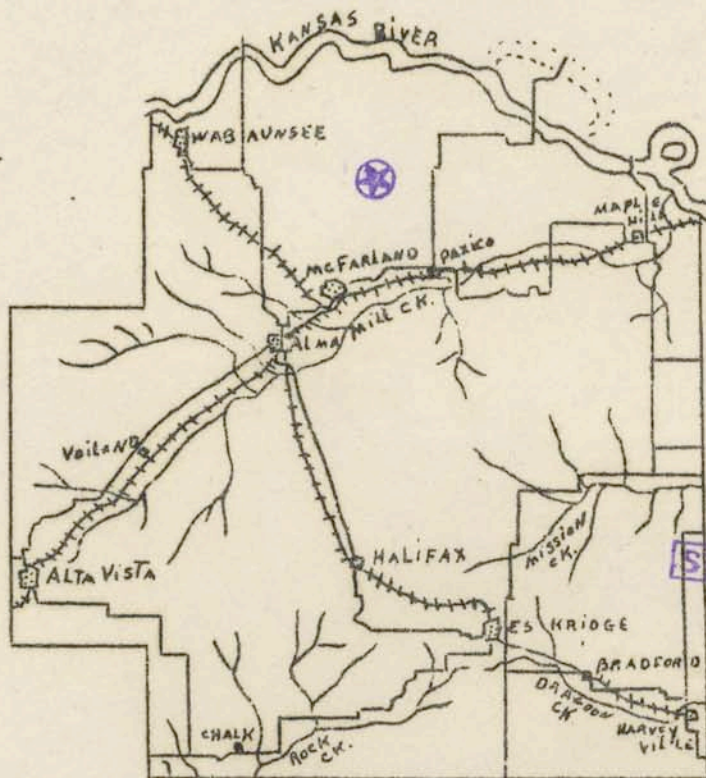
LEGUMINOSAE  
*Baptisia leucantha* T.  
 & G.

WABAUNSEE COUNTY  
 Map No. 335

*Amorpha nana* Nutt.



WABAUNSEE COUNTY  
 Map No. 336

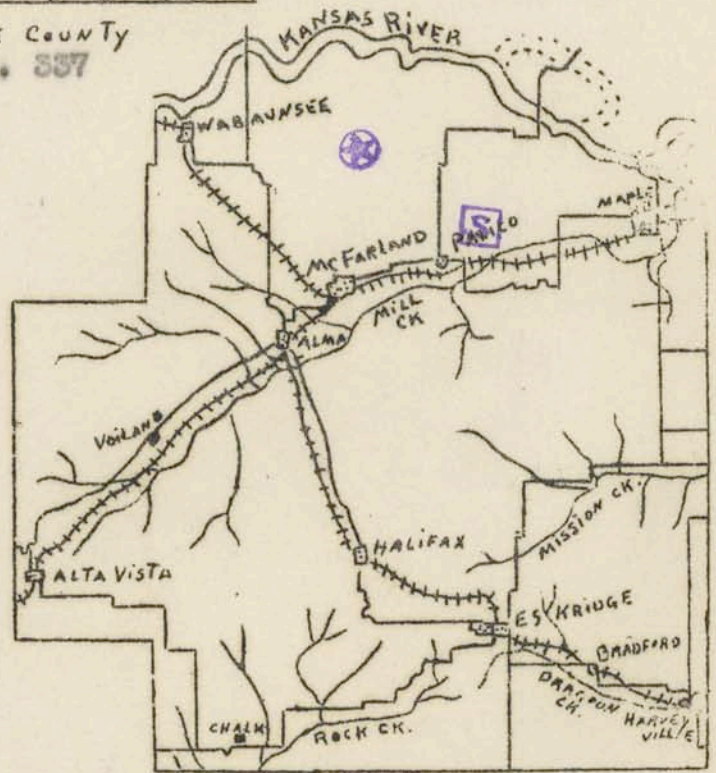


FABACEAE

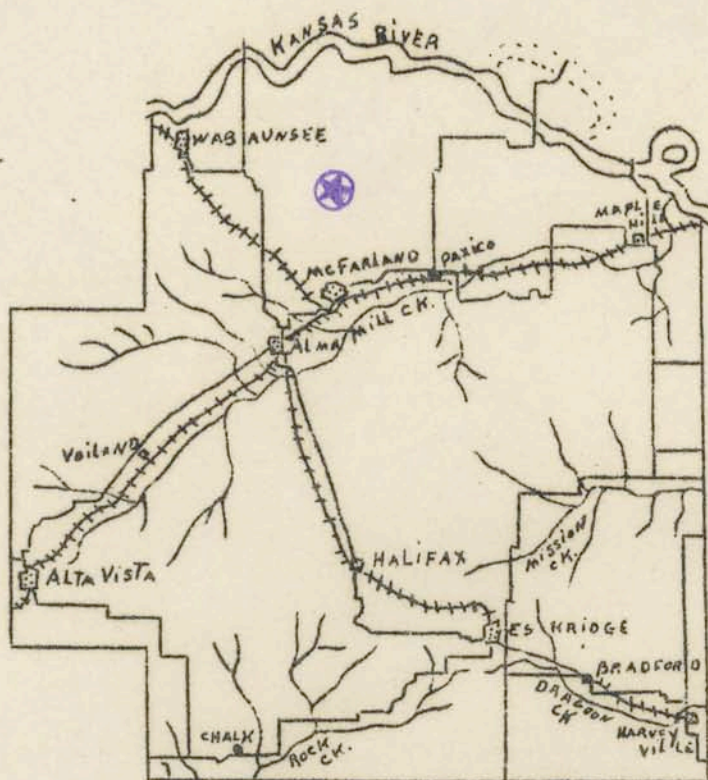
*Amorpha canescens* Pursh.

WABAUNSEE COUNTY  
Map No. 337

*Amorpha fruticosa* L.



WABAUNSEE COUNTY  
Map No. 338



FABACEAE

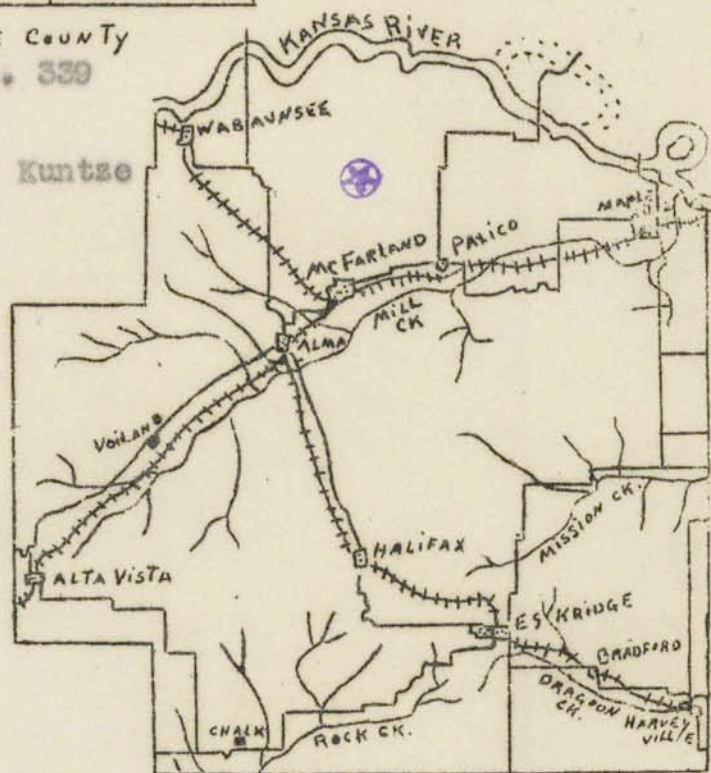
*Meibomia grandiflora*

(Walt.) Kuntze

WABAUNSEE COUNTY

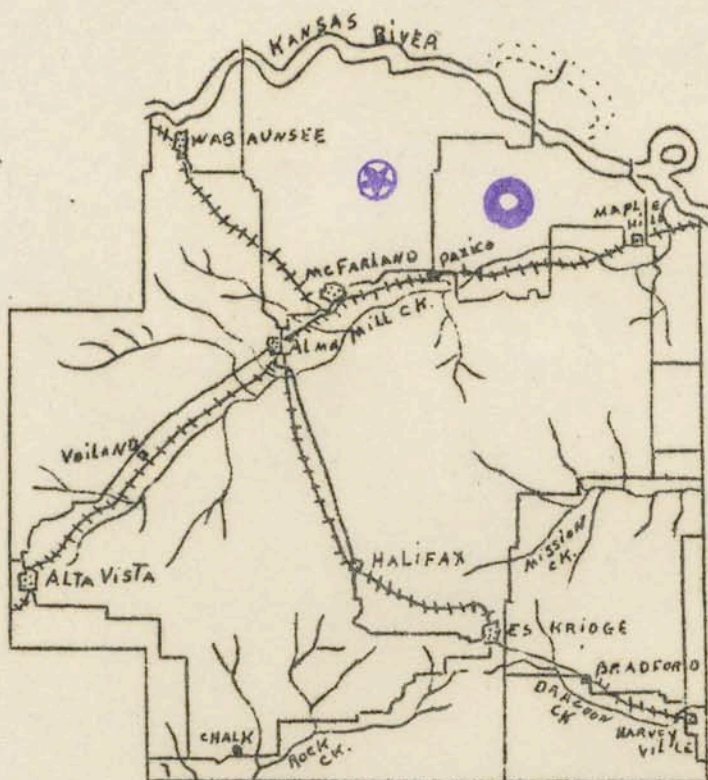
Map No. 339

*Meibomia canescens* (L.) Kuntze



WABAUNSEE COUNTY

Map No. 340



FABACEAE

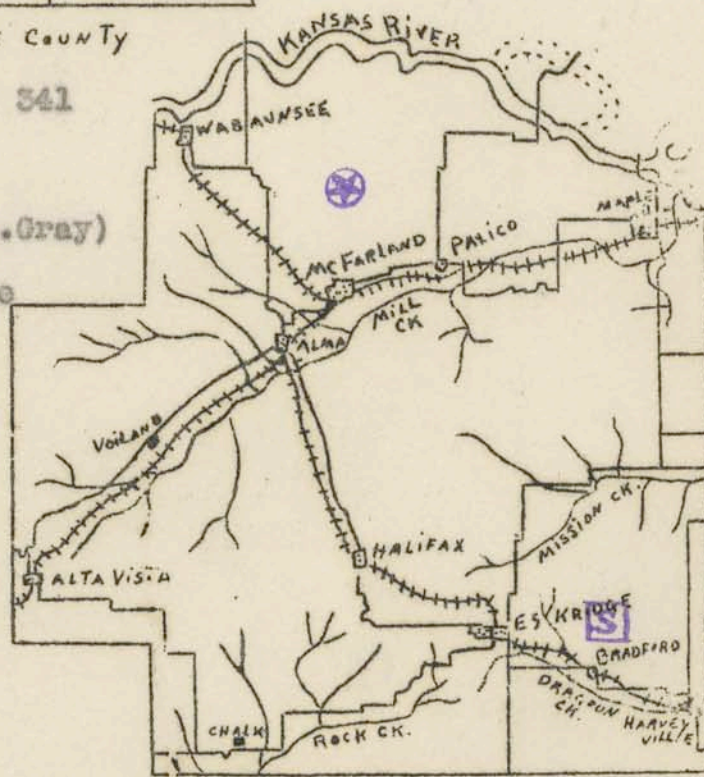
*Medicago sativa* L.

WABAUNSEE COUNTY

Map No. 341

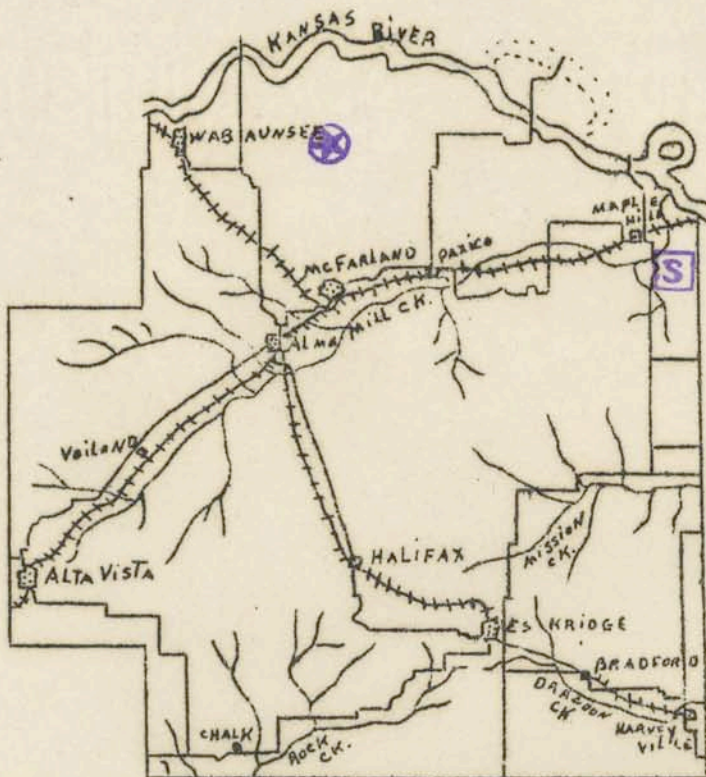
*Meibomia illinoensis* (A. Gray)

Kuntze



WABAUNSEE COUNTY

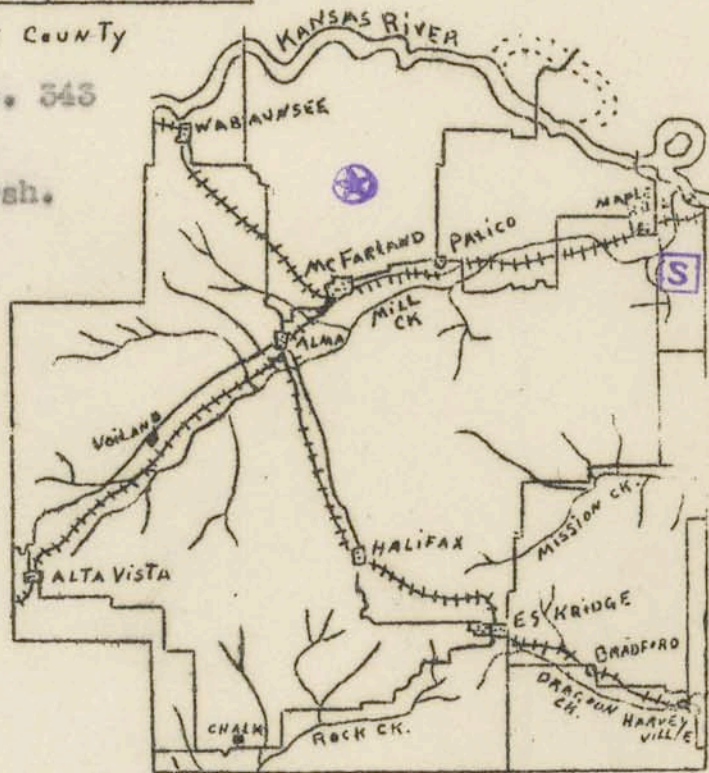
Map No. 342



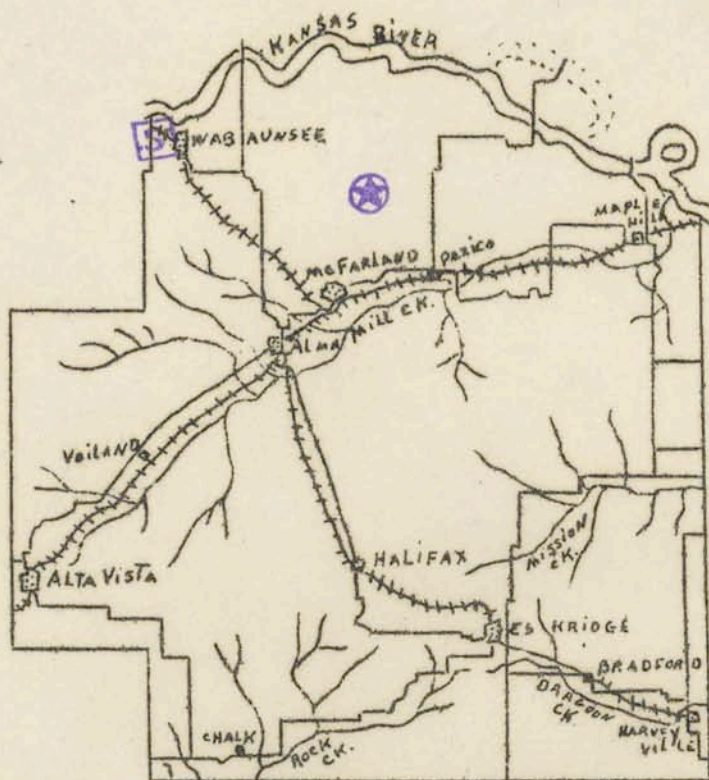
FABACEAE  
*Psoralea floribunda*  
 Nutt.

WABAUNSEE COUNTY  
 Map No. 343

*Psoralea agrophylla* Pursh.



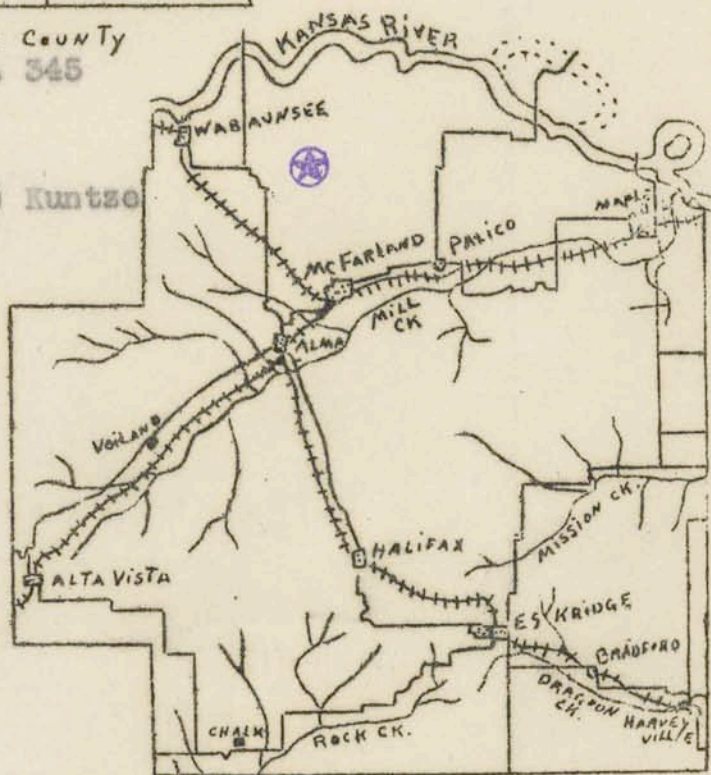
WABAUNSEE COUNTY  
 Map No. 344



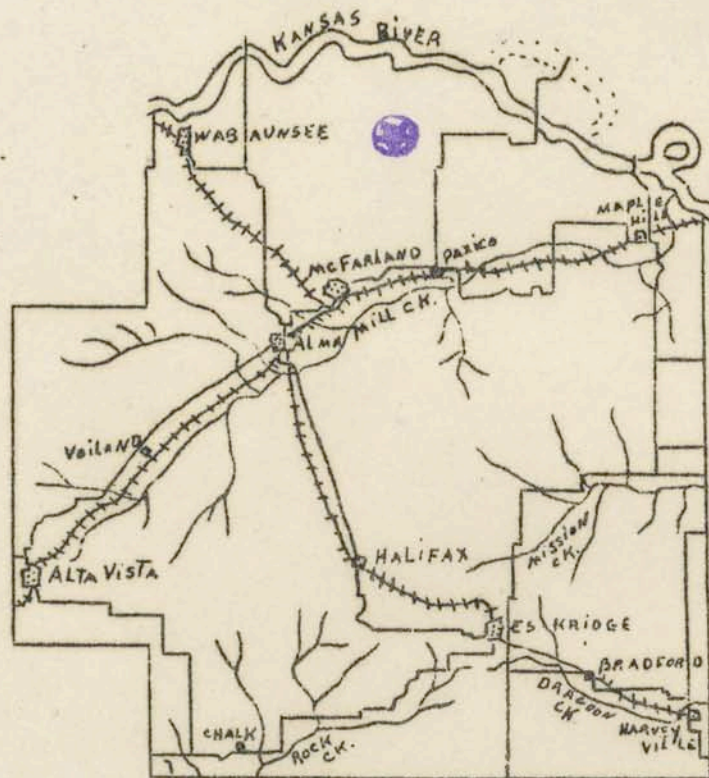
FABACEAE  
*Psoralea esculenta*  
 Pursh.

WABAUNSEE COUNTY  
 Map No. 345

*Falcata pitcheri* (T & G) Kuntze



WABAUNSEE COUNTY  
 Map No. 346



FABACEAE

*Astragalus canadensis*

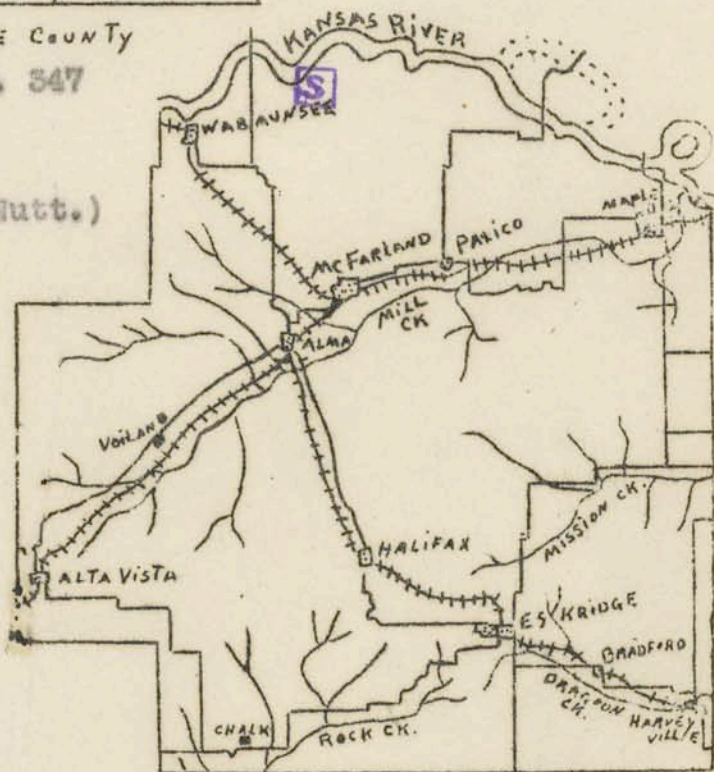
L.

WABAUNSEE COUNTY

Map No. 347

*Glycyrrhiza lepidota* (Nutt.)

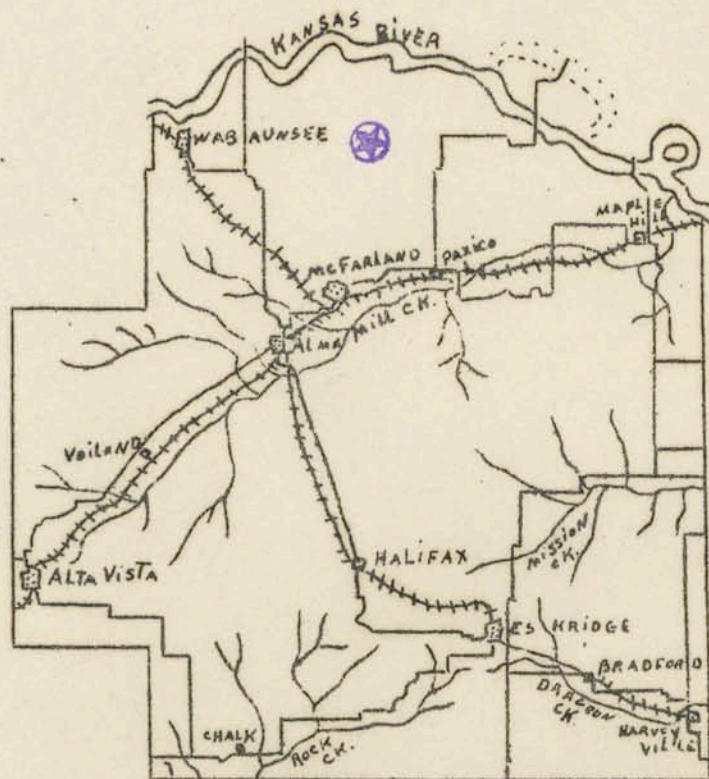
pursh.



WABAUNSEE COUNTY

Map No. 348





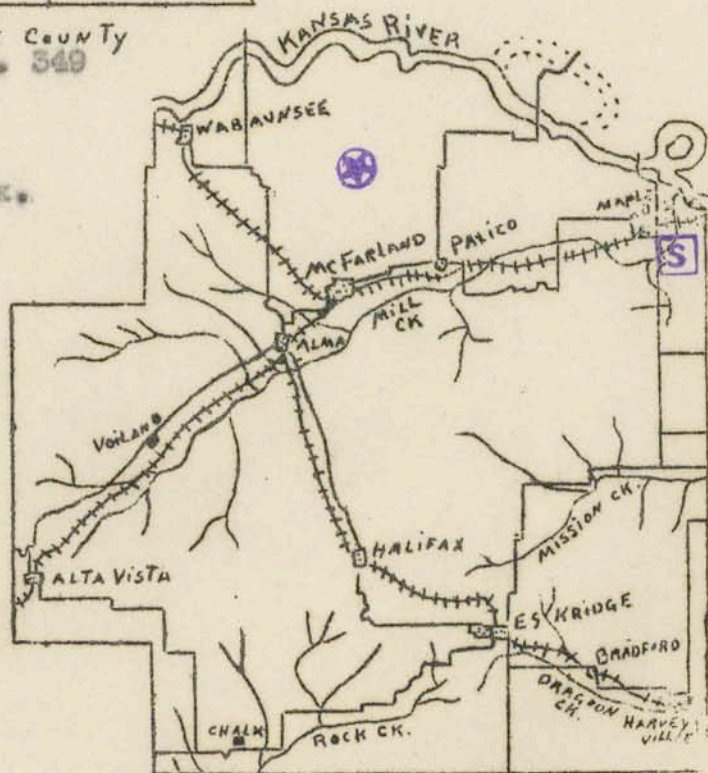
FABACEAE

*Lespedeza violacea*

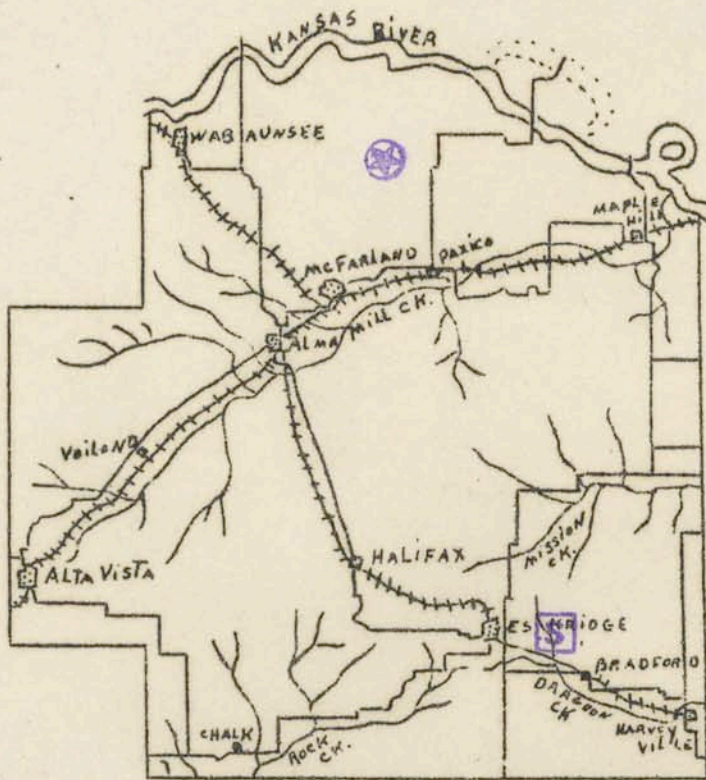
(L.) Pers.

WABAUNSEE COUNTY  
Map No. 349

*Lespedeza capitata* Michx.



WABAUNSEE COUNTY  
Map No. 350

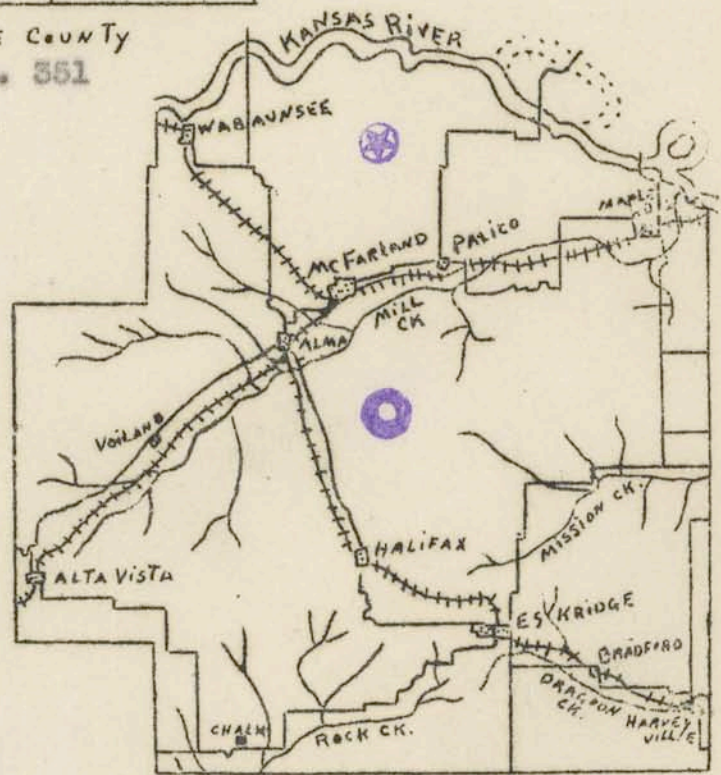


FABACEAE

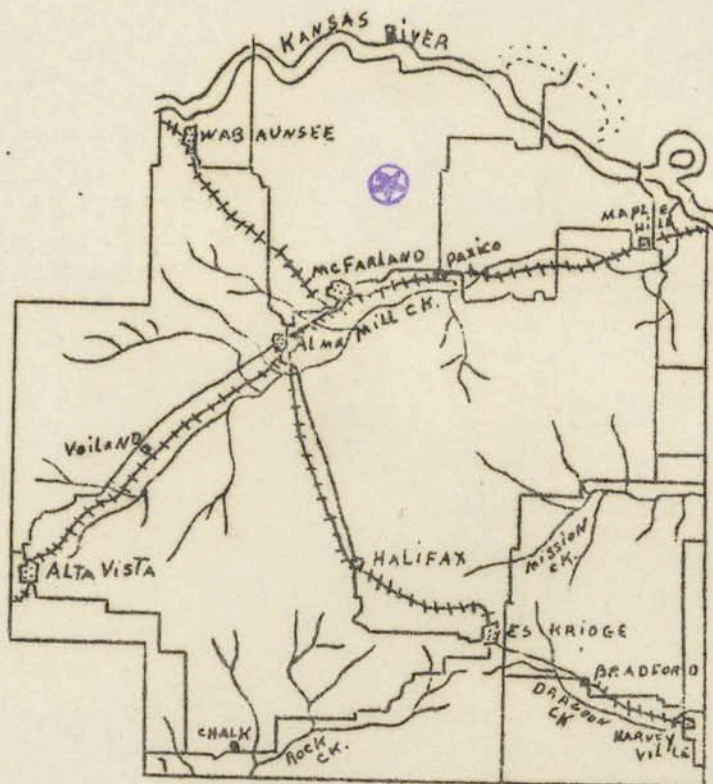
*Trifolium pratense* L.

WABAUNSEE COUNTY  
Map No. 351

*Trifolium repens* L.



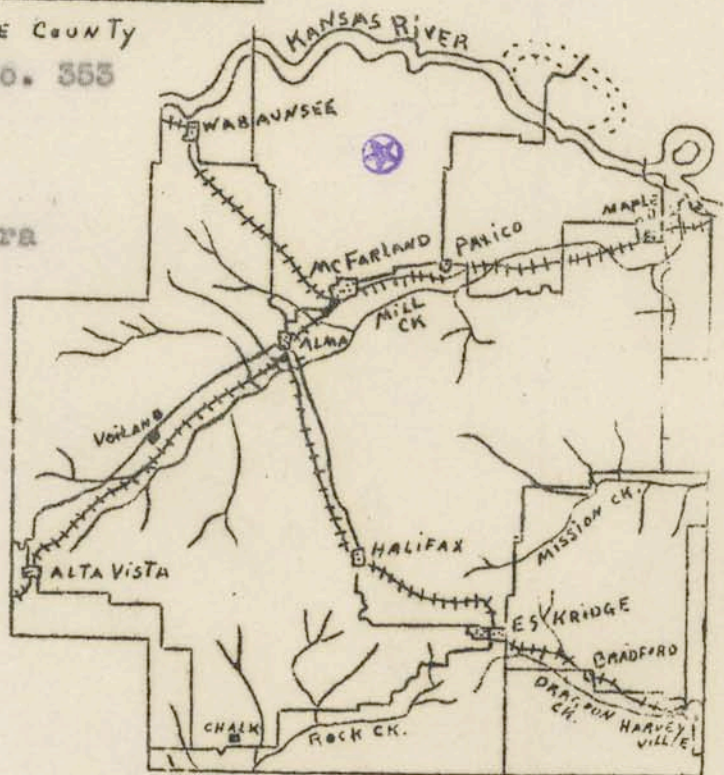
WABAUNSEE COUNTY  
Map No. 352



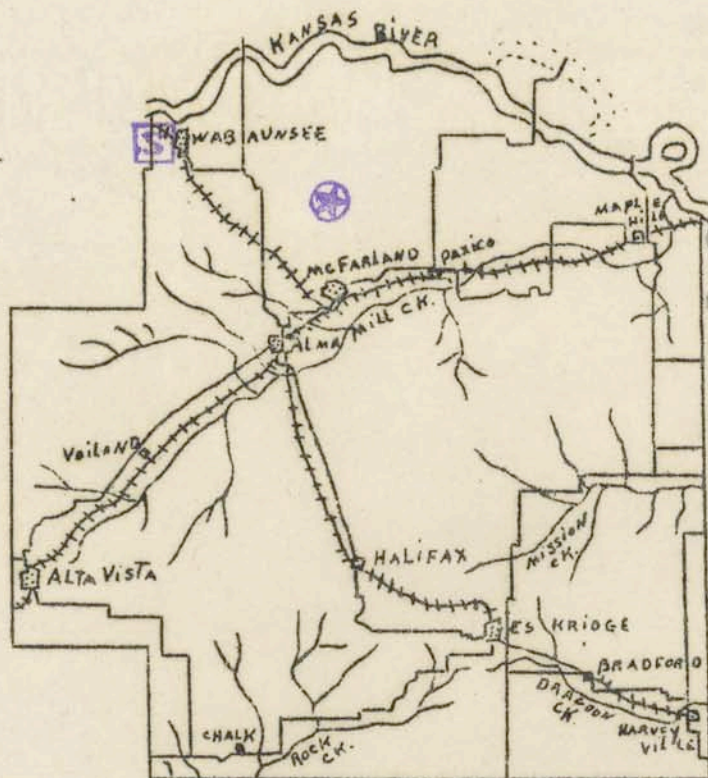
LEGUMINOSAE  
*Parosela dalea* (L.)  
 Britton

WABAUNSEE COUNTY  
 Map No. 353

*Strophostyles pauciflora*  
 (Benth.) Wats.



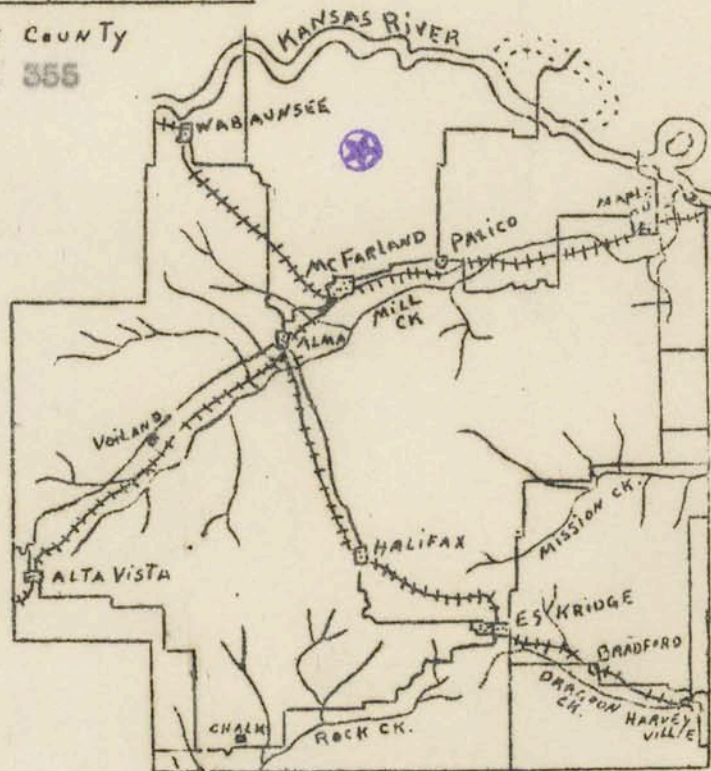
WABAUNSEE COUNTY  
 Map No. 354



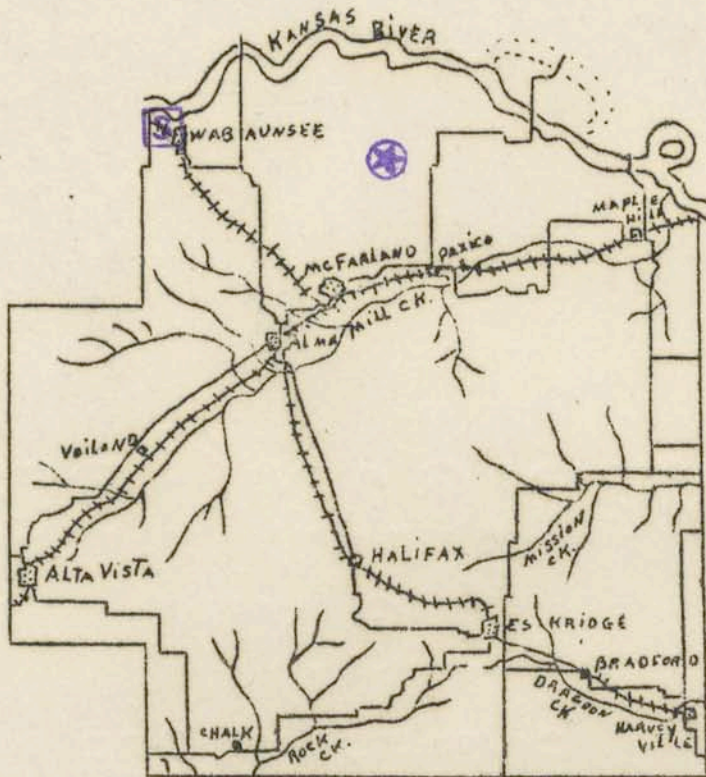
GROSSULARIACEAE  
*Grossularia missouriensis*  
 (Nutt.) Cav. &  
 Britt.

WABAUNSEE COUNTY  
 Map No. 355

GRASSULACEAE  
*Penthorum sedoides* L.



WABAUNSEE COUNTY  
 Map No. 356



PLATANACEAE

*Plantanus occidentalis*

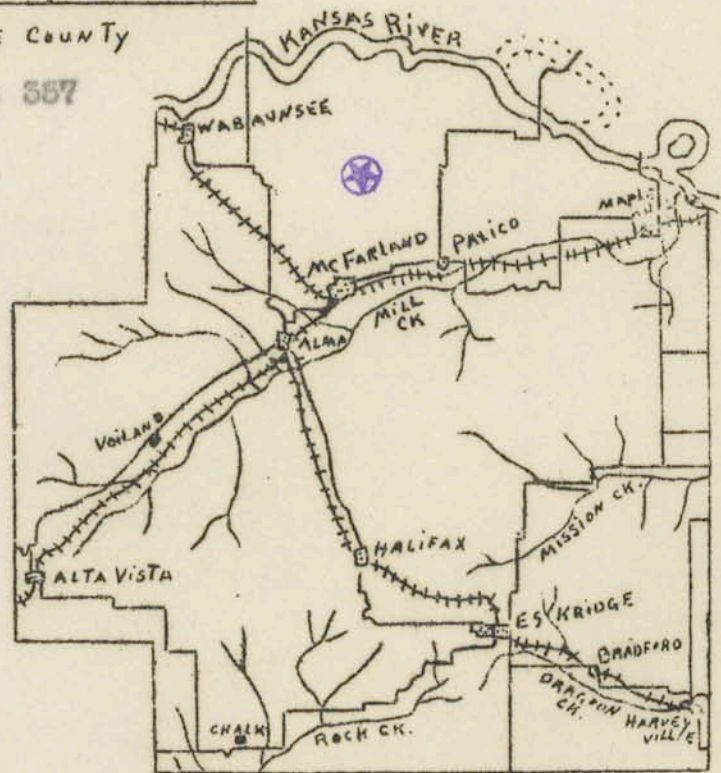
L.

WABAUNSEE COUNTY

Map No. 357

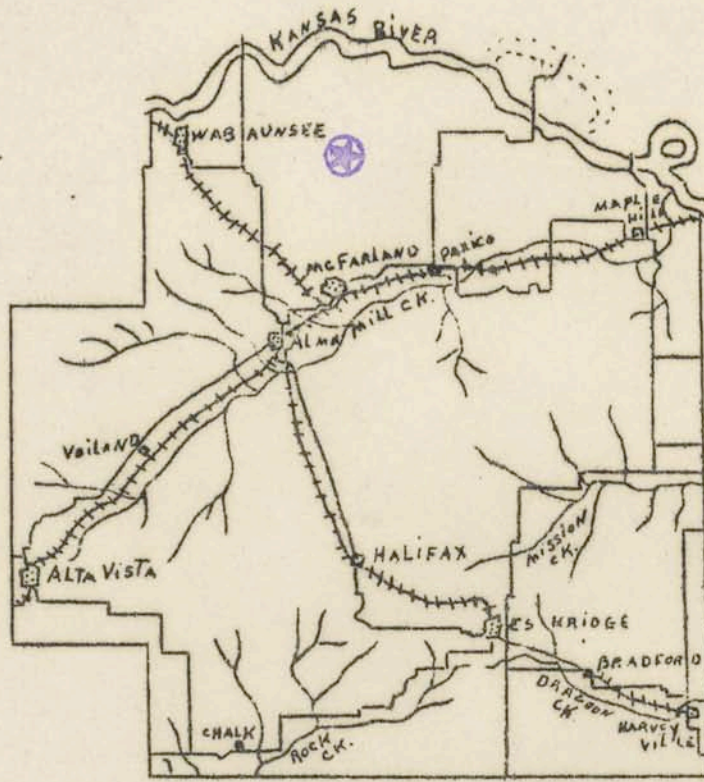
LYTHRACEAE

*Lythrum alatum* Pursh.



WABAUNSEE COUNTY

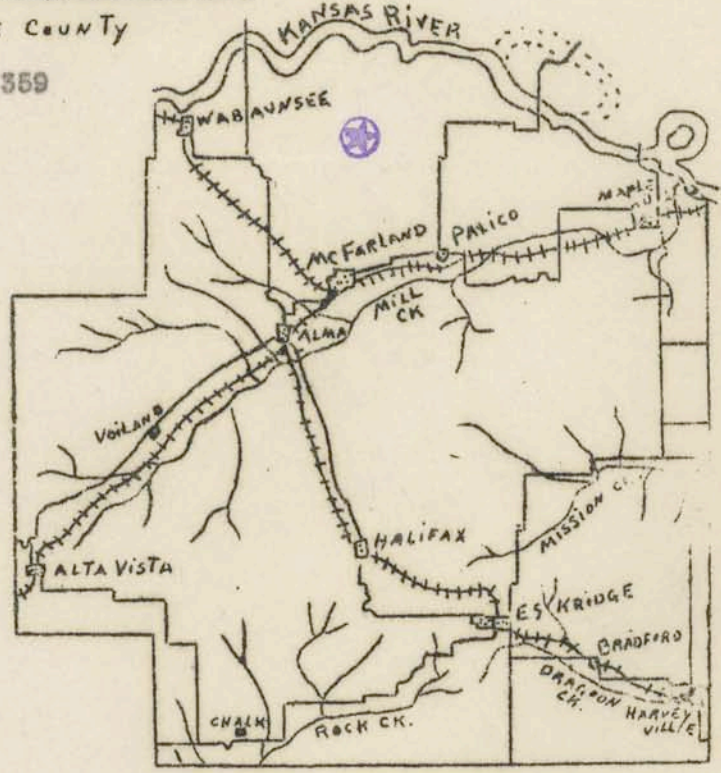
Map No. 358



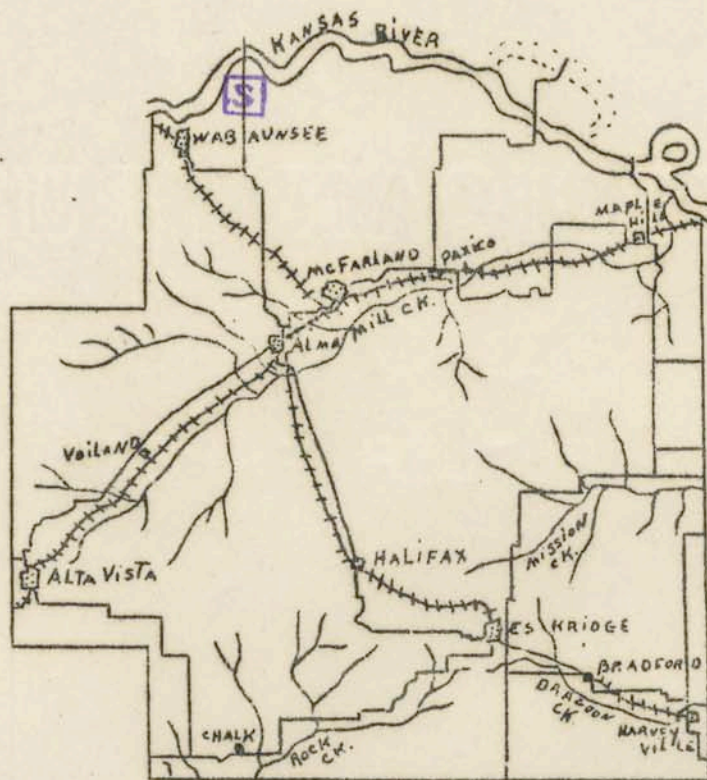
OENOTHERACEAE  
*Meriolix serrulata* (Nutt.)  
 Walp.

WABAUNSEE COUNTY  
 Map No. 359

*Oenothera biennis* L.



WABAUNSEE COUNTY  
 Map No. 360



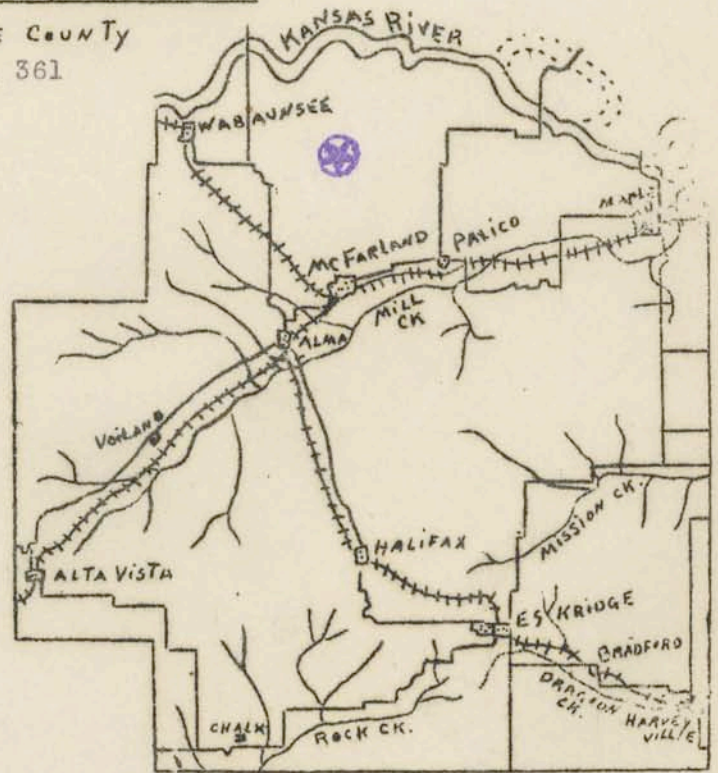
OENOTHERACEAE

*Raimannia laciniata* (Hill)

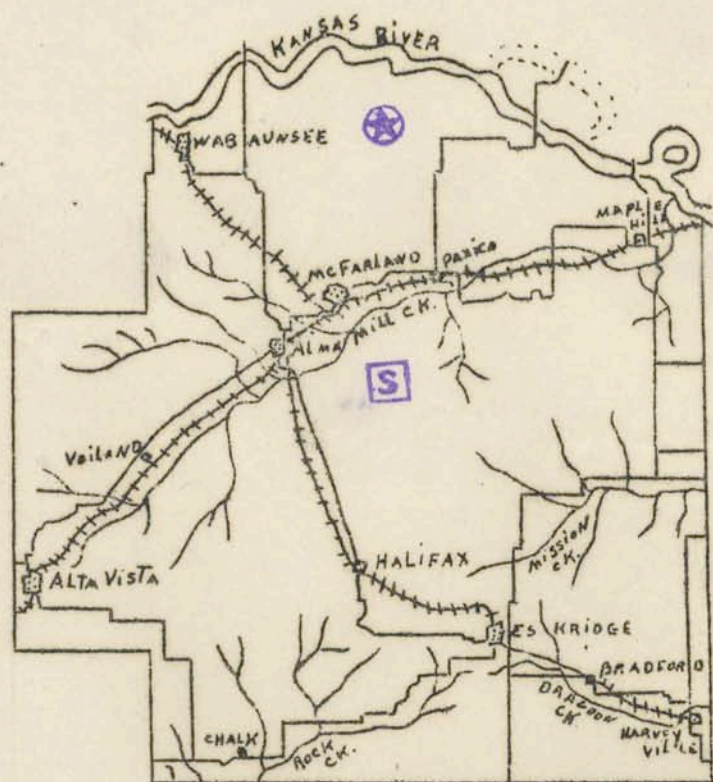
Rose

WABAUNSEE COUNTY  
Map No. 361

*Hartmannia speciosa* (Nutt.) Small



WABAUNSEE COUNTY  
Map No. 362



OENOTHERACEAE

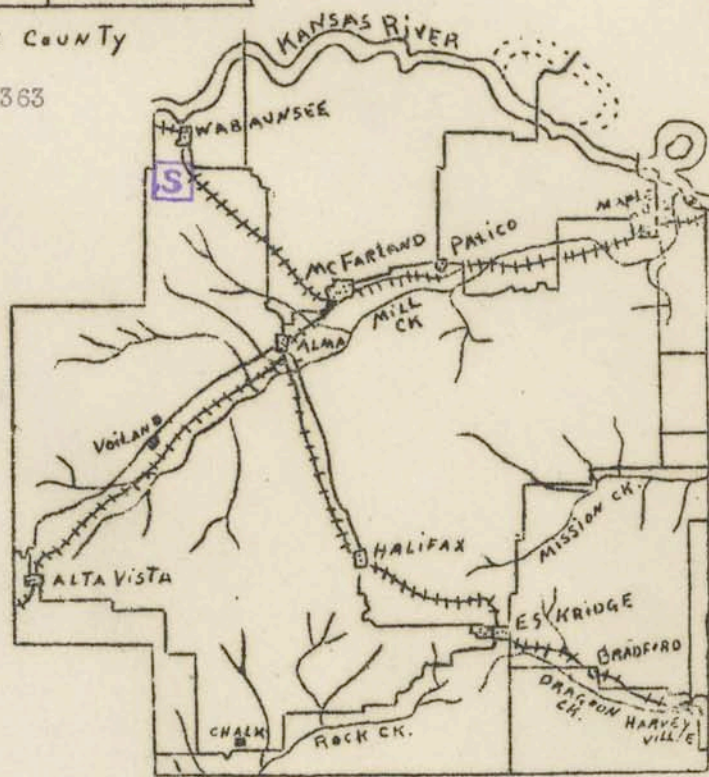
*Stenosiphon linifolium*

(Nutt.) Britton

WABAUNSEE COUNTY

Map No. 363

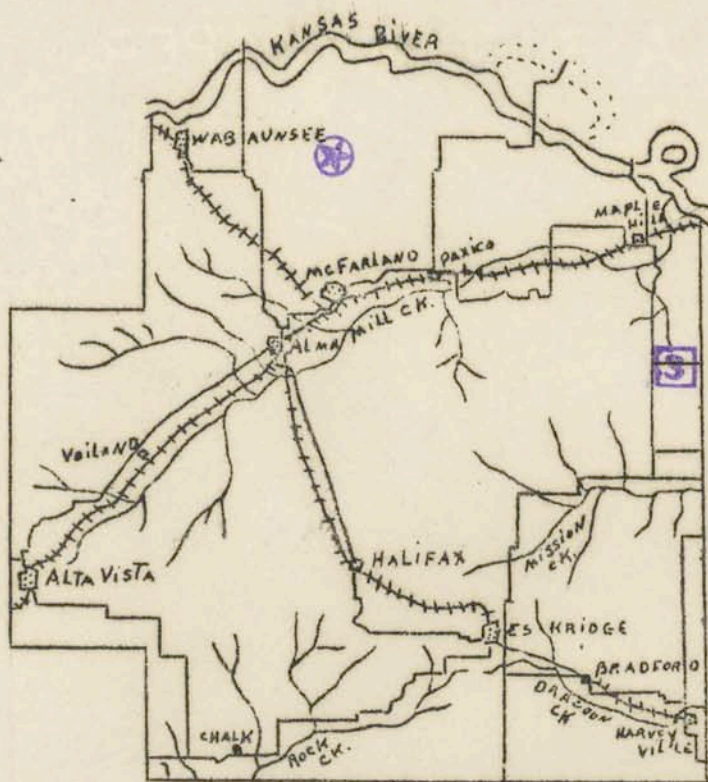
*Anogra albicaulis* (Pursh.) Britton



WABAUNSEE COUNTY

Map No. 364.





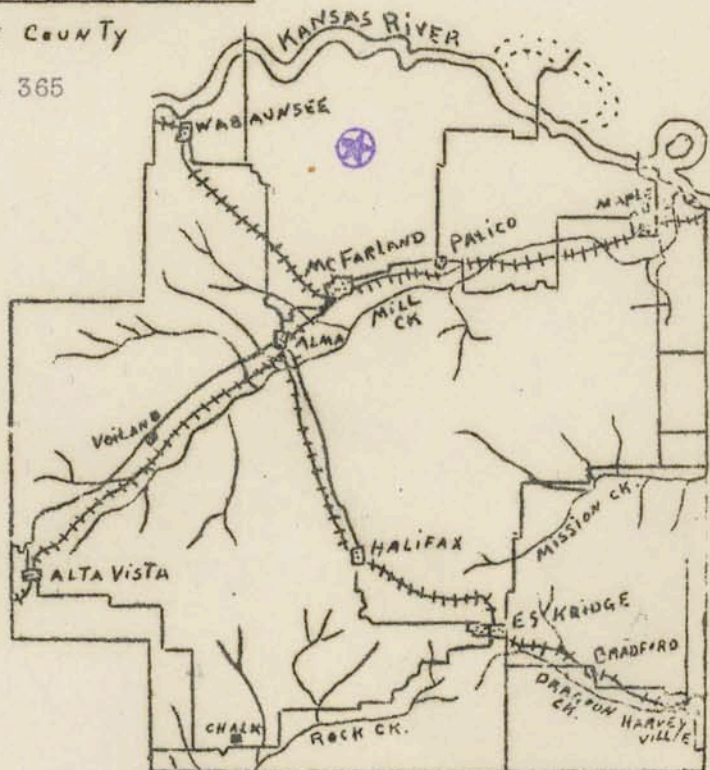
OENOTHERACEAE

*Gaura biennis* L.

WABAUNSEE COUNTY

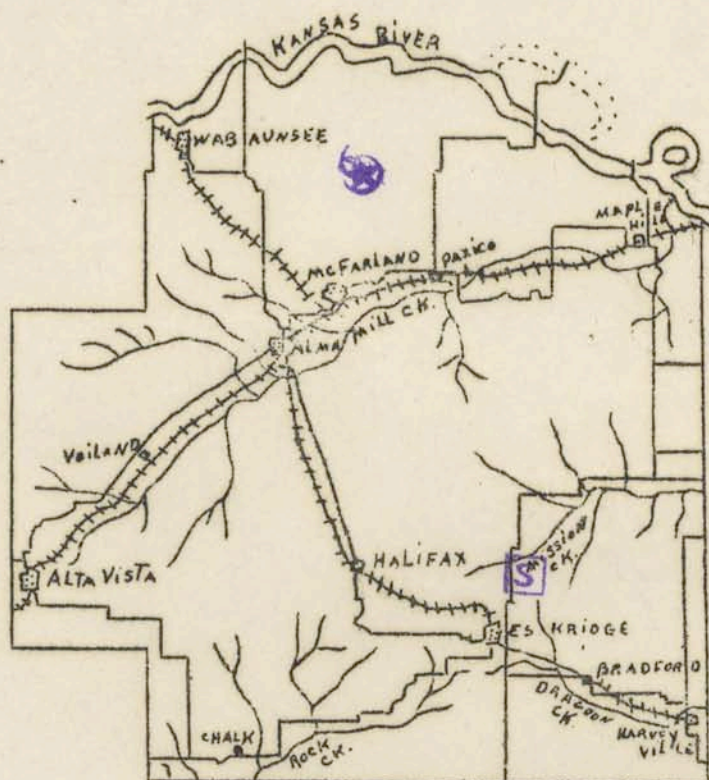
Map No. 365

*Gaura parviflora* Dougl.



WABAUNSEE COUNTY

Map No. 366



OENOTHERACEAE

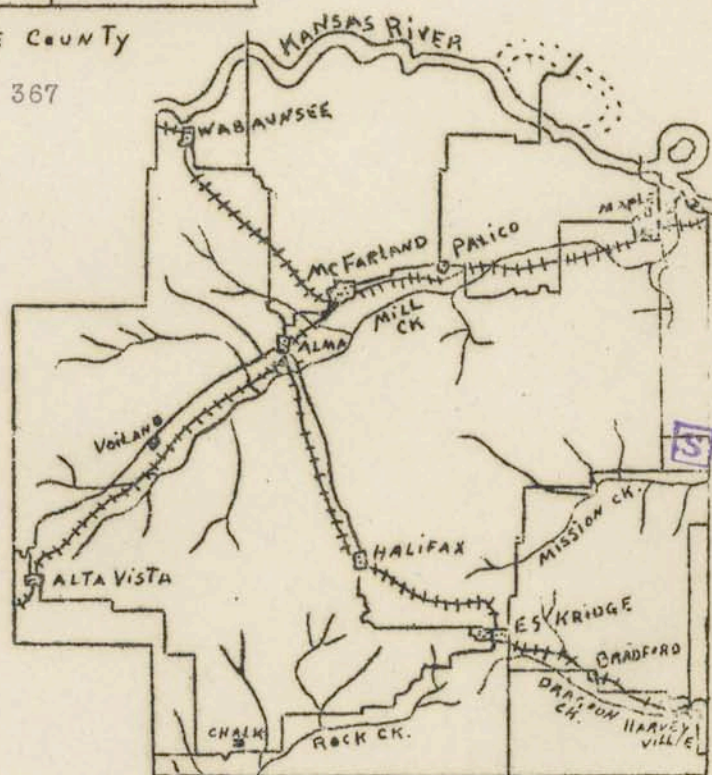
*Megapterium missouriensis*

Sims.

WABAUNSEE COUNTY

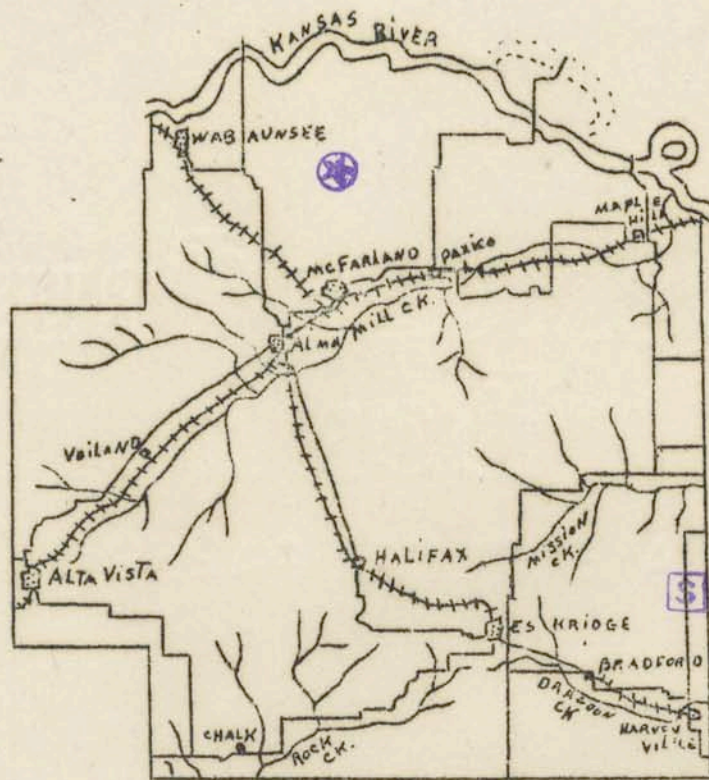
Map No. 367

*Oenothera serrulata* Nutt.



WABAUNSEE COUNTY

Map No. 368



CACTACEAE

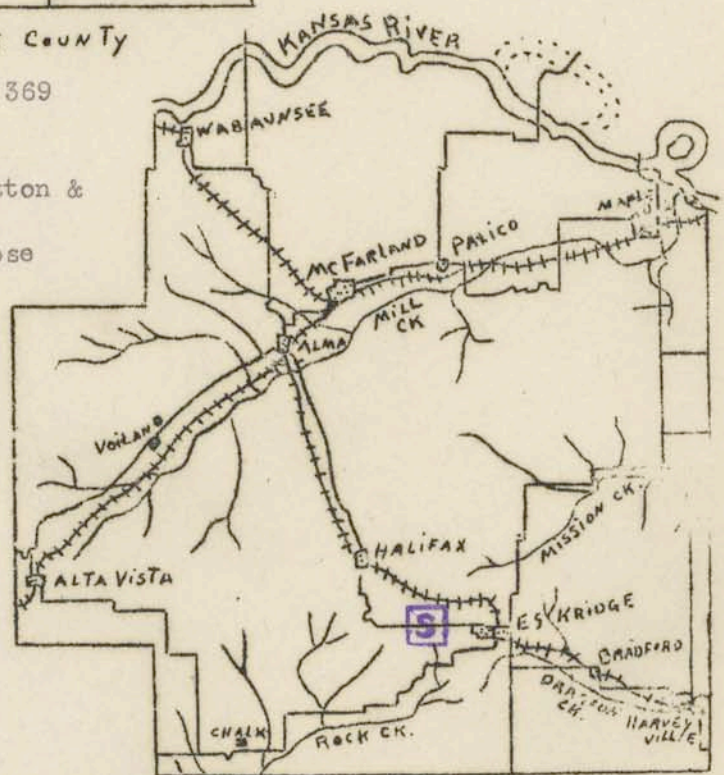
*Opuntia humifusa* Tourn.

WABAUNSEE COUNTY

Map No. 369

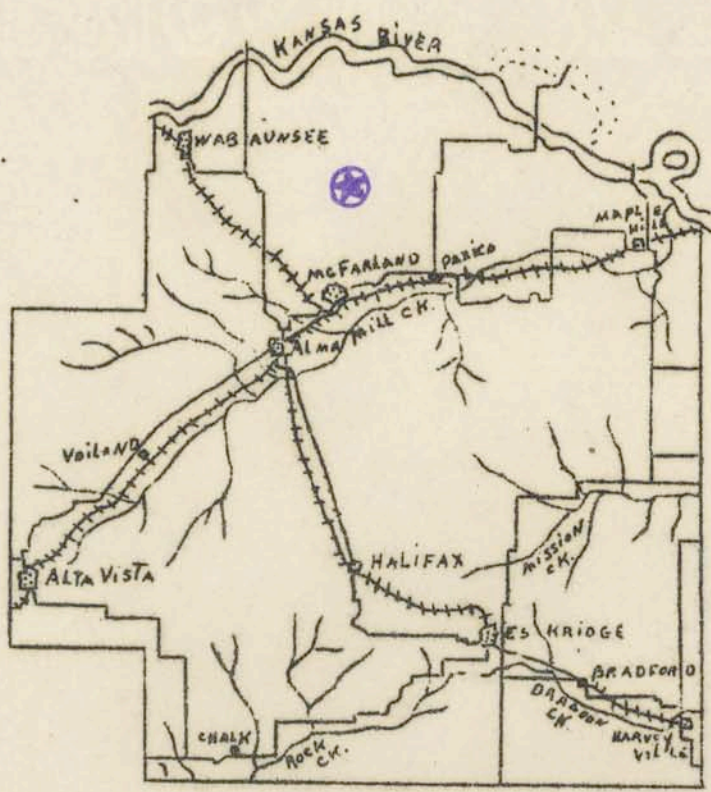
*Coryphantha missouriensis* (Sweet) Britton &

Rose



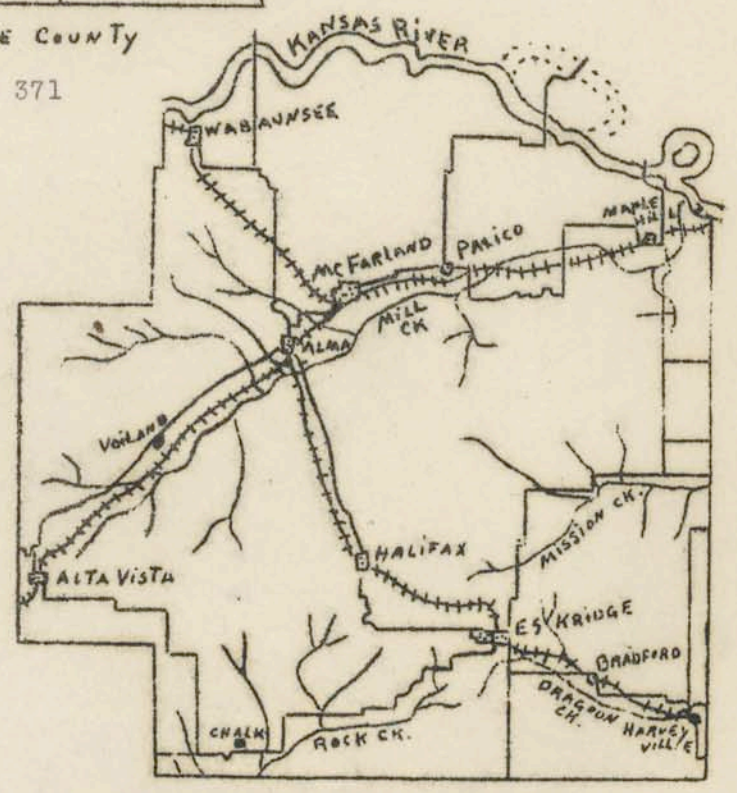
WABAUNSEE COUNTY

Map No. 370



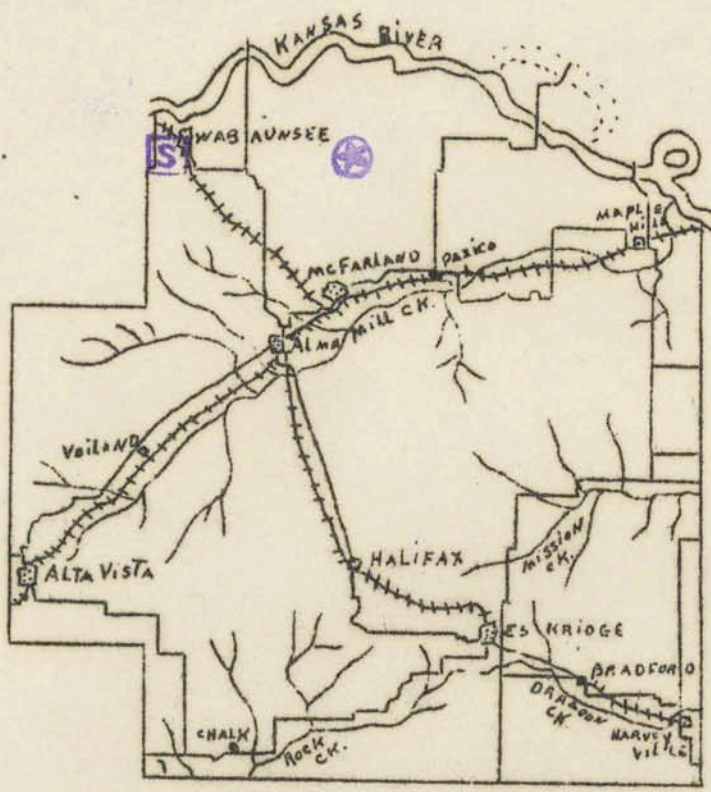
LOASACEAE  
*Mentzelia oligosperma*  
 Nutt.

WABAUNSEE COUNTY  
 Map No. 371



WABAUNSEE COUNTY

Revised copy -

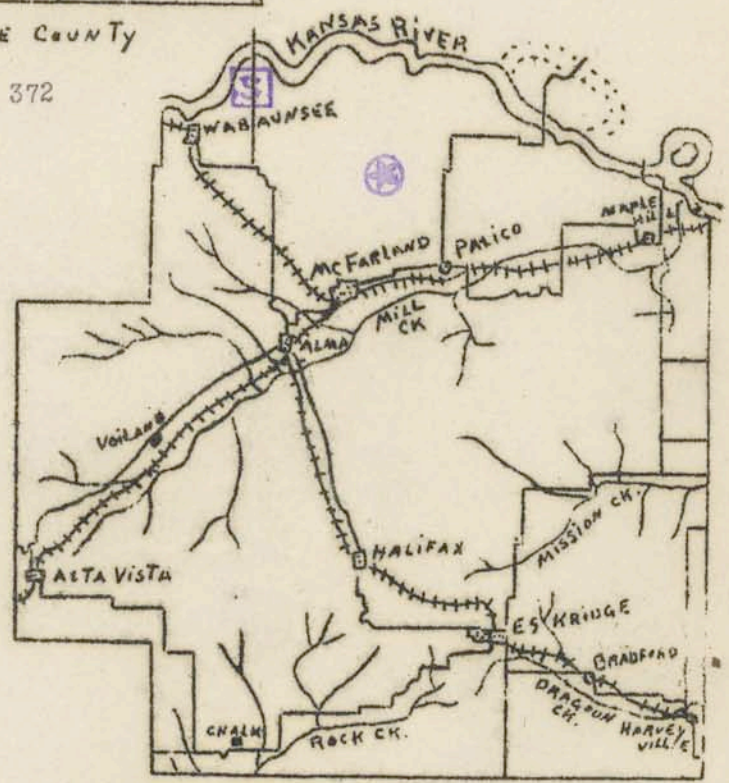


CUCURBITACEAE  
 Pepo foetidissima  
 H.B.K. Britton

WABAUNSEE COUNTY

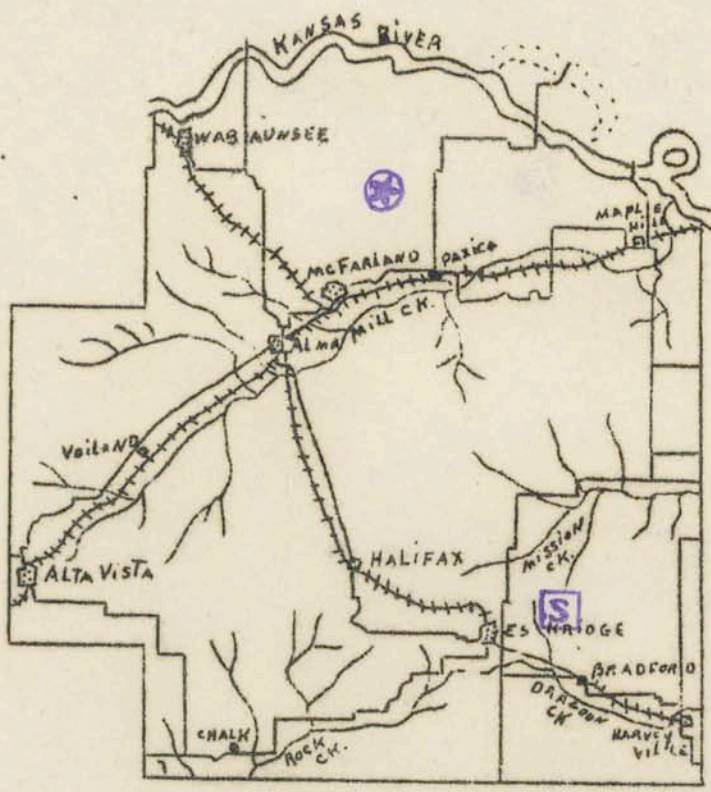
Map No. 372

*Sicyos angulatus* L.



WABAUNSEE COUNTY

Map No. 373



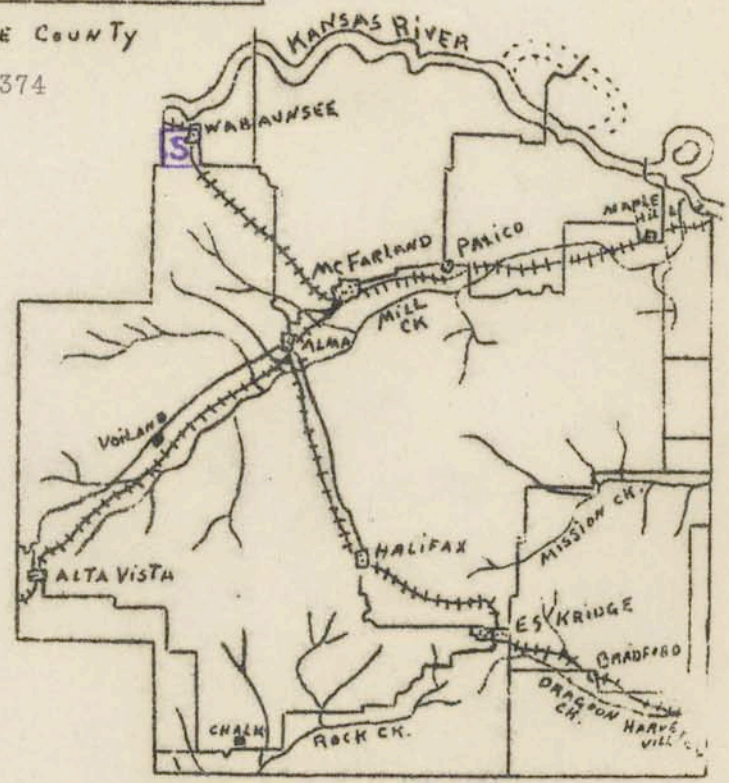
RHAMNACEAE

*Rhamnus lanceolata* Pursh.

WABAUNSEE COUNTY

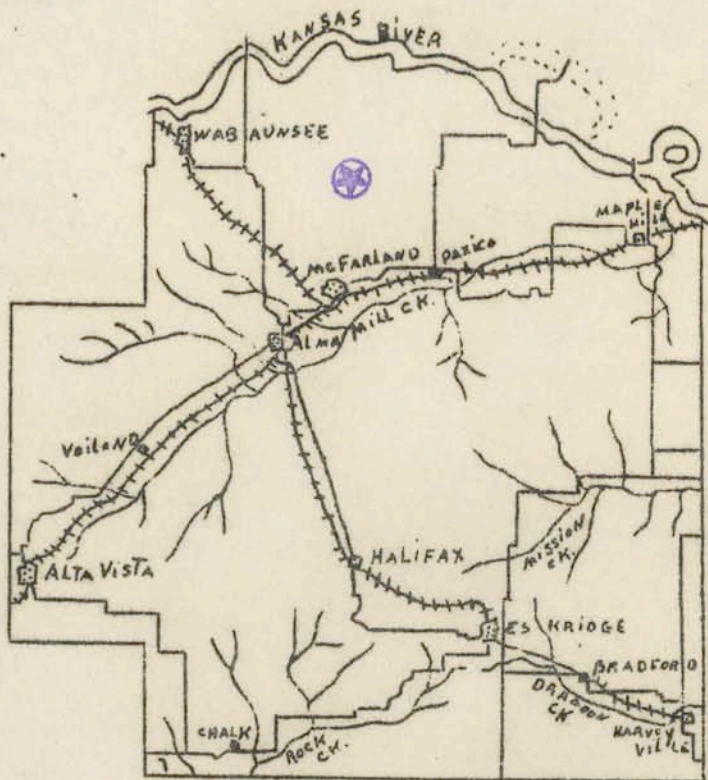
Map No. 374

*Ceanothus ovatus* Desf.



WABAUNSEE COUNTY

Map No. 375

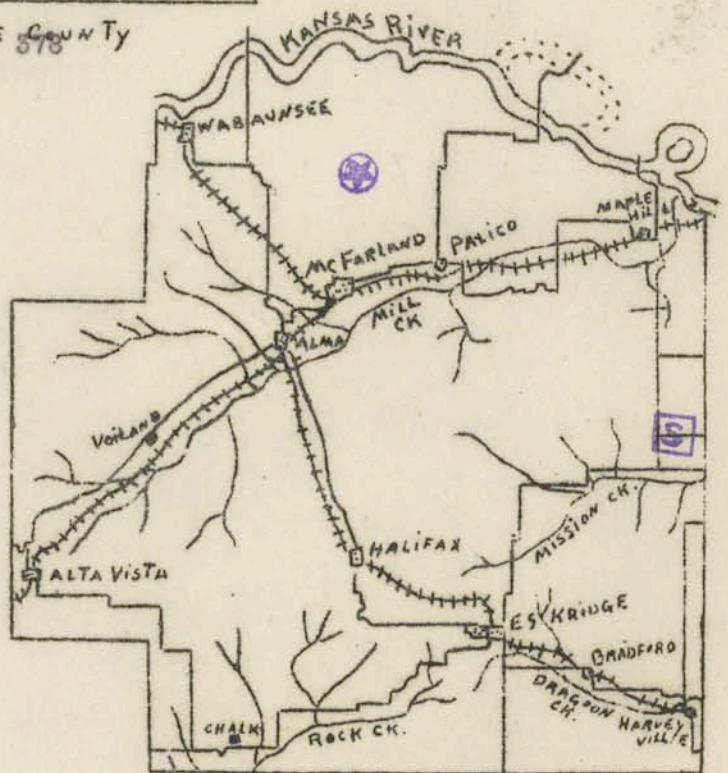


VITACEAE

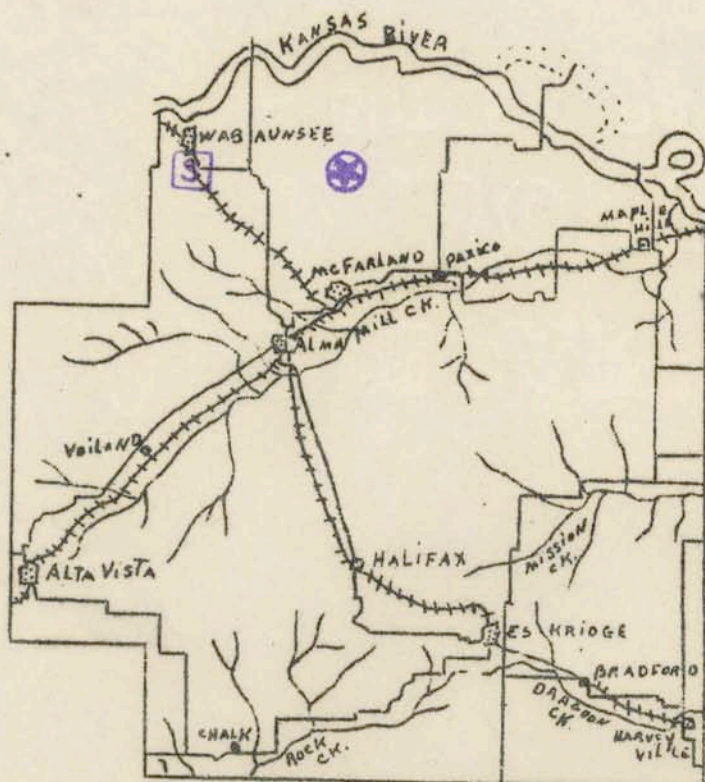
*Vitis cinerea* Engelm.

WABAUNSEE COUNTY  
Map No. 578

*Vitis cordifolia* Michx.



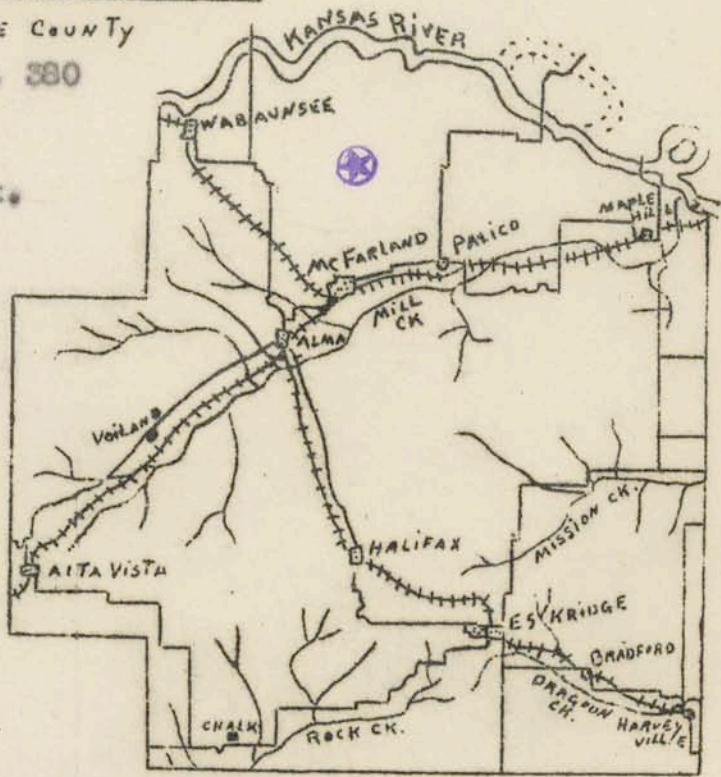
WABAUNSEE COUNTY  
Map No. 579



VITACEAE  
*Vitis vulpina* L.

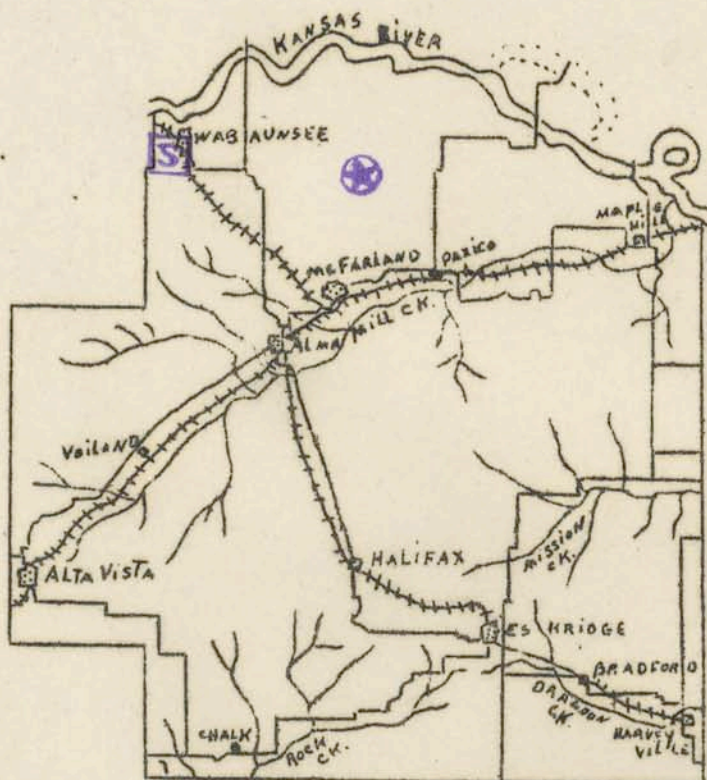
WABAUNSEE COUNTY  
 Map No. 380

*Ampelopsis cordata* Michx.



WABAUNSEE COUNTY  
 Map No. 381





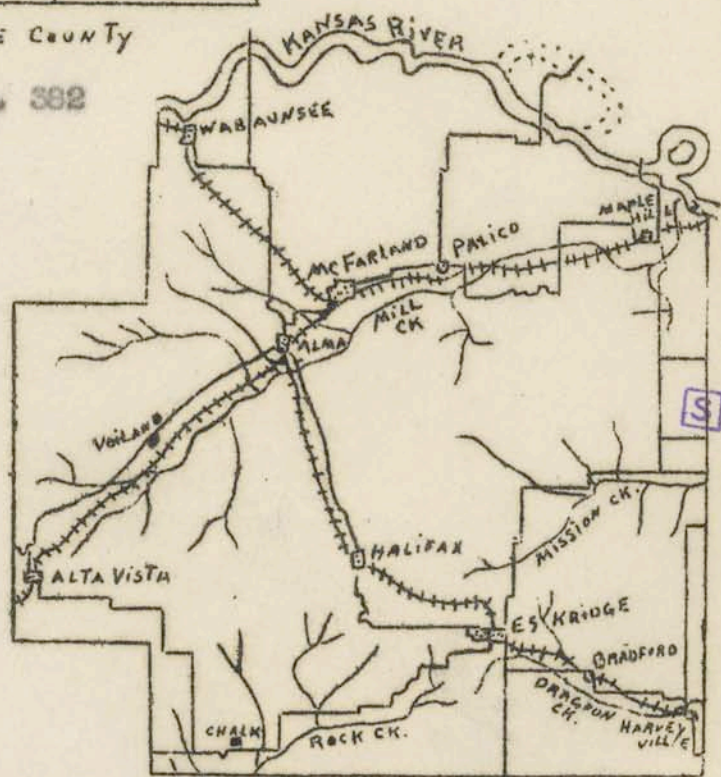
VITACEAE

*Parthenocissus quin-*  
*quefolia (L.) Greene*

WABAUNSEE COUNTY

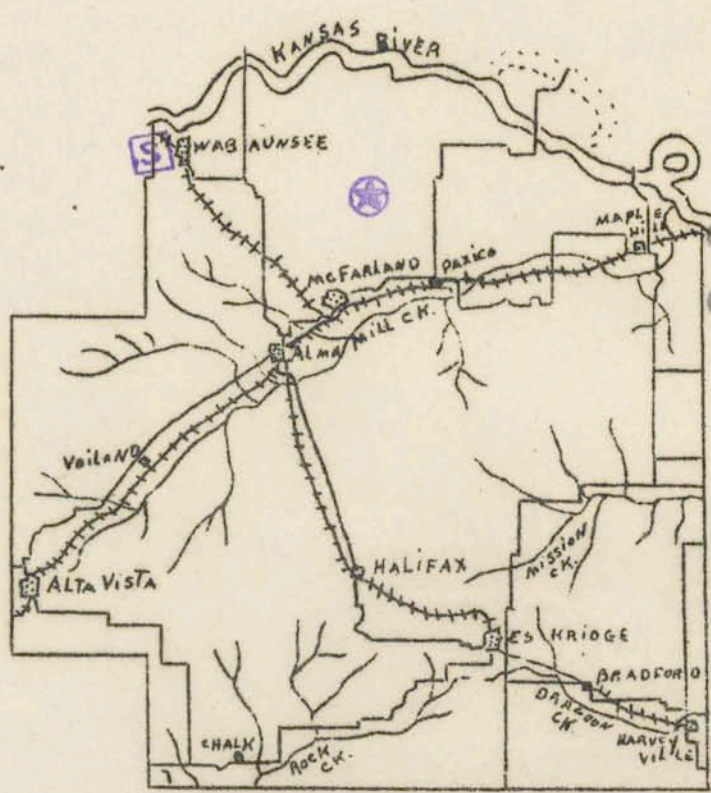
Map No. 382

*Vitis palmata* Vahl.



WABAUNSEE COUNTY

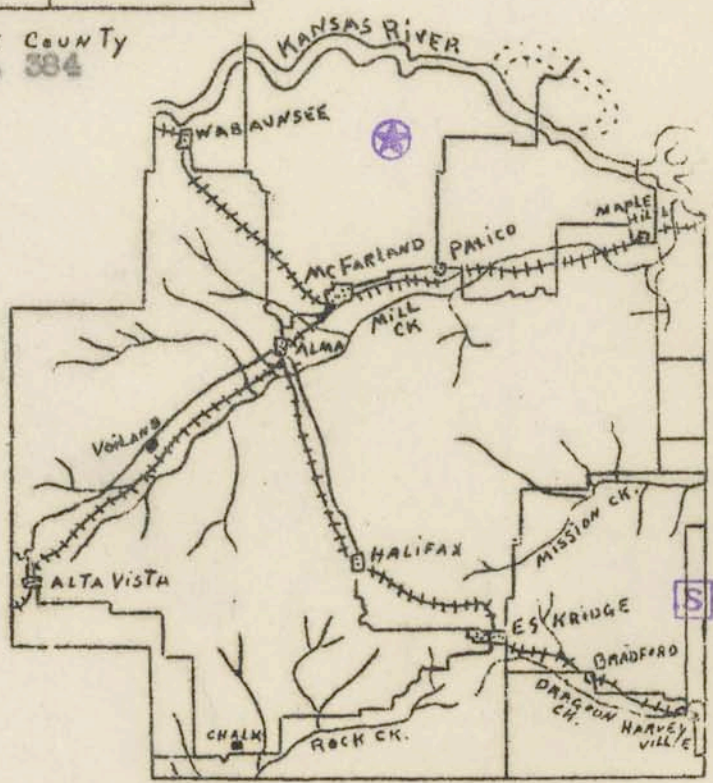
Map No. 383



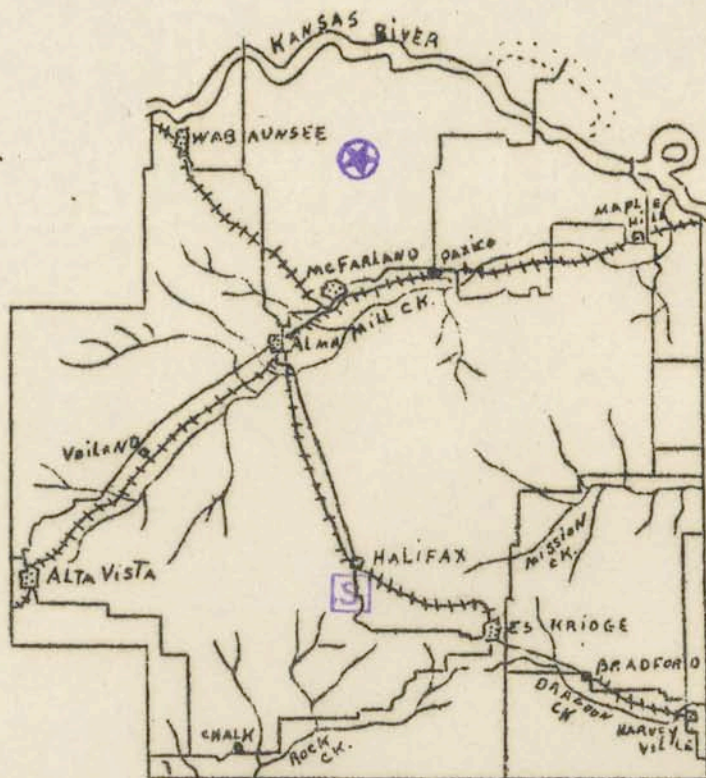
CELASTRACEAE  
*Celastrus scandens* L.

WABAUNSEE COUNTY  
 Map No. 384

*staphylea trifolia* L.



WABAUNSEE COUNTY  
 Map No. 385



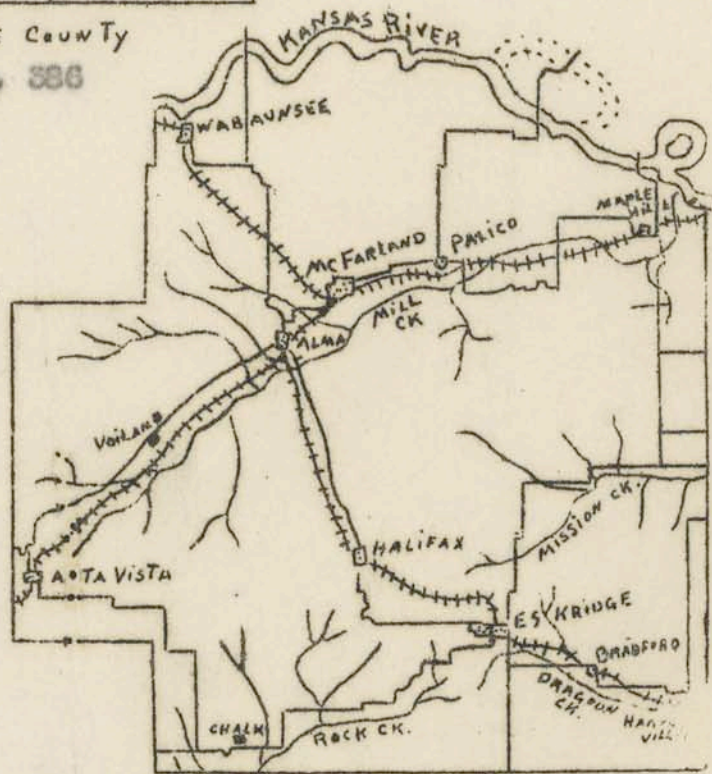
CELASTRACEAE

*Euonymus atropurpureus*

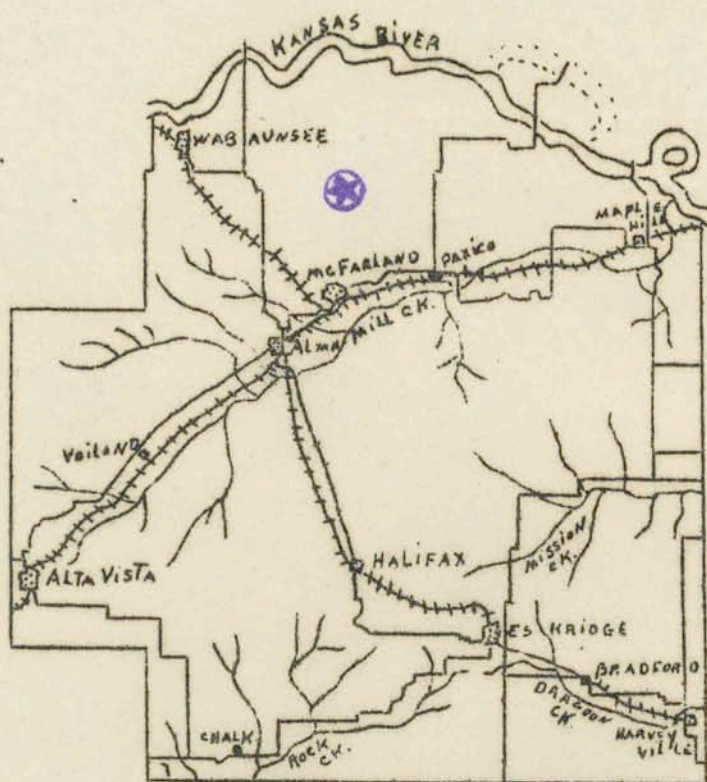
Jacq.

WABAUNSEE COUNTY

Map No. 386



WABAUNSEE COUNTY



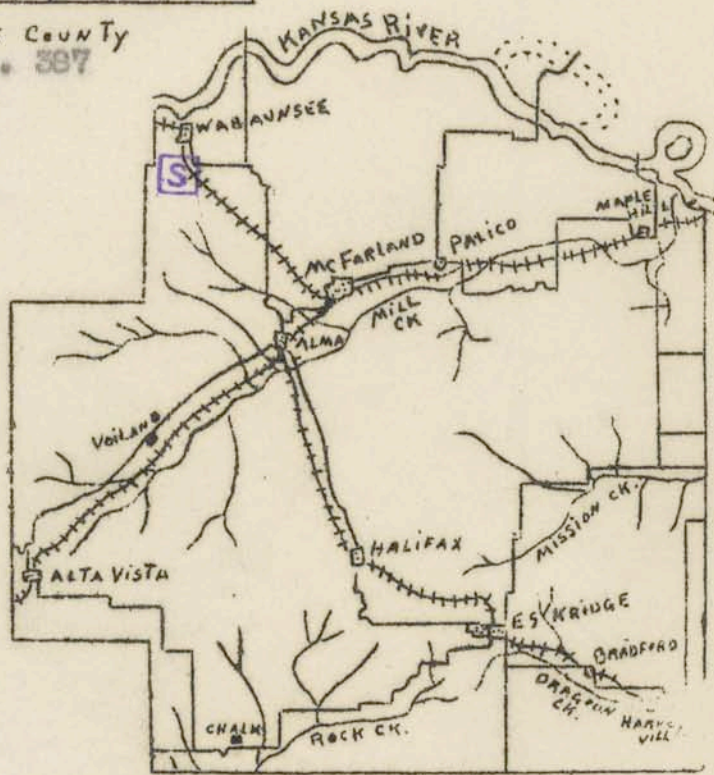
SANTALACEAE

*Comandra umbellata*

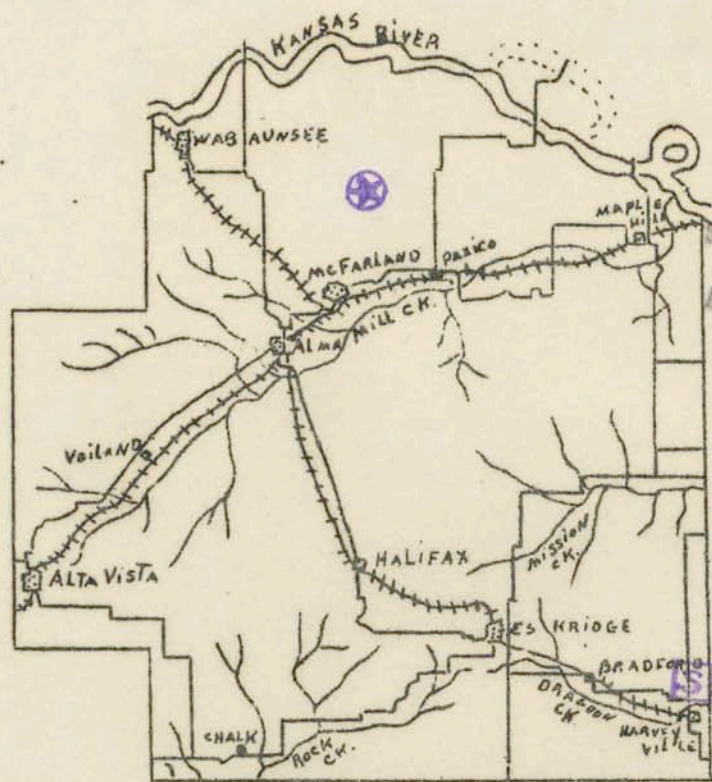
(L.) Nutt.

WABAUNSEE COUNTY  
Map No. 387

*Comandra pallida* A. DC.



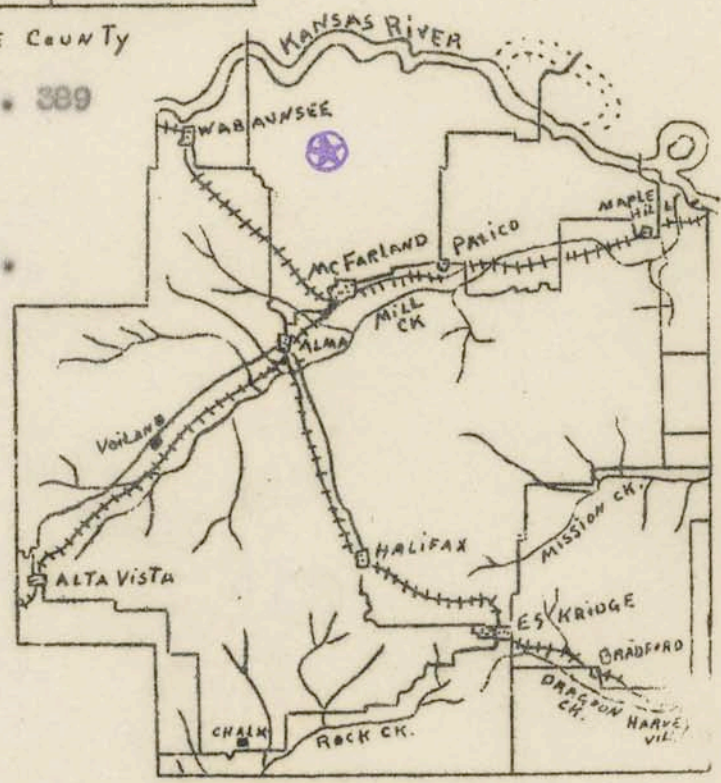
WABAUNSEE COUNTY  
Map No. 388



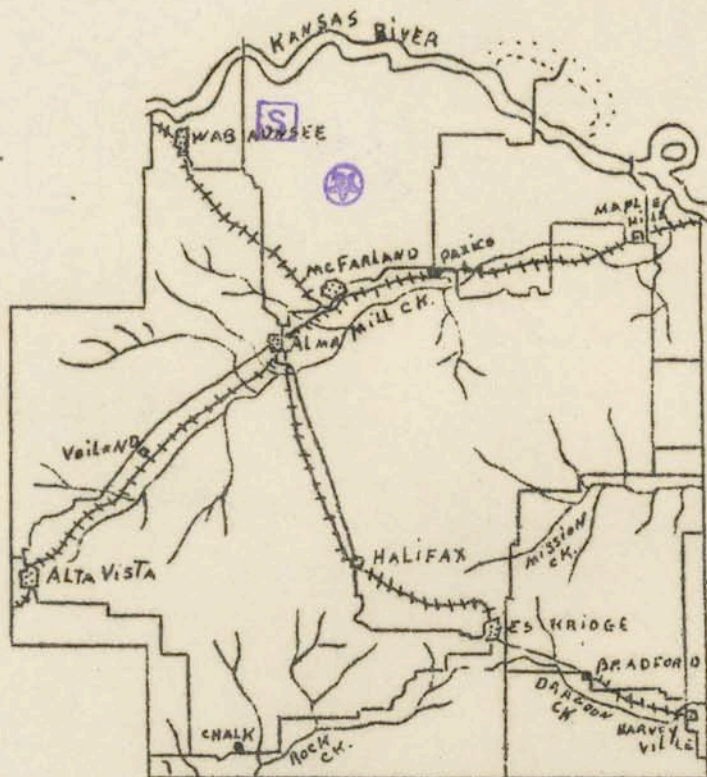
SAPINDACEAE  
*Aesculus arguta*  
 (Buckley) Robinson

WABAUNSEE COUNTY  
 Map No. 389

*Quercus prinoides* Willd.



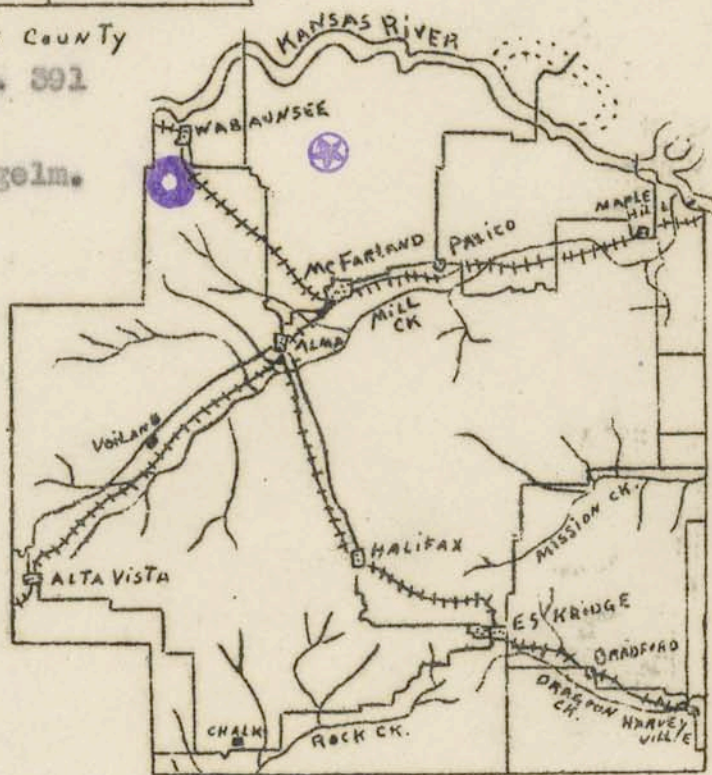
WABAUNSEE COUNTY  
 Map No. 390



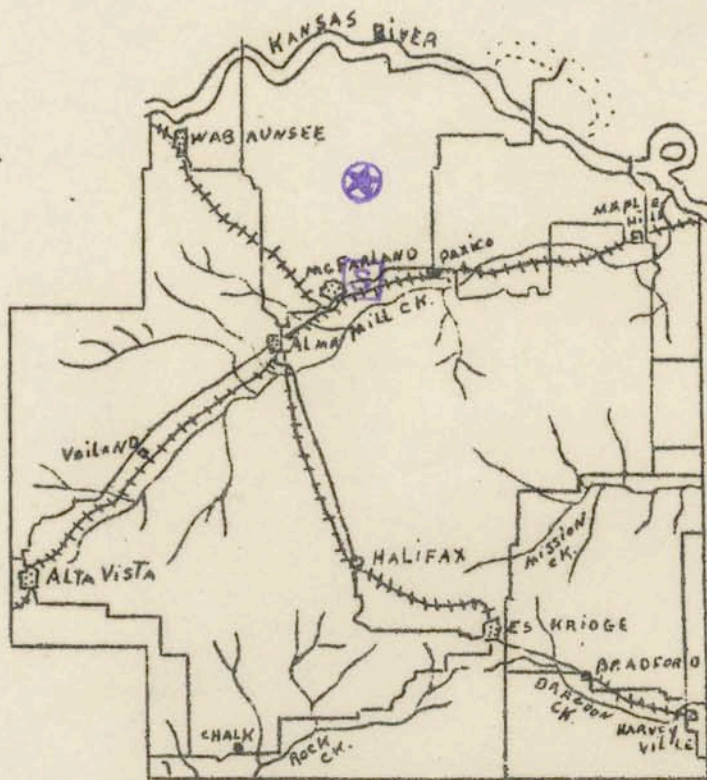
SAPINDACEAE  
*Quercus macrocarpa*  
 Michx.

WABAUNSEE COUNTY  
 Map No. 391

*Quercus muhlenbergii* Engelm.



WABAUNSEE COUNTY  
 Map No. 392

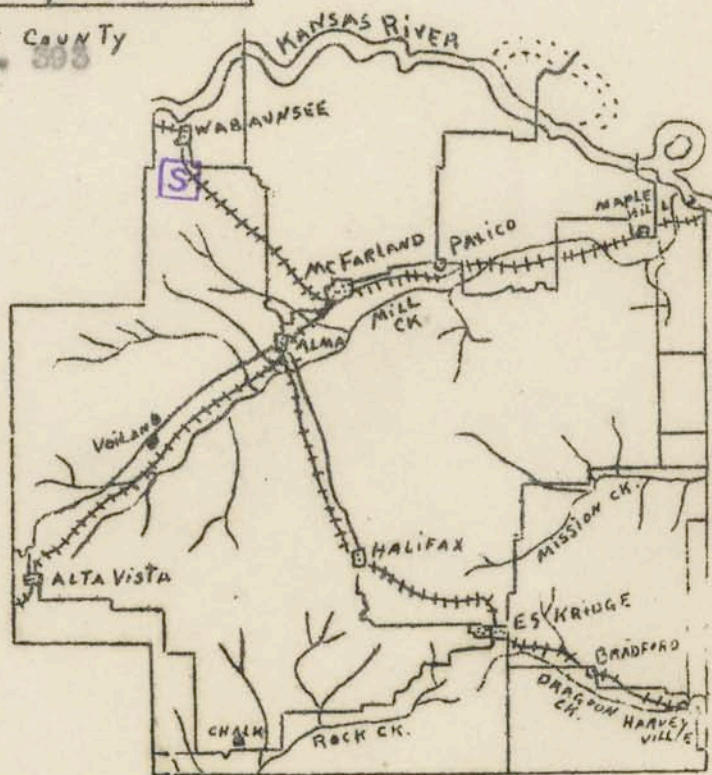


ACERACEAE.

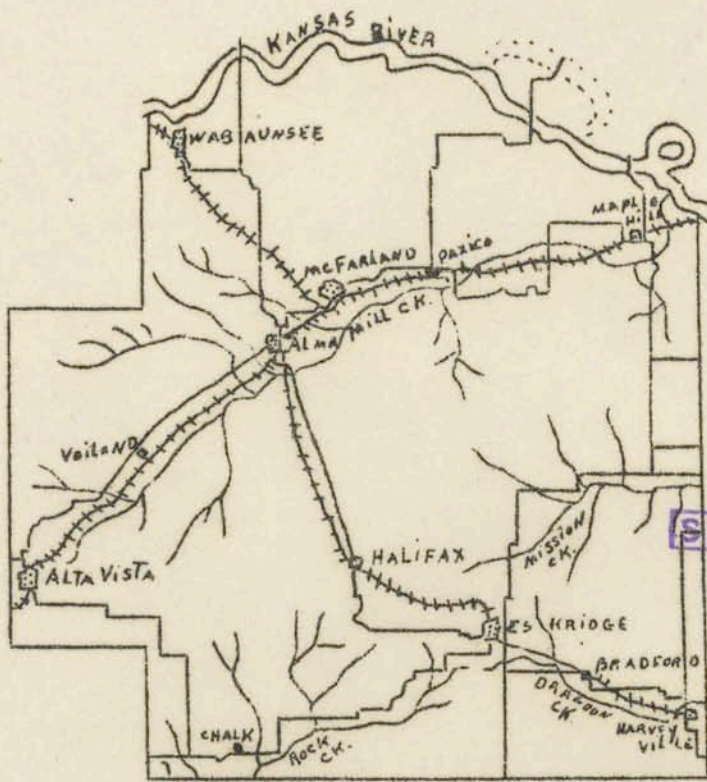
*Acer negundo* L.

WABAUNSEE COUNTY  
Map No. 393

*Acer saccharinum* L.



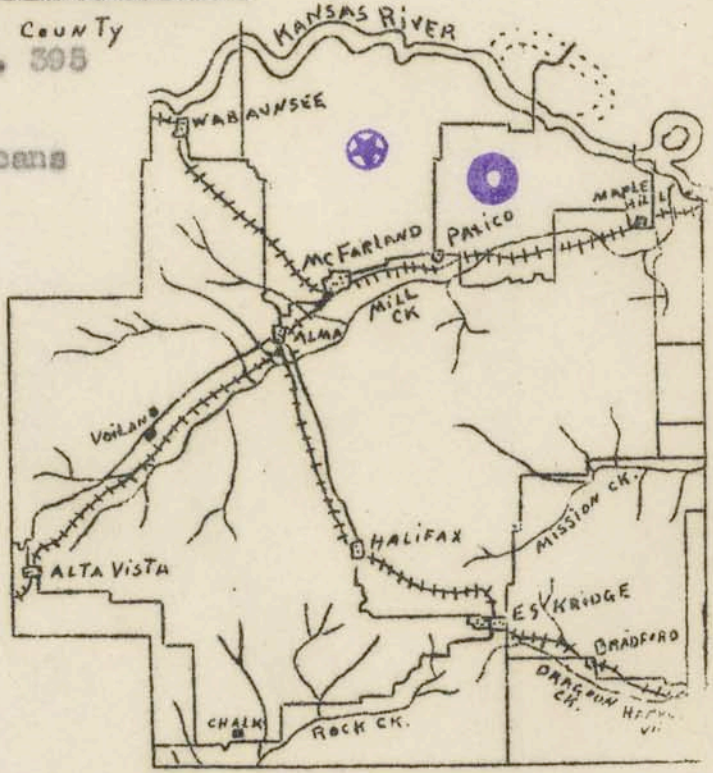
WABAUNSEE COUNTY  
Map No. 394



ANAGARDIACEAE  
*Rhus crenata* (Mill)  
 Greene

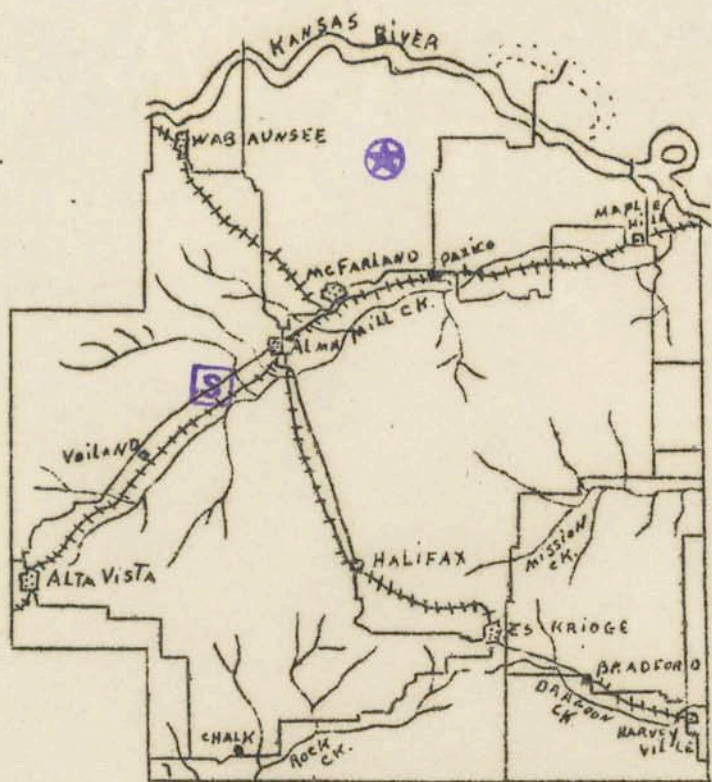
WABAUNSEE COUNTY  
 Map No. 395

*Toxicodendron* var. *radicans*  
 (L.) Vent.



WABAUNSEE COUNTY  
 Map No. 396

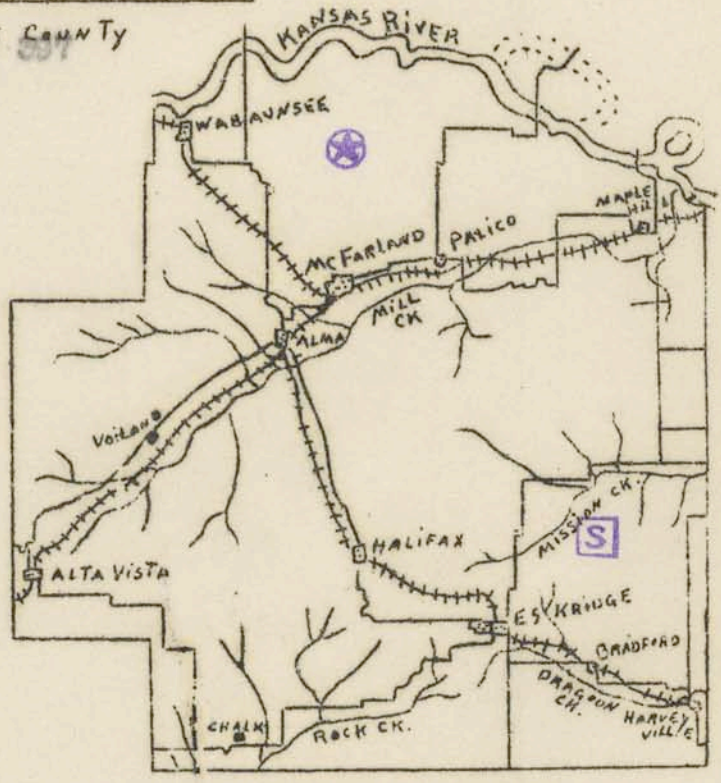




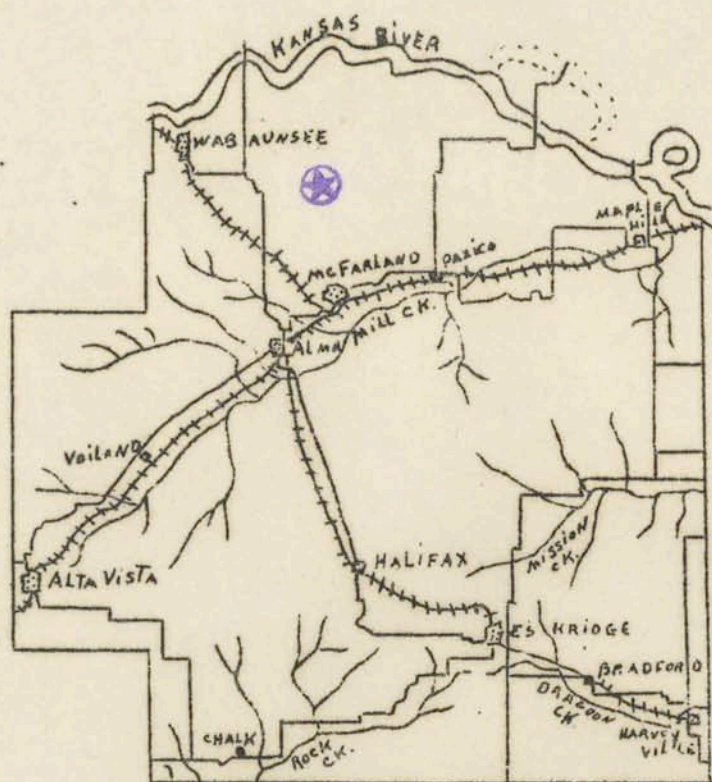
ANACARDIACEAE  
*Rhus glabra* L.

WABAUNSEE COUNTY  
 map no. 337

*Rhus trilobata* Nutt.



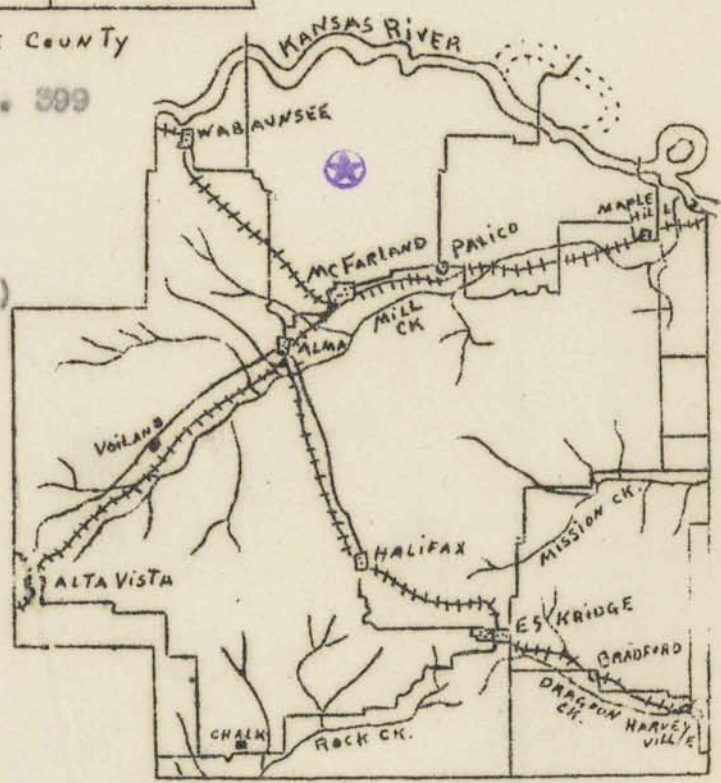
WABAUNSEE COUNTY  
 map no. 338



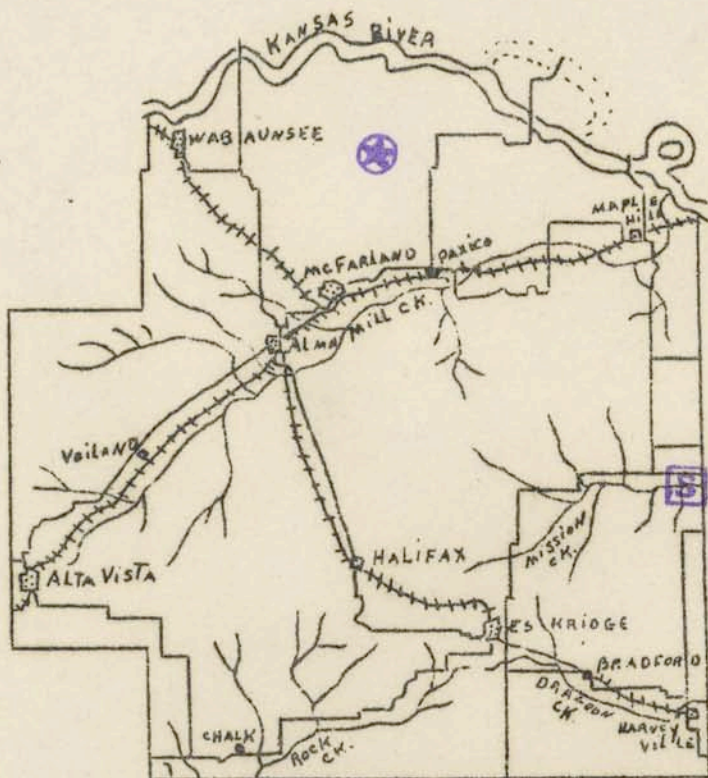
JUGLANDACEAE  
*Nicoria cordiformis*  
 (Wang.) Britton

WABAUNSEE COUNTY  
 Map No. 399

BETULACEAE  
*Ostrya virginiana* (Mill.)  
 K. Koch



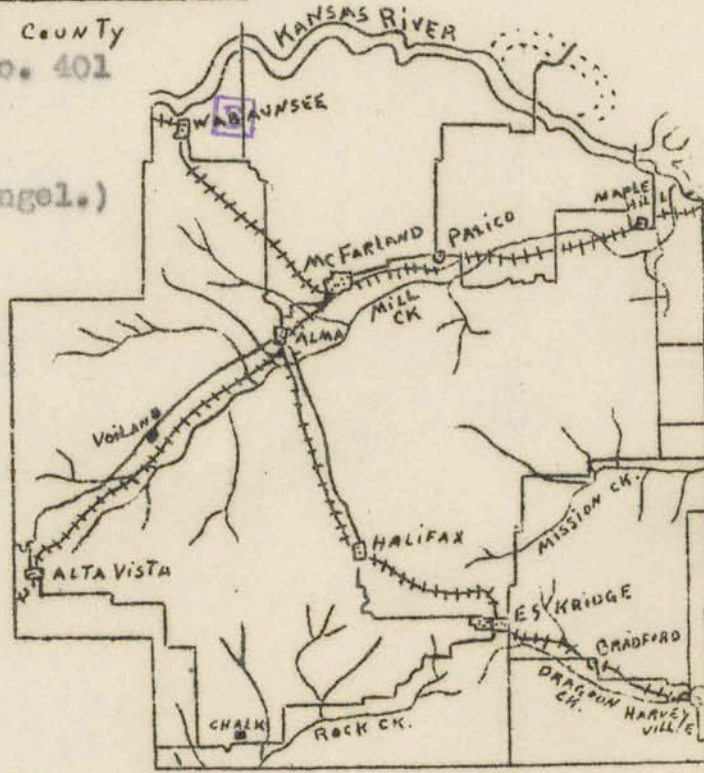
WABAUNSEE COUNTY  
 Map No. 400



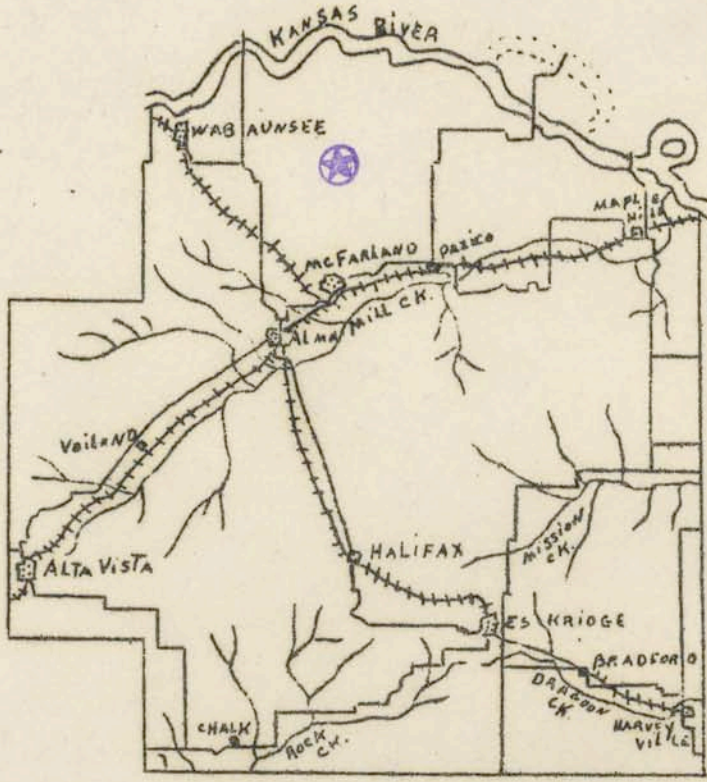
FUMARIACEAE  
*Bicuculla cucullaria*  
 (L.) Millsp.

WABAUNSEE COUNTY  
 Map No. 401

*Capnoides micranthum* (Engel.)  
 Britton

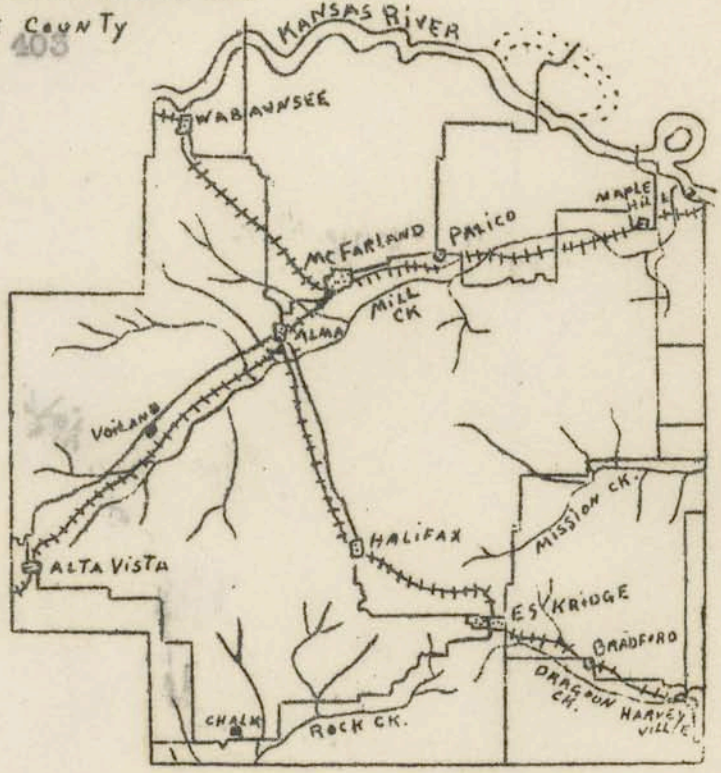


WABAUNSEE COUNTY  
 Map No. 402

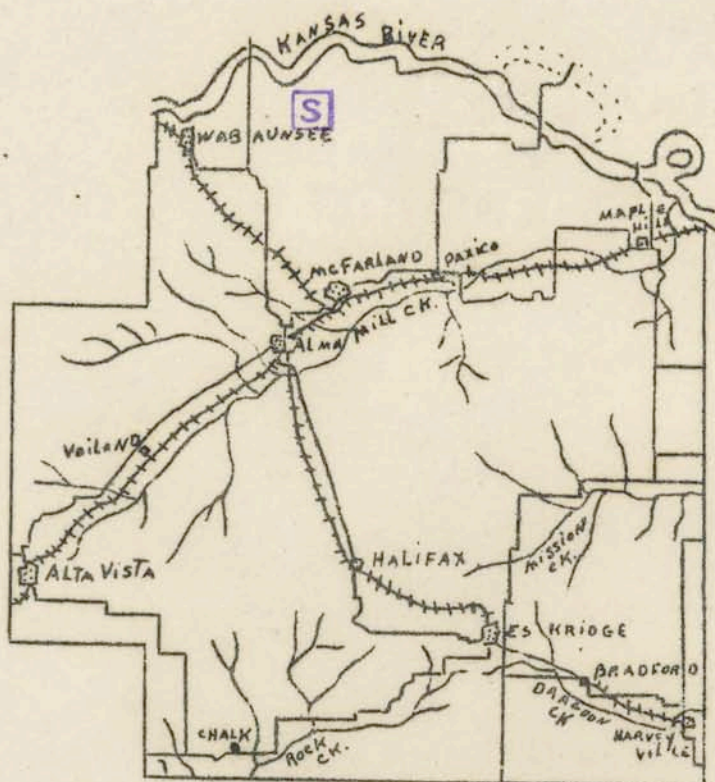


FUNARIACEAE  
*Capnoides aureum* (Willd.)  
 Kuntze

WABAUNSEE COUNTY  
 Map No. 403



WABAUNSEE COUNTY



APIACEAE

*Cogswellia foeniculacea*

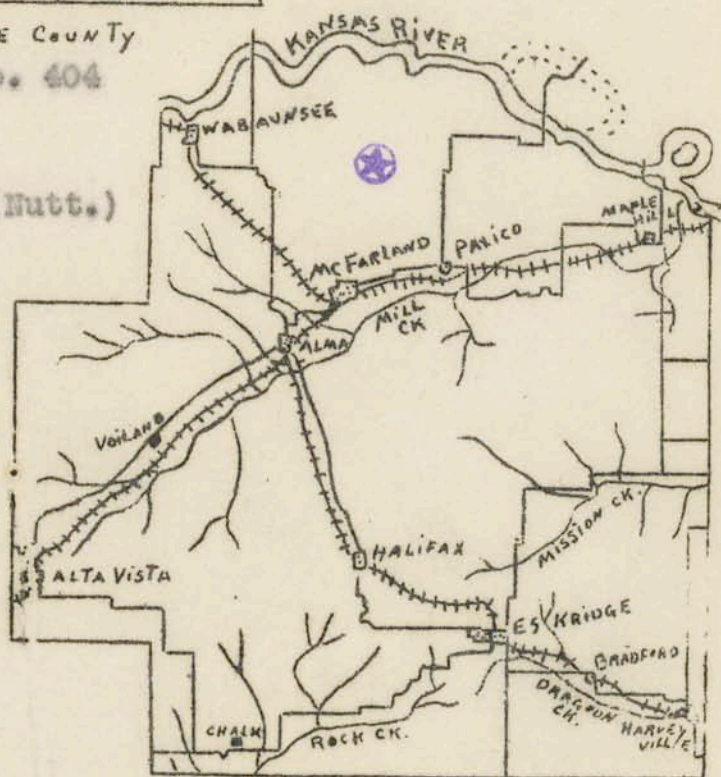
(Nutt.) Coult. & Rose

WABAUNSEE COUNTY

Map No. 404

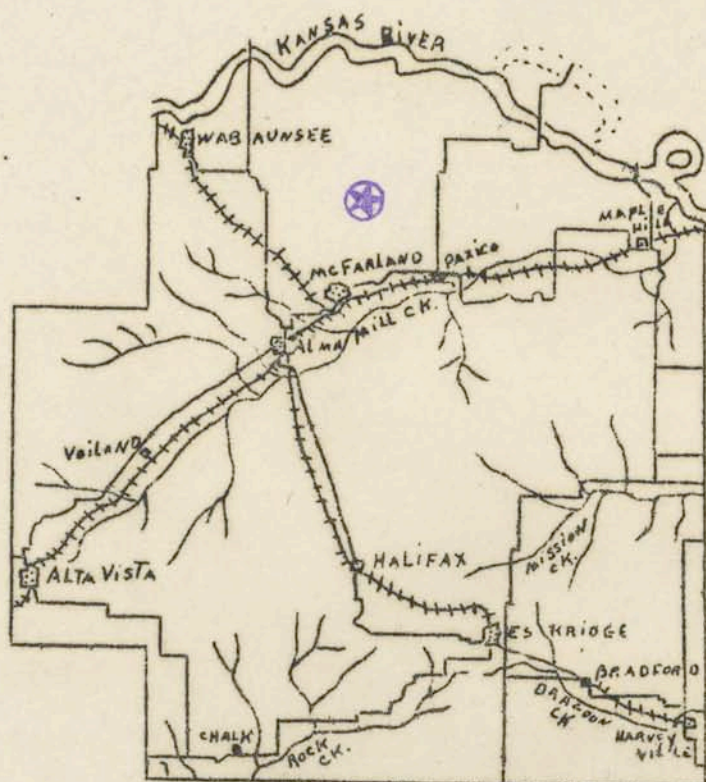
*Cogswellia daucifolia* (Nutt.)

H.E. Jones



WABAUNSEE COUNTY

Map No. 405



APIACEAE

*Spermolepsis patens*

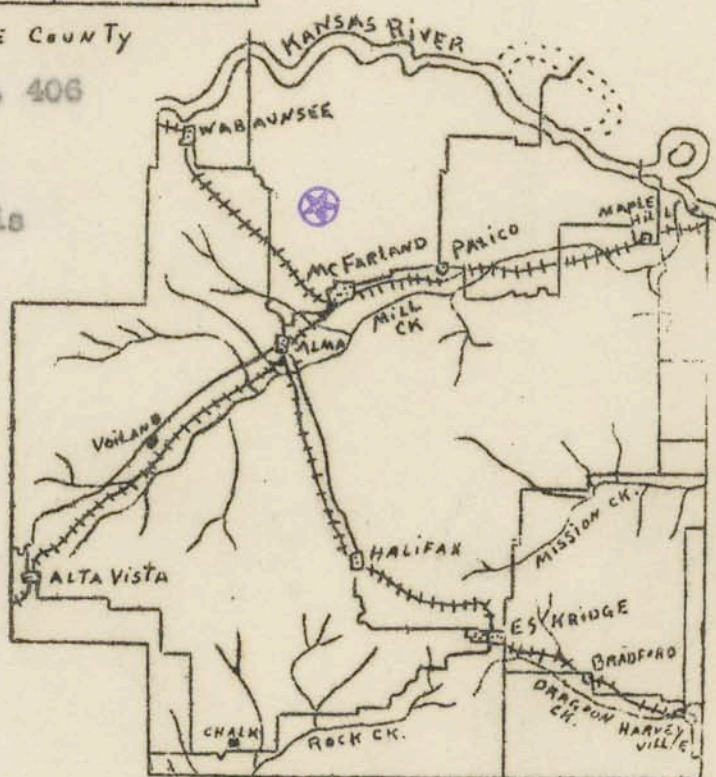
(Nutt.) Robinson

WABAUNSEE COUNTY

Map No. 406

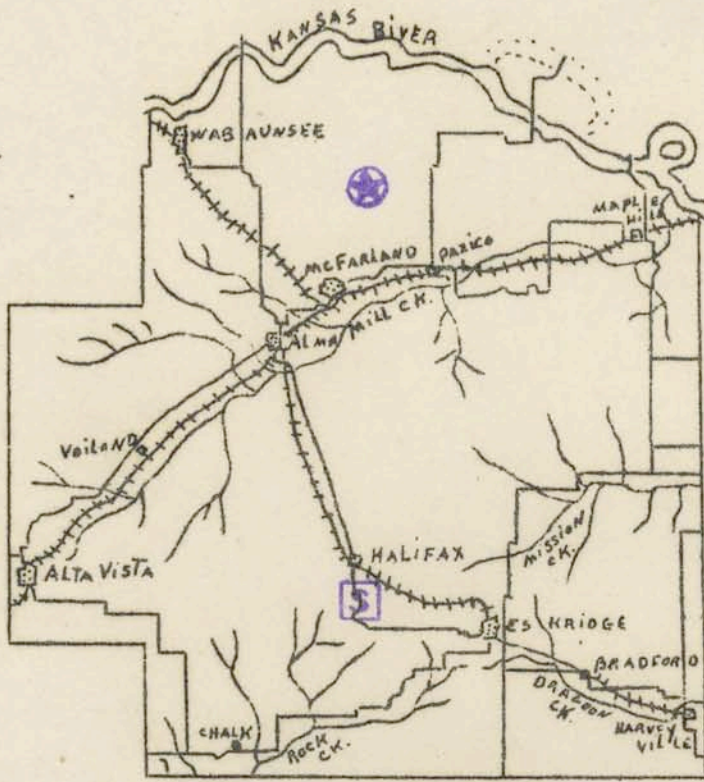
*Washingtonia longistylis*

(Torr.) Britton



WABAUNSEE COUNTY

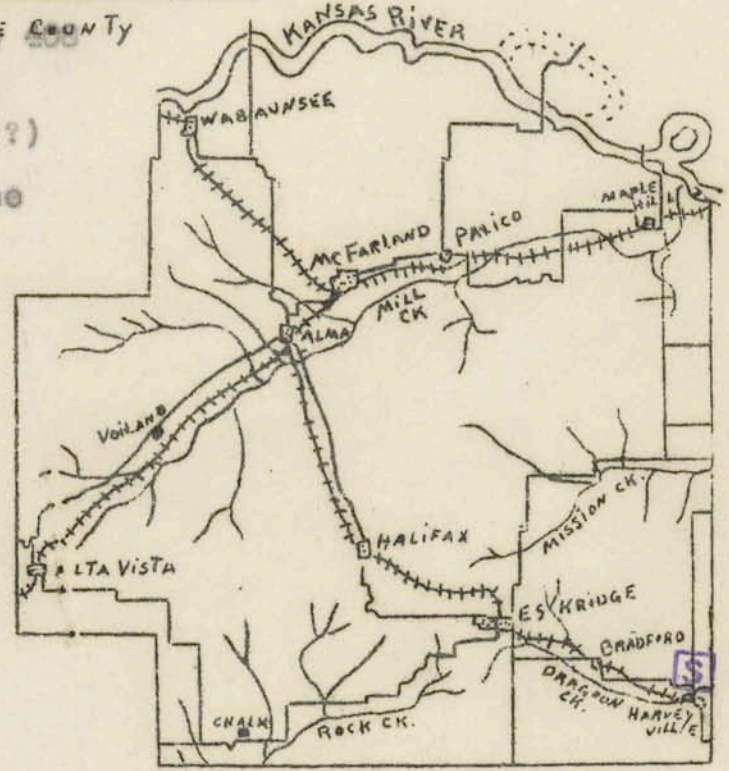
Map No. 407



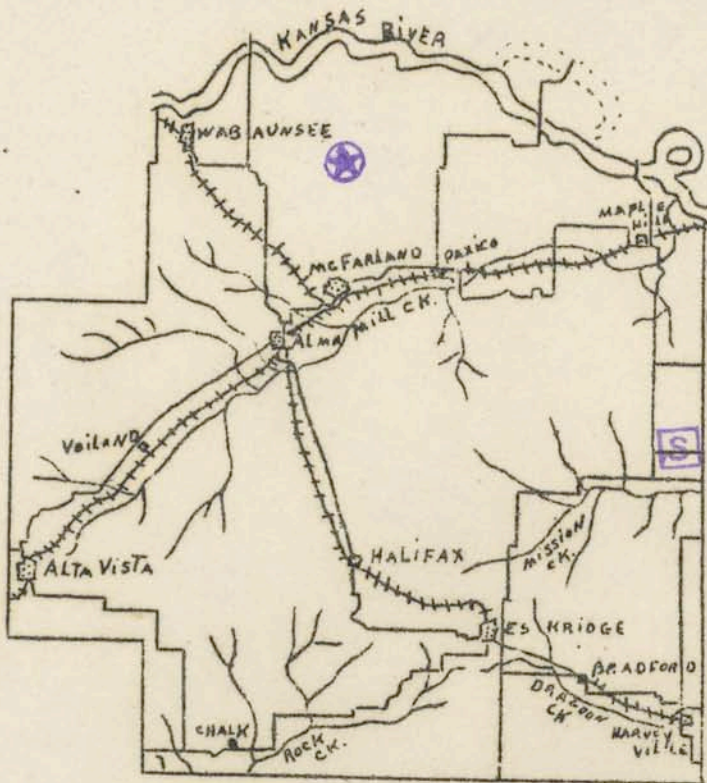
APIACEAE  
*Sanicula marylandica* L.

WABAUNSEE COUNTY  
 Map No. 400

*Chaerophyllum texanum* (?)  
 Coult. & Rose



WABAUNSEE COUNTY  
 Map No. 409



APIACEAE

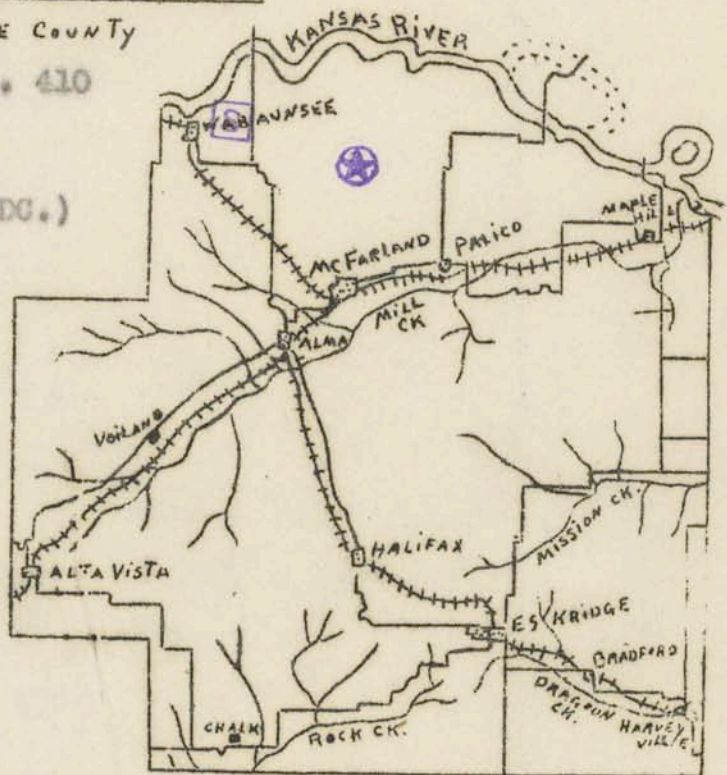
*Cicuta maculata* L.

WABAUNSEE COUNTY

Map No. 410

*Pleioisania nuttallii* (DC.)

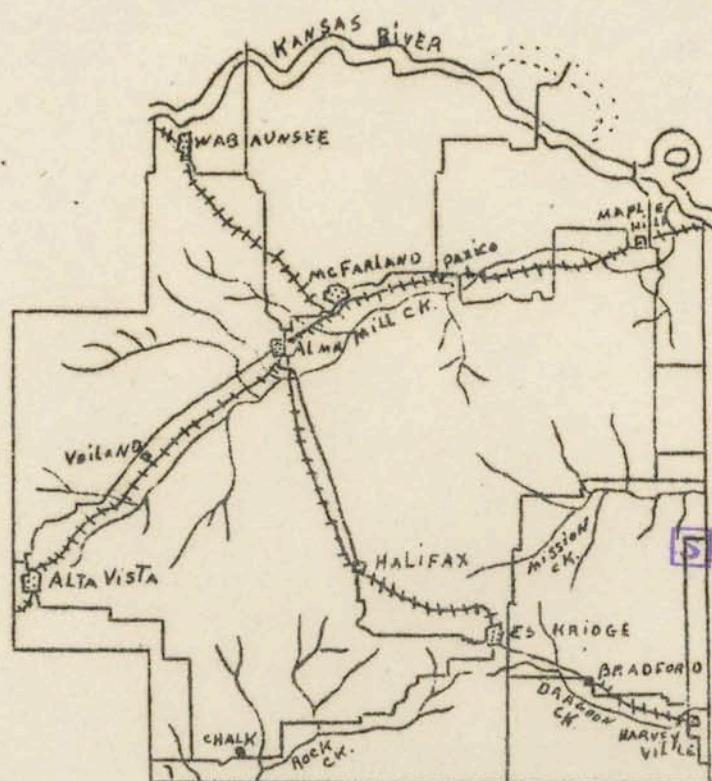
Coult. & Rose



WABAUNSEE COUNTY

Map No. 411

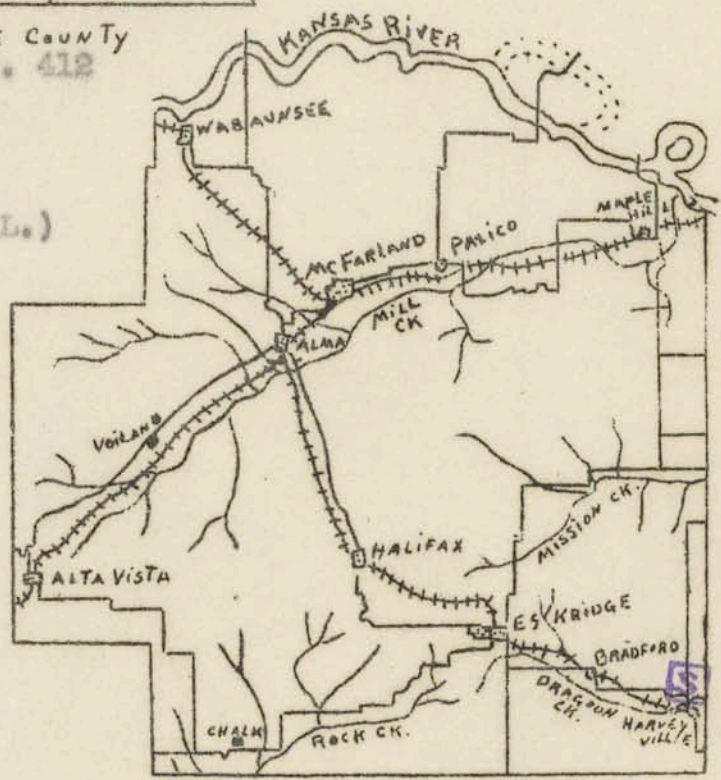




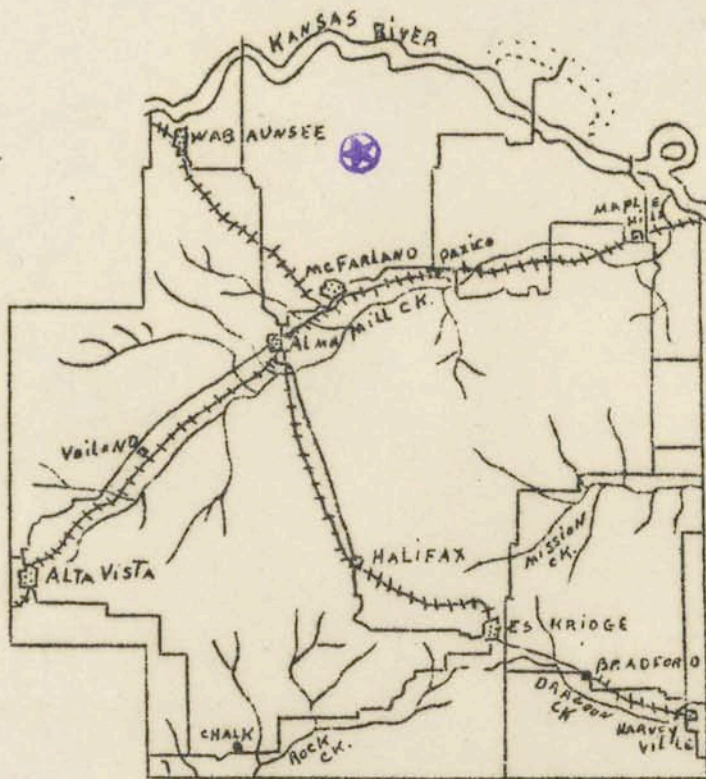
APIACEAE  
*Bryngium yuccaeifolium*  
 Nichx.

WABAUNSEE COUNTY  
 Map No. 412

*Cerofolium cerofolium* (L.)  
 Britton



WABAUNSEE COUNTY  
 Map No. 413



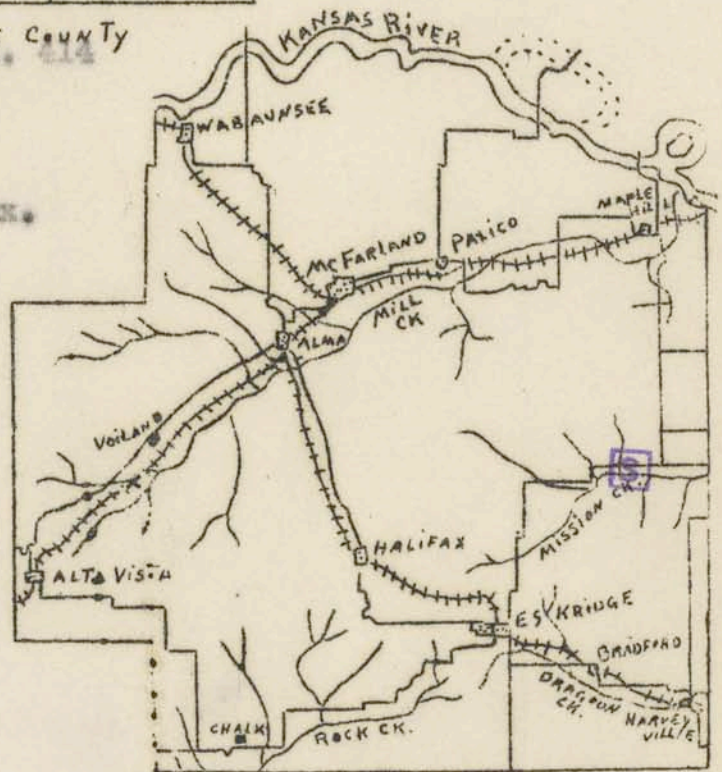
APIACEAE

*Zizia aurea* (L.) Koch.

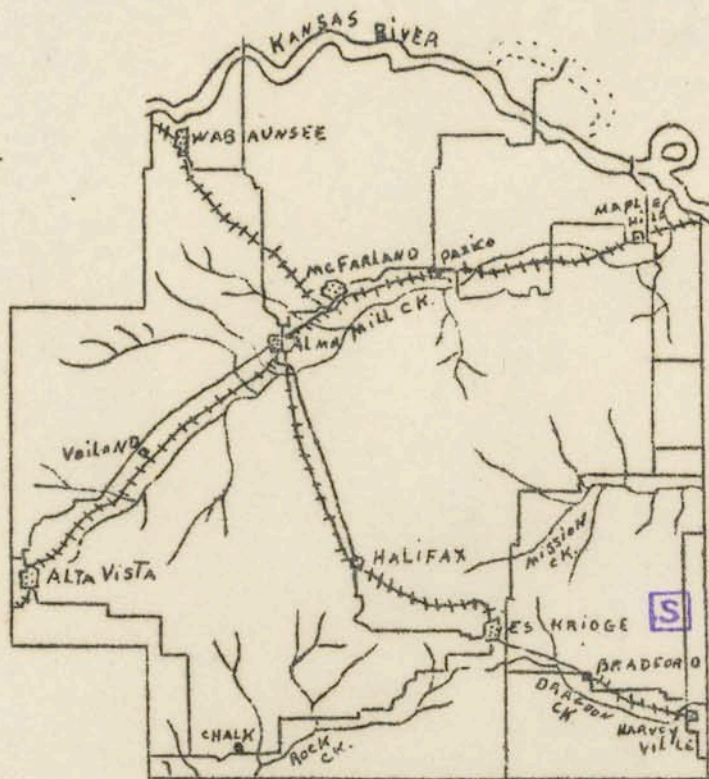
WABAUNSEE COUNTY  
Map No. 414

CORNACEAE

*Cornus asperifolia* Michx.



WABAUNSEE COUNTY  
Map No. 415

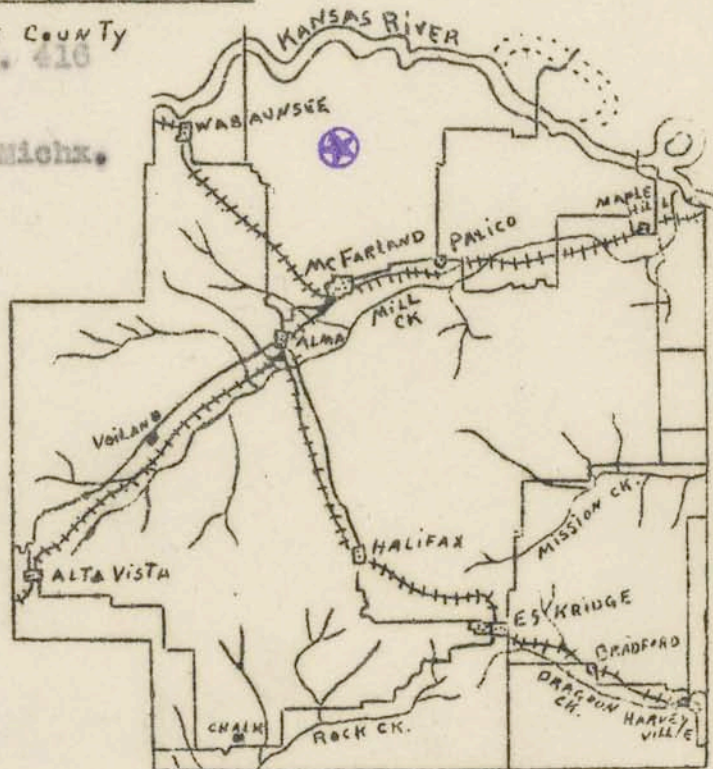


RUBIACEAE

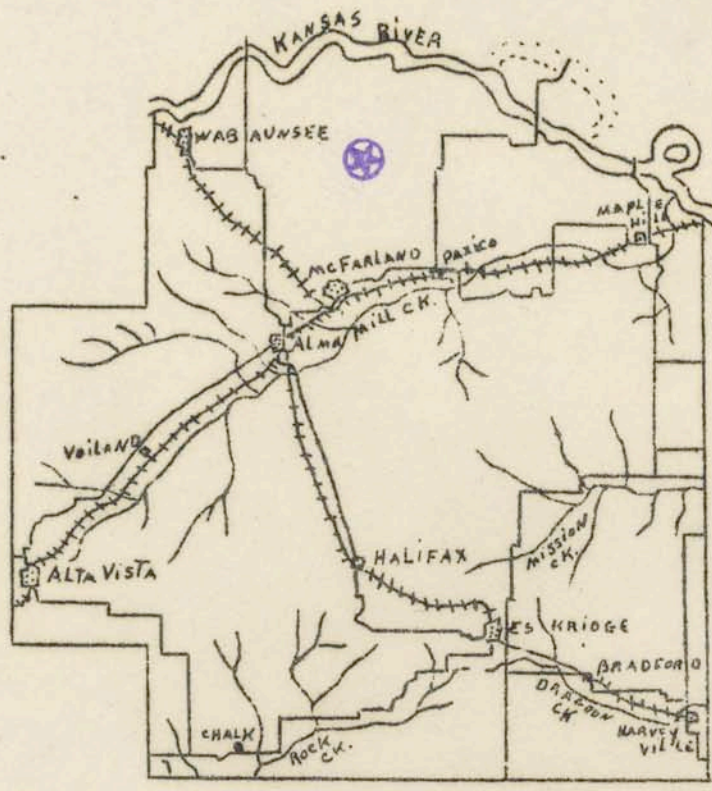
*Houstonia minima* Beck.

WABAUNSEE COUNTY  
Map No. 416

*Houstonia angustifolia* Michx.



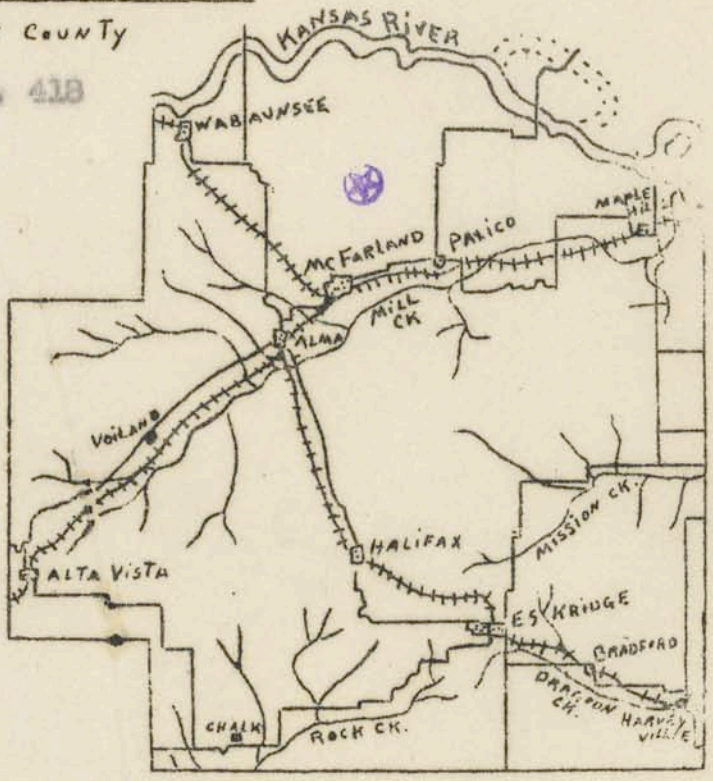
WABAUNSEE COUNTY  
Map No. 417



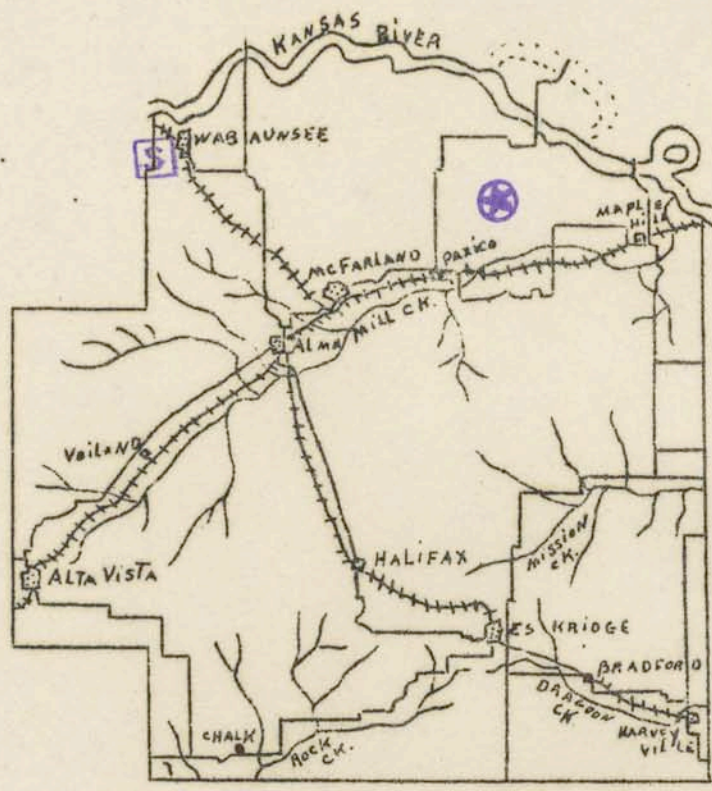
RUBIACEAE  
*Galium concinnum* Torr.  
 & Gray

WABAUNSEE COUNTY  
 Map No. 418

*Galium triflorum* Michx.



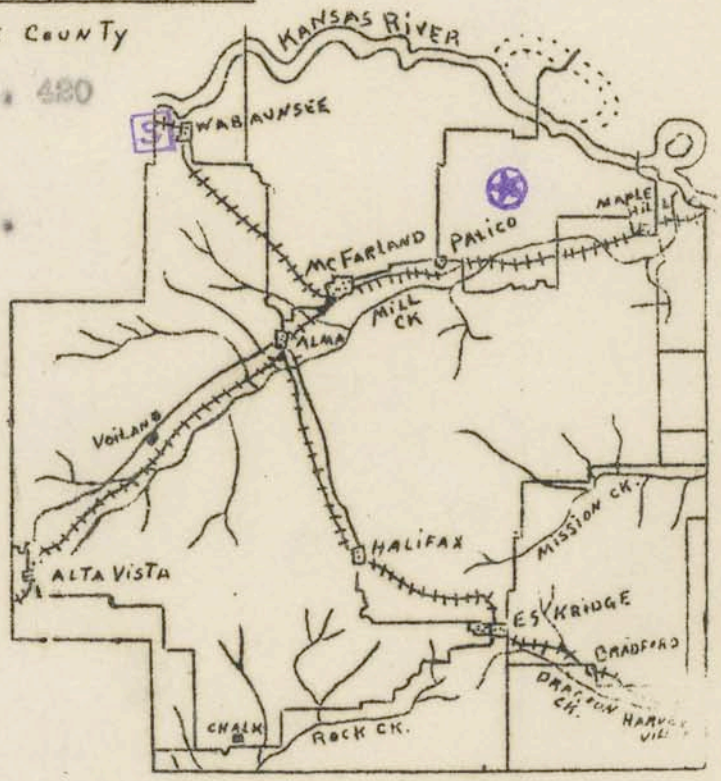
WABAUNSEE COUNTY  
 Map No. 419



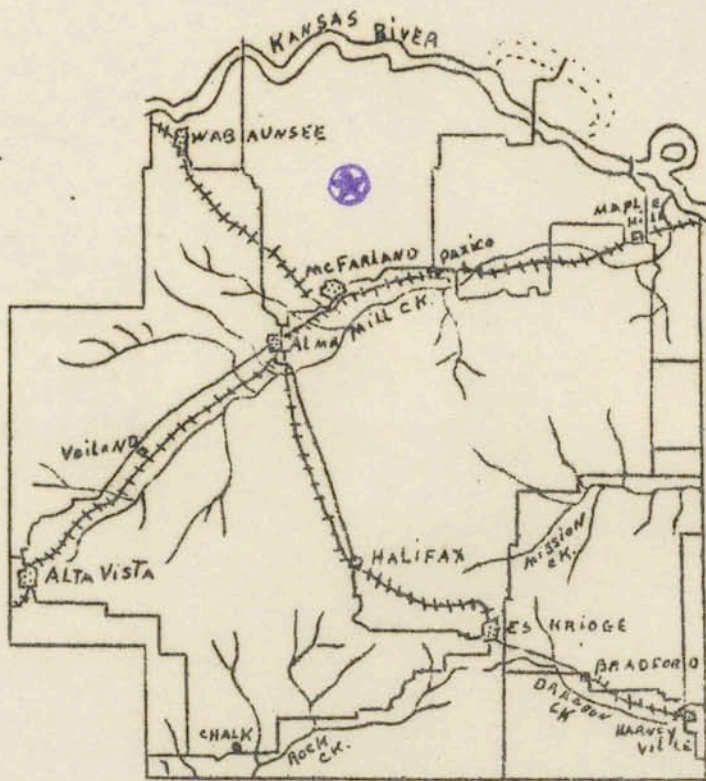
RUBIACEAE  
*Galium aparino L.*

WABAUNSEE COUNTY  
 Map No. 420

*Galium circozans* Michx.



WABAUNSEE COUNTY  
 Map No. 421



RUBIACEAE

*Cephalanthus occidentalis*

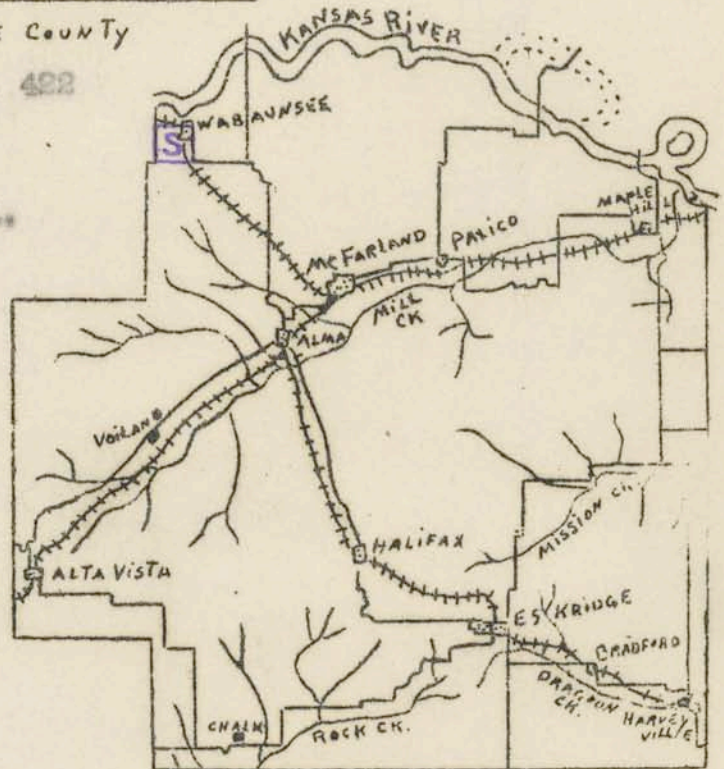
L.

WABAUNSEE COUNTY

Map No. 422

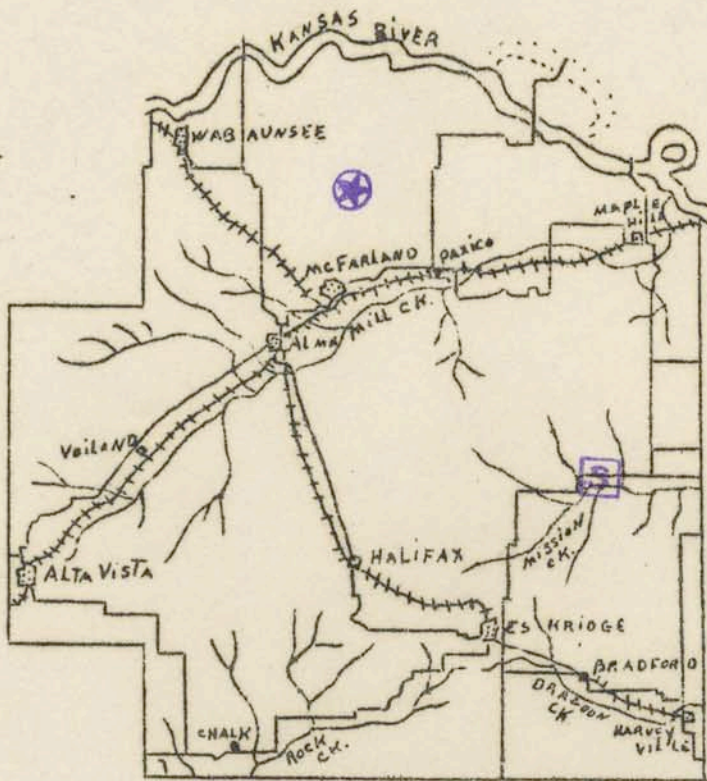
CAPRIFOLIACEAE

*Triosteum perfoliatum* L.



WABAUNSEE COUNTY

Map No. 423

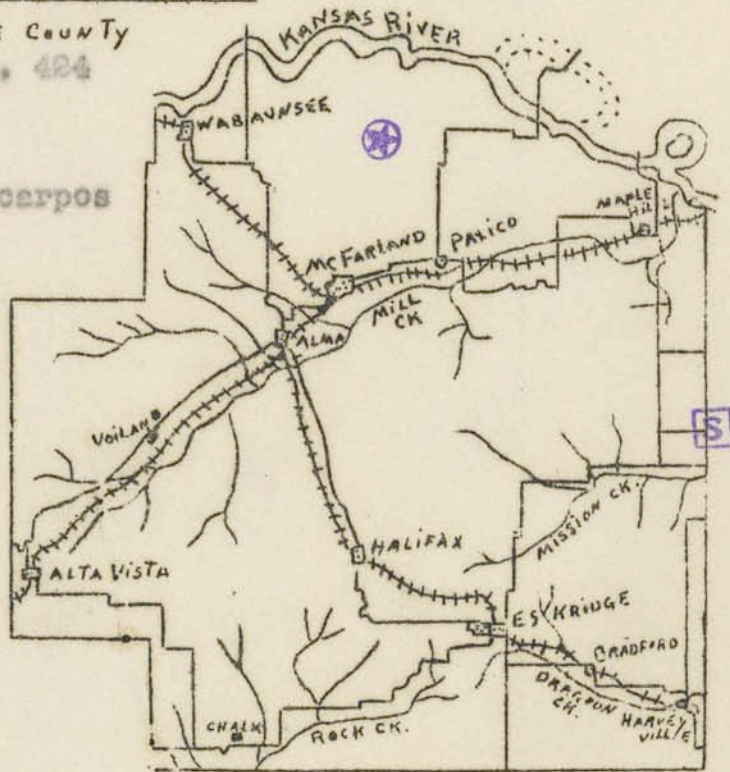


CAPRIFOLIACEAE

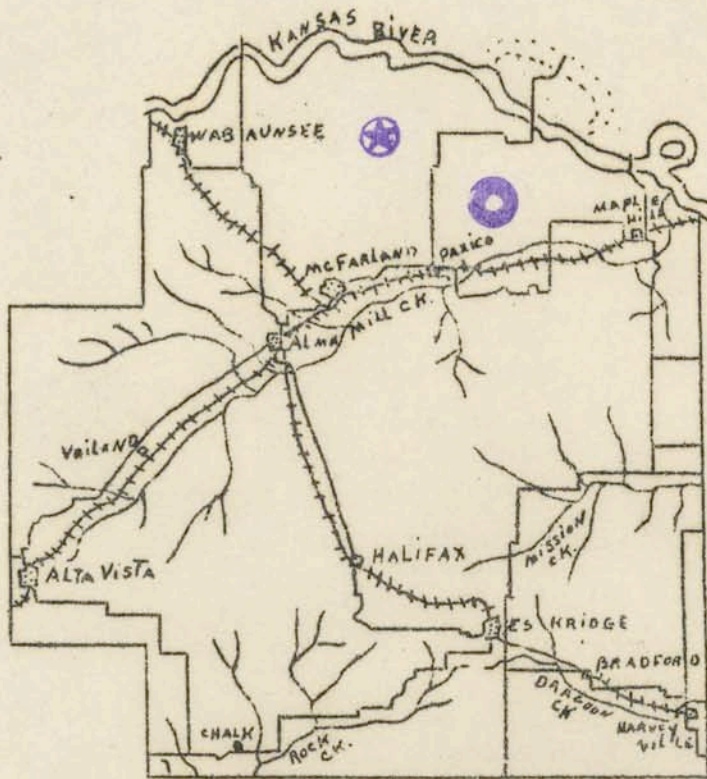
*Sambucus canadensis* L.

WABAUNSEE COUNTY  
Map No. 424

*Symphoricarpos symphoricarpos*  
(L.) Mack.



WABAUNSEE COUNTY  
Map No. 425



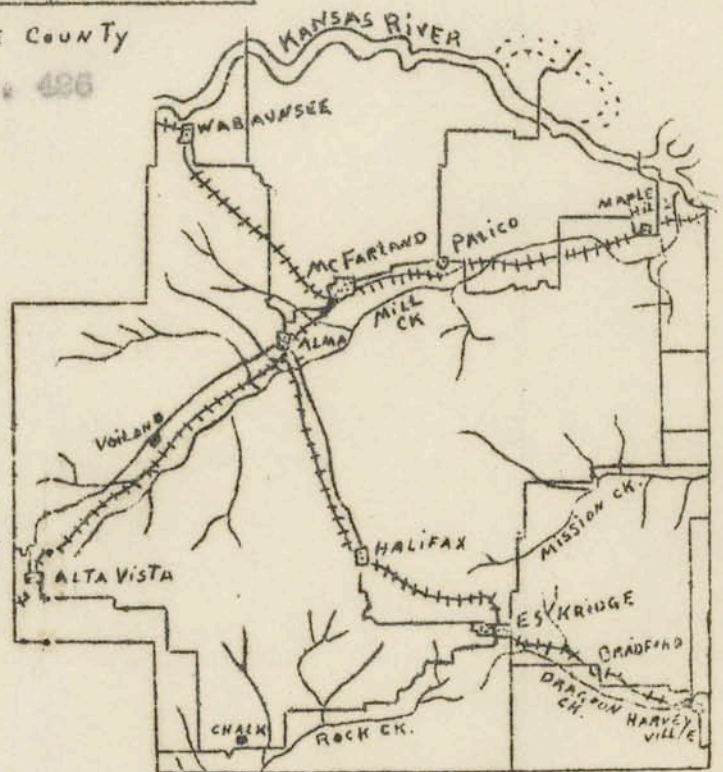
LOBELIACEAE

*Lobelia leptostachys*

A. DC.

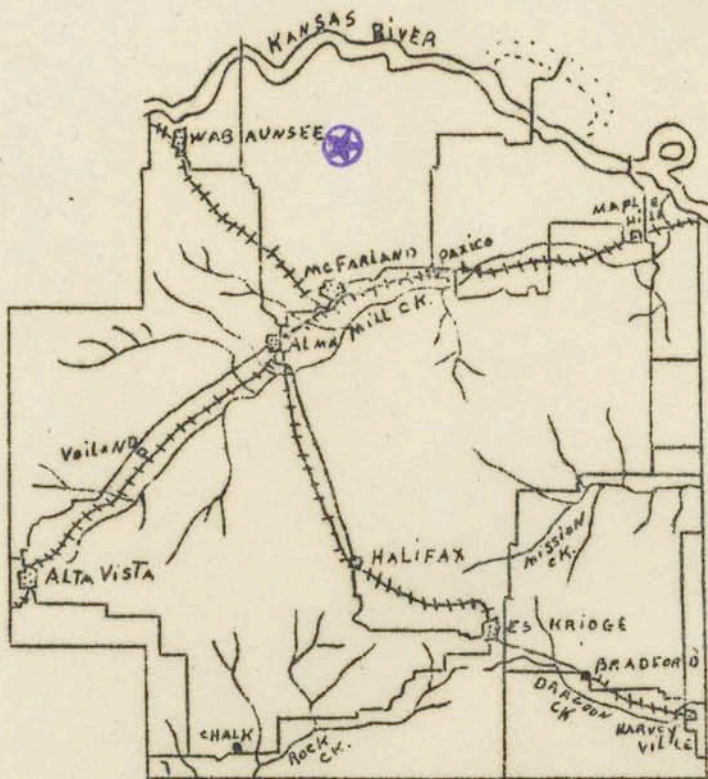
WABAUNSEE COUNTY

Map No. 426



WABAUNSEE COUNTY

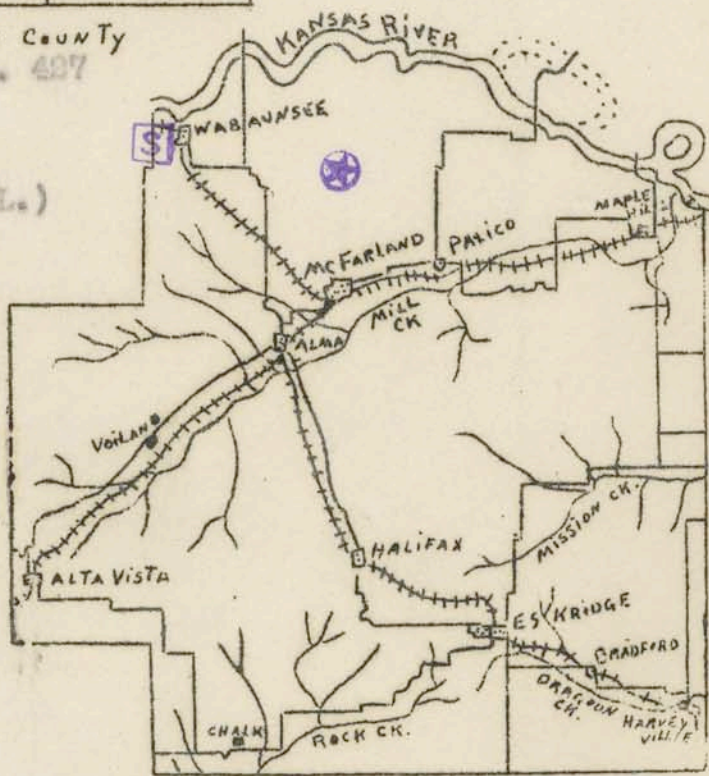




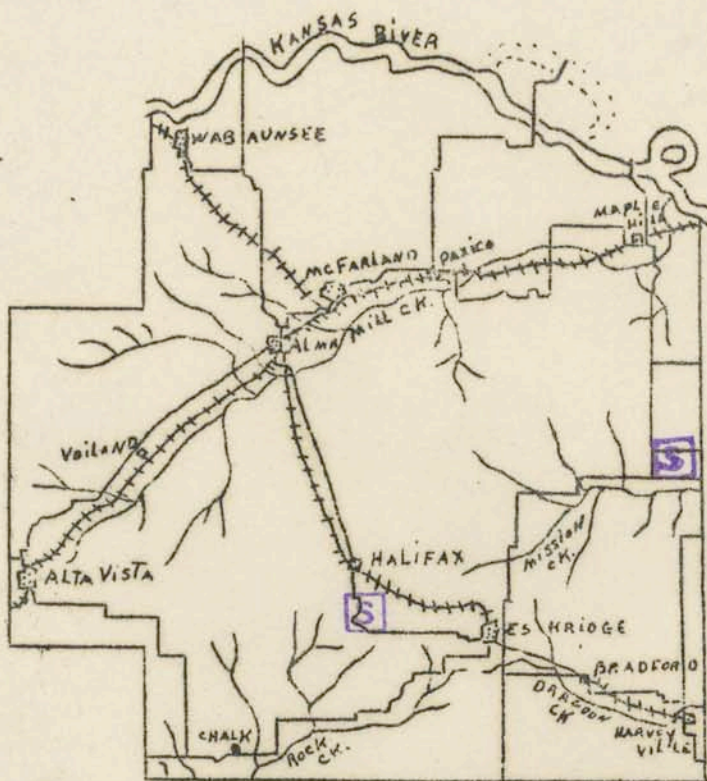
CAMPANULACEAE  
*Campanula americana* L.

WABAUNSEE COUNTY  
 Map No. 427

*Specularia perfoliata* (L.)  
 A. DC.



WABAUNSEE COUNTY  
 Map No. 428

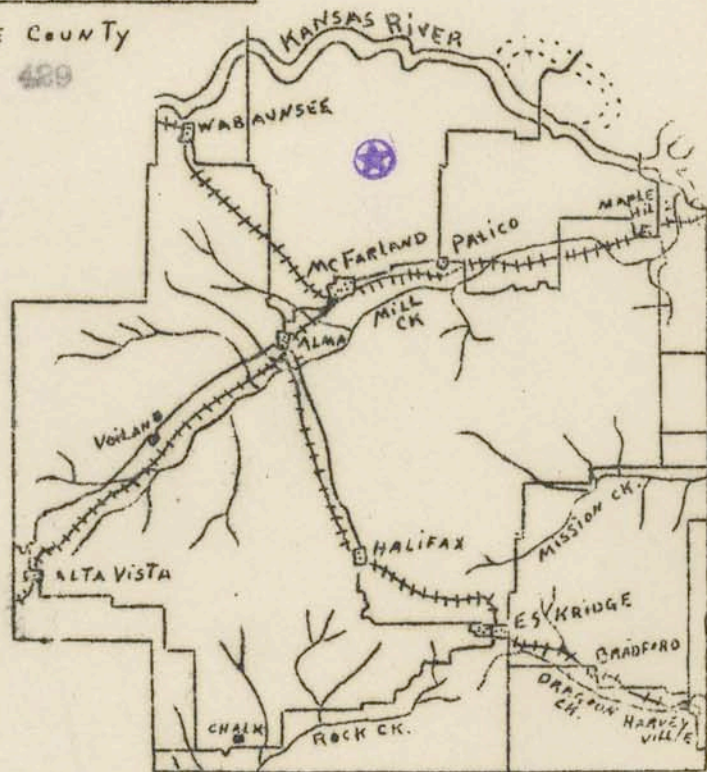


CICHORIACEAE

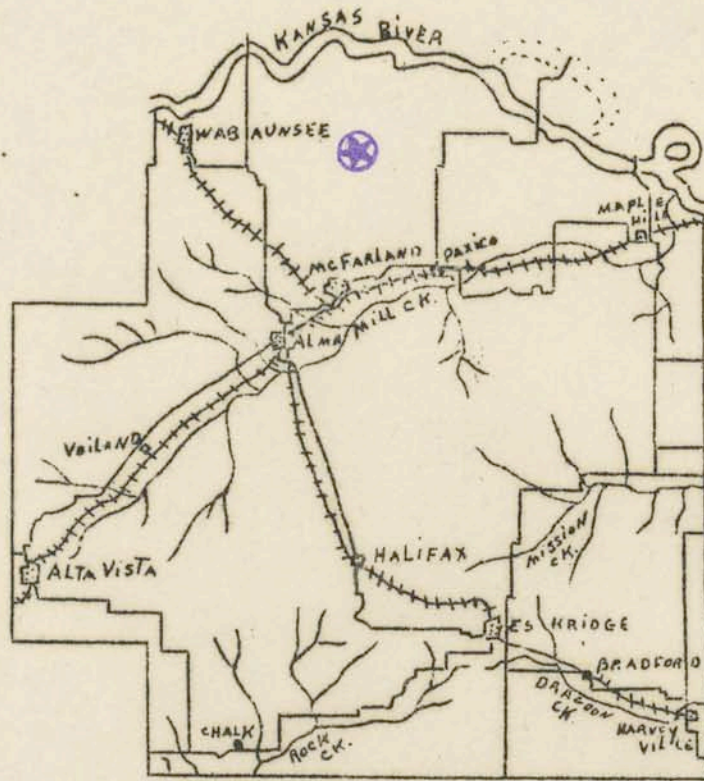
*Lactuca spicata* (Lam) Hitch

WABAUNSEE COUNTY  
Map No. 429

*Sonchus asper* (L.) Hill



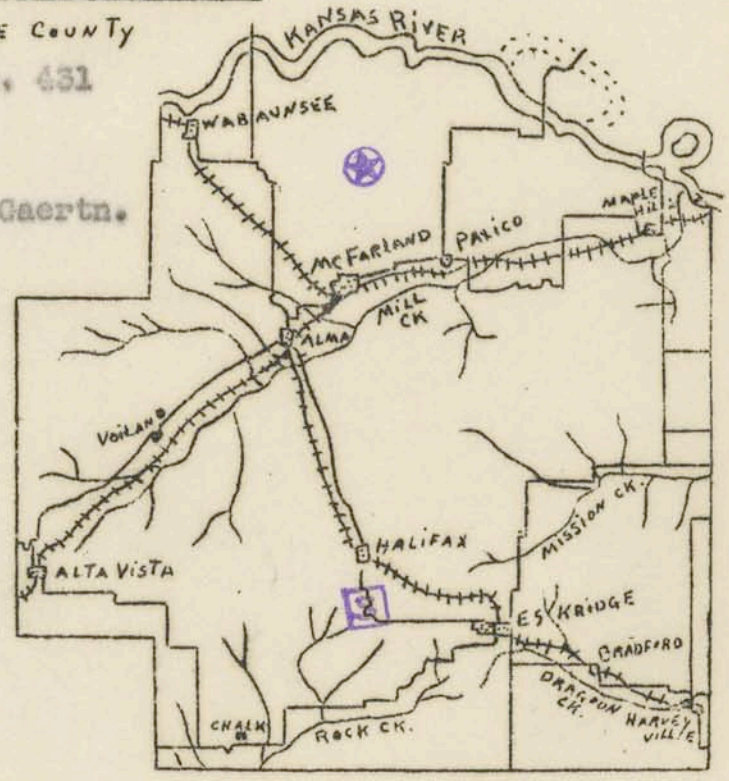
WABAUNSEE COUNTY  
Map No. 430



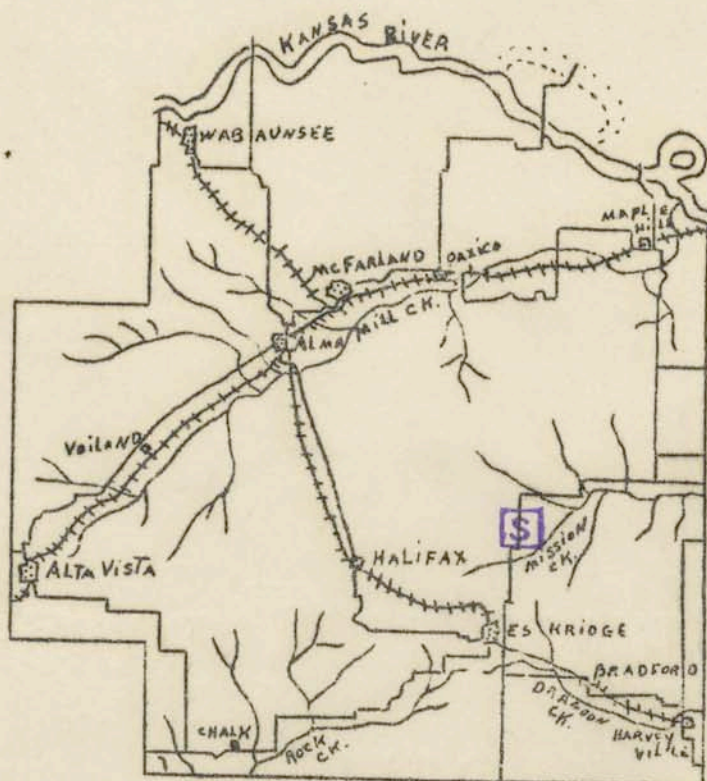
CICHOACEAE  
*Lactuca ludoviciana*  
 (Nutt.) DC.

WABAUNSEE COUNTY  
 Map No. 431

*Lactuca floridana* (L.) Gaertn.



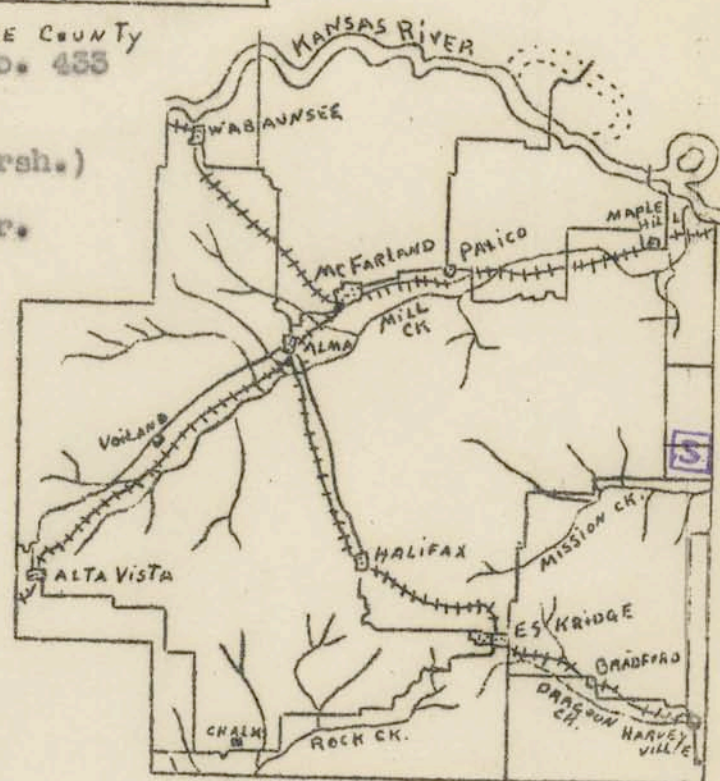
WABAUNSEE COUNTY  
 Map No. 432



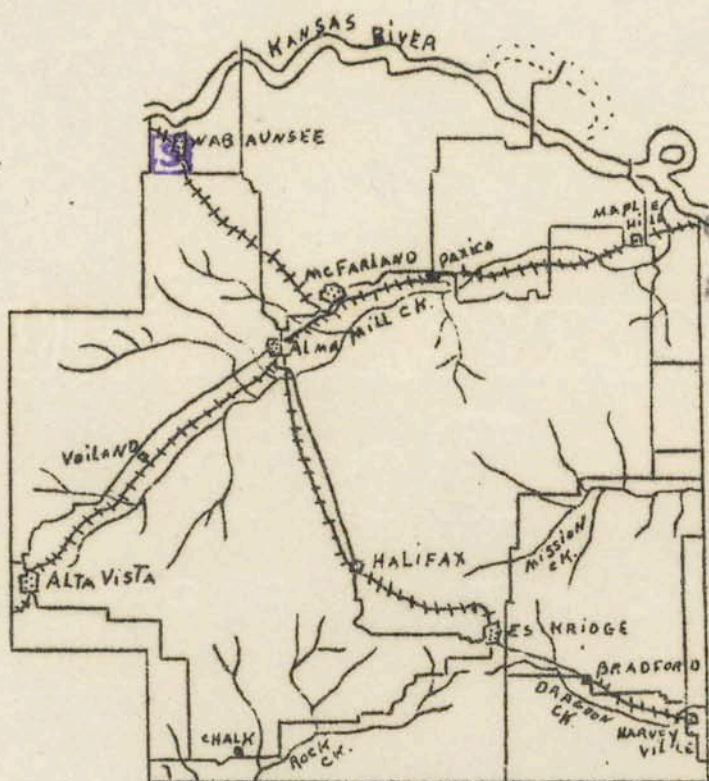
CICHORIACEAE  
*Tragepogon pratensis* L.

WABAUNSEE COUNTY  
 Map No. 433

*Agoseris cuspidata* (Pursh.)  
 D. Dietr.



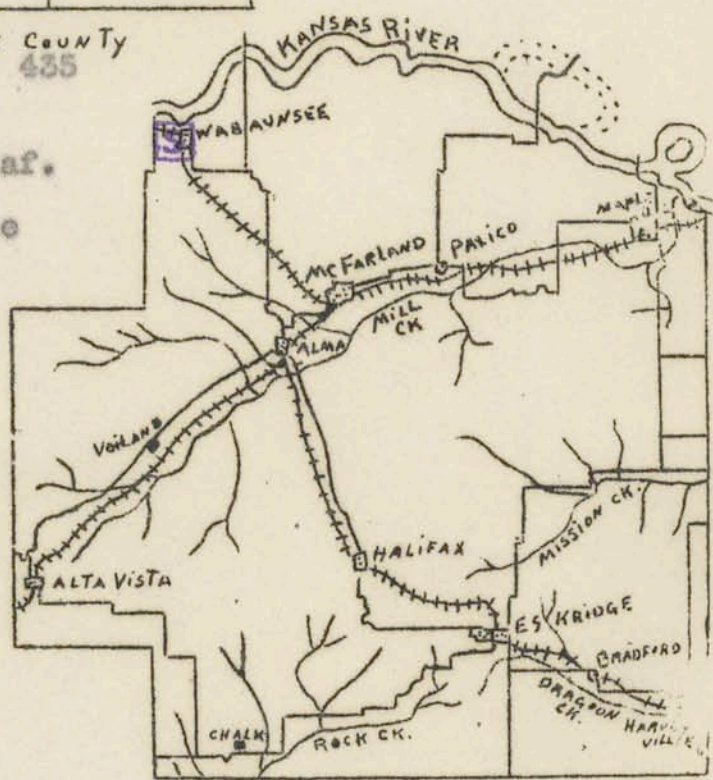
WABAUNSEE COUNTY  
 Map No. 434



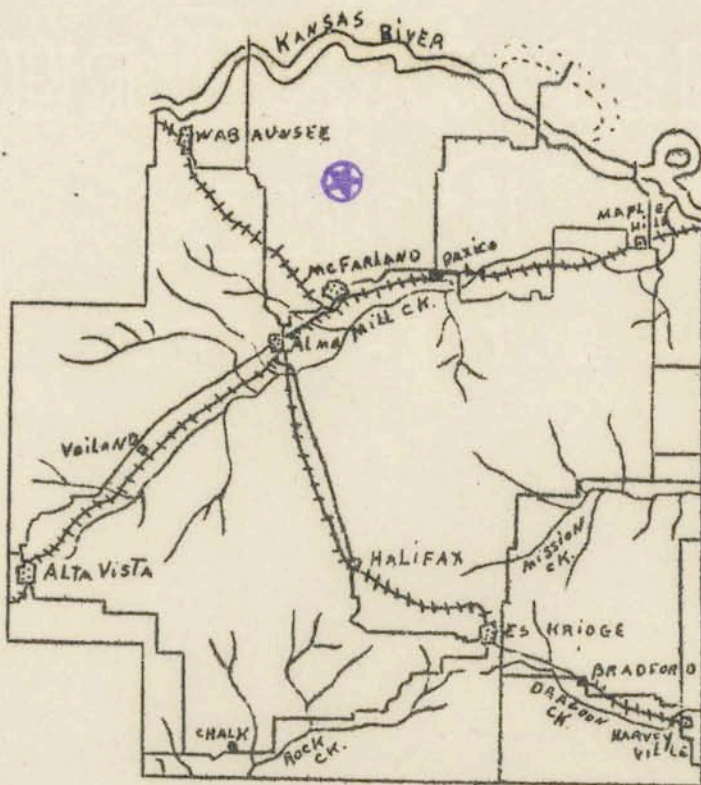
CICHORIACEAE  
*Senecio plattensis* Nutt.

WABAUNSEE COUNTY  
 Map No. 435

*Serinia oppositifolia* Raf.  
 Kuntze



WABAUNSEE COUNTY  
 Map No. 436



COMPOSITAE

*Ridgway alternifolius*

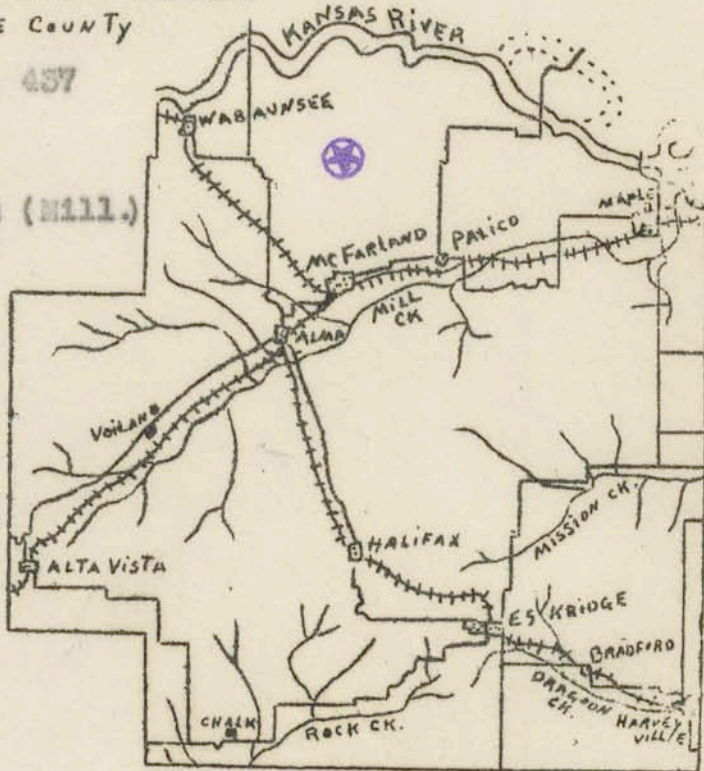
(L.) Britton

WABAUNSEE COUNTY

Map No. 437

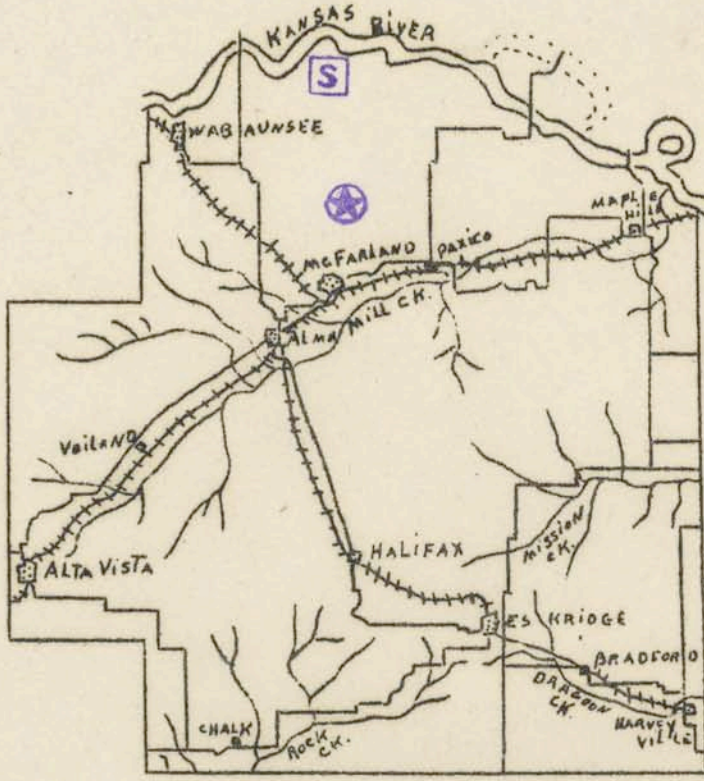
*Xanthium pennsylvanicum* (Mill.)

Wallr.



WABAUNSEE COUNTY

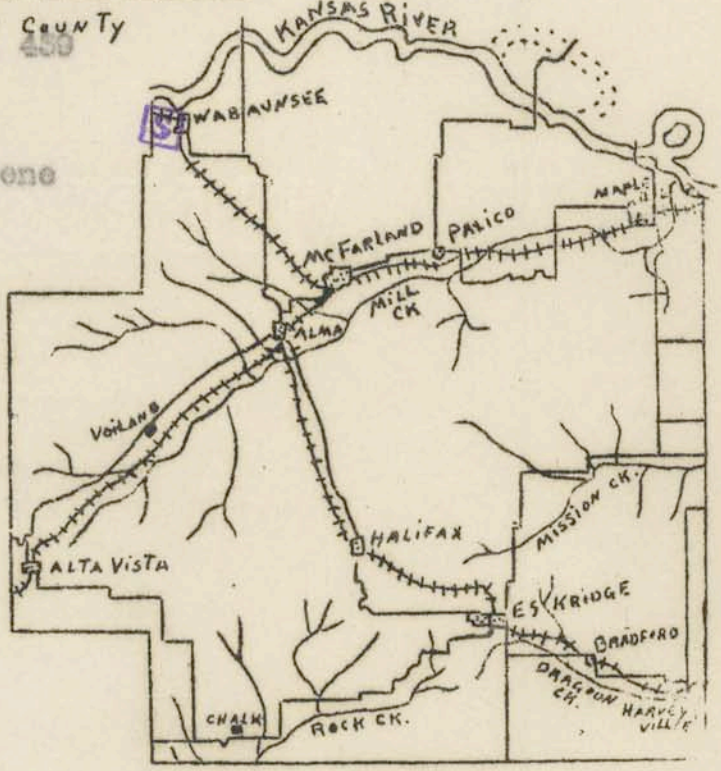
Map No. 438



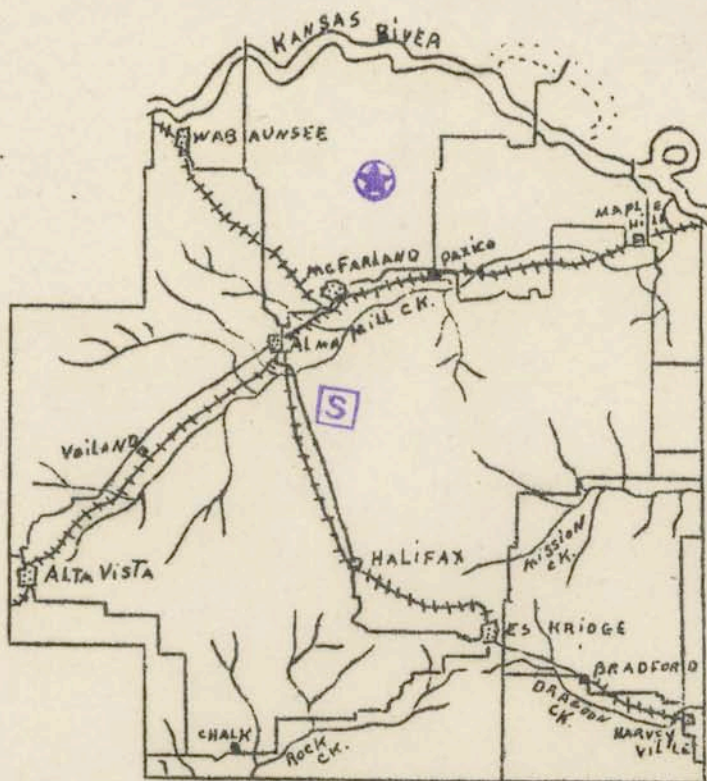
COMPOSITAE  
*Antennaria campestris*  
 Rydb.

WABAUNSEE COUNTY  
 Map No. 439

*Antennaria neglecta* Greene



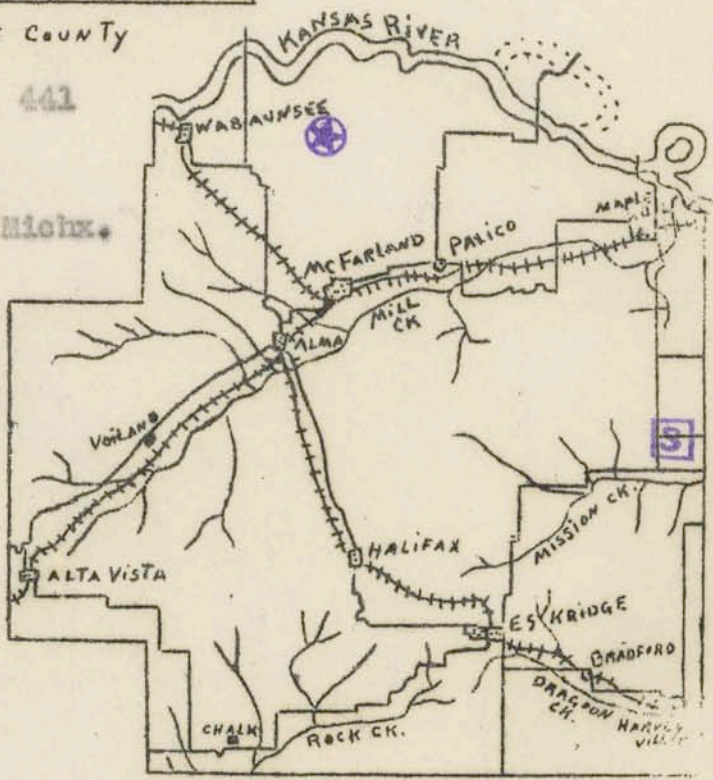
WABAUNSEE COUNTY  
 Map No. 440



COMPOSITAE  
*Silphium laciniatum* L.

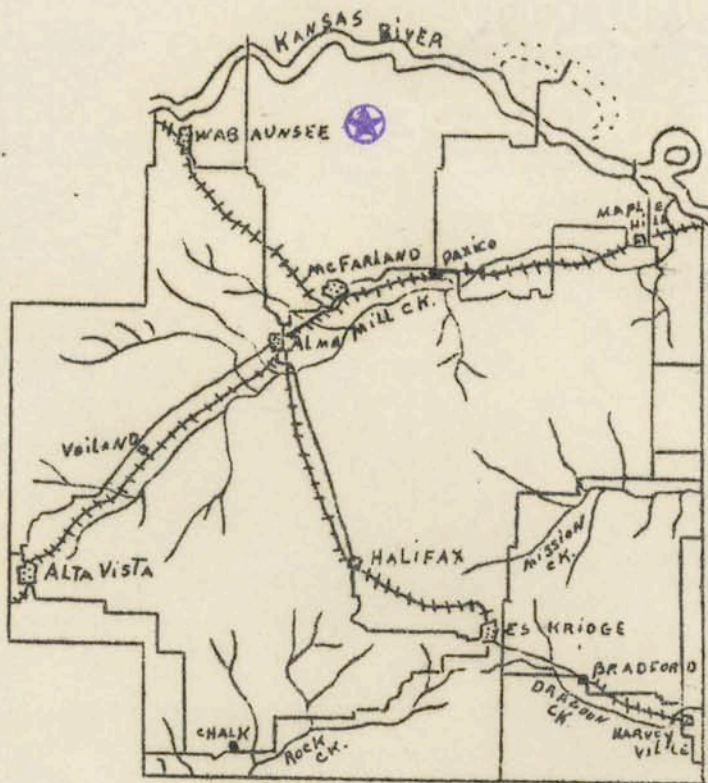
WABAUNSEE COUNTY  
 Map No. 441

*Silphium integrifolium* Michx.



WABAUNSEE COUNTY  
 Map No. 442

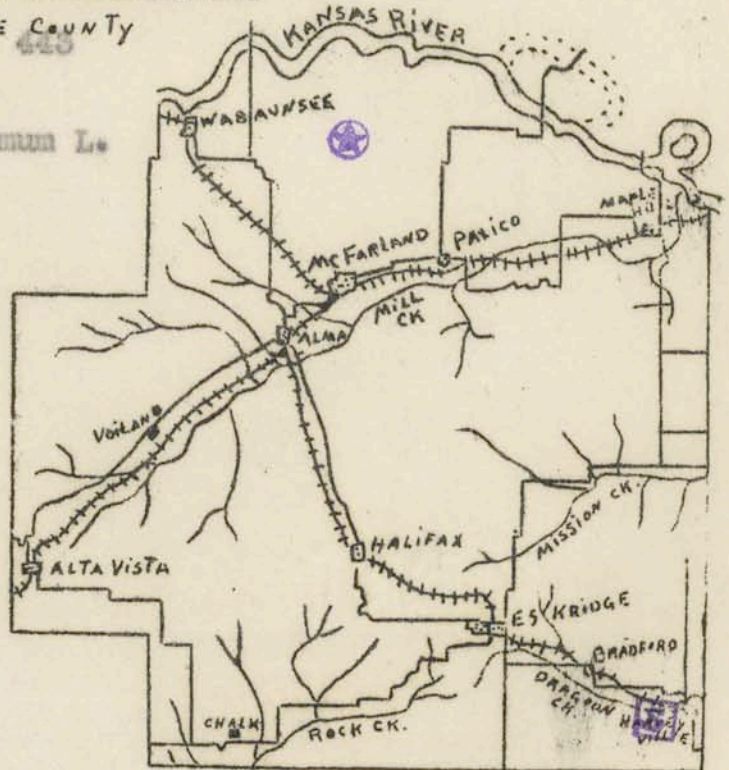




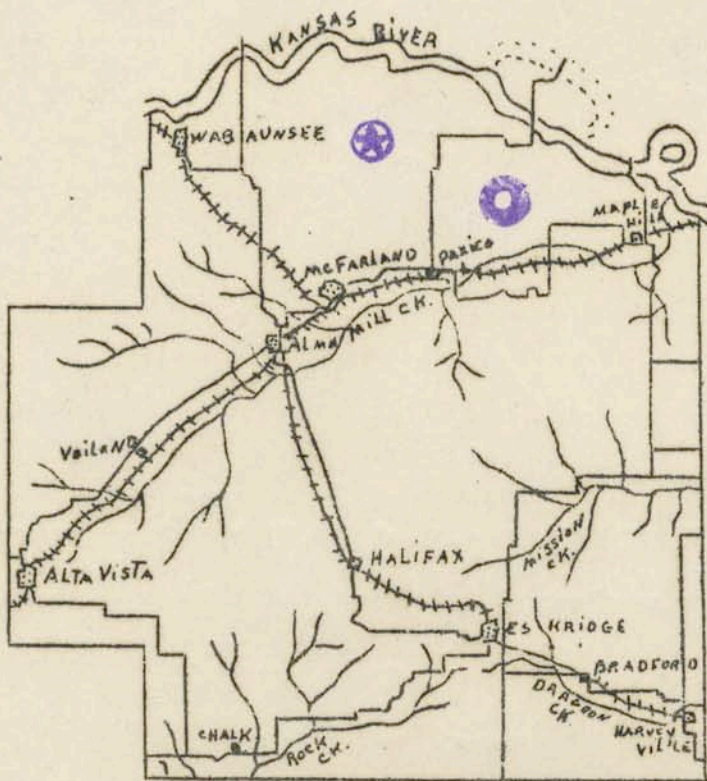
COMPOSITAE  
*Grindelia squarrosa*  
 (Pursh) Dunal.

WABAUNSEE COUNTY  
 Map No. 443

*Chrysanthemum leucanthemum* L.



WABAUNSEE COUNTY  
 Map No. 444

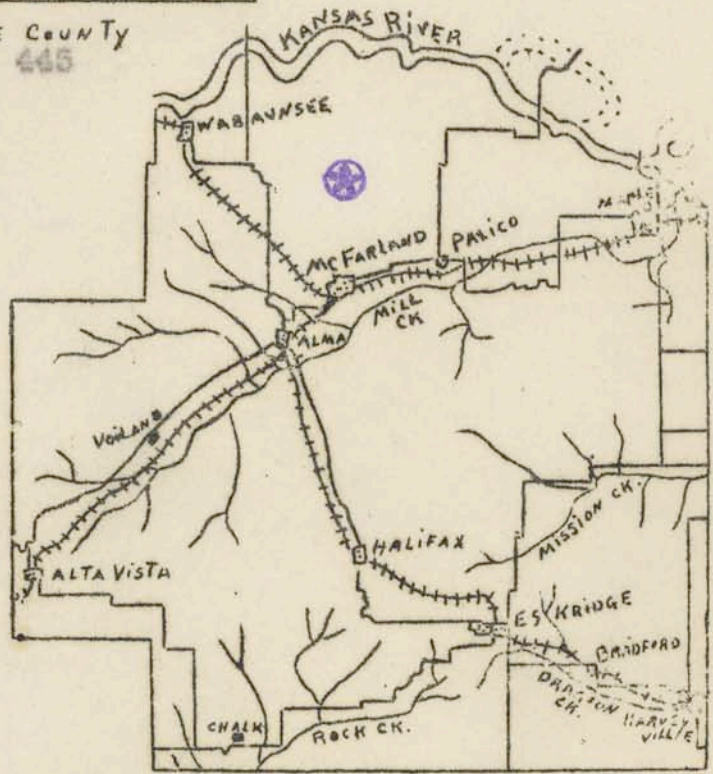


COMPOSITAE

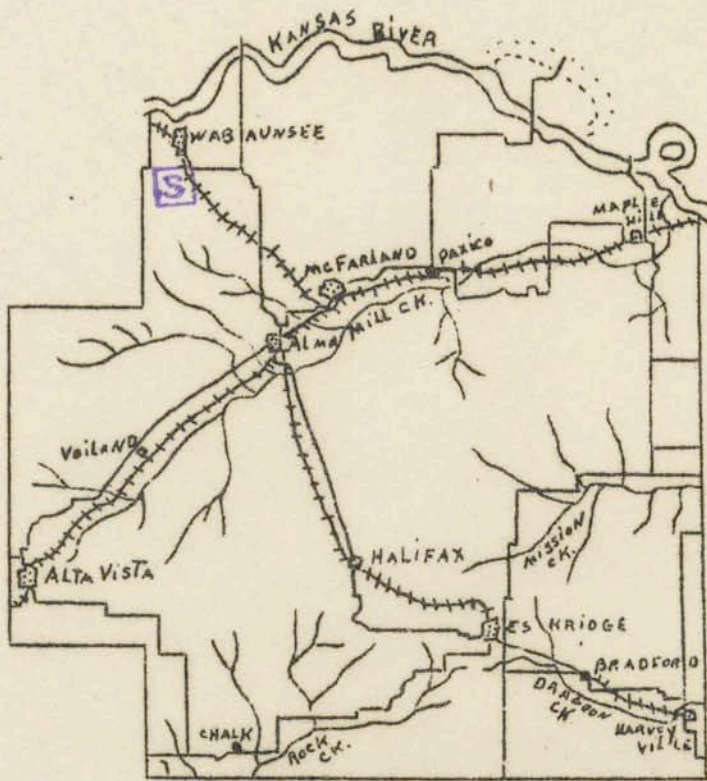
*Leontodon taraxacum* L.

WABAUNSEE COUNTY  
Map No. 445

*Heliopsis scabra* Dunal.

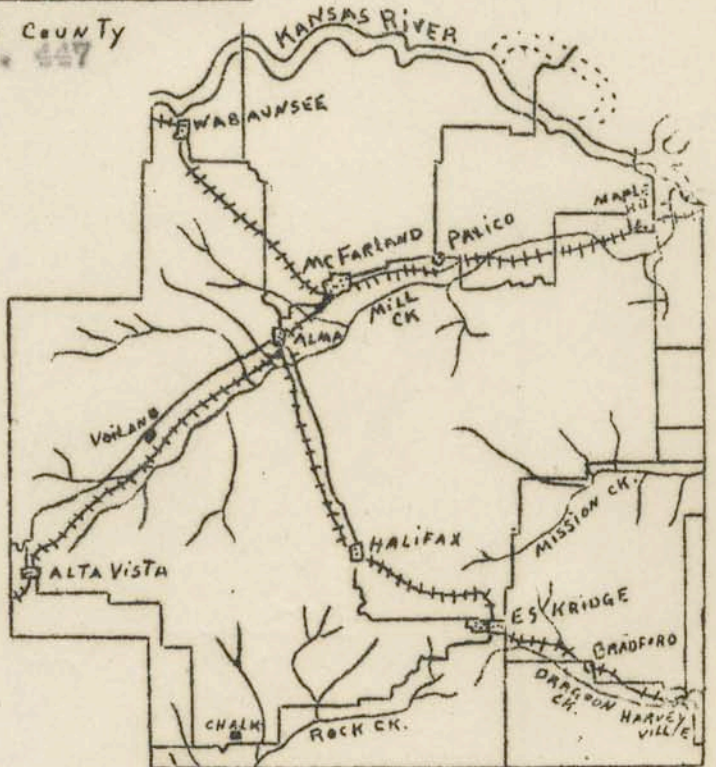


WABAUNSEE COUNTY  
Map No. 446

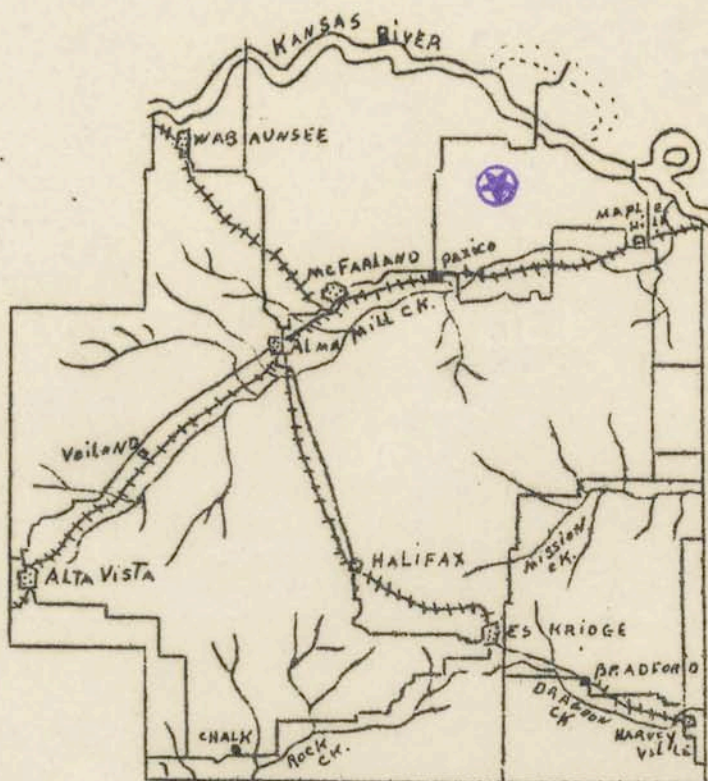


COMPOSITAE  
*Artemisia kansana*  
 Britton

WABAUNSEE COUNTY  
 Map No. 447



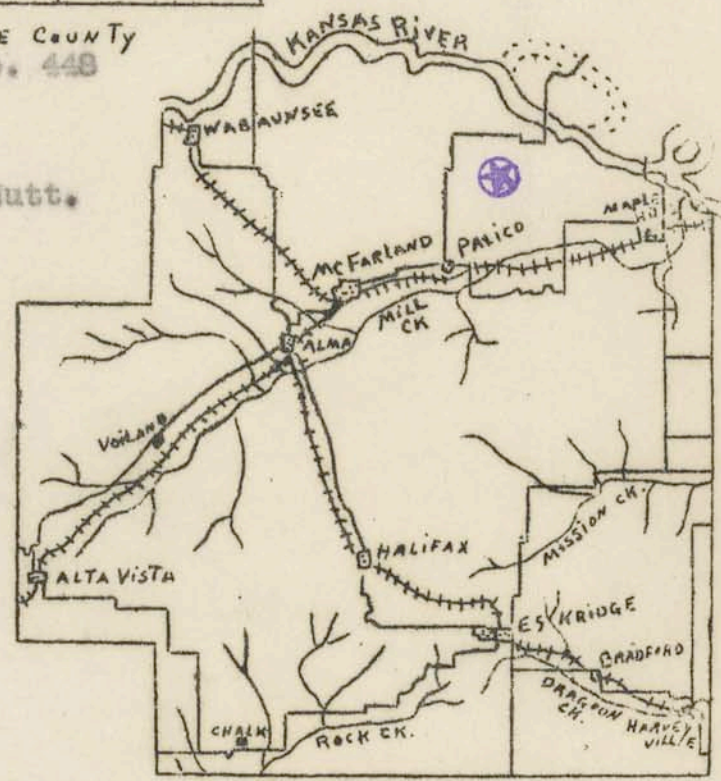
WABAUNSEE COUNTY



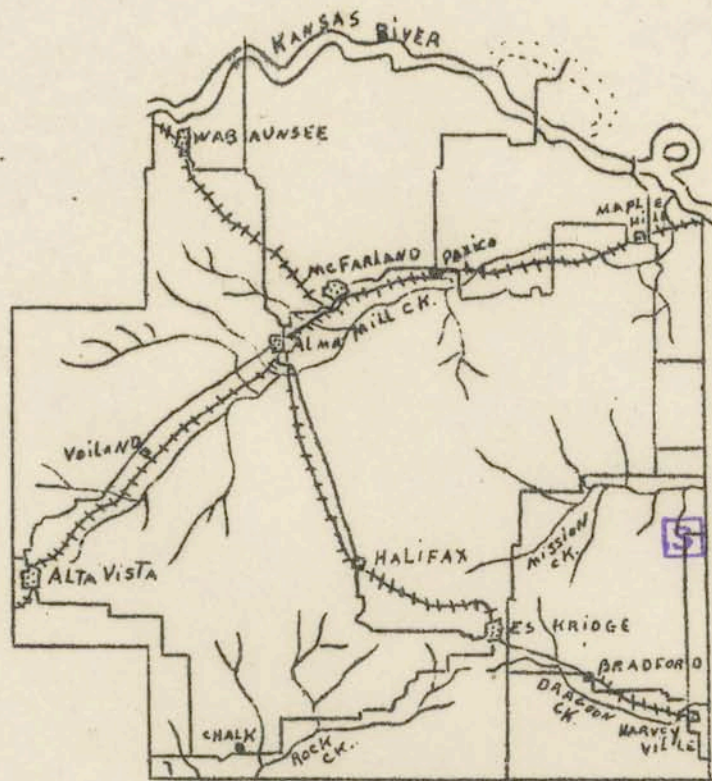
COMPOSITAE  
*Artemisia dracunculoides* Pursh.

WABAUNSEE COUNTY  
 Map No. 448

*Artemisia gnaphalodes* Nutt.



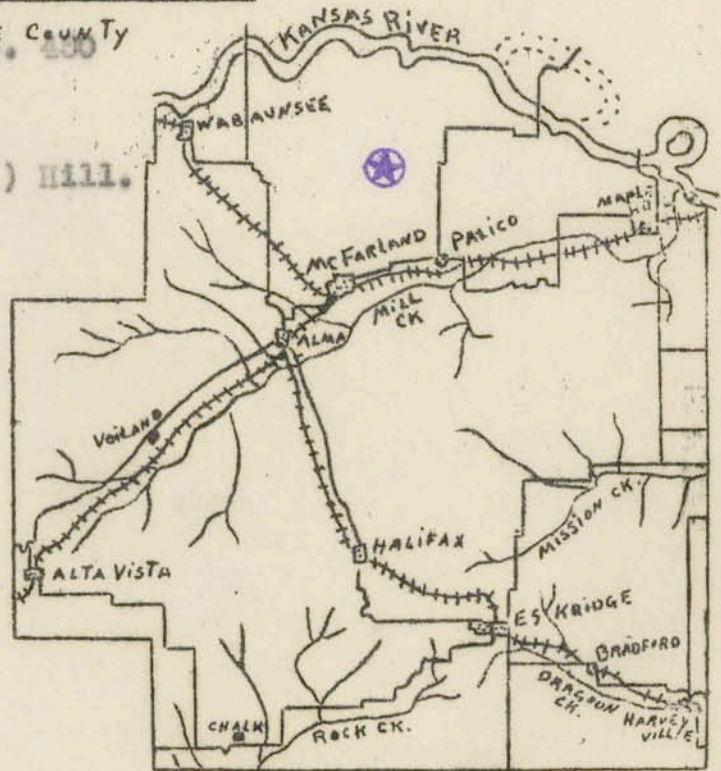
WABAUNSEE COUNTY  
 Map No. 449



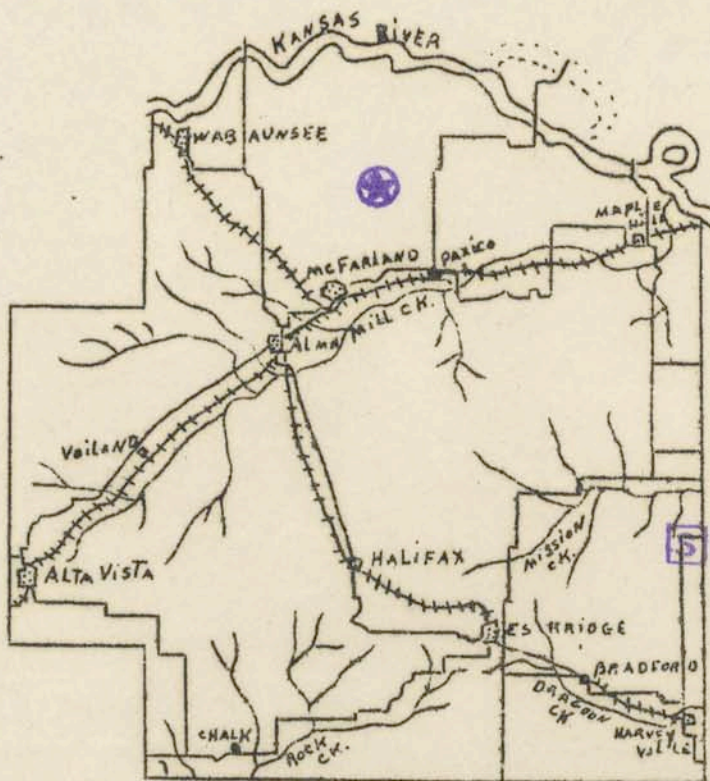
COMPOSITAE  
*Artemisia ludoviciana*  
 Nutt.

WABAUNSEE COUNTY  
 Map No. 450

*Cirsium lanceolatum* (L.) Hill.



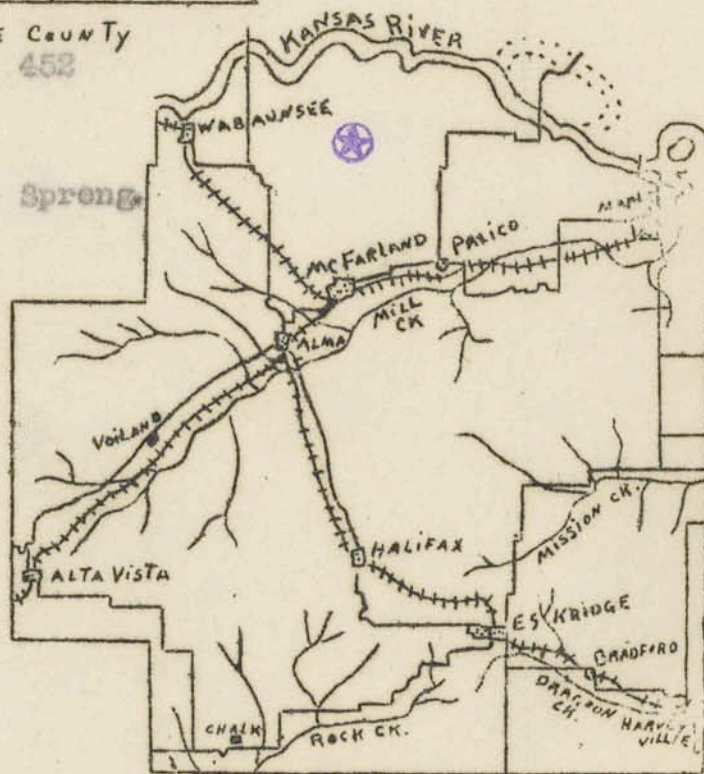
WABAUNSEE COUNTY  
 Map No. 451



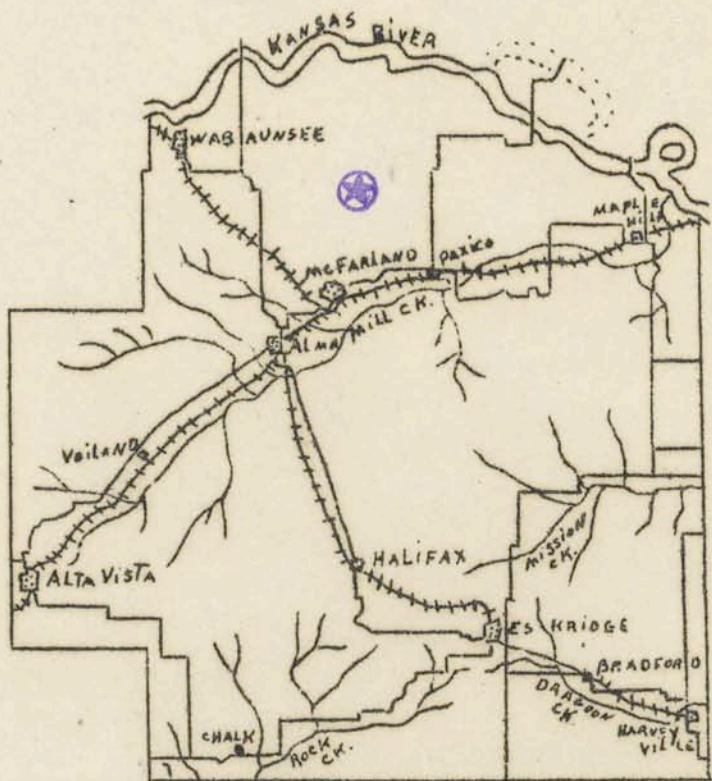
COMPOSITAE  
*Cirsium undulatum* (Nutt.)  
 Spreng.

WABAUNSEE COUNTY  
 Map No. 452

*Cirsium altissimum* (L.) Spreng.



WABAUNSEE COUNTY  
 Map No. 453

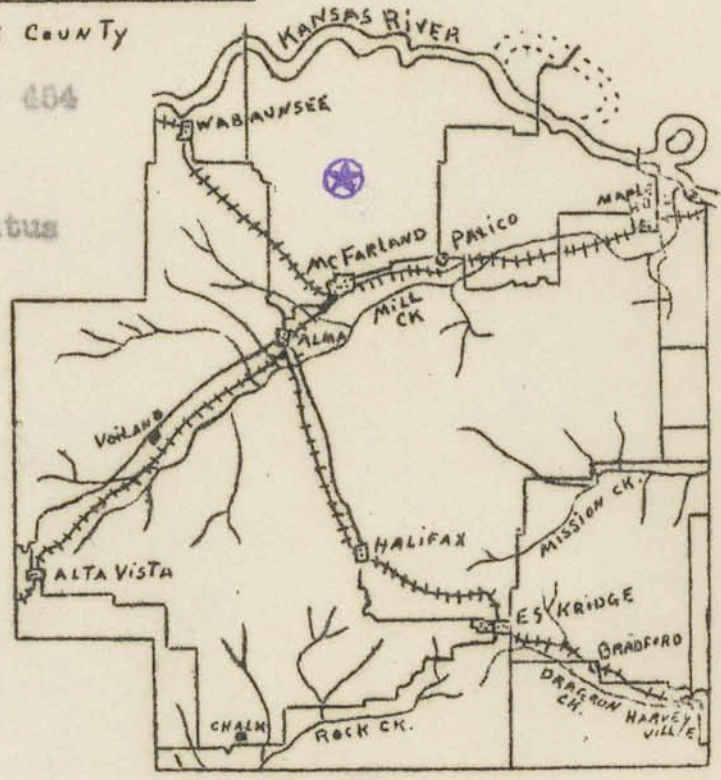


COMPOSITAE  
*Helianthus annuus L.*

WABAUNSEE COUNTY

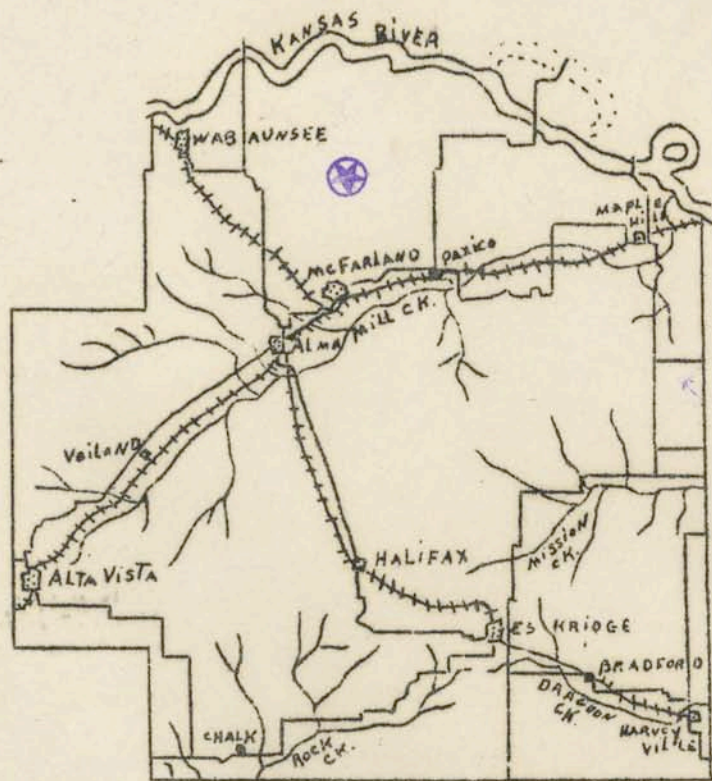
Map No. 454

*Helianthus grosse-serratus*  
 Martens.



WABAUNSEE COUNTY

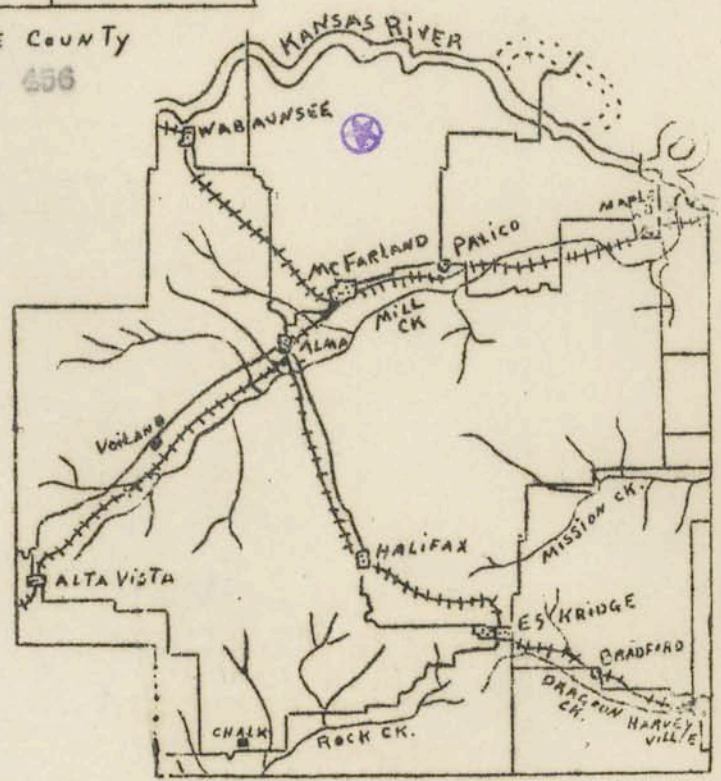
Map No. 455



COMPOSITAE  
*Helianthus maximiliani*  
 Schrad.

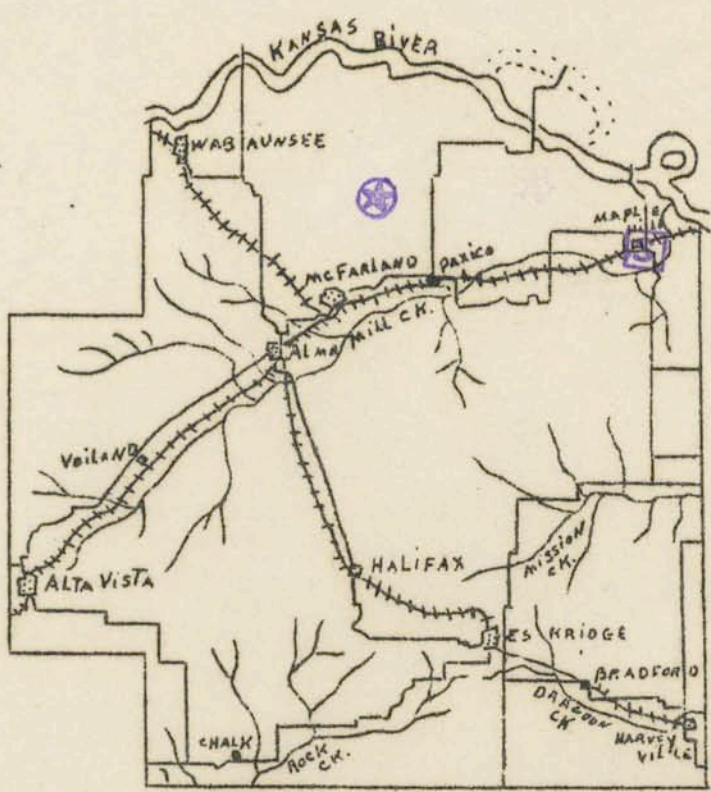
WABAUNSEE COUNTY  
 Map No. 456

*Helianthus orgyalis* DC.



WABAUNSEE COUNTY  
 Map No. 457

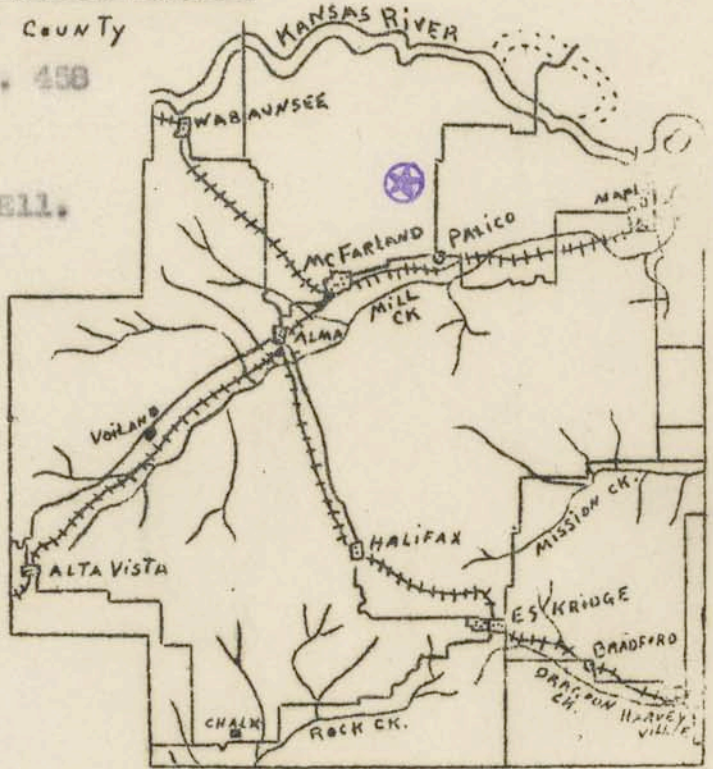




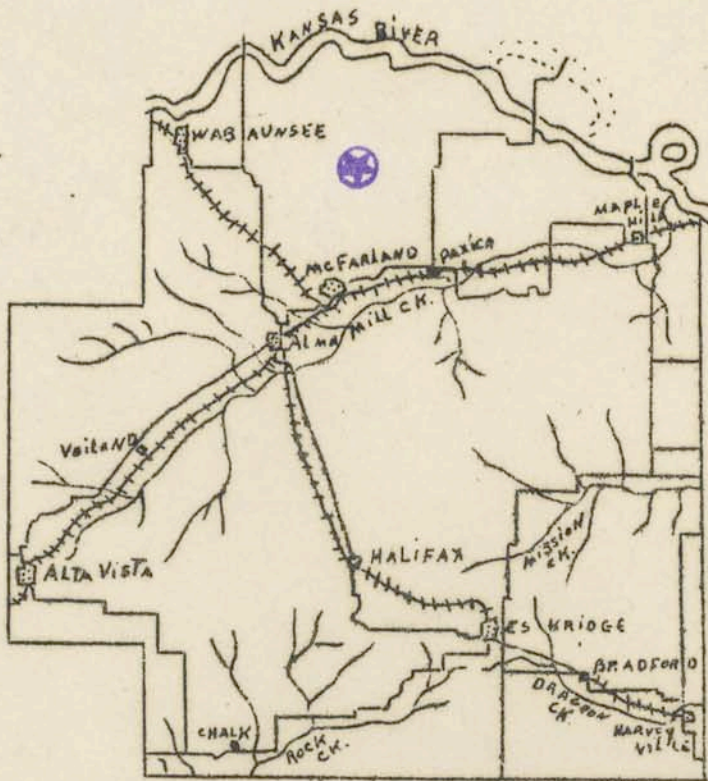
COMPOSITAE  
*Helianthus petiolaris*  
 Nutt.

WABAUNSEE COUNTY  
 Map No. 458

*Helianthus scaberrimus* Ell.



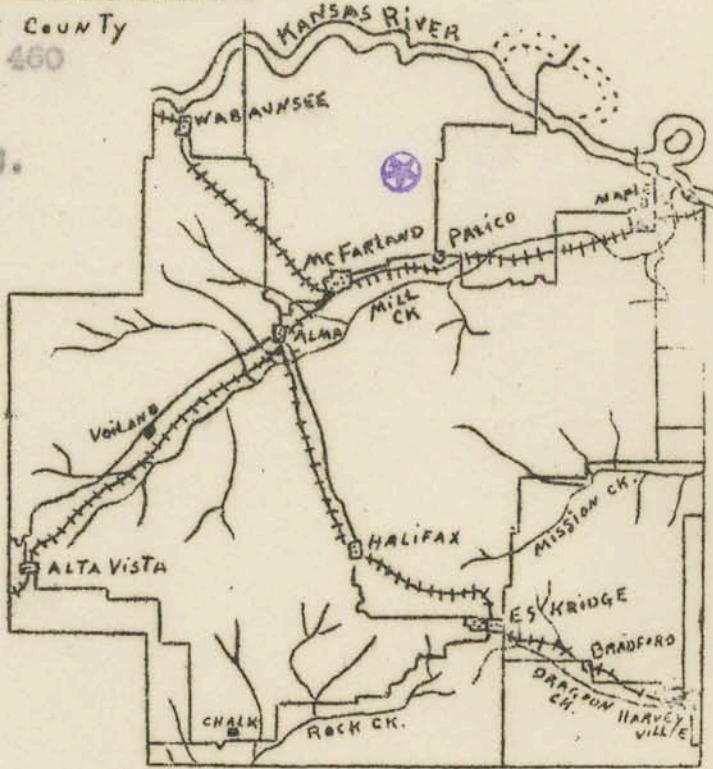
WABAUNSEE COUNTY  
 Map No. 459



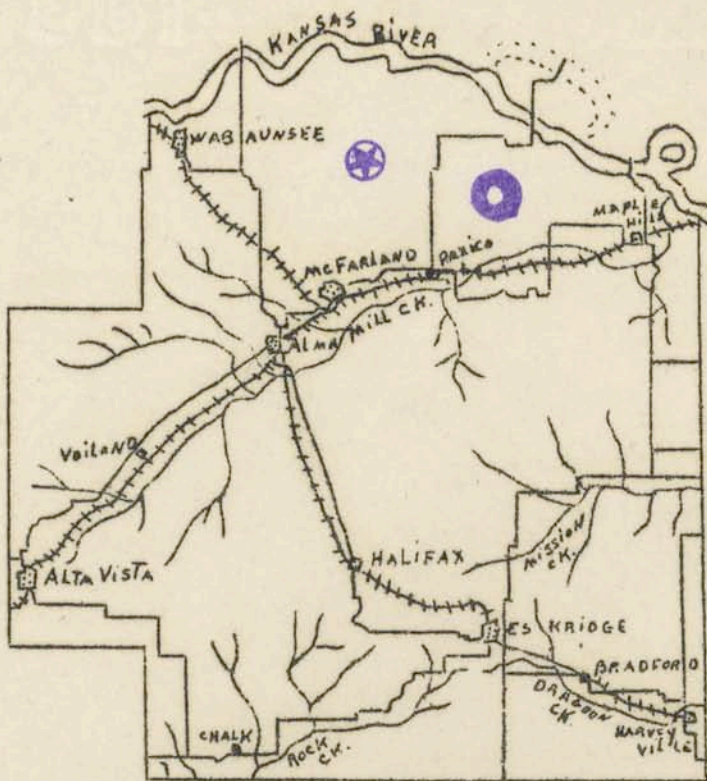
COMPOSITAE  
*Ambrosia elatior* L.

WABAUNSEE COUNTY  
 Map No. 460

*Ambrosia psilostachya* DC.



WABAUNSEE COUNTY  
 Map No. 461



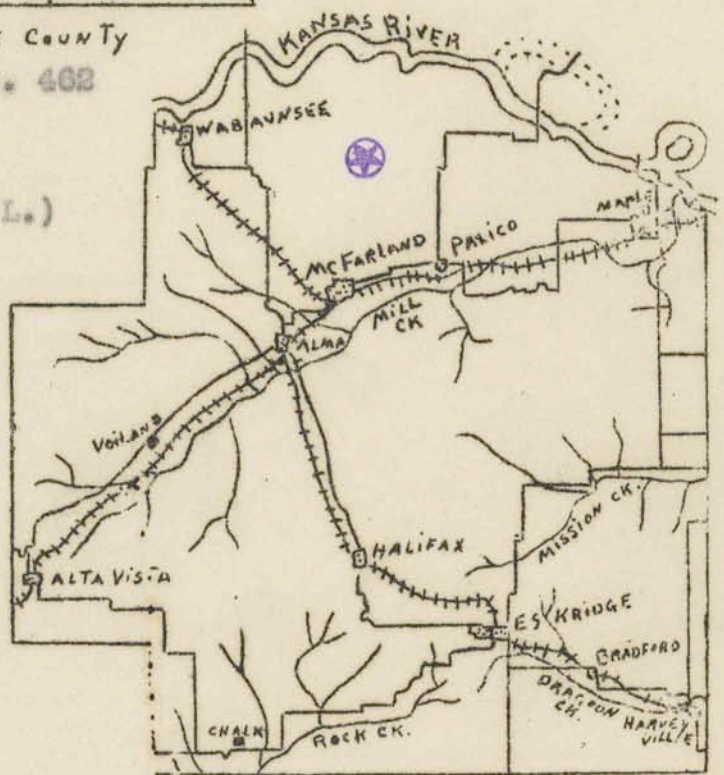
COMPOSITAE

*Ambrosia trifida* L.

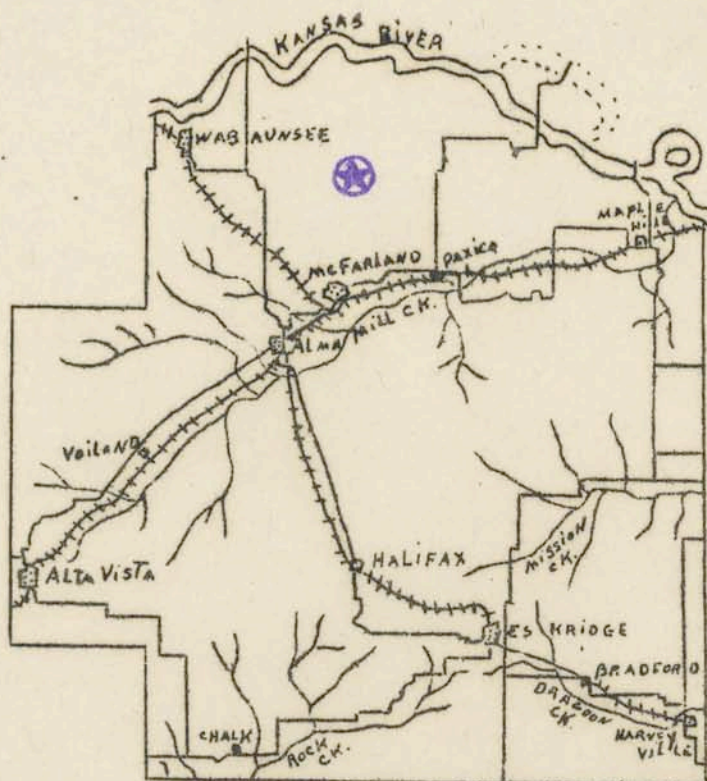
WABAUNSEE COUNTY  
Map No. 462

*Euthamia graminifolia* (L.)

Nutt.



WABAUNSEE COUNTY  
Map No. 463

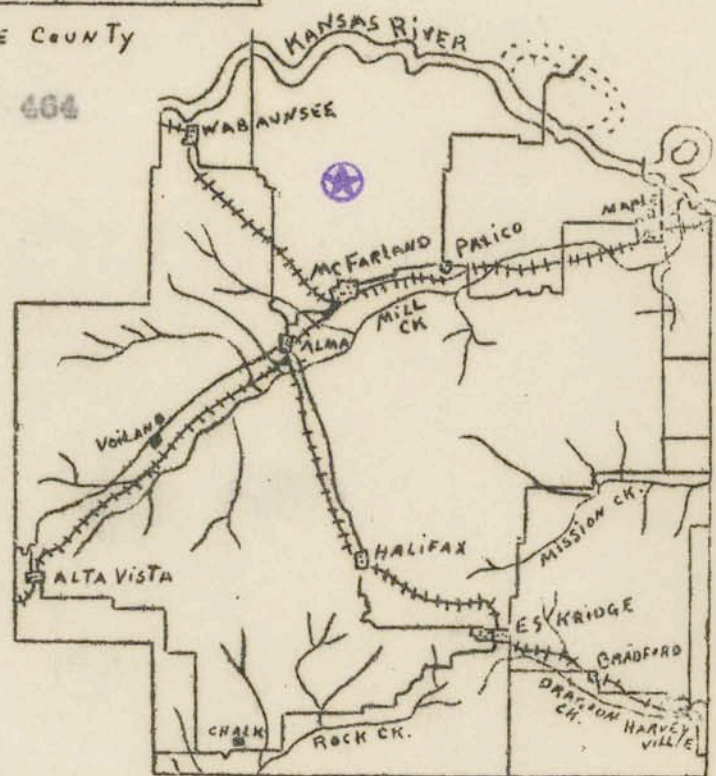


COMPOSITAE

*Aster laevis* L.

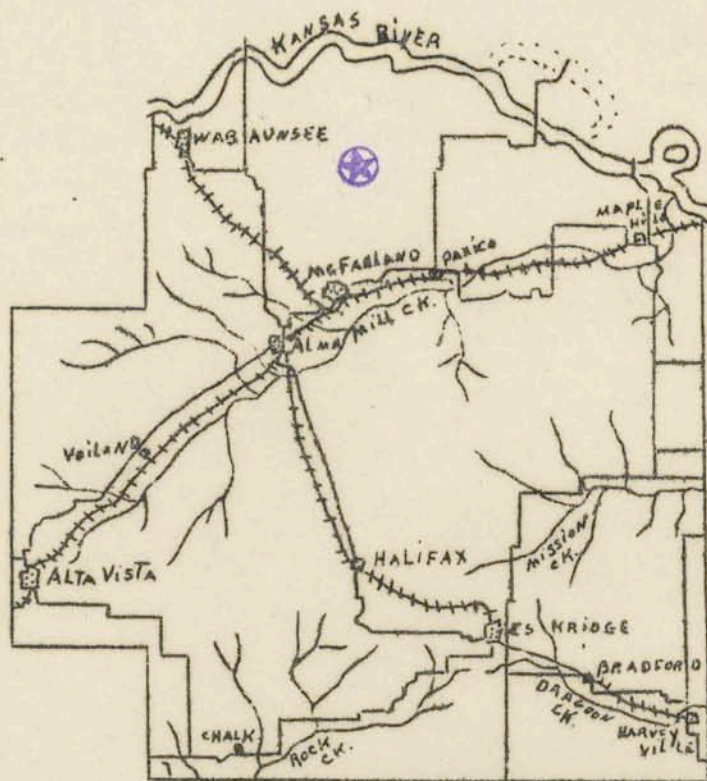
WABAUNSEE COUNTY

Map No. 464

*Aster multiflorus* Ait.

WABAUNSEE COUNTY

Map No. 465

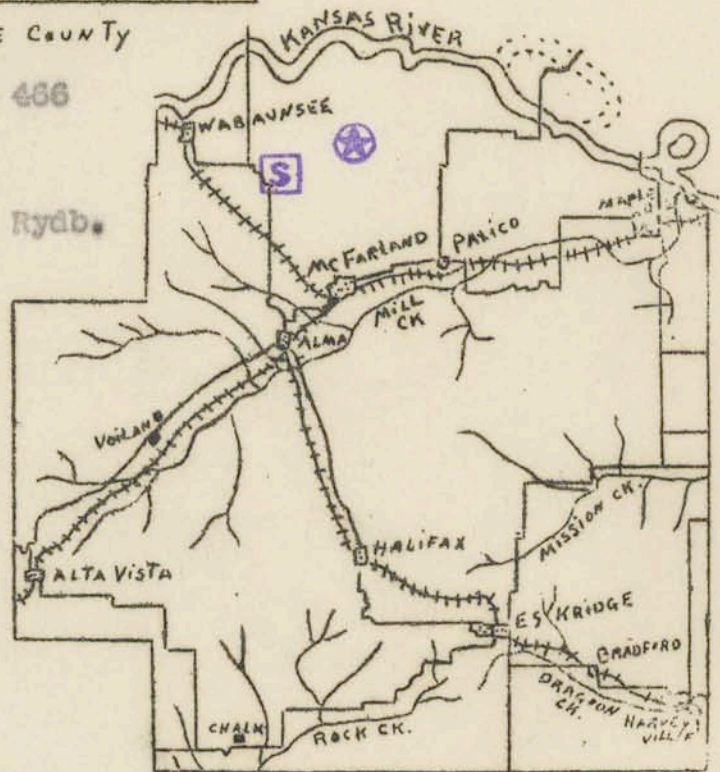


COMPOSITAE  
*Arctium minus* Bernh.

WABAUNSEE COUNTY

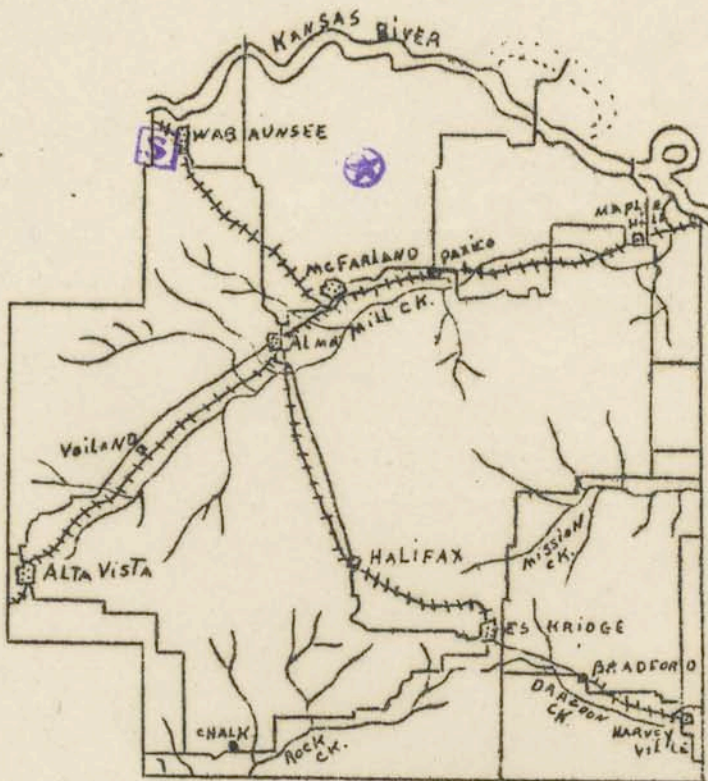
Map No. 466

*Boebera papposa* (Vent.) Rydb.



WABAUNSEE COUNTY

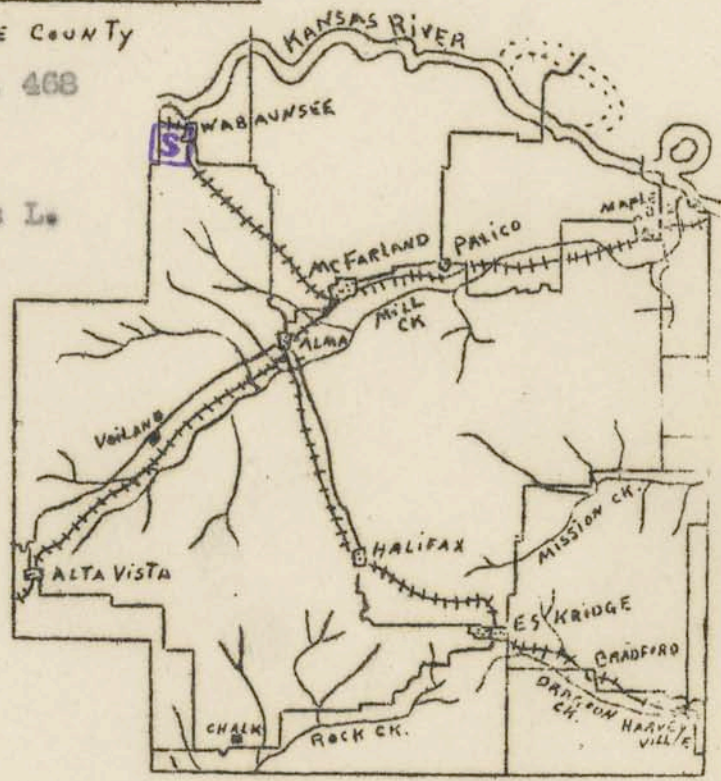
Map No. 467



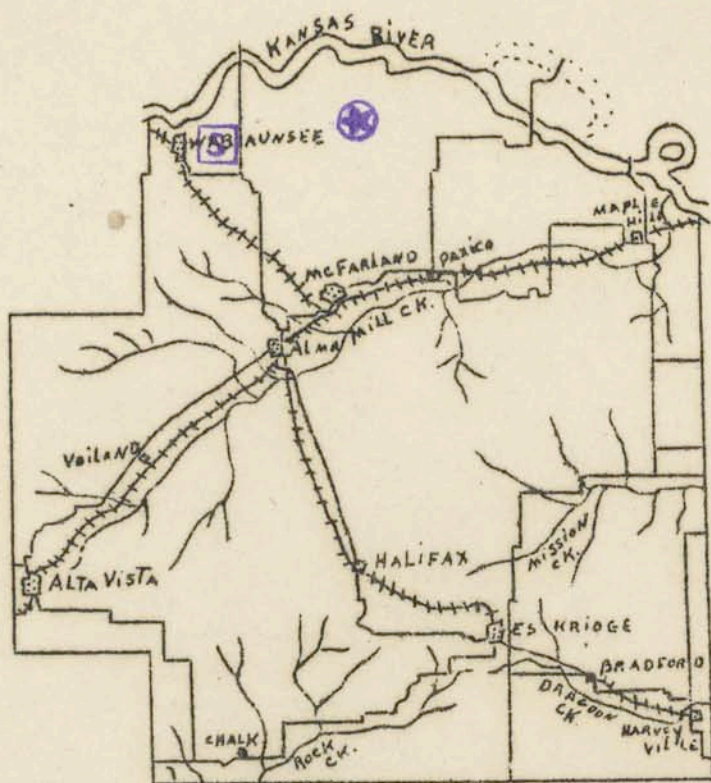
COMPOSITAE  
*Achillea millefolium*  
 L.

WABAUNSEE COUNTY  
 Map No. 468

*Erigeron philadelphicus* L.



WABAUNSEE COUNTY  
 Map No. 469

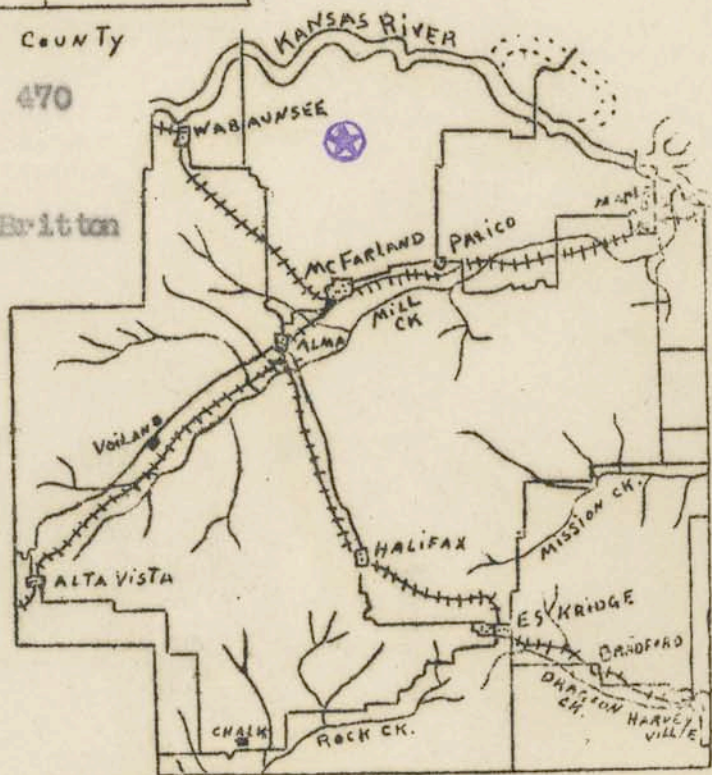


COMPOSITAE  
*Erigeron ramosus*  
 (Walt.) BSP.

WABAUNSEE COUNTY

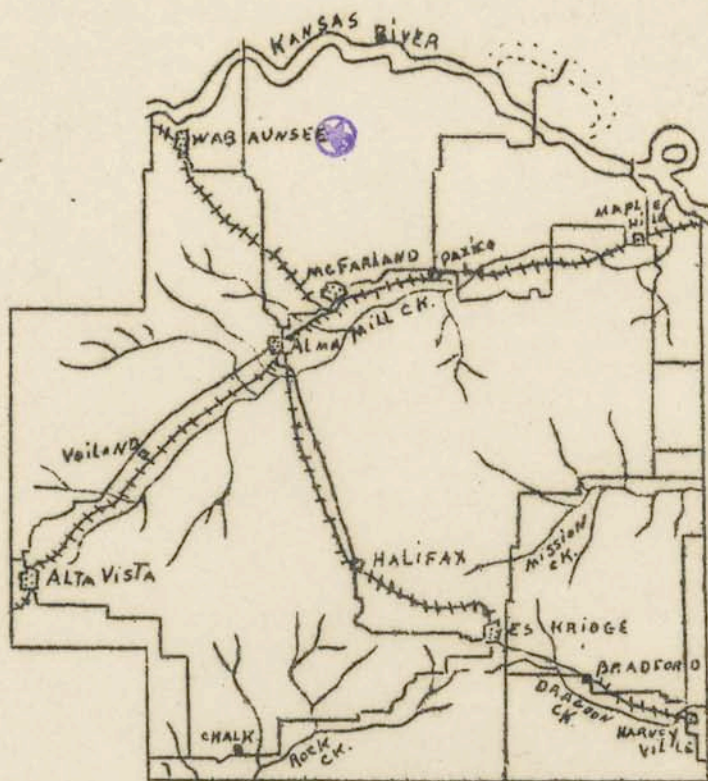
Map No. 470

*Leptilon canadense* (L.) Britton



WABAUNSEE COUNTY

Map No. 471



COMPOSITAE

*Eupatorium altissimum*

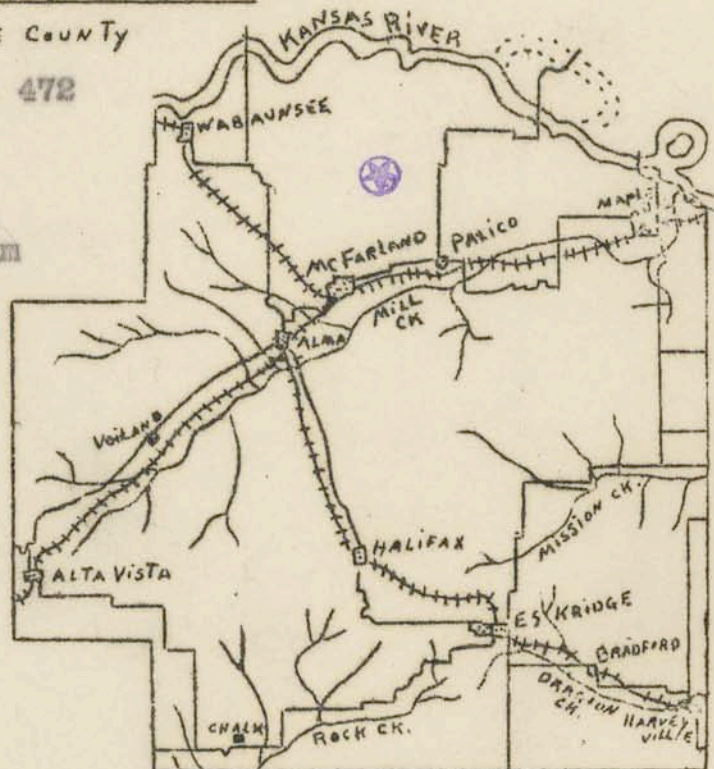
L.

WABAUNSEE COUNTY

Map No. 472

*Eupatorium urticaefolium*

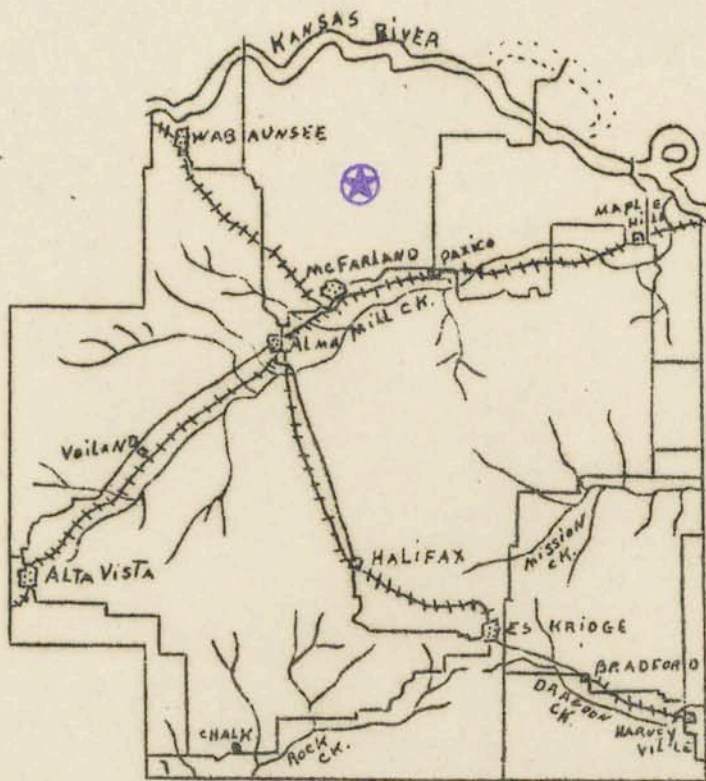
Reichard



WABAUNSEE COUNTY

Map No. 473

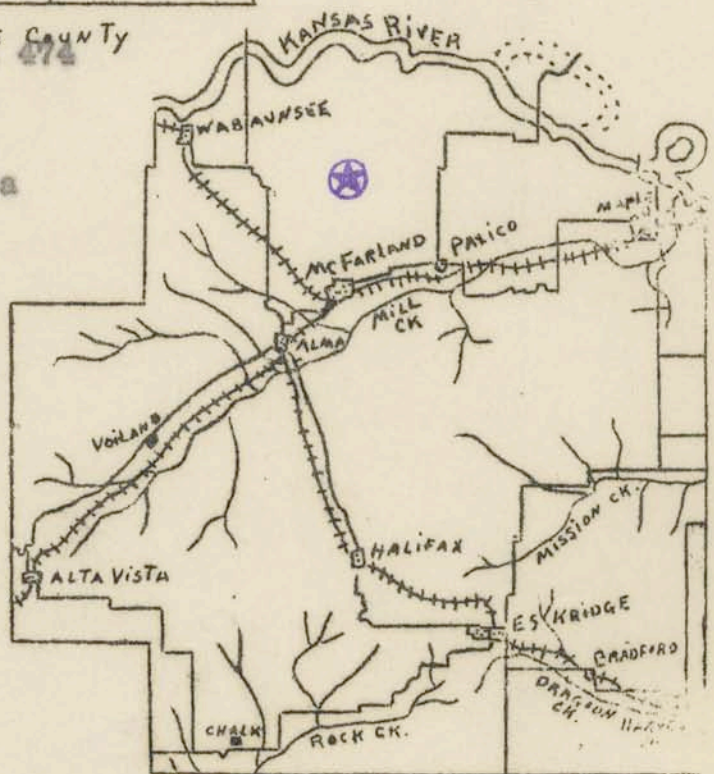




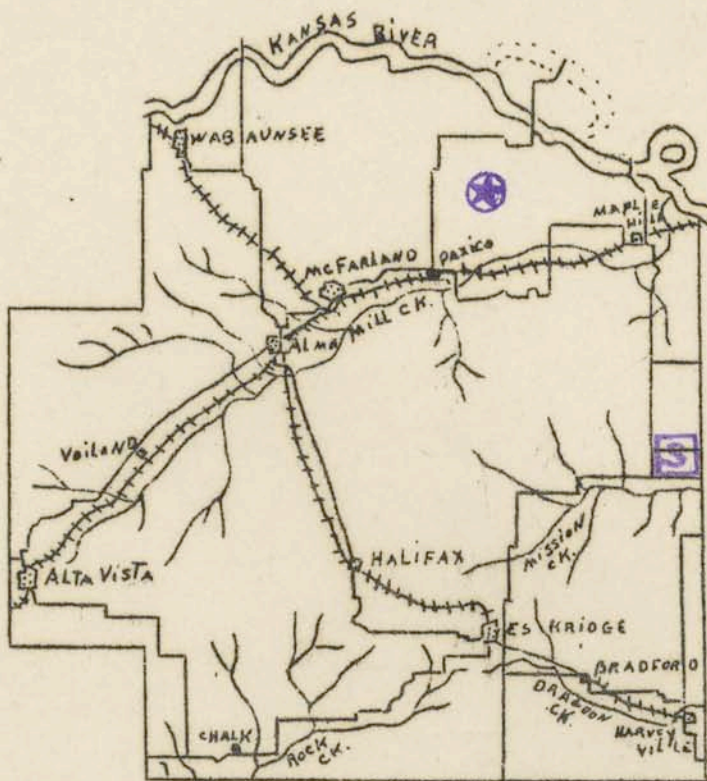
COMPOSITAE  
*Liatris punctata*  
 (Hook) Kuntze

WABAUNSEE COUNTY  
 Map No. 474

*Liatris var. squarrulosa*  
 Michx.



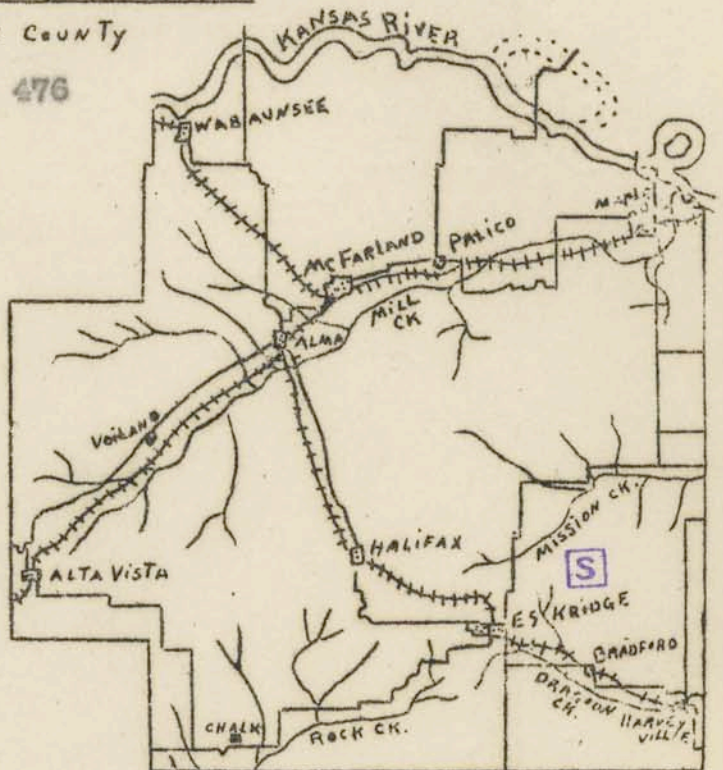
WABAUNSEE COUNTY  
 Map No. 475



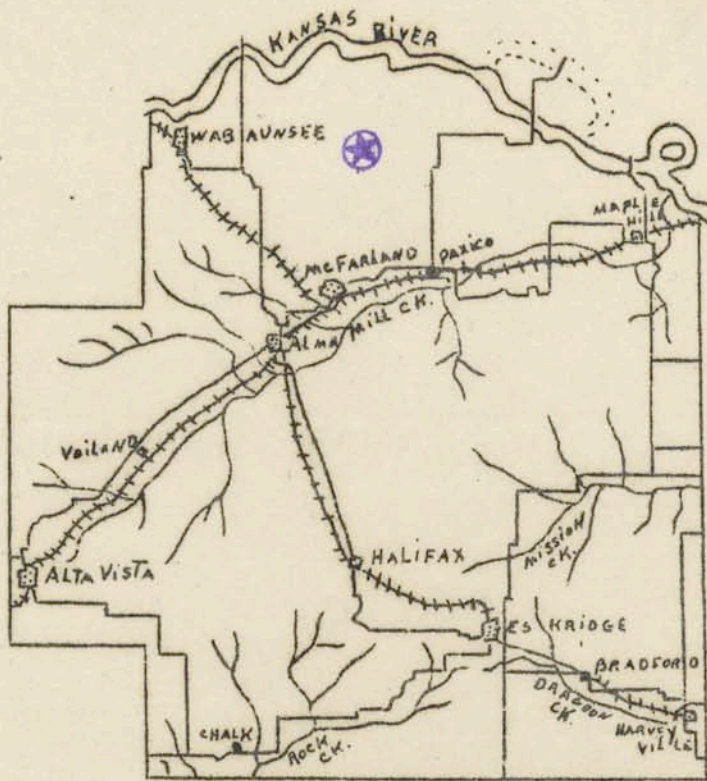
COMPOSITAE  
*Brauneria pallida*  
 (Nutt.) Britton

WABAUNSEE COUNTY  
 Map No. 476

*Brauneria purpurea* (L.)  
 Moench.



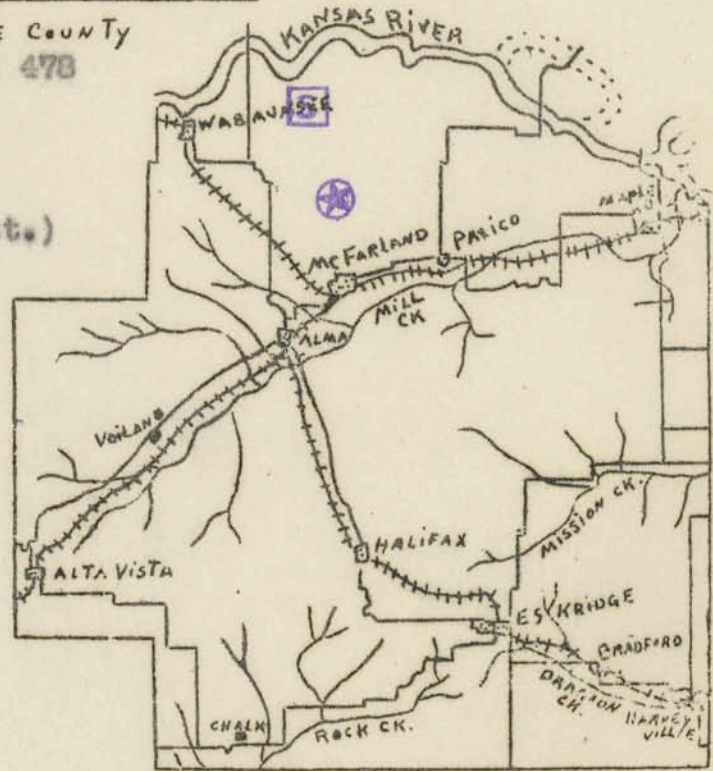
WABAUNSEE COUNTY  
 Map No. 477



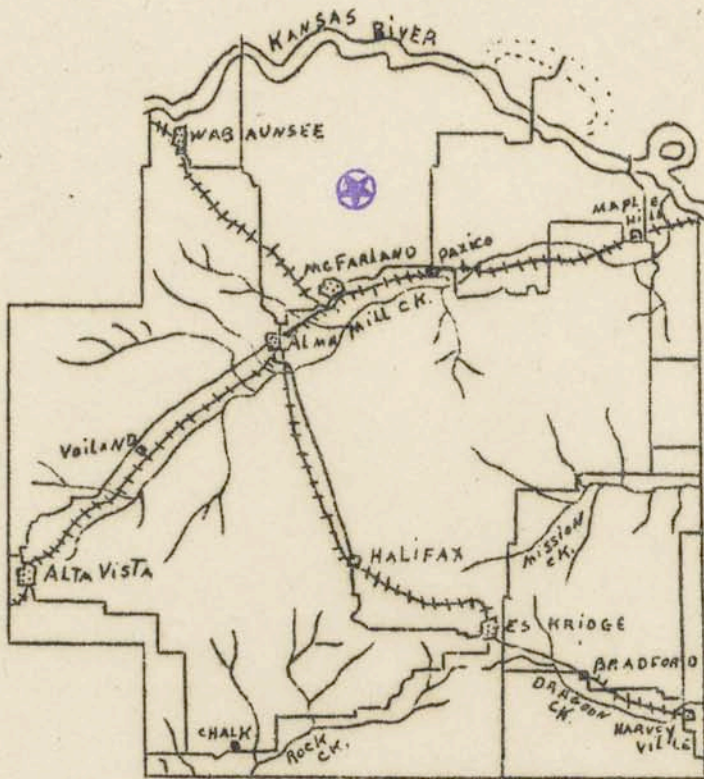
COMPOSITAE  
*Mesadenia atriplicifolia*  
 (L.) Raf.

WABAUNSEE COUNTY  
 Map No. 478

*Mesadenia tuberosa* (Nutt.)  
 Britton.



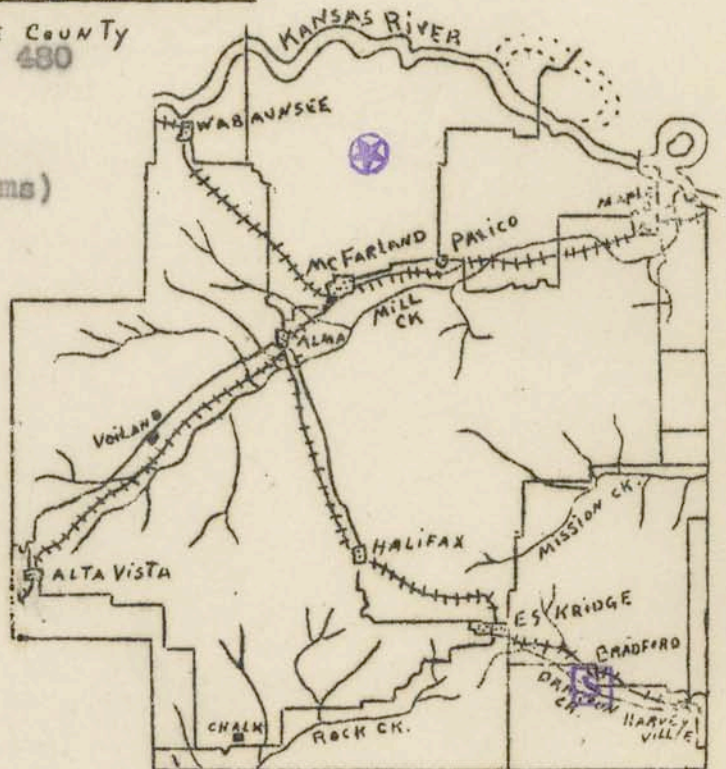
WABAUNSEE COUNTY  
 Map No. 479



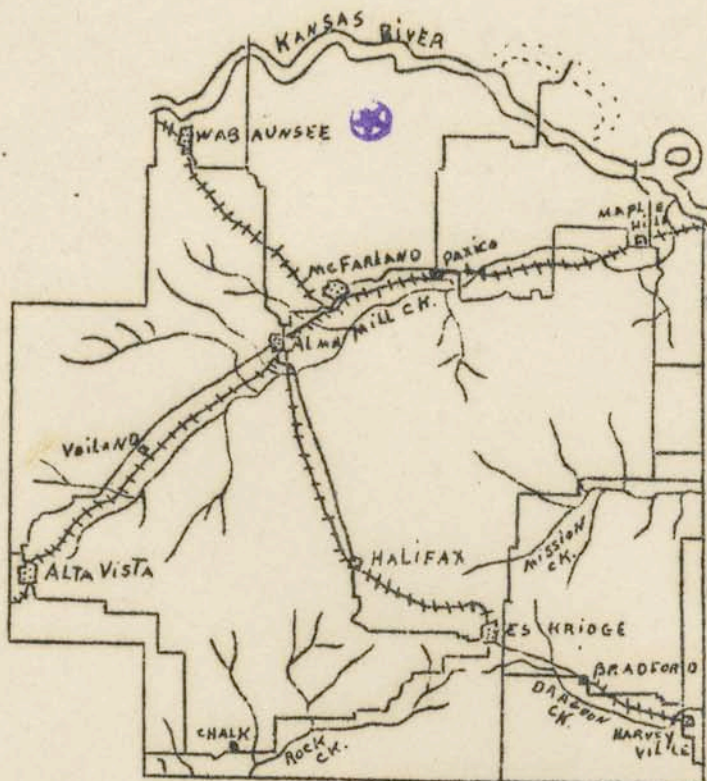
COMPOSITAE  
*Ratibida pinnata*  
 (Vent.) Barnhart

WABAUNSEE COUNTY  
 Map No. 480

*Ratibida columnaris* (Sims)  
 D. Don.



WABAUNSEE COUNTY  
 Map No. 481

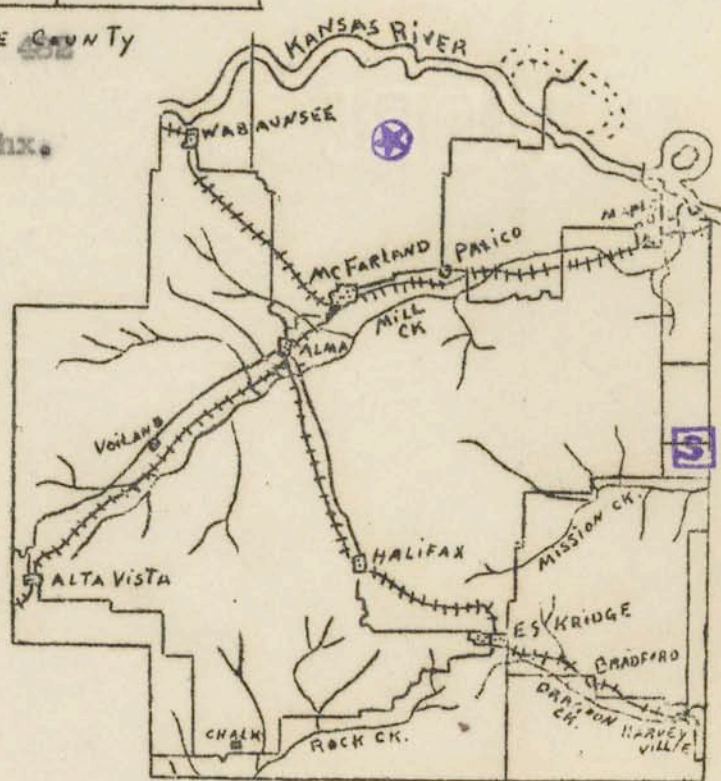


COMPOSITAE

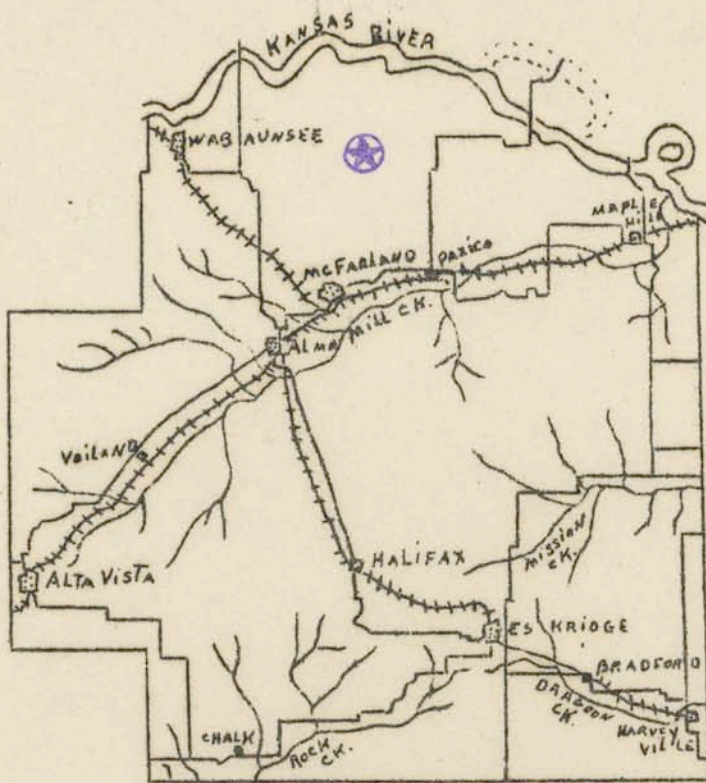
*Veronia baldwinii* Torr.

WABAUNSEE COUNTY  
Map No. 432

*Veronia fasciculata* Michx.



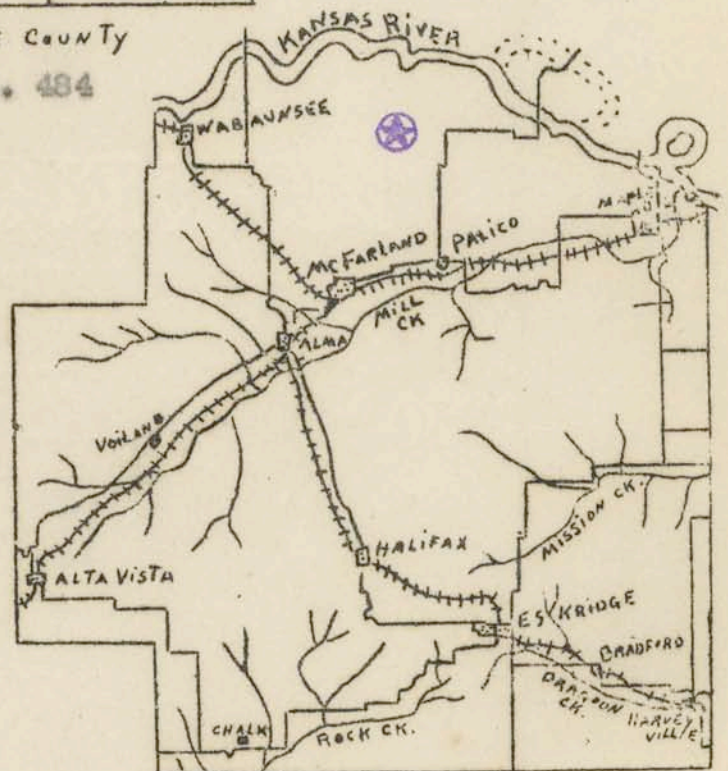
WABAUNSEE COUNTY  
Map No. 433



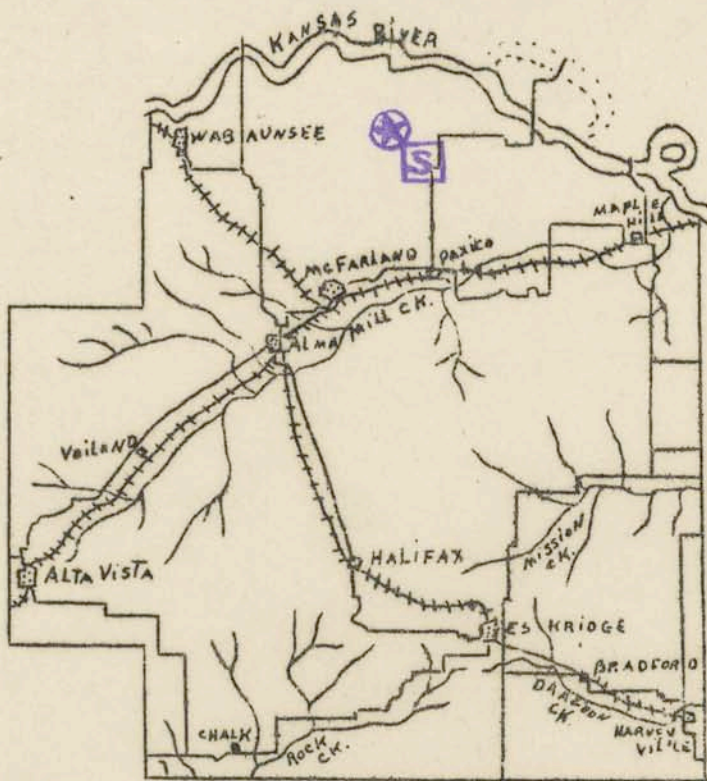
COMPOSITAE  
*Kuhnia eupatorioides*  
 L.

WABAUNSEE COUNTY  
 Map No. 484

*Rudbeckia hirta* L.



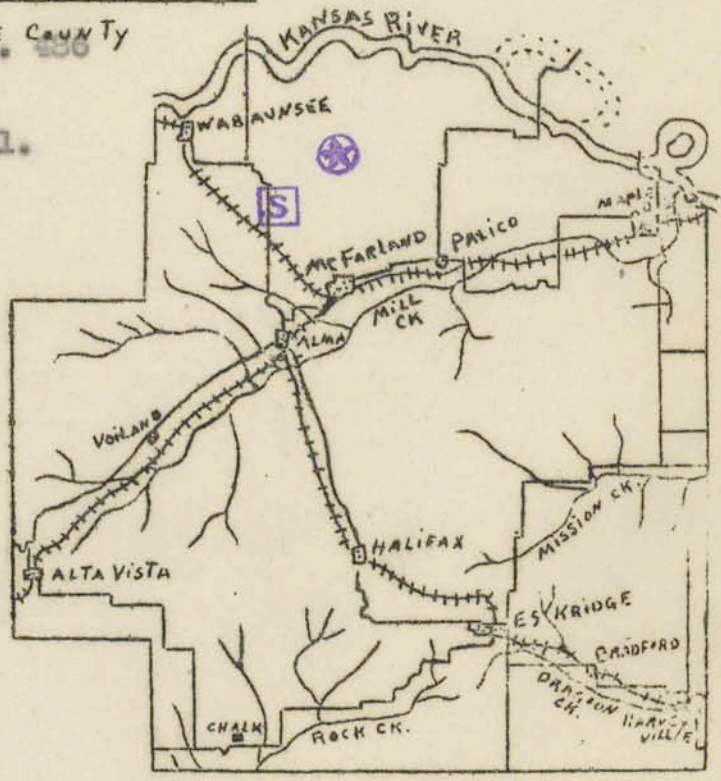
WABAUNSEE COUNTY  
 Map No. 485



COMPOSITAE  
*Solidago missouriensis*  
 Nutt.

WABAUNSEE COUNTY  
 Map No. 436

*Xanthium americanum* Mill.



WABAUNSEE COUNTY  
 Map No. 436