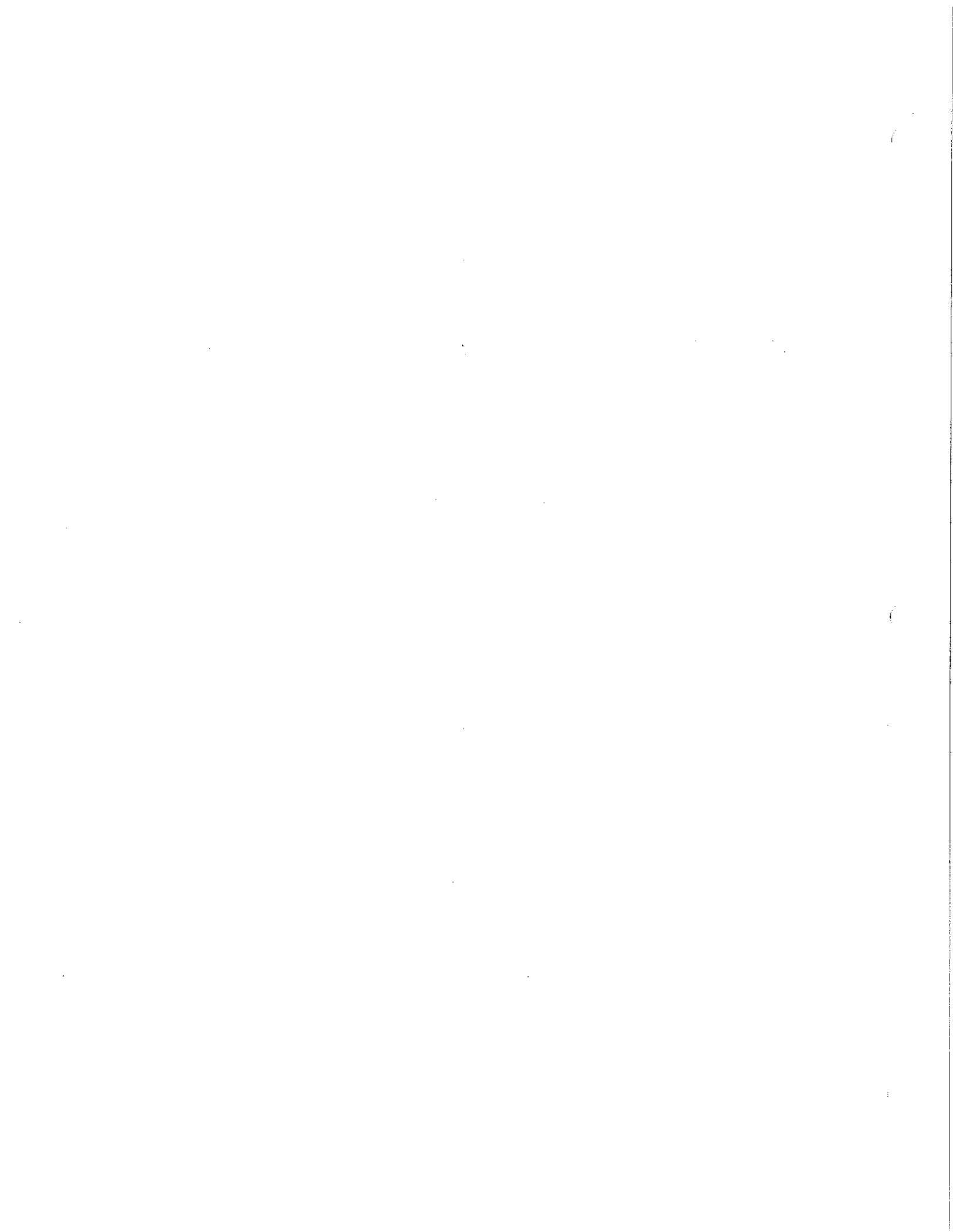


KANSAS PRESERVATION PLAN

STUDY UNIT ON

THE PERIOD OF RURAL/AGRICULTURAL DOMINANCE (1865-1900)

Prepared by the
Historic Preservation Department
Kansas State Historical Society
120 West 10th
Topeka, Kansas
February, 1984
Reprinted June, 1984



Publication Note

Materials for this publication were compiled and written by personnel of the Historic Preservation Department (HPD). The introduction, appendices, and chapters on "Programs" and "Rural Preservation" were prepared by Nora Pat Small, who was the architectural historian for HPD from September, 1981, through August, 1983. The "Historical Overview" and its bibliography were prepared by Marilyn Brady, who worked for HPD as a research historian from March to August, 1983. Editorial assistance was provided by Richard Pankratz and Richard Cawthon of HPD with additional guidance from Maxine Benson, Director of Publications for the Kansas State Historical Society.

Acknowledgement of Federal Assistance

The research and planning activities undertaken for preparing this publication, as well as the cost of the publication, have been financed in part with Federal funds from the National Park Service, Department of the Interior. However the contents and opinions do not necessarily reflect the views or policies of the Department of the Interior, nor does the mention of trade names or commercial products constitute endorsement or recommendation by the Department of the Interior.

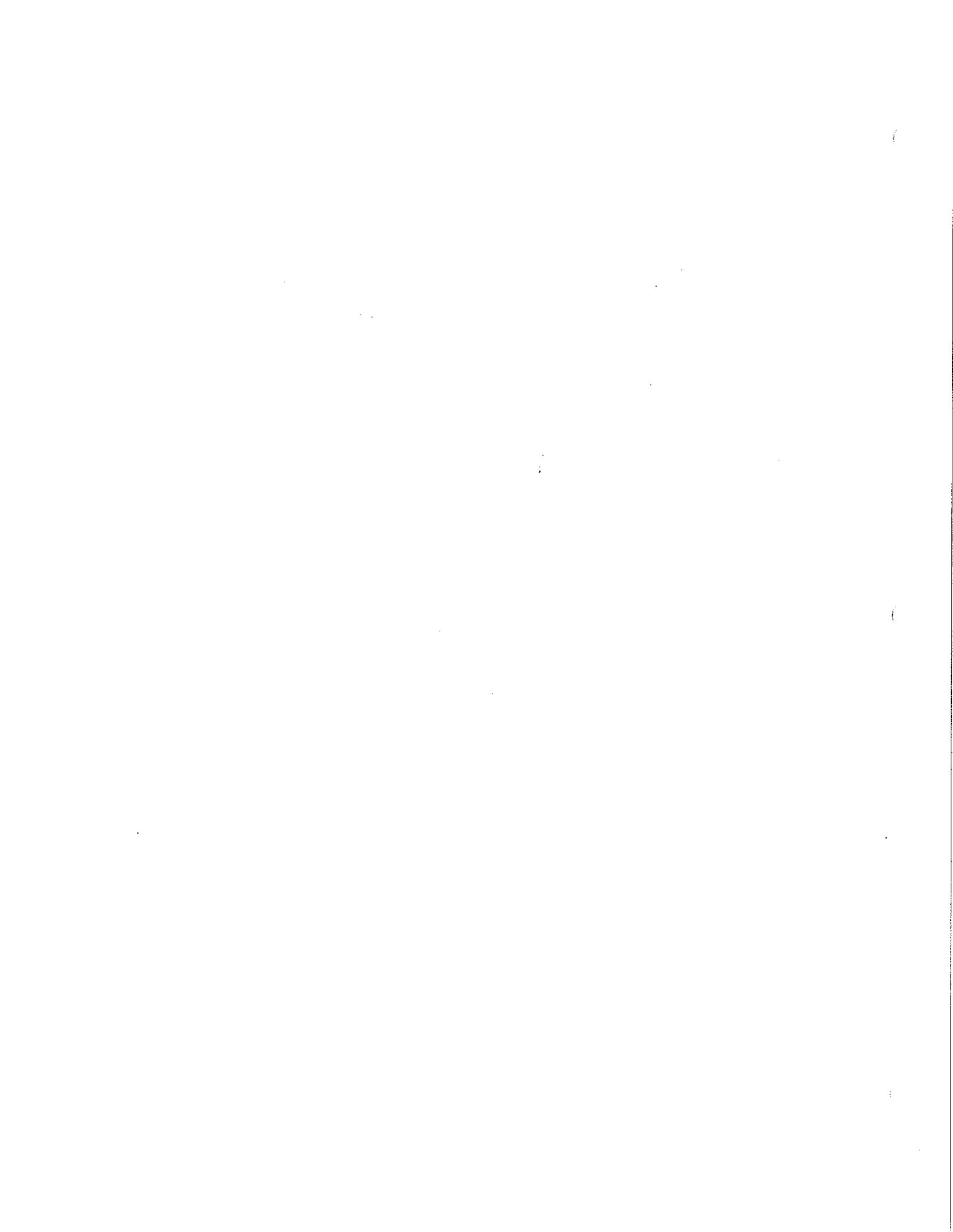


TABLE OF CONTENTS

<u>Chapter</u>	<u>Page</u>
INTRODUCTION	ii
I. HISTORIC OVERVIEW	I-1
General Factors Affecting Building in Rural Kansas, 1865-1900.	I-3
A. Physical Environment	I-4
B. Building Materials and Methods	I-5
C. Traditional Ideas about Building	I-7
D. Formal Style and Pattern Books	I-10
E. Social, Economic, and Political Developments	I-11
F. Topics for Consideration and Research: General Factors	I-14
Dwellings	I-15
A. Topics for Consideration and Research: Dwellings	I-17
Agricultural Structures	I-18
A. Barns	I-20
B. Outbuildings	I-22
C. Cattle and Sheep Industries	I-24
D. Topics for Consideration and Research: Agricultural Structures	I-25
Rural Communities	I-27
A. Commercial Buildings	I-28
B. Courthouses and other Governmental Buildings	I-30
C. Social Welfare Institutions	I-31
D. Manufacturing	I-31
E. Topics for Consideration and Research: Rural Communities	I-33
Mining	I-34
A. Topics for Consideration and Research: Mining	I-36

	<u>Page</u>
Transportation and Communication Structures	I-36
A. Railroads	I-37
B. Roads and Trails	I-38
C. Bridges	I-38
D. Topics for Consideration and Research: Transportation	I-39
 Other Structures	 I-39
A. Wells, Windmills, and Irrigation Ditches	I-41
B. Fences	I-42
C. Schools	I-43
D. Churches	I-45
E. Meeting Places and Recreational Spots	I-46
F. Cemeteries	I-47
G. Topics for Consideration and Research: Other Structures	I-48
 Bibliography	 I-50
 II. PROGRAMS	 II-1
Public Response	II-2
Evaluation of Preservation Data at State Level	II-4
Surveys and Evaluation of Historic Structures	II-4
Preservation Options, Goals, and Priorities	II-7
Rural Conservation	II-11
 III. RURAL PRESERVATION: A SHORT BIBLIOGRAPHY	 III-1
 IV. APPENDICES	 IV-1
A. Rural study unit questionnaire	IV-2
B. Counties with no rural survey	IV-6
C. Kansas historic structures inventory form	IV-7
D. National Register criteria	IV-10
E. Abstract of Mo-Kan rural survey project	IV-12

INTRODUCTION

The Resource Protection Planning Process, known as RP3, was developed by the National Park Service, Department of the Interior, as a means by which historic resources could be efficiently identified, evaluated, and preserved. It grew out of the increasing frustration engendered by neverending statewide surveys and the lack of properly evaluated survey materials. The shortcomings of the state surveys made state and federal review processes very difficult. Not enough material was readily available to decide if a federal highway project, for example, would have an impact on historic resources, or if a property proposed for nomination to the National Register merited listing, and if so whether it had local, state, or national significance.

The Resource Protection Planning Process is designed to build on information that is already available and to be easily accommodated to new material. It can be implemented at the state and local levels, adjusting to the special needs and concerns of each. One of its most important aspects is its flexibility.

RP3 in Kansas is called simply the Kansas Preservation Plan and consists of several main parts called study units. These are chronological, conceptual divisions of Kansas history.

Archeology in Kansas

The Settlement Period (1820s - 1880s)

The Period of Rural/Agricultural Dominance
(1865 - 1900)

A Time of Contrasts: Progress, Prosperity, and the
Great Depression (1893 - 1939)

The Recent Past (post 1939)

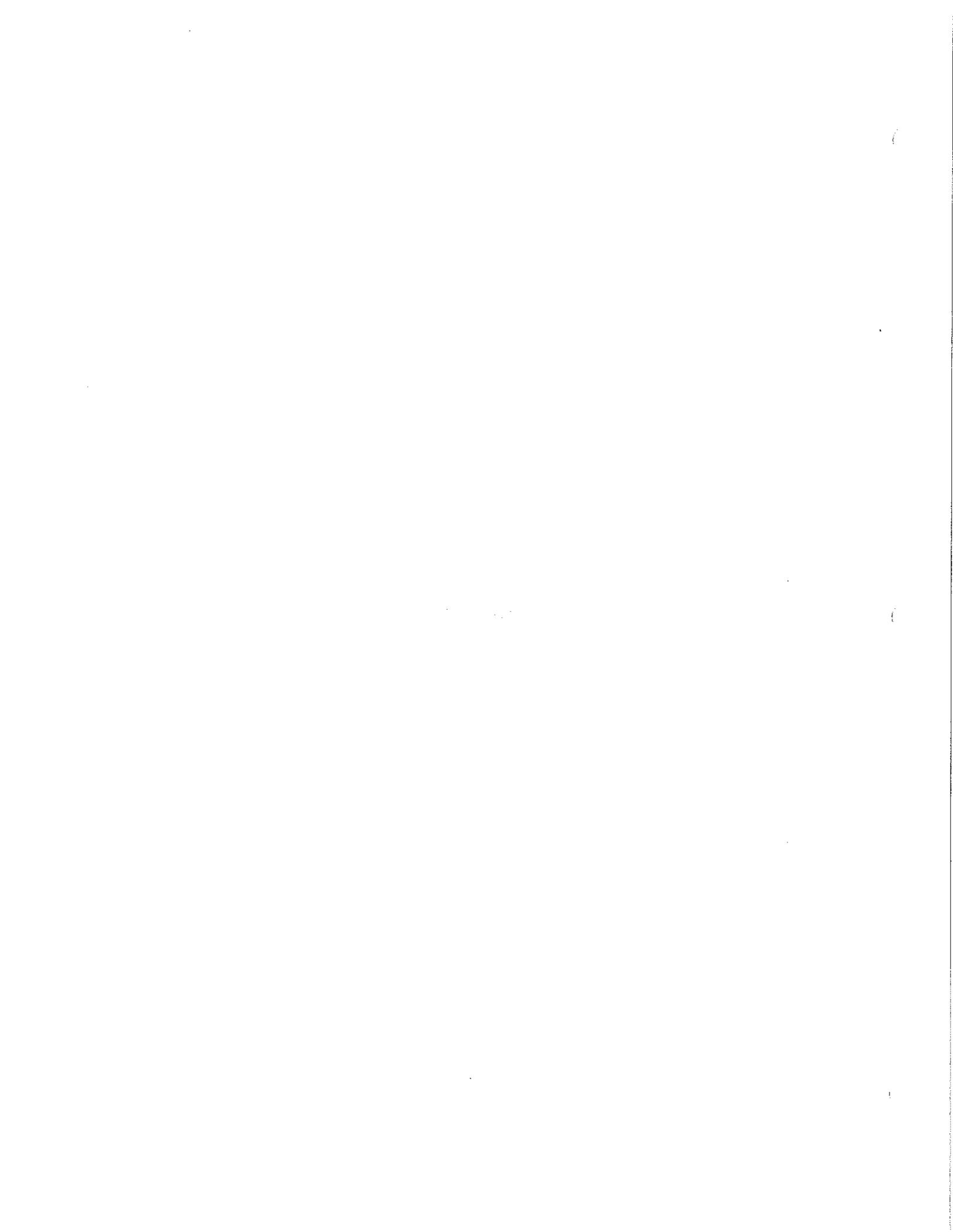
Urban Study Units

The Kansas Preservation Plan is meant to give direction to local preservation efforts as well as to state level projects. Each of the study units will, then, be a concise, easy to read document that can be used by planners, scholars, historical societies, county or city commissions, and others who are interested in or involved with historic resources. Each study unit will be kept in a looseleaf binder at the Historic Preservation Department (HPD) so that revisions and additions can be made easily. Copies of these study units will be distributed to interested parties as they become available.

Each study unit consists of three sections. The first is an architectural historical overview of the period in question.

It discusses architecture in terms of historic physical conditions as well as social conditions. It provides an understanding of why the built environment developed as it did. The second section, called Programs, consists of several parts. In it all available preservation data is reviewed and evaluated, state responsibilities are identified, and local projects suggested. The last section consists of the actual local and regional projects. Abstracts of each of the related projects will be kept in the study unit notebook for easy reference. Copies of the actual project reports will also be kept by HPD.

I. HISTORIC OVERVIEW



HISTORIC OVERVIEW

Between 1865 and 1900, the landscape of rural Kansas changed dramatically. Building proliferated as the young state grew and prospered. Many of the structures erected during this brief span of years are with us today--especially in the rural sections of the state--but too often they go unrecognized and unappreciated. If we want to identify these structures, to learn from them what life was like in the nineteenth century, and to make informed decisions about which of them to preserve, we need to know something of the building history of Kansas during these years. The aim of this overview is to provide Kansans with information about this important topic.

Ideally, a discussion of the building history of Kansas in the late nineteenth century would start out by telling which buildings were constructed in various parts of the state and then analyzing why they were built as they were. Such an approach is impossible here, however, because we know too little about the buildings constructed in rural Kansas during these years. Few authors of Kansas history have focused on buildings, and even fewer have placed Kansas buildings in an historical or architectural context. Some studies have been done on Kansas structures and are on file in the Historic Preservation Department, but the information that has been collected is often incomplete, and few rural buildings are included.

What we do know, and what we can provide in an overview such as this, is background material and general guidance for individuals and groups interested in the rural buildings constructed in Kansas in the late nineteenth century. We know what was happening in Kansas that affected building: where people lived, where they came from, and how they made their livings. From such facts we can infer what they might have built, and we can identify existing structures relating to their activities. In addition, we know what was being built in other parts of the country where more extensive studies of building have already been completed. Even though findings of studies of structures in Pennsylvania, Massachusetts, Texas, or North Dakota may not fit actual buildings in Kansas, they give some useful generalizations and points of comparison for understanding what was built here. Lastly, we know what rural Kansans were being told they should build in the late nineteenth century. Kansans had before them books, magazines, and government pamphlets giving them plans for every conceivable kind of structure. Not only dwellings but also structures such as chicken coops, railroad trestles, one-room schools, and windmills were described in great detail. The extent to which these plans were followed in Kansas remains to be seen.

The opening section of this overview will discuss some of the general factors which affected all types of buildings throughout the state. These will include the physical environment, building materials

and methods, people and their architectural traditions, national ideas about building, and major events which influenced structures in Kansas between 1865 and 1900. The rest of the overview will examine what we know and would like to know about specific types of buildings. We will look at all types of structures, not just the impressive buildings which have most often captured the attention of historians and architects but also the ordinary structures created by ordinary people, such as the fences, grain elevators, and farm buildings.

What is presented here is only a first step toward compiling a history of Kansas rural building from 1865 to 1900. By surveying the existing literature we can guess what was built and why structures were erected as they were, but many questions remain--more questions are raised than answered. The next step will require interested individuals in rural communities throughout the state to survey and study their own building history. As an aid to such local studies, the following sections include questions and topics to be explored and suggestions for further reading.

In the decades following the Civil War, Kansas was predominantly agricultural. Most Kansans lived and worked on farms or in small rural communities. Many of those not directly involved in farming depended on agricultural trade and produce for their livelihood. Their heritage lives on most strongly today in those areas of the state which have remained predominantly agricultural rather than in the urban centers with populations of 10,000 or more, and in those areas lies the best opportunity for discovering and preserving the rural heritage of the nineteenth century. Those areas will be the focus of this overview.

General Factors Affecting Building in Rural Kansas, 1865-1900

The physical environment--the weather, the shape of the land, the type of rocks and soil, the vegetation, and most of all, the accessibility of water--had a great impact on building in Kansas in the late nineteenth century. Related to this physical environment were the types of building materials available. Wood, clay, and rock were present in the state, and technological changes in transportation and in the processing and use of building materials greatly expanded the options of Kansas builders in the closing decades of the nineteenth century. People's ideas about structures and what they should look like were also important in determining the types of buildings they chose to erect. Sometimes these ideas were traditional ones, handed down from past generations within a specific region or ethnic group, and since people came to Kansas from a variety of places, they brought with them a variety of building traditions. Other ideas about building came from architects or other experts and reflected nationally popular viewpoints. Lastly, building always occurred in a social, political, and economic context. War, population shifts, and changes in the technology and economic base of the region also affected the functions of buildings and, thus, how people chose to build.

Physical Environment

In the past, even more than today, buildings reflected the physical environment in which they were constructed. Many of the histories of this region stressed the adaptations people had to make to live here. Consideration of Kansas building in the nineteenth century must be placed in the context of the state's geography.

Wherever people lived in Kansas, they had to protect themselves from storms, winds, and wide fluctuations in temperature. As they moved westward across the state, increasingly they had to cope with the additional problems caused by the lack of rainfall and scarcity of water. In the quarter of the state east of the ninety-sixth meridian, rainfall amounts averaged thirty to forty inches a year, trees and grass were present, and people could use familiar agricultural techniques. In fact, rainfall was often sufficient for farming as far west as the ninety-eighth meridian, especially if a family was fortunate enough to settle along a stream bank. Farther west, however, the arid environment created problems. The western half of the state lay west of the ninety-eighth meridian in territory considered "The Great American Desert" in the nineteenth century. Many people contended that no one could farm west of the ninety-eighth, or at best the one-hundredth meridian, which crossed three-quarters of the way across the state. In the 1870s and 1880s, many Kansans were trying to prove such dire predictions false. Aided by unusually abundant rainfall in those years, they seemed at first to succeed, only to be driven back from the driest areas in the 1890s. New methods of farming--accompanied by new types of structures--were necessary if people were to prosper in western Kansas.

Average rainfall amounts and the ninety-sixth, ninety-eighth, and one-hundredth meridians can be used to divide the state into four neat sections, but the landforms and rock types seldom follow these divisions. Limestone underlies much of Kansas, but it is more accessible and easily worked in some areas than others. Glaciers once covered the northeastern corner of the state, leaving sharp contours on the hills and depositing a layer of glacial till over the limestone there. The rough terrain of the Flint Hills bisects the east central section of the state from north to south. The flat High Plains are along the western border, their jagged edges cut by rivers. Elsewhere, low hills and rolling prairies prevail.

Several major rivers run roughly west to east across the state, carving up the landscape and uncovering different types of rocks. In eastern Kansas, river valleys and small patches of prairie alternate. To the west, the land becomes increasingly flat and both rivers and streams are less frequent. Although none of these rivers proved to be navigable, they were a source of water and sometimes timber.

Soil in the state is generally rich, and vegetation patterns are dependent on the amount of water present. When settlers arrived in Kansas, trees were generally present in the eastern part of the state, but they clustered along river banks and were seldom the types most favored by Kansas builders. Tall bluestem grasses prevailed in the Flint Hills, making that area a profitable one for grazing. Farther west, short Buffalo grass spread across the High Plains but trees were rare and found only along watercourses.

In order to survive and prosper in Kansas, inhabitants had to find ways of coping with the environment. Gradually they were able to do this by adapting the products of industrial America to their own needs. In the process their building became somewhat less related to the physical conditions in Kansas and more like that elsewhere in the country. In exchange for their former dependence on the environment, Kansans came to depend on modern technology and on the industrial society which created it.

Building Materials and Methods

Between 1865 and 1900, many of those who came to Kansas erected structures for themselves out of native materials, using methods handed down to them from their parents and grandparents. Increasingly, however, factory-produced building materials were shipped into the state, making possible new methods of construction.

Distance from the railroad and lack of money often left Kansans with little alternative but to build with materials which could be found in their own immediate area. Throughout the state, initial structures were often dugouts and sod houses, or, in eastern Kansas, log cabins. Although some Kansans continued to build and live in such dwellings well into the twentieth century, others erected more substantial buildings rather quickly, often still relying wholly or in part on local materials.

Wood was the favored building material, and some timber was available in the state. Even in the eastern section of the state, however, the wood was seldom of the types settlers preferred for building. Many of the trees were oak or walnut, which produced fine wood for some purposes but proved difficult to plane into boards, or cottonwood, which tended to warp and shrink as it dried. Nonetheless, numerous small sawmills sprang up throughout the 1850s and 1860s as Kansans sought to obtain lumber for building frame houses.

Many Kansans were also familiar with brick construction, and most early communities had brick yards. Like the sawmills, these were generally local concerns. They used clays found in the area. Methods of producing brick were unsophisticated and the brick was somewhat soft. It was a popular material, however, especially for business buildings and larger homes.

Other popular native materials for building were the limestone and sandstone which were plentiful in much of the state. In some regions chalk and quartzite were used. Sometimes builders used the stone much as it came from the ground, while at other times it underwent extensive shaping and finishing.

In some areas of the state, stone buildings predominated, with stone serving for all types of structures, large and small, simple and impressive. Rural towns had stone water troughs and sidewalks as well as courthouses, schools and homes. Farmers built stone houses and barns surrounded by stone fences and a wide variety of stone buildings. In fact, the enduring quality of stone buildings provides Kansans with a unique opportunity for studying the layouts of entire farm complexes. The reasons behind the local predominance of stone buildings in some areas of the state are still being debated. Some contend that the accessibility of the stone made it a popular building material; others argue that it was used where there were high concentrations of Germans or Swedes who had skilled stone masons in their groups. Or it may have been that where the material and the craftsmen coincided there were more stone structures of higher quality than elsewhere.

The spread of the railroad dramatically increased the options for Kansas builders, at least for those who could afford to buy building materials. Sawed pine boards, cut to standard sizes, became widely available in local lumber yards. Machine-made wire nails, also in standard sizes, could be purchased. Stronger brick, sometimes produced in the new factories of southeastern Kansas, competed with locally made products. Doors, windows, and trim could be bought ready-made. Merchants in rural communities throughout Kansas could purchase cast-iron trim or entire storefronts for their businesses, home owners could buy porches and gingerbread to decorate their dwellings, and churches could obtain stained glass windows. Kansans could order entire prefabricated buildings of all types and of varying degrees of elaborateness from catalogs.

The availability of such building materials and the publications about building encouraged people to adopt new methods of construction. Many Kansans began to use "balloon frames," consisting of light frames of wood studs, for their buildings. This new method, still popular today, proved adaptable to traditional building forms and styles, as well as to the new designs being introduced.

In addition, building was increasingly becoming a specialized trade. By the 1870s and 1880s, more and more Kansans were hiring others to construct their stores and dwellings. A few of the most affluent even hired architects. Although such practices presumably spread more slowly in rural areas than in urban areas, the hiring of experts became more and more common. Even those who could not hire someone else to design or build their structures had numerous publications available which explained such techniques as the construction of balloon frames and the laying of brick walls.

Traditional Ideas about Building

Within the limitations of the environment and the available materials, Kansans displayed a variety of building practices. Sometimes they built according to the accepted traditional patterns of a region or ethnic group. In other cases they built in accordance with nationally popular styles. Kansas builders often combined traditional forms with fashionable new elements within the same structure. In studying Kansas architecture, it is important to understand both the traditional ways of building and the fashionable architecture of the period.

Building done by ordinary people according to their own culture's traditional values is often called "vernacular architecture." Societies with a degree of cultural isolation tend to have shared ideas about the way a type of building should look and how it should be constructed. Building patterns are accepted without question, and the variation and adaptation which take place remain within certain well-defined limits. Vernacular buildings might be built by the owners themselves, with the collaboration of friends and neighbors, or by skilled craftsmen working in the vernacular tradition. Although great skill may be evident in vernacular buildings, no formal plan or aesthetic goal is articulated. Instead, functional requirements, available materials, and sometimes environmental factors lead to individual variations on the established building patterns.

In recent years, vernacular architecture has begun to be studied by scholars who have shifted their attention from the architecture of elite groups and sought to rediscover the cultural traditions of ordinary people. They have observed that American colonial buildings followed distinctive patterns and that differences existed between the buildings of New England, the Mid-Atlantic region, and the South. Some of these patterns have been traced to European prototypes. Other architectural streams can be seen developing out of the settlement of the French and the Spanish. Henry Glassie, Fred Kniffen, and others have shown how the original architectural traditions of early Americans were carried westward by settlers who crossed the Appalachians in the first half of the nineteenth century.

Such patterns become increasingly difficult to follow in the years after the Civil War when industrialization revolutionized communications and technology and regional and ethnic patterns were being challenged by the development of a national culture. Nonetheless, vernacular architecture did not disappear. Especially in rural areas and within groups who retained their ethnic identity, traditional building patterns survived. These vernacular buildings are an important segment of the buildings constructed between 1865 and 1900 and that significance should be recognized.

People came to Kansas from a wide variety of places and each group brought along its own traditions. While we know something of the groups who came, as yet we know relatively little about their building traditions and the extent to which they retained these traditions in Kansas.

The majority of those living in Kansas in the last third of the nineteenth century had come from nearby states to the north and east. Although increasing numbers of Kansans reported to census-takers that they had been born in the state, until 1900 large numbers continued to claim Illinois, Ohio, Indiana, Pennsylvania, Iowa, and Missouri as their birthplaces. In these states, the distinctive patterns of buildings which had characterized the American colonies had blended by the 1860s although the forms resulting from the blending varied considerably between regions. Studies of rural buildings in these states reveal structures similar to many in Kansas, indicating that many Kansas forms were brought from those areas.

Relatively few settlers came to Kansas directly from the eastern seaboard. Despite the abolitionist rhetoric of the 1850s, actual settlers from New England were never numerous. Some New Englanders had moved into the north-central states from which many Kansans came, however, and their influence, filtered through this intervening settlement, appears in this region. New England's influence was perhaps greater, however, than the numbers of settlers of New England descent might suggest, for many midwesterners regarded New England as the model for their tastes and attitudes.

The number coming to Kansas from southern states was also small. Some southern influences may have entered the state with settlers from Missouri, many of whom had come originally from the Appalachian region. The largest numbers to enter the state directly from the south were the newly freed slaves who came in significant numbers in the late 1870s, settling in urban areas and organizing their own communities in several counties. John Vlach has studied Afro-American vernacular architecture and has suggested certain building types which Blacks brought from the West Indies and from Africa, but as yet we do not know the extent to which such buildings are present in Kansas or if they match patterns of settlements by Blacks. A 1983 study at Nicodemus may help clarify such issues. Religious, as well as geographical, patterns were sometimes reflected in Kansas buildings.

Others who came to Kansas brought European ethnic traditions with them. Some immigrants had lived for a time in the eastern United States, but the largest influx came directly from Europe in the 1870s and 1880s. Often they came at the urging of agents of the railroads who sold them railroad lands and helped them settle in Kansas. While no one region of the state can be identified with any particular ethnic group, most immigrants settled in clusters near others of similar backgrounds. Many of these communities are in the central portion of the state, where lands were being opened in the years when European migration was peaking. J. Neale Carman's Foreign-Language Units of Kansas is an indispensable tool for studying the European groups in the state. It includes detailed maps and charts for various national, linguistic, and religious groups, even showing concentrations within counties and towns for various years.

Conditions in Europe and the choices made by the railroads regarding whom they wanted to attract to Kansas contributed to the ethnic patterns which developed in the state. Prominent among those who came were Germans and other central Europeans. Some of them came directly from Germany, but others, both Roman Catholic and Mennonite, were the descendants of Germans who had migrated to Russia a century earlier. Large numbers of immigrants also came from the Scandinavian countries: Sweden, Norway, and Denmark. There were French settlers and a variety of people from the British Isles. Jewish immigrants came from many different countries. (There is a rich literature on the various groups who came to Kansas and there has been no attempt here to summarize it all or to include it in the bibliography.) The extent to which these groups retained their ethnic building traditions is yet unclear and probably varied widely from group to group. Many may have quickly assimilated and discarded their traditional building practices as they encountered a new environment and new American construction techniques and ideas. Perhaps more ethnic diversity was present in initial log and sod buildings than in the buildings constructed as people became established in Kansas. Immigrants may have accepted some new building practices or features while retaining other traditional ones, and it seems likely that the groups which retained their own cultural isolation and autonomy also retained the most distinctive building practices.

Scholars who have examined the buildings of European immigrants in Kansas have observed a variety of practices. James Shortridge and others claimed that the use of stone revealed a typically German preference for that material. Carl Brandhorst found little evidence of ethnic patterns in his study of the stone buildings of central Kansas but did note some distinctively Czechoslovakian and German decorations on buildings and a few Danish structures linking the house with the barn and other buildings. Greg Schultz correlated the differences of Mennonite and Swedish communities with the barns which they built, and Albert Petersen showed the persistence of tradition in the face of gradual change through the structures and lives of German-Russian Catholics. Elizabeth Jaderborg observed some traditional Swedish building practices in the area of Lindsborg, but she maintained that they were quickly superseded by mainstream American ideas.

Although the observations that these and other scholars have made on the retention of ethnic building styles by immigrants are useful, their writings are not the only source of information on this topic. Published and unpublished diaries, letters, memoirs, and travel accounts by immigrants and by those who observed them firsthand are full of references to the structures they built. These works have not been examined for this overview, but they are important sources for understanding what and how groups were building.

Formal Style and Pattern Books

While some Kansans continued to follow vernacular traditions in building in the decades following the Civil War, others adopted wholly or in part--the newer ideas being put forth by experts. Increased contact with the rest of the nation, availability of new building materials, greater wealth for some individuals, and the desire to appear efficient, prosperous, and up-to-date all encouraged Kansans to adopt the new concepts which were described in numerous books, magazines, and pamphlets. Issues discussed in these publications ranged from formal architectural styles to the most efficient method of erecting various agricultural and industrial structures.

The issue of "style" is a complex one. Seldom can one point to a rural building in Kansas and state flatly that it is of a particular style. Sometimes a "style" was applied to traditional building forms by adding appropriate cornice, window, and porch trim. Other times, buildings followed a particular style faithfully from floor plan to the last detail on the chimney. In the years following the Civil War Kansans built homes, businesses, and public buildings that reflected, in varying degrees, the styles being popularized nationally by architects, designers, and publications.

In the late nineteenth century, a number of styles were available to those interested in fashionable buildings and able to pay for them. Architectural historians have identified the characteristic qualities of each and have found examples of Italianate, Second Empire, Gothic Revival, Queen Anne, and other styles built in Kansas between 1865 and 1900. Many of the structures which have been identified are in the urban areas of the state, and the extent to which such styles extended to the smaller towns and farms of rural Kansas needs further study.

Despite the differences among these styles, they share certain characteristics which set them apart from most earlier American styles and from vernacular building. More variety in buildings appeared. Symmetry and restraint were replaced with irregular shapes, a variety of textures, and lavish, exuberant ornamentation. Features of various styles were sometimes combined in a manner called "picturesque eclectic." Vertical lines were often stressed and towers and dormers broke the rooflines. Inside, rooms became more specialized and frequently more private. Symbolic connections were made between the form and decoration of a building and its use.

From the 1840s to the end of the century, a flood of architectural publications described these stylistic features. Although homes were the buildings most frequently discussed, schools, churches, and businesses also received attention. Books and magazines offered plans and drawings which could be followed by those wanting to adopt the new styles. Aesthetic discussions were often combined with advice on practical matters such as construction techniques, ventilation, or heating. These publications went to great lengths to teach Americans to consider these new styles as the ultimate in beauty and to appreciate the ways in which such architecture could enhance morality and virtue.

Not all the architectural publications focused on style, however. Another group of books, pamphlets, and magazines appeared which described and offered plans for the new specialized structures needed by post-Civil War America. Large and small structures relating to railroads, mining, and manufacturing were all outlined in great detail. Agricultural building also received extensive attention, as farmers were provided with instructions for erecting such structures as barns, sheep sheds, ice houses, and windmills. Agricultural journals, the U.S. Department of Agriculture, and the various state agriculture agencies were active in spreading this type of information. Manuals describing the specialized industrial and agricultural structures were available to late-nineteenth-century Kansans. The extent to which they influenced Kansans in their building choices remains to be seen.

Social, Economic, and Political Developments

In 1865 Kansas was quite different from what it would be by 1900. Although the state was far from empty at the close of the Civil War, building was sparse and the population was concentrated in the eastern counties. Only in these counties were there as many as five persons per square mile. Elsewhere in the state, forts, farms, trading posts, and small communities were scattered along trails and rivers. Some Indian reservations existed in eastern Kansas, and nomadic Indians occupied the western part of the state. Many of the structures that were erected were small and temporary ones. Since it was difficult to get crops marketed, farming was generally limited to what could be used by a family, its animals, and the local community. Many Kansans made a living by supplying wagon trains or speculating in land. Struggles over slavery contributed to the violence of the region from the time it was opened for settlement to the end of the Civil War.

Yet, during the turbulent years between 1854 and 1865, the foundation was laid for the state's future growth and development. Indian tribes, which had been moved into eastern Kansas in the 1820s, the 1830s, and 1840s, were moved again to make room for white settlers. Congress passed new, more liberal land laws, allowing farmers to homestead land, and surveyors began to lay out the rectangular grids of fields and roads which came to characterize the Kansas landscape. State government was organized as Kansas entered the union in 1861. Numerous railroad companies received grants to build in Kansas, and tracks began to be laid west across the state from Kansas City.

The twenty-five years following the end of the Civil War were years of enormous growth for Kansas, as the statistics indicate:

Date	Population	Miles of Railroad
1860	100,000	5
1870	360,000	1,234
1880	990,000	3,104
1890	1,420,000	8,794

Many of those who entered Kansas in these years came from nearby states to the east and northeast. Some were veterans of the Union Army who received bonus land. During the late 1870s and 1880s other groups came, adding to the diversity of the state's population. Newly freed Blacks entered Kansas from the southern states. European immigrants, many of them encouraged to come to Kansas by agents from the railroads, settled in the central counties and in scattered areas throughout the state.

Population moved westward across the state in roughly parallel waves, each decade seeing another quarter of the state inhabited. The first quarter of the state, where rainfall and vegetation allowed traditional farming practices to continue, had been settled by the time the Civil War ended. By 1870, settlement reached halfway across the state to the ninety-eighth meridian where average rainfall dropped to thirty inches a year, and water for farming was less reliable. By 1880 settlers had moved out to the one-hundredth meridian and the twenty-inch rainfall line, and by 1890 the whole state was inhabited enough to be organized into counties.

Railroads played a critical role in this rapid growth of population, as the miles of track increased faster proportionally than the number of inhabitants in the state. Railroads were often directly responsible for the placement of Kansas farms and towns. They had received approximately ten million acres--a fifth of the state--in various land grants, and they often moved into areas before settlers, establishing towns along their tracks and selling land to settlers eager to profit from proximity to the railroad. In addition, the coming of the railroads directly contributed to farming and ranching in Kansas by making it possible to sell crops and livestock to eastern cities. In 1867 Abilene became the first of a series of towns serving the cattle trails from Texas which spread across central and southern Kansas in the 1870s. By the 1880s Kansas had established itself as a major area for raising and fattening beef. Meanwhile, winter wheat, first introduced by Mennonite settlers, was becoming the predominant crop in the west-central sections of the state.

Selling in eastern markets meant that Kansans were able to buy eastern goods, including newly manufactured products such as threshing machines, barbed wire, and water pumps which enabled them to farm and ranch in the plains. It also meant they could buy factory-produced lumber, brick, and nails, as well as decorative architectural trim available from mail-order catalogs. These products introduced rural Kansans to the latest in building methods and styles and revolutionized Kansas building.

As Kansas grew, its inhabitants were establishing themselves in numerous rural communities and towns as well as on farms. Competition among the towns was high as each boasted of its own prospects for the future and sought to attract business and settlers. In the 1860s and 1870s many communities had their own facilities for grinding wheat and corn, for sawing wood and making bricks, and for producing such items as buggies and furniture. Mining also occurred in scattered locations around the state. Generally, however, the towns which prospered most were those along the railroads, serving the needs of the local farmers and providing them with a link to the outside world.

The years closely following the Civil War were prosperous ones. In spite of two bad years in the mid-1870s, the state boomed. Railroad agents, state bureaus, and local newspapers touted the advantages of settling in Kansas. Speculators dreamed up imaginary towns, each aspiring to become the major metropolis in the region, and town fathers tried to induce eastern industries to locate in their communities.

At the end of the 1880s and in the 1890s, the boom ended. Prices for farm goods fell, and there was little rain. Railroad companies, bankers, ranchers, and farmers all found themselves overextended. The day of the cattle drives had passed. Population dropped drastically in the western counties of the state, those most marginal for farming. In some areas, as many as fifty percent of the people left. Mortgages were foreclosed, and by 1890 a third of the state's farmers no longer owned the land they farmed. In the central portions of the state, farmers were often able to hold on to their land, but their ability to do so was tenuous. Many of them became involved in the political unrest which culminated in the Farmers' Alliances and the Populist Party. Under such circumstances, the rural building boom of the previous decades slackened.

While the depression and droughts of the 1890s caused hardship for many Kansans, those years also witnessed the establishment of new economic enterprises which would flourish in the twentieth century. Food processing and manufacturing became increasingly centralized in emerging urban areas of the state where there were good railroad connections. In southeast Kansas, coal, oil, and gas resources were developed, providing fuel for transportation and industrial growth. As the impressive businesses, houses, and courthouses built in the 1890s testify, some Kansans remained solvent during these lean years.

Topics for Consideration and Research: General Factors

The general factors we considered in this section are not merely abstractions. In the sections that follow we will look at the ways in which these factors affected specific types of buildings in Kansas. Whatever buildings are being discussed, however, it is well to keep in mind that the environment, the type of available materials, various ideas about buildings, and major events of the period influenced decisions and must be considered. As we begin to understand these factors, they themselves can provide the focus for further consideration and research. The questions listed below are examples of issues which they raise. Certainly these are not the only possible questions and others will be included with the discussion of particular types of structures. These questions are intended merely to draw together some recurring themes and to call attention to some of the directions which further investigations might take.

1. What was the effect of the environment on particular buildings or types of buildings? Were buildings adapted in certain ways to the Kansas climate? What was the effect of the dryness of the western portion of the state on the buildings constructed there?
2. What kinds of building materials did people use? How and why do building materials change in Kansas between 1865 and 1900? Can the change be traced in specific types of buildings or in the buildings of a particular community or farming area? Is it possible to relate the use of materials, such as stone, to its local availability or do other factors seem to be at work? Who did the actual building? What variation in materials or construction methods can be seen within a community or on farmsteads? Who bought and used ready-made materials and who did not?
3. Which groups of people retained traditional ideas about building? What are some specific features of buildings in the areas which people left to come to Kansas? Are they adapted in certain ways? Do they appear in other parts of the state?
4. Did Kansans follow the advice about architectural styles and building practices which were featured in late-nineteenth-century publications? Do the pictures and plans from the books and magazines match what was being built in Kansas?
5. Can the effects of the arrival of the railroad be traced in the buildings of a particular community? To what extent do local booms and busts affect building? How are Kansas buildings affected by the changes in technology and production and marketing that occurred nationally after the Civil War?

Dwellings

Nationwide, house forms and styles underwent a tremendous change from 1865 to 1900. This change was no less great in rural Kansas than in the rest of the country. For almost the entire period in question frontier-type houses--soddies, cabins of log or stone, dugouts--were evident. Sometimes in succession, sometimes almost simultaneously, larger and more substantial homes in the classical idiom and in various Victorian styles were built. Rapid change was encouraged not only by rapid settlement but also by the incredible technological advances of the Victorian era and by the ever-expanding railroads.

It is generally easier to discuss and define rural Kansas houses by their form rather than by their style. "Style" was something that was often applied over an older, traditional house form to give it an up-to-date appearance. This section will provide an overview of common house types in rural Kansas in the last half of the nineteenth century. It will alert the reader to things he should observe in a house or group of houses but will not attempt to analyze any house type of the period in detail.

The form of a house--its floor plan, roof shape, fenestration, and so on--is influenced by a number of factors. Among these are culture, climate, geography, economics, and available technology. The rural houses in Kansas reflect the era in which they were built, the cultural background and economic status of their builders, and the region in which they were built. Which of these factors had the greatest impact on the final form of the house varied from place to place and from period to period.

The two classic frontier houses in Kansas--the soddie and the log house--were not as simple as most people tend to think they were. Both demonstrated variations in construction technique that, if analyzed, would probably indicate the roles of traditional cultural values and of necessity in the building of the dwellings. Albert J. Petersen points out, for example, that German-Russians who settled in the Hays vicinity in 1876 built sod dwellings of a type found on the Volga River in Russia. They were set three feet in the ground, projected several feet above ground level, and had interior walls plastered with a mixture of mud and grass. Because so few sod dwellings are extant a detailed comparison of those built in various regions of the state would depend for the most part on written and photographic evidence. In doing any type of study of this type the researcher would want to note to what extent the various structures were subterranean, what type of sod blocks were used, what the roof covering was, how large the structure was, how permanent it appeared to be, when it fell into disuse, and whether or not it was covered with another material later on.

"Log" and "cabin" are two words that seem to be closely related for most Americans. The log cabin has typified the frontier ever since Americans began to romanticize their frontier days. Actually log houses were not necessarily cabins and not all cabins were built

of logs. A cabin is a one-room, one-story structure (sometimes with a loft) that in Kansas was built of logs, stone, or both, and in some cases of sod. On the other hand some log houses were much more elaborate structures than the typical cabin.

In a log house of any size features such as the notching on the ends of the logs, the type of chinking (if any) between logs, the finish of the gables, the division and use of space within the home, and the arrangement of doors and windows can all give clues to the origins of the dwelling. They can help date the building and indicate much about the cultural affiliation of the builder.

In time, Kansans' houses became larger and more complex. Builders came to depend less on local, hand-crafted building materials and more on goods imported by the railroad. Traditional folk or vernacular building forms were combined with modern technology and aesthetics to produce homes of mixed heritage. They were built of masonry or wood or sometimes both materials. Those of wood generally used a balloon frame, a major innovation of the nineteenth century.

Generally speaking, the regularly massed and classically detailed dwellings date from the late 1850s to the early 1870s in rural Kansas and reappear again in the beginning of the twentieth century. From the post-Civil War era until the close of the century Victorian styles and massing seem to have been predominant, but this has yet to be field checked in Kansas.

The observer of rural dwellings in this state will find that several basic house types and variations thereof continually recur. Those that are most likely to appear in the 1865-1900 period consist of what are called the Upright-and-Wing, the Four over Four, the I-house, the Southern Pyramidal, the Midwestern Cube, and various irregularly massed Victorian styles.

The Upright-and-Wing is a house with what might be called a lazy T plan. The "upright" is usually two stories, its gable end facing front. The "wing" can be one, one-and-a-half, or two stories, the ridge line of its hipped or gabled roof perpendicular to that of the other section. The Four over Four is a simple two-story house with four rooms on each floor, hipped or gabled roof, and symmetrical fenestration. The I-house is a two-story house with two rooms on each floor, one room deep, a gabled roof running parallel to the front facade, and symmetrical fenestration. It can have a lean-to or ell addition to the rear. The Southern Pyramidal is a small one- or one-and-a-half-story square house with a pyramidal or truncated pyramidal roof.

Although much study is needed on these house types, casual observation indicates that in Kansas the Upright-and-Wing was common in the 1860s and 1870s. The I-house and the Four over Four first appeared in the territorial period and were built through much of the later nineteenth century. The Southern Pyramidal is an old house type that has often been overlooked on the Kansas landscape. It appears to have been present for most of the 1865-1900 period. The Midwestern

Cube is a two-story version of the pyramidal house, popular during the same period. It is likely that none of these forms remained static over the last half of the nineteenth century, but not enough is now known about them to date particular changes to particular eras.

The houses in Victorian styles are generally more complex in plan and ornamentation than the houses mentioned above. Often Victorian-type detailing was applied to the older house types, but it was obvious that the Romantic ideals of the Victorians had not been embraced.

All sorts of Romantic revivals occurred in the Victorian era. Variations of the Gothic theme, villas in exotic styles, Queen Anne, Italianate, Eastlake, and French Second Empire, among other styles, appeared in various forms across the state.

Although the stylistic variation seems never-ending, there are some characteristics that unified these Victorian styles. Most had irregular massing and were asymmetrical in plan and fenestration. They were meant to be evocative of romantic and exotic styles, and most often they were the products of machines rather than of craftsman. This last point is highlighted by the fact that it was not only possible to order plans and specifications for these stylish houses from magazines, catalogs, and local lumberyards, but one could also buy all of the hardware, decorative trim, lighting fixtures, furniture, and so on through mail-order catalogs.

This is by no means a comprehensive list of house types to be found in Kansas. The types identified here have been studied in other locations and are known to exist here. There are many others that have not been studied in any organized fashion and therefore their salient characteristics have not been identified. These houses deserve far greater attention than they have received so far.

Topics for Consideration and Research: Dwellings

In studying rural houses in Kansas from 1865 to 1900 one must be alert for clues that indicate which aspects of the structure were traditional and which were modern. A major question yet to be answered in Kansas is the extent to which popular architecture replaced the vernacular in rural areas. How long did people cling to old and familiar building forms before adopting modern concepts of how a house should look and how it should be arranged?

There has been some debate among scholars as to what extent ethnic practices or climate and availability of materials influenced the construction of houses in Kansas. This is a topic that needs to be addressed quickly, before too many more of the original houses in rural ethnic settlements are lost.

An interesting study in Kansas with its long history of an agriculture-based economy would be to analyze the use of the house and house-associated outbuildings (wash house, chicken coops, etc.) from 1865 to 1900. What effect did changes in agricultural practices have on the house form and on the use of the individual rooms? Did advances in technology change the farm wife's duties or the way she performed them?

Agricultural Structures

In the decades following the Civil War, the vast majority of Kansans lived and worked on farms. Eighty to ninety percent of the state's population consistently reported farm residence or agricultural employment to census takers. These people, and the farms they built, are central to the rural Kansas landscape.

Kansas farms are more than the sum of individual houses, barns, and outbuildings. They are integral units and must be studied as such. Each individual structure takes on added significance when it is considered in the context of others in the group. While we can talk about the construction and function of separate farm buildings, we need also to consider the way they relate to each other, to surrounding roads and fields, and to the land itself.

The buildings on any Kansas farm were built to serve practical ends. Within them farm activities took place, and crops and animals were sheltered. Different farming methods and different crops and animals necessitated different farm layouts. The dramatic changes in agriculture in Kansas between 1865 and 1900 had their impact on the buildings being erected on Kansas farms and ranches.

On arriving in eastern Kansas in the 1850s and 1860s, farmers had continued to plant the same crops and follow the same practices that they had in Ohio, Indiana, Illinois, Iowa, and Missouri. Most raised corn, which was easy to grow on unbroken land and fed both family members and a few livestock. In addition, potatoes, squash, sorghum, and other crops were grown and locally consumed. River-bank areas were preferred, but even the small stretches of prairie in eastern Kansas could be farmed with traditional methods if a family was willing to dig for water and haul wood.

Rather quickly, all this began to change. As farmers moved into the arid sections of central and western Kansas, they discovered the need for larger farms and the expensive new farm machinery which was beginning to be manufactured. New methods of farming came into wide use. National transportation networks involved farmers in worldwide markets, and the possibility of good profit from cash crops encouraged farmers to specialize.

By the end of the century, basic patterns of Kansas agriculture had been established—patterns reflected in the buildings on Kansas farms. Diversified agriculture remained somewhat common in eastern

Kansas. Along the northern border of the state, corn was the dominant crop, sometimes sold and sometimes fed to hogs which were being raised for market. Corn remained the chief crop of the state into the twentieth century, but by the 1880s wheat was beginning to rival it in the central and western sections, and ranching was becoming a major business in the state. Winter wheat, introduced to central Kansas by the Mennonites in the 1870s, quickly became the most profitable crop there. The Flint Hills developed as a cattle raising area. The rainy years of the 1880s and experimentation with irrigation raised hopes of farming and ranching on the High Plains. Sugar beets were among the crops tried. The droughts of the 1890s sent many who had settled in western Kansas back to wetter regions. Some remained, however, learning to cope with the dry environment.

Glenn Trewartha has studied agricultural regions nationally and attempted to define the farmstead patterns which accompanied different types of agricultural operations. He made diagrams showing the placement of structures on sample farms and ranches around the country and collected information about the size of the overall farm and farmstead, the size and type of the house, the types and numbers of outbuildings, and the presence or absence of gardens, orchards, and animal pens. Although he included few Kansas farms in his survey, his charts and drawings for cattle, wheat, and corn regions provide useful information for studying Kansas farms, while his general methodology is a good example of how to reach an understanding of farm patterns.

In addition to the type of farming being done, ethnic traditions sometimes affected the building and placement of farm structures. Although in the late nineteenth century nearly all American farms were composed of detached buildings, an occasional Kansas farmstead had a connected house and barn or a chain of connected outbuildings. This type of building was probably derived from German-Russian farmsteads in eastern Europe, although there is also a connecting-barn tradition in northern New England. In addition, the specialized buildings which were believed to be necessary differed from group to group. Some immigrants may have continued to build structures which were more specifically suited to the countries from which they came than to Kansas. In his study of the German-Russian Catholics of central Kansas, Albert Petersen included information on the type and placement of outbuildings. His study indicated the possible differences in ethnic traditions regarding these matters. It may be that traditional methods of building and traditional building types were retained in these minor buildings for a longer time than they were in the more prominent houses and barns.

By the late nineteenth century, there was also an abundant amount of agricultural literature which advised farmers on all subjects, including which outbuildings were needed and how they should be arranged. Great concern was shown in these publications for sanitation and cleanliness and the placement of wells and privies. Such publications were widely available in Kansas--some printed locally, others issued by the Kansas State Board of Agriculture. The extent to which they were used remains unknown.

Barns

The barns which were built in Kansas in the late nineteenth century are still among the most impressive features of the rural landscape. These barns offer testimony to the various functions that they performed and to the traditions of their builders. Barns may be large or small, revealing their use, the overall prosperity of their owner, and the value placed on providing substantial shelter for feed and animals. Barns may be built out of local materials and display building skills handed down from generation to generation, or they may exhibit the latest styles and features being suggested in agricultural magazines.

Any one barn is a composite of many features, but when groups of barns are studied, similarities can be identified. As with houses, scholars argue over the validity of various classification schemes, but whether one stresses vernacular architectural traditions or barn function, certain patterns appear. Although these patterns have been studied most extensively in the eastern United States, they may also be traced in Kansas. Every person who has studied barns has come up with a slightly different system for classifying them. John Fraser Hart emphasizes barn functions in his descriptions, but many of those who stress vernacular traditions agree with his main points.

According to Hart, one type of barn is a simple, often small, structure with an entrance on the long side of the building. These structures were designed initially for threshing and housing grain, but some included space for animals. Often these were frame structures, with lofts above a single main floor. Because such buildings were built by many English colonists who came to America, they are sometimes called "English barns." However, non-English immigrant groups who came to Kansas and settlers in the Rocky Mountains built similar barns.

Barns designed to house both animals and grain can also be traced back to colonial America, particularly to upstate New York and Pennsylvania. Generally these were larger, more substantial structures also with side entrances. They were often built into the side of a hill or with a ramp to give easy access to two stories. Animals were housed on the lower level, and grain was threshed and stored on the second floor. A loft area provided additional grain storage.

The Germans who came to Pennsylvania had their own particular style of bank barns. These also had two stories, both with entrances. A distinctive feature of these barns was the way in which the second story extended beyond the first on the side of the barn opposite the hill or ramp, giving a sheltered entrance to the animal stalls on the first floor. This feature is called a forebay. In addition, the gable ends of these barns sometimes were of stone or brick and often had distinctive decorations and slits for ventilation. Such "German" or "Pennsylvania" barns were adopted by many in areas where both animals and grain needed winter protection.

Meanwhile, in the southern United States, other types of barns developed. While the tobacco barns and stables of the plantation south had little influence outside the region, the barns which developed from the corncribs of Appalachia spread widely. These cribs were initially small log or board structures designed to store corn. Several of these could be linked together under one roof to create a barn in which corncribs and stalls along either side opened onto a center passageway running from one end of the barn to the other. Unlike the barns discussed above, the entrances were in the gable ends. Often additional sheds and lean-tos were added on either side, extending the width of the structure. Because they were designed to store corn, rather than to provide space for wheat and for threshing, such barns became popular in the cornbelt of the Midwest, even in areas where southern settlers were few.

Immigrants entering Kansas in great numbers from Europe in the 1870s and 1880s brought different ideas about barn buildings with them. Greg Schultz, who studied the Mennonites and the Swedes, has identified distinctive patterns of barns for both of those groups. Schultz was particularly interested in the factors that encouraged groups to retain their traditional barn building practices and those that encouraged them to incorporate new ideas. He believed that the stress which the Mennonites placed on preserving their own beliefs and culture was reflected in the slowness with which their barns changed. On the other hand, the growing prosperity of some individual Swedish farmers led to increased diversity of the size and design of their barns.

In their studies of barns, several scholars have focused on the hay hoods used to protect the pulleys which lift hay into the hayloft and have drawn different conclusions about their significance. James Shortridge said that in Kansas the presence of the larger, square hay hoods corresponded with the presence of settlers from Missouri or the south and that the presence of smaller, triangular hay hoods typified settlement by northerners. On the other hand, Richard Francaviglia claimed that in the Rocky Mountains and on the west coast, hay hoods reflected different climatic conditions. He stated that larger hay hoods, providing the most complete coverage of the hay pulley, corresponded with areas having the most rainfall, and that in the dry regions, hay pulleys might not be covered at all. He also noted that in dry climates, barns were less needed and received less care than they did in areas where stock and their food supply needed protection. Francaviglia used these facts to argue that climate and the desire to have the most economically productive structure, rather than traditional ideas about barns, were the most important factors influencing their features.

Although all the barns discussed above can be traced back to colonial America, if not further back to their European prototypes, round and octagonal barns were creations of the nineteenth century. Perhaps the first were built by Shaker communities in the 1820s or 1830s. In the 1840s and 1850s Orson Fowler and other pattern book authors encouraged their construction, along with the construction of

octagonal houses. Round and octagonal buildings experienced a small wave of popularity after the Civil War, and a few such barns were built in Kansas, chiefly between 1900 and 1915. For all their merits, however, they never received wide acceptance.

There are other indications that some Kansas farmers were building barns which exemplified some of the features being lauded by the agricultural experts of the time. Schultz observed that the dramatic "gambrel" roof, with two roof slopes to allow for greater grain storage, was introduced to the Swedish farmers by the advice literature being published for farmers toward the end of the century. Also, the barns pictured in Evert's Atlas of Kansas in 1887 show that some Kansas farmers were experimenting with new, and often unusual, types of barns. While the pictures in this publication were meant to display how progressive and prosperous Kansans were and cannot be viewed as typical of the state, they do provide some evidence that new ideas about farm buildings were actually being tried.

Outbuildings

Old farm outbuildings are not always easy to identify and study. Many were multifunctional or have been modified to serve functions other than those for which they were created. Factors such as personal preference or economic status of the owner caused great variations. Nonetheless, some general types and functions of buildings can be identified and some patterns traced. Amos Long has conducted one of the most detailed studies of rural outbuildings. In his book, Pennsylvania German Family Farms, he described a wide variety of structures as well as the tasks and folklore associated with each. His work, focusing on a particular ethnic tradition in another part of the country, provides useful comparisons for Kansas structures.

According to Long, one group of outbuildings on farms centered around the farmhouses and the variety of tasks performed there. Farmhouses served numerous important functions, including the processing and preparing of farm products and housing and feeding farm workers. Sometimes farmhouses included dwelling space for several families, for several generations of the same family, or for "hired hands." At other times, additional dwelling space was needed, and farms might contain an additional tenant house or, on a ranch, a bunkhouse. "Granddaddy houses" where retired relatives lived may have been common among some ethnic groups.

The kitchen was the center of many farm activities. Here food was processed and cooked. In some parts of the country, the kitchen in the main farmhouse was supplemented by a "summer kitchen." The purpose of a summer kitchen was to remove the heat and confusion of canning and processing fruits and vegetables from the main dwelling during the summer months when such crops were ripening. Although summer kitchens are generally associated with the South in this country, where the warm climate makes them welcome, both German-Russian Catholics and Mennonites seem to have built them in Kansas.

Other farm buildings also supplemented the work generally performed in farmhouses. Bake-ovens and smokehouses aided in cooking. These were tiny, windowless structures, usually of stone, with little more than a place for fire and ashes, a chimney, and oven space. Drying houses, containing racks on which to spread out fruits, were sometimes found in orchard areas. Washhouses, with stoves and fireplaces for heating water, removed laundry chores from the farm kitchen. Sometimes, several of these buildings were connected to each other or the back of the main farm dwelling.

If a farmstead had a spring, it was often protected by a spring-house. Generally these structures were designed to provide well-ventilated areas where foods could be cooled or stored. Sometimes they were large enough to house such activities as the churning of butter. In regions where springs were found, well-houses or pumphouses were sometimes built, and occasionally an ingenious farmer devised a way to cool food with water pumped by a windmill.

In parts of the country where ice could be cut from local ponds, icehouses existed on many farms. These small, well-insulated structures were capable of keeping ice through the summer. Icehouses were often constructed partially underground. Some icehouses were built in Kansas, and they were most prevalent among particular ethnic groups. Albert Petersen discussed their popularity among German-Russian Catholics. However, the development of refrigerated railroad cars by the 1870s meant that ice was available for purchase in rural Kansas towns, and the importance of icehouses declined.

Root cellars, designed for the storage of food, were frequently constructed on Kansas farms. Sometimes, in areas like the Flint Hills, these were elaborate, rock-lined caves with arched entrances. Such cellars may reflect the continuation of ethnic traditions. In other cases, dugouts and soddies which had initially served as dwelling places for settlers were converted into root cellars when more substantial houses were built. Besides providing for the storage of food, Kansas root cellars served another important function by offering the farm family protection in case of tornados or other storms.

Although indoor plumbing was beginning to appear in urban areas by the 1870s, privies were still important structures on the farms--and in the towns--of rural Kansas. Although usually small, simple wooden structures, privies did vary in size and placement of the seat, or seats, and were sometimes constructed of stone or brick. Amos Long's chapter on privies indicates their variety. The placement of the privy was a frequent topic in the farm advice literature.

Chicken coops might be near either the house or the barn, perhaps reflecting whether the husband or the wife was primarily responsible for the chickens. Advice books stressed the need for good light and ventilation for chickens, and most chicken coops had large openings on the south. The extent to which chickens were kept in coops or allowed to run free might be learned from the size and extent of the coops built to house them.

Outbuildings that clustered around the barn tended to supplement it and provide additional space for animals, feed, and equipment. Horses and cows were usually housed in the barn itself if they were kept indoors, but often pens and corrals were also provided for them. Hogs and sheep sometimes had separate sheds. As a farmer's stock of equipment grew, so did the size and number of buildings for storing and repairing it. More affluent farms, like houses in towns, had carriage houses. Wagon sheds, two stories high to allow for loaded hay wagons, were sometimes built.

In addition, many farmers needed extra structures in which to store feed for their livestock. Grains were sometimes placed in simple rectangular sheds. Corncribs were constructed in a variety of shapes and sizes. Often these were larger at the top than at the bottom and had space between the side slats to provide good ventilation.

Silos began to appear in the second half of the nineteenth century and won quick acceptance on midwestern farms. Their development provided better winter feed for animals and allowed farmers to raise more stock. The first silos were stone-lined pits, sometimes dug inside the barn. Next, vertical rectangular models were tried, but the corners tended to trap air and allow spoilage. By the 1880s and 1890s round silos appeared, built of wooden staves held together with wire hoops. Concrete silos did not become common until well into the twentieth century.

Cattle and Sheep Industries

The cattle industry in Kansas had several facets, and cattle-related activities have left a variety of structures on the Kansas landscape. Although early settlers in the state generally kept a few cows, the real establishment of the industry in Kansas dates from the post-Civil War years when Texas ranchers began driving their cattle to Kansas railroad terminals. The growth of eastern cities and the possibility of shipping beef by rail opened up new profits in the cattle trades, profits worth the long drive from Texas to Kansas.

As soon as the war was over, ranchers began driving cattle from northern Texas, through eastern Indian Territory (now Oklahoma) to Baxter Springs, Kansas, and then on to railroad terminals at Sedalia, Missouri. The real cattle boom began in 1867 when Joseph McCoy turned the tiny town of Abilene at the western terminus of the Kansas Pacific railroad track into a shipping point for cattle. Abilene quickly prospered, but as the tracks moved across the state, other cattle towns sprang up. Ellsworth replaced Abilene as the major cattle shipping center, only to be replaced in turn by towns such as Wichita, Newton, and Caldwell as railroads moved toward the southern border of the state. By the mid-1870s, the Santa Fe Railroad stretched diagonally across Kansas, and Dodge City monopolized the trade.

The cattle drives and the cattle towns flourished only a short time--about two decades. By the 1880s, the cattle industry had spread out of Texas, and cattle were being raised throughout the Great Plains. Instead of merely processing and shipping Texas cattle, Kansans were grazing and marketing their own large herds. The fine pastures of the Flint Hills and the laws restricting the movement of cattle into Kansas encouraged the practice of fattening cattle over the summer in the upland pastures there. In an article on grazing in the Flint Hills, Walter Kollmorgan and David Simonett claimed that the region established long-term financial and cultural ties with Texas and the Southwest in the late nineteenth century. If that is true, the structures of Flint Hills ranches may reflect such influences. In addition to summer grazing, wintering and raising cattle became a big industry in both the Flint Hills and western Kansas. Expectations of profit ran high during the 1880s as easterners and Europeans invested capital in Kansas herds. By the end of the decade, however, overstocking, overextension of financial backing, competition for grass and water, droughts, and blizzards led to the failure of many ranchers. Those who remained in western Kansas regrouped, built fences and windmills, and concentrated on the establishment of smaller, better herds.

Numerous books and articles have been written about the cattle drives, the towns they created, and the growth of cattle ranching. Even though the authors of such works seldom focus on structures which were built, they do provide useful background material and occasional descriptions and photographs. Many of the buildings seem to have been of a temporary nature. Wooden stores and sidewalks lined cowtown streets. Soddies and dugouts were present on ranches. In some instances, wooden structures were erected and moved as the cattle boom shifted. For example, the two-story Drover's Cottage, a leading Abilene hotel, was moved to Ellsworth when the cattle trade prospered farther west.

Although less famous than the cattle industry, sheep ranching also emerged as an industry in Kansas following the Civil War. Like cattle, sheep were driven into the state. Instead of coming from Texas, however, they entered the state from the west. Although sheep towns never boomed as cattle towns did, sheep were also shipped from Kansas railroad terminals. Sheep gradually began to be raised in increasing numbers in the state, especially in the Flint Hills and on the western plains.

Topics for Consideration and Research: Agricultural Structures

Although in the past the buildings relating to farming and ranching have been largely overlooked, the study of these structures can give us important information. For example, by analyzing such structures we can see the effects of climate and the type of farming operation at work on people's decisions about what to build. We can also examine the effects of particular ethnic traditions, the available materials, and the agricultural advice literature of the period. The fact that all of these factors were present in Kansas during the late nineteenth century makes the state an especially good place to study agricultural buildings. In addition, since many farmers constructed outbuildings of stone, numerous structures built before 1900 are still in existence for us to study today.

The work which has been done on agricultural buildings can help focus questions to be addressed, suggest methodologies to be used, and provide useful points of comparison for Kansas structures. Glenn Trewartha has shown that by analyzing the numbers, types, and placement of farm buildings we can establish patterns which are typical for different types of agricultural pursuits. His work could be expanded and tested in Kansas. Amos Long and Albert Petersen have conducted detailed studies of the particular arrangements and types of out-buildings which characterize specific ethnic groups. Similar studies on other groups are needed. An additional approach would be to compare the structures found in Kansas with diagrams and plans in farm manuals such as the volume compiled by Brian Halsted and in the publications of state and federal agencies.

Barns are one type of agricultural structure which has been extensively studied, and the barns found in Kansas need to be examined in the context of what is known generally about them elsewhere. For example, how well do the classification systems which have been developed around barn function and vernacular traditions of barn building apply here in Kansas? Can correlation be made between the origins of settlers and the types of barns they built? Are the differences in climate in different parts of the state reflected in different features of barns?

Additional questions may be raised about structures related to the cattle industry in Kansas. Where do traces of the old cattle trails remain? How were the original cattle towns laid out? Where were the cattle pens and where were the hotels? How many saloons were there? How long was it before homes and schools were built? The cattle towns which remained small rather than emerging as modern cities may be the best places for finding the answers to such questions and for finding structures which still preserve the flavor of the nineteenth-century cattle trade.

The structures relating to the development of the ranching industry in the state also need to be examined. Such structures can tell us a great deal about what life was like on the ranches of the plains. What kind of living accommodations were there for cattle ranchers and for their cowhands? Where were their family dwellings? Bunkhouses? What structures were there for the care and feeding of animals? Once we can identify the structures relating to ranching in Kansas, we can compare those structures with similar ones described in advice books and known to have been built elsewhere. Recent studies of ranching structures on the Texas high plains provide a point of comparison for Kansas ranch buildings and windmills.

Sheep-related structures in Kansas have received even less attention than those related to cattle ranching, although the Pratt Ranch, which is now owned by the state, offers an example of a successful sheep ranching operation in western Kansas before 1900. Further identification and study of buildings connected with the sheep trade and sheep raising would allow us to compare sheep- and cattle-related structures within the state, to see whether or not sheep were raised in Kansas as they were in other parts of the country, and to establish if the structures designed for sheep in the farming manuals were actually built here.

Rural Communities

Although Kansas remained a predominantly rural and agricultural state between 1865 and 1900, not all of its inhabitants lived on farms and ranches. During those years the number of Kansans living in towns of over 2,500 inhabitants averaged between ten and fifteen percent of the state's population. Most of the towns were relatively small, however. Only Leavenworth had a population of over 10,000 in 1870. Three towns claimed that distinction in 1880, six in 1890, and nine by 1900. The focus in this section of the overview is on the smaller Kansas communities that never became highly populated. Particular attention will be paid to the towns that served primarily as agricultural trading centers.

Competition between Kansas towns was keen. Even the smallest communities made sweeping claims about their present and future advantages, and some offered free land or other inducements to prospective inhabitants, railroads, or manufacturers. Each decade between 1850 and 1890 brought high hopes and booming economies to towns in different sections of the state. Although some towns grew and prospered, others quickly faded, leaving few reminders of their early dreams of grandeur.

Not all small towns in Kansas were alike, and the buildings and layout of a town may reflect distinctive values or practices. Some communities were organized by specific ethnic groups. For example, Mennonite and Catholic German-Russian immigrants tried to preserve the village patterns of land ownership they had known before coming to America as well as the traditional style and placement of buildings. Other communities organized around specific economic activities. Cattle terminals, railroad yards, and mines all influenced the towns in and near which they were located. In addition, pursuit of the coveted prize of being the county seat was an important factor in the growth and layout of a town.

For the purpose of this study, perhaps the most significant towns in Kansas between 1865 and 1900 were the agricultural trading centers which grew up across the state. While many of these towns, large and small, contained manufacturing establishments and aspired to national markets, the real economic base of most rested on buying the agricultural products of Kansas farms and selling farm families the items they wanted and needed. Many of the towns founded in Kansas before the Civil War had been primarily trading centers, and the spread of the railroads in Kansas led to the growth and development of many more.

John Hudson has described some of the general characteristics of agricultural trading centers which grew on the plains of Kansas and other states. He said that many of these towns were actually created by the railroads as they entered unsettled areas. In such regions towns were placed at intervals convenient to the railroad companies, who also platted them, sometimes on the basis of standardized plans created in the main office. The major street generally paralleled the track or intersected it at a right angle. Depots, elevators, livestock pens, hotels, and lumber yards occupied prime locations near the track. Banks, offices, and stores lined the streets nearby. Schools and

churches--and sometimes courthouses--were often given free land away from the track. Because the primary function of such towns was to serve the surrounding agricultural area, the number of actual inhabitants and the number of dwellings may have been low in proportion to the number of business buildings.

Many of these trading communities remained quite small, but nonetheless, they served a critical function for a few decades in the late nineteenth century. Gradually, however, automobiles and paved roads gave local farmers and ranchers access to larger trading centers farther away, and many small Kansas towns began to decline.

We are beginning to assemble a body of useful information on Kansas towns and to realize their importance in the early history of the state. At the local level, histories of many towns exist, some recent and some written by early settlers. Many of these, however, contain little information on buildings or focus only on a few of the most prominent structures. Several books and articles have been written which are helpful for putting local histories in the larger context of town building in the Midwest. John Hudson and John Reps have both made some interesting generalizations which need to be checked more carefully by examining towns in Kansas. Carole Rifkind and Stephen Jacobs have provided examples of the ways in which small towns in other parts of the country have been studied and photographed.

Commercial Buildings

Clustered in the centers of small towns were the buildings in which the major business of the rural communities was transacted and goods and services were exchanged. These groups of buildings form cohesive units, and the significance of an entire block or street of such buildings is greater than the individual structures. Stores and shops were generally connected to each other, each sharing a wall with its neighbor. In addition, these structures were often constructed within a few years--or even a few months--of each other, giving the streets a unity of detail and overall design which is often missing in urban areas today.

Initially most commercial buildings were simple structures and many of them were capable of fulfilling various functions. If one business failed, another totally different enterprise might move into its place. In communities established before the arrival of the railroad, original buildings were generally of locally available materials: log, sod, stone, or locally produced brick. The coming of the railroads increased the availability of cut lumber, and in the towns created by the railroads, balloon frame wooden buildings went up with amazing speed. Whole main streets appeared in a matter of days, with stores displaying both false fronts which extended above their rooflines and porches ready to shade prospective customers.

If a town thrived, the initial commercial buildings along the main street were replaced as quickly as possible with more impressive structures. Sometimes this occurred within a few years of a town's founding. The newer buildings were often built of brick, but carefully worked stone was prevalent in the central part of the state. Two and three stories were the general rule, although a few buildings were taller. Rooms on the upper floors were used for offices or meeting rooms or provided dwelling space for the family of the owner or for renters. The decorative trim, the plate-glass windows, and even entire cast-iron storefronts used on these buildings could be ordered from catalogs.

These buildings were often created to advertise the prosperity of their owners, and they displayed the lavish detail which characterized the various architectural styles popular in the late nineteenth century. Fancy brick and stone work; carved details on windows, pillars, and cornices; and even bay windows, turrets, and towers graced these structures. Unity of design was created by regularly placed windows, repetition of decorative details, and common building materials.

Many of the buildings along the main streets of small Kansas towns housed local merchants. Others contained the offices of professionals or perhaps of the local newspaper. Livery stables, with stalls inside and doors large enough to serve carriages, were almost always present in rural communities. Banks were often among a town's most impressive structures, designed to convince depositors of their financial stability with grandeur, substantialness, and stylish decoration. Hotels were also considered essential. While some of these were modest structures, resembling large houses or stores, others were surprisingly lavish, displaying the town's prosperity to visiting dignitaries and potential investors. Saloons were present in some communities but became less frequent as increasing numbers of Kansans supported prohibition in the late nineteenth century. Opera houses graced the streets of many rural towns, in communities the size of Caldwell, Grainfield, Concordia and Oskaloosa, as well as larger towns. These opera houses varied considerably in size and overall elaboration, but many of them welcomed nationally known singers, actors, and vaudeville performers to entertain rural Kansans.

Other commercial structures were designed to serve more utilitarian functions. The most distinctive of these were the grain elevators. Robert Riley has researched the history and construction of grain elevators and their spread in the Midwest. He stated that these tall, narrow structures were first introduced in the East to allow for the vertical storage of grain. Builders experimented with heavy timber construction, but by the end of the Civil War balloon frames were being used. The lightness of this type of construction, however, made elevators vulnerable to the pressure of the stored grains and to the high winds of the prairies. By the 1880s, more complicated and substantial building methods were tried. Elevators continued to be rectangular, and wood continued to be the principal material used, making sparks from the railroad trains a constant danger. The 1890s brought the use of corrugated galvanized iron siding for grain elevators and the introduction of brick, tile, and steel bins. Concrete came into use for major elevators after 1900, but given the expense involved, the use of concrete spread slowly in rural areas.

Information about commercial buildings is scattered, and, in the case of nineteenth-century Kansas, fragmentary. One of the best sources is the 1887 Evert's Atlas of Kansas. While it is doubtful many buildings in rural Kansas towns were as large or as grand as those pictured, the drawings do provide a sense of what was sometimes achieved, in small towns as well as in large, and, equally important, what sort of structures Kansans were aspiring to build.

Courthouses and other Governmental Buildings

Courthouses and other governmental buildings typically occupied positions of honor in many small nineteenth-century communities. Stores and other commercial buildings were usually clustered around these buildings or along a street nearby.

The distinction of being the county seat was fiercely sought by young Kansas towns in the post-Civil War era. Stories are told of the "county seat wars" which were fought as towns competed for the distinction and presumed financial advantages of being the center of county government.

Photographs show that initially some courthouses were modest affairs, resembling simple stores, houses, or schools. More substantial and lavish courthouses quickly became common throughout rural Kansas as communities demonstrated the importance with which they viewed these buildings and themselves. In her book on Kansas courthouses, Julie Wortman described many of these structures which are still in existence today. The courthouses dating from the late nineteenth century are elaborate buildings of stone and brick. They reflect the formal styles which were popular nationally, and many of them were designed by professional architects.

Edward Price has noted that courthouses like these frequently formed the major focal point of a rural town or shared this honor with the railroad depot. Sometimes the courthouse was one of the first major buildings constructed, its stylish silhouette standing out strangely against open fields nearby. Gradually, however, courthouses were surrounded with small parks which provided shade, benches, and hitching posts for those who came to town for a day's business in the stores and offices across the street.

Courthouses were not the only governmental buildings constructed. Jails were common structures in most nineteenth-century towns, and some towns had city halls, such as the one constructed in Kingman in the 1880s. In addition to housing other city governmental activities, that building served as a firehouse and had a three-story octagonal tower for drying the fire hoses.

Social Welfare Institutions

During the late nineteenth century, the state government was beginning to engage in social service activities. In keeping with the ideas of the times, various complexes of buildings were constructed which were designed to house and help specific groups of needy individuals by providing them with proper environments. In 1890 the Board of Trustees of the State Charitable Institutions reported eight projects, including insane asylums, reform schools, an orphanage for soldiers' children, and schools for the deaf, dumb, and blind. Although several of these institutions were in Topeka, rural locations were often said to be more suitable than urban ones. There was an insane asylum in Osawatomie, and the Industrial School for Girls was in Beloit. At least some of these "Charitable Institutions" constructed by the state were elaborate buildings designed by leading architects, including the men who served as state architects during this period.

Local communities and religious groups also began to consider the need for hospitals and other social service facilities. Some private institutions were founded. For example, Mary A. Bickerdyke, who was well known for her nursing activities during the Civil War, started a home for Civil War nurses, their mothers, and their daughters in the 1890s.

Although information about local and private institutions is widely scattered, it appears in county records, newspapers, and histories. Individuals should be aware of the possible existence of these groups, and of the importance of the buildings they constructed. In addition, state documents, such as the reports of the Board of Trustees for State Charitable Institutions, are valuable sources for information on state institutions.

Manufacturing

Today manufacturing is generally assumed to take place in urban areas, but in nineteenth-century Kansas every rural community had its own means of making and processing goods needed by its residents and the residents of nearby farms. The major industries in the state were involved in processing food raised by Kansas farmers and in supplying them with building materials and farm equipment. By the 1890s, however, this pattern was beginning to change. Information about the manufacturing enterprises active in the state before 1900 can provide clues for locating structures in rural areas which relate to these activities.

Mills were important elements of Kansas communities from the 1850s until the 1870s, generally serving to grind grain or to saw wood. Other mills were used to process sorghum. Initially, most mills were placed along streams and rivers and ran on waterpower. A few were windmills, built with stone towers and blades spanning seventy to eighty feet. Mills of this type have been moved and reconstructed in Wamego and Smith Center. Steam mills were also present, gradually replacing waterpowered ones by the end of the century.

Initially, corn and wheat were both ground in Kansas mills for local use. When Turkey Red wheat was introduced in central Kansas in the late 1870s, new milling techniques and new types of grinding devices were required to process the hard wheat. Such changes necessitated the investment of more capital, and many of the smaller family-owned mills found it hard to compete. As ever-increasing amounts of Kansas wheat were shipped out of the state and sold on the world market, more and more of it was ground in the large mills concentrated in Kansas City and other emerging urban areas. Grain elevators along the railroad tracks steadily replaced the gristmills along the streams of rural Kansas.

Early mills were also used to prepare the lumber which many Kansans considered essential for building. Since little timber suitable for this use was present in Kansas, local sawmills flourished only until the arrival of railroads, which brought lumber and other building supplies. By the end of the century rural towns typically had lumber yards, not sawmills.

In the 1860s and 1870s numerous small Kansas towns had brickyards. Brickmaking in the nineteenth century was a relatively cheap and easy procedure which did not require elaborate equipment or intense firing. Most communities had some suitable local clay which could be mixed and dried, either in the sun or in wood-burning kilns. But, as in other industries, technological advances led to the centralization of the industry as well as to the production of sturdier bricks. By the 1890s the small family-owned brickyards throughout the state were closing, and new modern factories appeared in southeastern Kansas where good clays and the availability of coal and gas favored the mass production of fired bricks.

In addition to the food and building materials processed by early Kansans, local shops produced a variety of other products for the homes and farms of nearby residents. Tools, wagons, carriages, and furniture were among the items produced locally. Many of these shops retained some importance until the close of the century.

While the spread of the railroads contributed to the decline of some local industries, such as milling and the production of building supplies, it led to the growth of others. Industries based on the cattle trade are a good example of this growth. Shipping connections and the development of refrigerated railroad cars meant the rise of the meat-packing industry in locations where cattle trails intersected railroad tracks or where cattle ranching was occurring. Often meat-packing plants were accompanied by related industries such as soap and tallow making. Eventually, however, meat-packing, like other industries, became centralized in Kansas City and other urban areas with good railroad connections.

In the 1870s and early 1880s, many Kansas towns viewed the railroads as the means for them to become manufacturing centers able to buy and sell in national markets. They sought to convince eastern industrialists to locate in their communities and to open plants producing a wide variety of products. Some Kansas manufacturers canned and

processed foods grown in the state. Others, such as barbed wire manufacturers, imported materials and sought to produce for a local market. Some products, such as organs and shirt collars, were not distinctively Kansan in either raw materials or sales. In most areas of the state, little came of the expectations of becoming industrial centers.

Excellent articles by James Malin, Richard Douglas, and William Seiler trace the development of manufacturing in Kansas. They relied heavily on the statistics in manufacturing censuses, and much of their work focused on areas like Kansas City, which became a manufacturing center, and Lawrence and Leavenworth, which aspired to. Nonetheless, many of their observations are relevant for the whole region. Malin's article on Kinsley provided examples of how small western towns sought to achieve importance as manufacturing centers.

Sources such as these, however, seldom provide information about the structures which were built for manufacturing or which of them still remain in existence today. The Historic American Engineering Record (HAER) project has made a start toward collecting this information. Margaret Whittemore has written about and drawn some of the early mills in the state. There is some scattered information in the records of the Kansas Historic Preservation Department, and some sites are mentioned by James Shortridge and the authors of the WPA guide to the state. Such information is very fragmentary, however.

Topics for Consideration and Research: Rural Communities

Although we know about a few of the more impressive buildings in rural Kansas communities, many questions remain about the towns themselves and the variety of structures which composed them. By identifying and examining these structures we can learn a great deal about the economic base of these communities and how people's livelihoods affected their building. We can also gain insight into the ways in which ethnic communities did or did not maintain traditional architectural practices.

Scholars such as John Hudson, Edward Price, and John Reys have made some general observations about the layout of towns in the Midwest. It is useful to keep their theories in mind in studying a town's history and its architecture. To fully understand why communities developed as they did, we should be aware of such factors as the extent to which the railroad determined the town's layout; the roles of depots, courthouses, and commercial blocks in the daily life of the rural community; and the presence of once-common structures such as blacksmith shops and harness makers.

In the late nineteenth century, rural Kansas towns were a vital part of the countryside that surrounded them. Neither the towns nor the farms and ranches nearby can be understood apart from each other. And yet, many questions exist about the relationship between those on the

farms and those in the towns. For example, did the people in towns and on nearby farms share the same cultural traditions and economic status or were there sharp differences between farm families and those with whom they traded? Information about the types of buildings each group constructed would give us insight into such questions. It would be helpful, for example, to know what differences there were between the building of small towns and the surrounding farms and ranches and whether any of the differences could be attributed to ethnic or economic causes. Also, how do the buildings and the layout of agricultural trading centers compare with those of manufacturing or mining or cattle towns?. Do any of the buildings in small towns rival the elaborate structures which were erected in such places as Leavenworth, Kansas City, or Topeka?

Courthouses are one type of structure which has been thoroughly studied, both in Kansas and in the nation as a whole. Other governmental buildings have seldom been examined, however, and we know relatively little about the structures which housed fire departments, jails, and city offices. Since the late nineteenth century was a time of expanding governmental activities, these structures are significant and can teach us about the activities which government performed. Social service institutions also expanded greatly during the late nineteenth century. These have been thoroughly researched in urban areas of the country, but little work has been done in areas like rural Kansas. We do not know the extent to which the state institutions, and the structures which housed them, followed the principles and examples of similar urban groups, or if there were significant differences.

Since much of the manufacturing that went on in Kansas in the late nineteenth century occurred in small towns and involved processing local farm products and creating materials for local farmers to use, the early mills and other factories are part of the rural story. Yet the structures connected with these endeavors have seldom been studied. Locating and identifying these structures is necessary if we are to understand their relationship to the local community as well as their scope of operation.

Mining

Like manufacturing, mining activities occurred in many areas of the state during the years immediately following the Civil War, with local coal mines and quarries supplying the needs of local farmers and townspeople. By the 1890s, however, as the smaller mines were closing down, mining was developing as a nationally important industry in southeastern Kansas. An overview of the various earth-based resources which were mined in the state can provide the context for identifying mining structures.

Early settlers in Kansas were aware of the existence of coal in the state, some using it for fuel instead of wood. Strip mines or shallow shafts supplied most of the coal. Mines occurred in a variety of locations, and most of them were small-scale, locally owned operations.

A farmer might dig coal on his own land for his own use or take his wagon to a nearby mine to get enough coal for the winter. Sometimes farmers worked at mines like those at Minersville in Cloud County during the winter months and returned to their homesteads in time for spring planting. In Leavenworth County deep-shaft mines were dug in the late 1850s and 1860s. Prisoners from the Kansas penitentiary worked these, supplying coal for various state institutions. By the 1870s Osage and Franklin counties were developing their coal resources and aspiring to become major coal producing areas.

Coal deposits in southeastern Kansas were mined with strip pits as early as the 1860s, and the coming of the railroads in the 1870s meant that these fields assumed increased importance. Railroads transported southeastern Kansas coal to Kansas City and beyond. The railroads began using coal instead of wood in their locomotives, and the Santa Fe Railroad became so interested in obtaining coal that it built mining communities such as Frontenac. By the 1890s Cherokee and Crawford counties had emerged as the center of the coal district.

Kansans also began to tap oil and gas resources in the period between 1865 and 1900. Tar springs in Miami County had been known earlier to both Indians and settlers. The search for oil began on a small scale in the 1860s. Prospecting continued, and by the 1880s small amounts of gas had been found near Mound City and Paola had gas piped into the town. In the early 1890s, gas discoveries in the Neodesha field led to the use of gas in Coffeyville, Cherryvale, and Neodesha. A major gas strike at Iola in 1894 established Kansas as a major gas-producing state. Significant oil discoveries were made in the 1890s at Neodesha, Chanute, and Humboldt, among others. By 1895 Standard Oil had established an oil refinery at Neodesha. The gas produced in southeastern Kansas provided fuel for smelting and manufacturing operations in the area. The basis for major growth in the twentieth century had been laid.

Lead and zinc were also mined in eastern Kansas by the 1870s, if not earlier. The availability of coal and gas in the area led to the growth of smelting industries nearby.

Fuels and metals were not the only resources which Kansans were taking from the earth between 1865 and 1900. They often quarried rock for themselves and their neighbors and mixed their own mortar and plaster. Stonework did not necessitate heavy machinery or require extensive skills especially in central Kansas, where limestone was soft and easy to work when fresh out of the ground. Grace Muilenburg and Carl Brandhorst have described how early Kansans in the central part of the state worked their own stone. Gradually, however, as Muilenburg related, stone quarrying became a business, and Kansas limestone was shaped and shipped away from the area where it was quarried. Other building materials were also produced from Kansas natural resources before 1900. Gypsum was generally found in central Kansas and used for plastering walls. There was an early factory at Blue Rapids, and stories about Kansas gypsum attracted English investors to put in a plant at Medicine Lodge. With additional plants at Salina and in

Dickinson County, the industry prospered until competition developed from Texas plants in the 1890s. Raw materials for cement, brick, and tile were found in various places throughout the state, but the clays in the southeast section and the availability there of coal and gas led those industries to concentrate in that region by the 1890s.

Another product which Kansans mined was salt. Like other resources, it was initially obtained and processed at scattered locations around the state. Sometimes salt-water wells provided water, and salt was produced by evaporation. By the 1890s major salt mines had been established near Hutchinson.

James Malin, Richard Douglas, and William Seiler have compiled detailed surveys of early mining in Kansas, using the materials in state and federal censuses. John Clark has continued the early story with his treatment of the industrial growth of southeastern Kansas after 1890.

Topics for Consideration and Research: Mining

It would be particularly useful to find structures relating to the small-scale mines which existed in rural Kansas immediately following the Civil War. Little work has been done anywhere studying this type of mining operation. If structures relating to these early mines could be located, they would be important resources which could serve as a basis for comparison with the larger, later mines which characterized industrialization. Early quarries, salt mines, and other structures also need to be sought.

More information also must be collected about the mining operations which developed in southeastern Kansas in the late nineteenth century and flourished there after 1900. The mines themselves, strip pits and slag heaps, the structures used for processing ores, and the early oil and gas wells all need to be studied and recorded. It would be useful to know about mining communities in which miners' families lived. Were they like those of the farms and small towns of rural Kansas, or did they resemble the mining camps of the far west or of Appalachia? How were mining communities laid out and what kind of dwellings did workers live in? Did mine owners live nearby? What types of homes did they occupy?

Transportation and Communication Structures

Transportation facilities have always been of critical importance to rural Kansans. In the last third of the nineteenth century these facilities expanded enormously, dramatically changing the Kansas landscape. Major transcontinental trails had crossed the state in the years before the Civil War, going to Santa Fe, Oregon, and Denver. After the war, railroads spread quickly in Kansas, bridge technology improved rapidly, and roads and trails were built linking individuals and communities to larger transportation networks. Telegraphic poles and lines were erected wherever railroad tracks were laid, but facilities for electricity and telephones, which were beginning to appear in cities, probably did not appear on the rural landscape of Kansas before 1900.

Railroads

In 1860 the only railroad track in the state was a five-mile stretch in Doniphan County, but by 1870 the Kansas Pacific crossed Kansas and several lines extended to the southern border. By 1873 the Santa Fe Railroad had followed the old Santa Fe Trail diagonally across the state, and a network of smaller lines was being laid, linking all parts of Kansas to national markets. By 1890 Kansas ranked second among the states in number of miles of track.

The mere presence of these tracks had an enormous impact on the landscape, often cutting across open country before settlers arrived, bisecting the buffalo hunting grounds of Indian tribes, and creating new patterns of transportation and communication. The tracks themselves are important artifacts. David Weitzman offers guidance in determining when and by whom tracks were laid through an examination of cross ties, nails and the tracks themselves. With the tracks came a host of other structures, some built by those drawn by the railroad and others created by railroad companies themselves. Wherever the tracks went, trestles and bridges were built. Some of the first major bridges in the state were built for railroads, and the railroads probably erected the first windmills and water tanks. Signal towers, watchmen's shanties, coal bins, and ash pits were also constructed. Telegraph wires accompanied track across the state. At some key junctures, railroad yards were built, with foundries and roundhouses for keeping trains in good working order. Railroads built hotels, such as the one at Wallace, and the Harvey Houses, such as the one at Florence, which served food to railroad passengers. Even lodging for newly arrived immigrants to Kansas was constructed by the railroads.

Among the most picturesque and most widely appreciated structures which the railroads built were the rural depots which still exist at the centers of many small Kansas towns. The history and architecture of these depots is a fascinating topic and one which is beginning to receive attention. In The Country Railroad Station in America, H. Roger Grant and Charles Bohi describe the varied functions these buildings served and the varied styles which different companies adopted in different parts of the country. According to Grant and Bohi, on the plains where railroads were built before settlement, depots were usually built from standardized plans drawn up in the company's home office. Like fast food franchises today, distinctive colors and styles became company logos. Size and permanence of a depot were indications of how hopeful a company was about a town's prospects. Since towns created by railroads were often speculative ventures, initial depots were usually small, simple, and temporary. Some were even portable units which could be moved along the railroad tracks. If towns grew and prospered, more substantial stations were built. Usually these were multifunctional buildings, combining freight room and waiting room with office space for railroad business and telegraphic equipment. Sometimes they even contained living space for the station manager and his family.

Roads and Trails

Although railroads dominated Kansas transportation between 1865 and 1900, roads and trails continued to serve important functions. Shipping continued along the major trails until each was replaced by a railroad. Wagon trains left from the last terminal on the track. In the late 1860s cattle trails entered the state. Although most of these trails stopped at Kansas terminals, in the 1870s and 1880s cattle crossed the western portion of the state on their way to the northern plains. The U.S. Army was also busy building roads as it battled against Plains Indians who were resisting the loss of their land. Even more prevalent were the roads built by local governments which linked one community with another and farmers and ranchers with their neighbors and the nearby towns. Generally following section lines, these roads reinforced the rectangular grids which characterized the Kansas landscape.

Most nineteenth century roads in rural Kansas were simple dirt affairs, but by the 1880s some people were experimenting with hard surfaces. Brick and stone were common paving materials, but the frequency of their use for sidewalks and streets in late nineteenth century rural Kansas towns is as yet unknown. Asphalt surfacing for roads was being developed but probably did not spread to rural areas before 1900. After 1900 hard-surface roads and automobiles introduced a new era in transportation in Kansas.

Bridges

In 1865 fords and ferries still provided the chief means of crossing the rivers and streams of Kansas, but in the decades that followed many bridges were built. Railroads took the lead in bridge building and were usually the first to span major rivers. Most early bridges were of wood. Bridge technology developed rapidly, however, in the second half of the nineteenth century. New materials and new designs resulted in stronger and longer-lasting bridges.

Kansas bridges have received some attention in the past and are currently receiving even more. Margaret Whittemore and others studying specific areas have dated and described some early bridges. The Kansas Department of Transportation has conducted a comprehensive inventory of all bridges in the state more than fifty years old. That information has been transferred to the Historic Preservation Department. David Weitzman's book Windmills, Bridges and Old Machines and the National Park Service's publication on the bridges of Montana provide useful information about bridge building techniques in the nineteenth century for those interested in examining local structures.

Topics for Consideration and Research: Transportation

Few structures related to transportation have been studied and many questions remain about their construction and their use. Railroad depots have received the most attention nationally and regionally. In Kansas they have not been adequately studied as a group. More information about the depots that were built in the state would allow testing of the generalizations that H. Roger Grant and others made about rural depots in the Midwest. We could learn the extent to which standardization of depots was present in Kansas, the differences in depot design from company to company, and the types of facilities found in different sized towns. In addition, we would be able to tell when the more elaborate depots which characterized the early twentieth century were built in Kansas. Railroad structures other than depots have been virtually ignored, both in Kansas and in the country as a whole. The Historic American Engineering Record and others have begun to collect material and to offer guidance for individuals curious about local structures. Magazine articles and plan books from the late nineteenth century, such as Walter Berg's encyclopedic Buildings and Structures of American Railroads, which was published in 1893, indicate the enormous variety of construction under way and provide diagrams to compare with structures found locally. Railroad structures can tell us a great deal about engineering technology of the period.

Roads, trails, and bridges built in Kansas between 1865 and 1900 have also been neglected. Much information remains to be gathered about what was built where and when and by whom. Roads and bridges, utility poles, and lines all need better dating. Data on construction methods should also be assembled. Discovering where roads and trails were placed is essential if we are to understand the arrangement of various buildings on farms and in small towns. Some present-day roads were originally laid out in the period under study and follow the land survey lines then being established. The location of others can be traced from the existence of fencerows and hedges or from old maps.

Other Structures

In addition to the structures already discussed, Kansans added other features to the late-nineteenth-century rural landscape. They planted trees and yards and set up fences and windmills. In towns and in the countryside they built schools, churches, meeting places, and cemeteries, all of which have become an important part of our rural heritage.

The placement and shape of farms and towns were the result of deliberate activities of early Kansans. The rectangular patterns which characterized farms and the plats of towns were the result of the land surveys that took place in Kansas in the second half of the nineteenth century. Neither the streams and ridgelines of eastern Kansas nor the desire of some immigrant groups to maintain traditional village patterns of land ownership were able to disrupt seriously the predominance of straight roads and property lines which resulted from these surveys.

The specific laws governing the distribution of land in Kansas provided that the farms of Kansas would be large, at least in relation to the size of farms in the eastern United States. This trend was intensified by the desire and the ability of many of those who came to Kansas to get more than one of the allocated portions of land, especially in the western part of the state, where it was argued from the start that only large farms and ranches were economically feasible.

As they divided up the land in particular ways and established farms and towns, Kansans reinforced the patterns they created by extensive planting. Not only did they plant crops but they also planted large numbers of trees and hedges which have become an enduring part of the rural landscape. Although some trees had been present when settlers arrived in Kansas, many of them were cut to provide timber for building or fuel for woodburning railroad engines. As Kansans moved west, they encountered areas which were treeless. Some people may have honestly believed that by planting trees they could bring more rain to arid regions. Perhaps some wanted simply to "civilize" the country with trees and hedges that reminded them of former homes back east. Others may have sought to achieve practical ends like fencing or a break from the wind and sun with their trees.

In the Timber Culture Act of 1873 the federal government offered an additional inducement to plant trees, promising 160 acres of land in exchange for planting forty acres in trees. Even railroad companies undertook tree planting, hoping that the acres of trees they planted west of the one-hundredth meridian would supply them with needed wood and prove that western Kansas was not a desert. Many of the trees that were planted failed to grow, and the Timber Culture Act was repealed after many abuses. Nonetheless, in contrast to the barren scenes in early photographs, today the streets of Kansas' small towns are lined with trees. These trees, like the buildings of the state, are part of the heritage created for us by early Kansans.

Many authors have touched briefly and somewhat impressionistically on the general features of the rural Kansas landscape. A few have dealt with various aspects of the landscape in more depth and have given the reader suggestions about other materials. In The Look of the Land, John Fraser Hart discussed the importance of land division patterns and farm size in the makeup of the landscape. Paul Gates has thoroughly researched land distribution in Kansas. Wilmon Droze's Trees, Prairies and People focused primarily on the twentieth century, but the first two chapters provided a detailed account of private and governmental attempts to plant trees west of the one hundredth meridian before 1900. Droze cited early documents published by the federal and Kansas governments about tree planting. He stated that the Kansas Horticultural Society was particularly active in its efforts to have trees planted and published extensively on the subject. While J.B. Jackson's article on yards raises some provocative questions, Richard Sutton offered an example of an actual study designed to determine with some exactitude where different kinds of trees were planted in a rural Nebraska county.

Wells, Windmills, and Irrigation Ditches

Wherever people went in Kansas, they needed water. In eastern Kansas it was relatively easy to find. Rainfall averaged well over thirty inches a year, providing adequate water for most crops. If no springs were found, wells could be dug and lined with limestone, and cisterns could be built to catch rainwater. In central and western Kansas, however, obtaining water was more difficult. This was the country known to people of the time as the "Great American Desert," and debates raged over whether or not the land west of the ninety-eighth or one hundredth meridians could be farmed at all.

As settlers arrived in the arid sections of Kansas in the 1870s, they tried traditional means of obtaining water. Bernice and Robert Webb have described some of their problems and achievements. Wells one hundred to two hundred feet deep were dug by hand into the waters of the Ogallala formation. Although most of these wells were less than six feet across, some were much larger, meeting the needs of travelers and whole communities. The hand-dug well in Greensburg, Kansas, for example, is thirty-two feet across. Sometimes the loess, through which the wells were dug, was cohesive enough that the wells did not have to be lined. By the mid 1880s machinery, powered by steam or by horses, eased the task of well drilling in western Kansas.

If wells were small, buckets or handpumps brought water to the surface. In western Kansas horses and thirty-gallon kegs were sometimes used. The innovation which solved the problem of drawing water, however, was the windmill. Although a few early Kansans built large stone windmills on the Dutch model to grind grain and run other equipment, windmills in Kansas were primarily used for pumping water.

T. Lindsey Baker has written several detailed books and articles about the history of windmills and other water-related structures. Between the Civil War and the 1890s windmills used for pumping water were large wooden structures, built in a wide variety of styles. Generally their blades were sixteen or eighteen feet across, but some models measured as much as thirty feet. Such windmills were quite expensive, costing \$1,000 to \$2,000. Few farmers could afford them, and most of the early ones were apparently built by railroads. Gradually, they were also purchased by ranchers and towns.

During the drought of the 1890s windmill technology improved. Smaller, cheaper models made of metal became available to Kansas farmers. A variety of styles continued to be produced well into the twentieth century. In addition, state and national agencies encouraged farmers to build their own windmills out of supplies they already had on hand. Whether any of these low, fat, "jumbo" or "battleax" windmills can still be found in Kansas remains to be seen.

Water storage facilities were also constructed in the late nineteenth century. Tanks or towers were built by railroads or by towns and later by individual farmers and ranchers. Stone, brick, or wood were all used for water tanks. Ponds and reservoirs were also built, carefully constructed in such a way as to make the earthen sides as nearly waterproof as possible.

Kansans were not interested in water only for themselves and their livestock. They also needed to water their crops. Thus, there were many experiments with irrigation in the 1880s and 1890s in different sections of the state. The projects on the Arkansas River near Garden City, which Conner Sorenson has described, were particularly impressive. The first Garden City canal was completed in 1880. During the next decade several large canal systems were constructed in the Garden City vicinity totaling 336 miles of major canals. Most of these canals averaged thirty to forty feet across and were five to ten feet deep. The Eureka Canal; however, had a main channel one hundred feet across and fifty-foot-wide lateral channels. In the 1890s droughts and irrigation projects upstream in Colorado left the Arkansas River dry. Farmers in western Kansas were in need of new sources of water for irrigation. Like farmers elsewhere in the state, they turned increasingly to windmills.

Abundant information about innovative ways of obtaining water was printed in the national and local publications during the 1890s. Stories and pictures can be found in national magazines such as Harper's, specialized publications like Irrigation News, and materials distributed by state and federal agencies. Some of the best illustrations of homemade windmills are found in the U.S. Geological Survey's Water Supply Paper No. 29 (1898). The farm illustrations in Evert's 1887 Atlas of Kansas also show a variety of windmills.

Fences

Kansans built a surprising variety of fences in the decades following the Civil War. Leslie Hewes has meticulously researched and described the various types constructed in the state. When wood was available it was widely used. Early settlers arriving in the timbered eastern portion of Kansas initially built sturdy rail fences in "zigzag" or "worm" patterns. As timber became more scarce, they shifted to the simpler post-and-rail styles. Local sawmills or proximity to the railroad made board fences an option. As settlers move westward, other materials were used. When the U.S. Department of Agriculture conducted a survey of fences in 1870, they determined that only thirty-nine percent of Kansas fences were built of wood. Some Kansans dug ditches and put up sod fences, and others used locally available stone. Stone fences, of various designs, were the dominant type of fence in several local areas. The abundance of stone fences in Wabaunsee County and parts of Douglas County has led to speculation about whether the reason was the availability of stone in those regions, the bounty paid by the state for building fences, or preferences of some ethnic groups for stone fences.

Another type of fencing popular in Kansas in the 1860s was Osage Orange hedge. Although hawthorne, mulberry, willow, and honey locust were also used for hedging, they were never as widely used as Osage Orange. Young Osage Orange plants could be interwoven to form a dense barrier. Nurseries did a thriving business selling seeds and plants. Nursery owners advertised in farm journals, offering contracts to plant and develop Osage Orange hedges.

Initially, fences in Kansas seem to have been built primarily to keep hogs and other animals in rather than to protect whole fields and pastures. This would have been consistent with early herd laws that required livestock be kept under control. Gradually this pattern shifted, however, and by the late 1860s the Kansas state government began urging farmers to fence their fields, even identifying the types of fences they should build. In 1867 the state legislature passed "An Act to Encourage the Growing of Hedge and the Building of Stone Fences," which paid farmers \$2 a year for each four rods of fence. This bounty continued to be paid until 1887.

Barbed wire fencing had been introduced into Kansas by the late 1870s. Even though the early straight wire had proven inefficient for fencing, acceptance of barbed wire was not immediate. Numerous styles of barbed wire appeared, and rights over patents created risks for those who tried to use it, as described by Walter Prescott Webb and Earl Hayter. In the post rock region of central Kansas, the use of barbed wire and the use of rock fence posts spread simultaneously in the 1880s. Although Osage Orange retained some popularity well into the twentieth century, barbed wire slowly but surely became the most common type of fence in the state.

Like windmills, fences of different types were widely discussed and their merits debated in the publications of the late nineteenth century. Both the state and the national agriculture departments kept statistics on them. They were discussed in publications like the Kansas Farmer and sometimes noted in maps and drawings.

Schools

Other typical features of the rural landscape were the schools which appeared in the countryside as well as in the small rural communities. The most typical and probably the most important of these were the one-room country schools. These schools were an essential part of the educational system in Kansas well into the twentieth century, and some of the buildings constructed in the late nineteenth century are still in existence. Many of these were built by families living nearby on land that one family had donated. Locally available building materials were frequently used. Although frame schoolhouses were popular, the expense of buying boards meant that many small schools were built of stone, especially in central Kansas. Typically those schools were small rectangular buildings, with the door or doors in the gable end and windows along each side. A small cupola with a bell was often present.

By the 1870s and the 1880s educational journals and agencies of both the state and federal government were offering advice on how to construct rural one-room schools. The Kansas Board of Education even had a contest for the best one-room school design. Whether or not Kansans consciously adopted any of the published plans for one-room schools, the structures they built do seem to reflect commonly held assumptions about how schools should be constructed.

While rural schools were intended to provide a place where children could learn their lessons, these structures served a variety of other functions. Often schools became general meeting places for a community. Political meetings, box suppers, plays produced by school children, and lyceum events all took place in rural schools. When considering the possible significance of rural schools, all of these activities should be taken into account.

"Country School Legacy: Humanities on the Frontier" was the title of a recent study funded by the National Endowment for the Humanities. It focused on one-room rural schools in an eight-state region, including Kansas. This project was one indication of a growing appreciation of the important educational and social functions these schools served. While no formal publications have yet appeared in connection with this project, a manuscript which Sara Judge prepared on the schools of northeastern Kansas is in the library of the Kansas State Historical Society.

Schools were also built in small towns. Generally they were larger structures, often of brick or stone, with several different classrooms for graded education. By the 1880s some small towns had high schools. Many of the earliest high schools in the state were private academies owned and operated by religious groups. Some of these, such as the Quaker academy at Hesper, were in rural communities. In 1886 the Kansas legislature passed a law which allowed funding of county high schools. By 1890 public high schools had been established at Chapman and Effingham. They were among the first schools of this type in the country. The idea behind such schools was that children whose families lived on farms could move into town to attend high school, working to earn their board or living with relatives. While it is known that national educators drew up plans for grade school and high school buildings, little information has been collected on those that were built in Kansas.

Colleges were established in many Kansas towns. In 1890 the State Board of Agriculture reported the existence of about twenty colleges, several established by the state and the others by religious groups. (Given the vagueness about what constituted a college or an academy at that time, exact numbers are difficult to establish). The state institutions and some of the religious colleges were in towns that are considered urban today, but there were also colleges at Highland, Baldwin, Lecompton, Sterling, Oswego, Lindsborg, St. Marys, and Winfield before 1900. Church leaders sometimes chose rural communities for their schools because they believed that such rural settings would enhance the attainment of their educational goals. Some colleges constructed rather simple buildings, but others built large, substantial structures in nationally popular architectural styles.

Churches

Churches, like schools, are scattered throughout the rural landscape of Kansas, and, like schools, many of them seem to conform to a simple basic pattern. Many rural churches from late-nineteenth-century Kansas are small rectangular structures of stone or clapboard, some displaying the stained glass windows with pointed arches and small pointed towers which are characteristic of the vernacular Gothic Revival architecture.

E.R. DeZurko and Emil Fischer pointed out in their studies of Kansas churches that many church buildings blend the simplicity of line and form of classical building styles with the elaborate, irregular decorative details of Gothic architecture. The use of Gothic features on churches was widespread in nineteenth-century America, reflecting the belief of many people who thought that the style of a building should be symbolically related to its functions. The popularity of this type of church building makes it difficult to determine if the Kansans who built them were remembering churches they had known in eastern states or if they were using the available plan books for churches.

Despite the apparent similarity of churches in Kansas, we do not know if nineteenth-century churches were, in fact, of such a uniform design. Given the religious diversity of the state, one might expect to see some ethnic and denominational variations in church buildings. Elizabeth Jaderborg identified some unique features which characterized early Swedish churches in Kansas, including the use of paneled pulpits, octagonal pillars, and octagonal and "onion" towers. She noted, however, that many of the churches that had displayed such features are no longer in existence, having been replaced with more "American" gothic churches. J. Neale Carman's Foreign-Language Units in Kansas has detailed information about the location of churches built by immigrants from different countries and of different denominations, thus making it possible to identify these structures and trace possible patterns of ethnic groups.

Emil Fischer suggested that the growth of Sunday schools among some Protestant denominations after the Civil War may have influenced the design of their churches. He claimed that the need for a new space arrangement to handle the needs of the Sunday schools resulted in a popular L-shaped church plan with a square tower in the bend of the L. He said this design was called the "Akron Plan" after the Ohio town where it was developed. However, we do not know to what extent this design was used in Kansas.

Despite the possibilities for ethnic and denominational differences, it may be that Kansas churches appear to be similar because Kansans were strongly influenced by available pattern books. In his study of late-nineteenth-century churches in Nebraska, Iowa, Wisconsin, and other states to the north and east of Kansas, Richard Ostergren maintained that ethnic and denominational differences were minor and limited primarily to interior decorative detail. He said that the pattern books available after the Civil War were largely responsible for the prevalence of rectangular, frame churches of similar design in the area he studied. Whether this is true for Kansas needs to be established.

Meeting Places and Recreational Spots

Between 1865 and 1900 a host of rural Kansas groups were meeting or organizing to pursue a wide variety of activities and interests. They gathered to work for various causes and simply to enjoy themselves. Because of the historical significance of such groups the places where they met should be identified.

Some organizations had their own clubhouses and meeting places, and many more obtained them after 1900. In the nineteenth century schools, churches, and the upstairs rooms of store buildings often served as meeting places, enhancing the historical significance of those buildings. Parks and fairgrounds were popular spots for rallies, fairs, and political meetings.

Traditionally, political organizations have received the most attention from Kansas historians. Certainly the farm protest groups which culminated in the Populist party had national importance and are a unique and significant part of our rural heritage. The Republican party dominated state politics for much of the post-Civil War period, but Democrats were also present, especially among some ethnic groups. More information about the meeting places of all these groups would be useful to historians trying to understand these parties at the local level and to identify more precisely the groups to which these parties appealed.

The Populists were only one of the activist and reform groups in Kansas in the late nineteenth century. Many other smaller and less well-known groups which are beginning to interest historians also were active in the state. Some of these groups were active in labor issues, such as the Knights of Labor, who built a meeting hall (no longer in existence) in Cloud County at Minersville. Other laborers, especially the railroad workers and miners who organized strikes in southeastern Kansas, must have held meetings, but we do not know where. Additional groups devoted to a wide variety of causes also existed in Kansas. Nationally known Socialists and anarchists spoke at meetings in the state, while groups advocating free love, prohibition, or women's suffrage were also active. As historians try to understand these groups and the people to whom they appealed, the places they met take on new significance.

Some organizations in the late nineteenth century appealed to certain ethnic or socioeconomic groups, or women. Women's groups became exceptionally popular, especially among middle-class women. Some groups met for primarily social ends while others focused on literary topics or worked for various causes, such as temperance or suffrage. Some women's groups had their own clubhouses before 1900 and founded and housed early libraries. Ethnic groups also met to pursue practical goals, to celebrate traditional holidays, or to enjoy themselves. Often such gatherings took place in churches, but Germans frequently built "turnhalles" to house such meetings and celebrations.

Rural Kansans also came together often for recreation. Bismarck Grove, located north of Lawrence, was the site of many fairs, reunions, and conventions and drew people from long distances. Chautauqua

encampments took place in Forest Park in Ottawa and in other towns as well. Numerous other communities had fair grounds with arched entrance gates, grandstands, and race tracks. Small towns followed the example of larger cities in creating park areas, sometimes near courthouses or depots. And near most communities there were favorite picnic spots, camping grounds, and swimming holes. Traces of all of these are part of our rural heritage.

Cemeteries

Cemeteries are a rich cultural resource from which we can learn about the past. As any genealogist knows, cemeteries can provide critical information about individual men and women, their birth and death dates, their family relationships, and sometimes even a clue to their personality. In a similar way, cemeteries can provide us with information about the larger community and the values which its members shared.

Not all cemeteries are alike. Many are small family burial grounds with simple homemade markers on the graves. Such cemeteries were typical of early Kansas, when trips into towns were infrequent and deaths of family members, especially children, occurred with great frequency. By the 1890s the use of such family burial grounds was probably declining in Kansas.

Similar to the family cemeteries are the cemeteries located alongside the small churches which dotted the rural landscape in the nineteenth century. Usually these contained graves laid out in neat rows with stone or wooden gravemarkers. Some of these small cemeteries continued to be used over a long span of years and contain examples of styles of grave markers which appeared by the last decades of the nineteenth century.

Sometimes small cemeteries display particular regional or ethnic variations. D. Gregory Jeane has described the unique qualities of the hilltop cemeteries of rural white communities of some portions of the southern United States. John Vlach has identified specifically Afro-American patterns of grave decoration which can, in some cases, be traced back to African practices. James Shortridge and Ruth Landes have noted the distinctive grave markers which characterize the Prairie Pottawatomie in Kansas.

By the last two decades of the nineteenth century, new ideas about cemeteries and new styles of gravemarkers had become popular nationally, and probably in Kansas as well. Cemeteries were laid out in the form of parks, with winding roads and paths and parklike landscaping replacing the straight rows characterizing earlier cemeteries. The styles of gravemarkers which were favored also began to change. As the nineteenth century progressed, taller stones were used, often in the shape of urns, obelisks, or pulpits. Flowery epitaphs were often engraved on the stones. Elaborate stones in the new styles were made of granite or marble instead of local stone and could be ordered from catalogs.

Topics for Consideration and Research: Other Structures

Study of the features of the rural Kansas landscape enumerated in the preceding sections could center on a wide range of issues. Some issues concern the relationship of the physical environment and the new technology which was developing in the late nineteenth century. Even features of the landscape we generally take for granted, like the patterns of land ownership, can provide a context for understanding the structures which were created on it.

Because so many of the existing trees in Kansas were planted, they too are a part of the created environment of the state, and by studying them we can learn about the values of those who planted them. By systematically studying the placement of windbreaks, shade trees, and hedges, we can gain information that will allow us to address such larger questions as why Kansans planted as they did.

The fences of nineteenth century Kansas offer illustrations of the way in which traditional structures were modified to cope with the demands of the Kansas environment and of the importance of new technology in making this adaptation. Virtually all scholars who have treated the agricultural history of the area have discussed the importance of the introduction of barbed wire, and Leslie Hewes has carefully analyzed the various statistical records of fences actually built in Kansas in the late nineteenth century. Hewe's findings somewhat temper the more sweeping claims about the importance of barbed wire for the agricultural development of the state and suggest some interesting questions about the users of different kinds of fences. Were there ethnic or economic patterns? Also, attention needs to be paid to the fences which surrounded the yards and gardens in rural towns. How were they constructed? Were they primarily practical structures or did they display particular stylistic preferences?

The history of water-related structures in Kansas is another topic that raises all sorts of questions about the effects of the environment and of technology. To what extent did the arid plains of Kansas force people to find new means of survival and to build new kinds of structures? Did the need for water make farmers more dependent on factories and on cash? Did small farmers, unable to afford windmills, get squeezed out, or did they find alternatives? Historians such as Ray Allen Billington, Gilbert Fite, and Walter Prescott Webb have offered general answers to these questions and argued about the issues involved. What is most needed now is good information about the actual wells, windmills, tanks, and irrigation ditches that were built in Kansas and that may remain in existence today. When and where and by whom were these structures first built? Who had them and who did not? Were they as diversified as the plans indicate?

More information about the schools and churches of the rural landscape would help us understand the values of early Kansans. How much variety was there in these structures? Where did differences occur? Comparisons between schools and churches built in the small towns and in the countryside would be particularly useful. In addition, studies could be done for different denominations and ethnic groups, perhaps using J. Neale Carman's Foreign Language Units of Kansas.

Virtually nothing is known about the meeting places and recreational spots of early Kansans. In order to collect information, we need to be aware that such places existed and be sensitive to clues about their locations. Sometimes information may be found in general accounts of the groups involved or in diaries or memoirs or in a general work such as Everett Dick's The Sod-house Frontier, which includes discussions of clubs and of recreational activities. The more we can find about where groups met, the more we can understand their appeal and their basis of support in the community. The more we learn about the places where Kansans met and played, the more we can understand what life was like for people who lived here a century ago.

By looking at cemeteries scholars have been able to learn a great deal about the people who created them. Cemeteries have been used to study a community's beliefs and values, especially those relating to death. Placement of graves and the variety in size and elaborateness of tombstones may be indications of the presence or absence of wide differences in social status in a community. The names on tombstones may testify to the presence of particular ethnic groups in an area. Age at death and death dates learned from tombstones can be useful to those trying to learn the composition of a community and the health factors present there.

BIBLIOGRAPHY

Books and articles about specific types of structures and about the overall history of the state and region may provide background materials and provocative questions for studying Kansas buildings. Many of these have been listed in this bibliography. Other useful sources exist, especially materials dating from the nineteenth century. Given the importance of sources such as locally produced documents and nationally circulated publications, this section will suggest their usefulness and how they can be obtained. For more detailed guidance in locating and using a wide variety of historical materials, consult Nearby History by David Kyvig and Myron Marty.

Some of the resources mentioned here and elsewhere in the overview are available in local libraries and local historical societies. Recent books and articles not present in rural communities can be ordered by local librarians through the interlibrary loan service of the Kansas State Library (State Capitol, Topeka.) The majority of the nineteenth century materials mentioned in the overview can be seen at the Kansas State Historical Society in Topeka, or at the Kansas Collection at the University of Kansas Libraries in Lawrence.

Sources that have not been extensively researched are the histories, atlases, directories and newspapers of the various Kansas communities. Local histories can help establish the general historical outlines of an area and the families who settled there. Many of these histories were written by early residents or contain reminiscences. Local atlases were widely published in the late nineteenth and early twentieth centuries. These are usually quite detailed and often illustrated, allowing researchers to learn a great deal about the settlement patterns of a community and even the placement and appearance of particular buildings. Early city directories and newspapers can serve a function similar to that of the atlases and histories. Advertisements may be as useful as the formal stories and pictures in describing and identifying buildings. Some papers ran regular columns about land transactions and new buildings. A word of caution is in order, however, as all these publications attempted to show a town or a county in the best possible light in an effort to attract additional inhabitants. The structures described cannot be taken as typical, and at times it is necessary to be cautious about distinguishing between what was built and what was being proposed.

Local newspapers, directories, and atlases have been collected by the major research libraries in the state as well as by local historical societies. Some of these publications have been microfilmed to make them accessible to more people. The listing of county histories and atlases prepared by Lorene Anderson and Alan Farley is useful in locating these volumes, although, since it was printed in 1955, it does not include more recent works. The Kansas

State Historical Society has an unusually fine collection of newspapers published in the state in the nineteenth century. A list prepared in 1916 identifies what was published in each Kansas community.

Another indispensable resource for studying Kansas buildings is the 1887 Everts Atlas of Kansas. The L.H. Everts Company prepared detailed maps by county and by town for many states. The maps are accompanied by long descriptions of major companies, farms and ranches in each area. Lavish illustrations of all types of farms, homes, and businesses supplement the other materials. While few Kansans could aspire to the kinds of structures depicted, the illustrations give a good indication of the variety and the sophistication of Kansas building in the 1880s. The volume has been reprinted and could be used as the basis for a study of farm types or buildings, or to provide a context for existing buildings in a region.

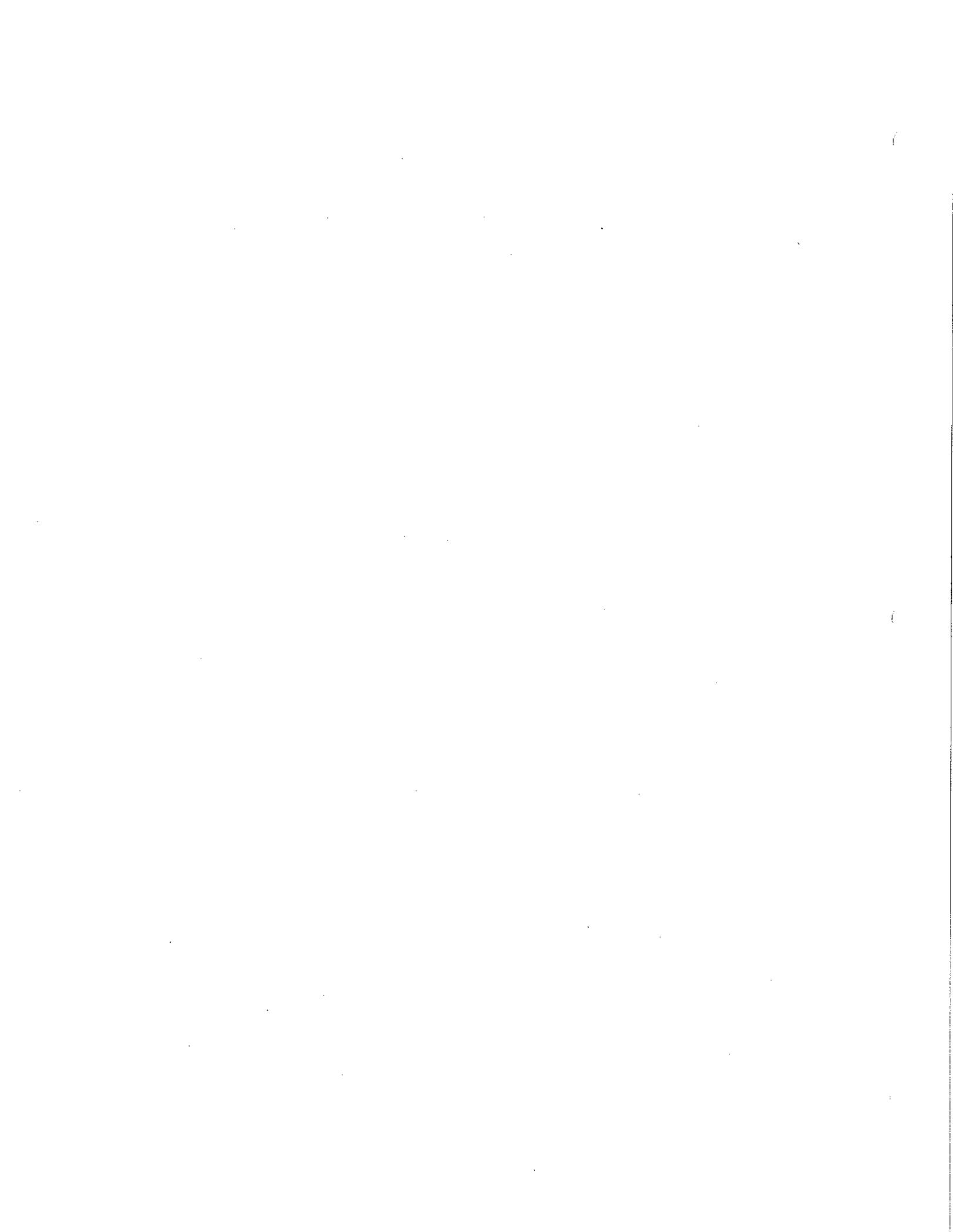
Diaries, letters and other documents by Kansans written in the late nineteenth century may contain valuable information about the construction and use of various structures. For example, Sod House Days by Howard Ruede contains fine descriptions of the process of digging a well and of building dugouts and soddies. It also contains a description of an 1870s grain elevator. Autobiographies and memoirs written by those who grew up in rural Kansas before 1900 may also be valuable. Indeed, people living today in rural Kansas have a store of memories about early Kansas buildings and know stories that were told concerning them. Such individuals can be important resources for anyone studying local history and local structures.

Also useful are photographs taken in the late nineteenth century which not only offer a delight to any researcher, but also convey a great deal of information not recorded elsewhere about the structures that were being erected. Major libraries in the state as well as local historical groups are now working to collect and reproduce these valuable resources.

Additional information about Kansas building can be found in the surveys and censuses collected by various state and federal agencies in the late nineteenth century. Although descriptions of individual buildings are seldom present, overall statistics on the number of stone fences or grist mills, for example, can be useful in understanding whether a particular local structure is unusual or typical. Annual and biennial reports of the Kansas State Board of Agriculture and the various censuses of agriculture, housing, and manufacturing are especially helpful. State and national agencies also issued numerous publications advising people what to build. The various branches of the U.S. Department of Agriculture, the state agriculture board, and the extension department at what is now Kansas State University in Manhattan published frequent advice articles, often in the annual reports or general information series. Browsing in such publications, which are available in major libraries, can give a good background for analyzing what was actually built.

Official records of ownership and sometimes other information about structures are available in local courthouse records. Such information is important to anyone surveying an area because it establishes the exact identity of a structure or plot of land. National archive records may also be useful. The possibilities of such records are discussed in detail in Nearby History.

Many other national publications are useful for studying late nineteenth-century Kansas building. Articles about Kansas structures appeared in a wide range of national magazines, including popular journals such as Harper's, as well as magazines devoted specifically to such topics as farming, irrigation, or railroads. Items which proved useful are included in relevant sections of the bibliography and in the section on pattern books. Such publications are seldom well indexed, but references to relevant articles can be found in recent books and articles. The publications themselves can generally be found in research libraries, at the Kansas State Historical Society and at universities.



Outline of Contents

	<u>Page</u>
I. Research Guides and General References	I-55
A. Methodology	I-55
B. Bibliographies	I-55
C. General Histories	I-55
D. Atlases and Guidebooks	I-56
II. Physical Environment	I-57
III. American Architectural History	I-58
A. Historical Studies	I-58
B. Style Guides	I-58
IV. Vernacular Architecture (General)	I-59
V. Building Materials and Methods	I-60
VI. Ethnic Building Traditions in Kansas	I-61
VII. Residential Architecture	I-63
VIII. Kansas Agriculture	I-64
IX. Farmstead Layout	I-65
X. Farm Buildings	I-66
XI. Cattle and Sheep	I-68
XII. Town Planning	I-69

	<u>Page</u>
XIII. Public Buildings	I-70
XIX. Commercial Buildings	I-71
XX. Manufacturing	I-72
XXI. Mining	I-73
XXII. Railroads	I-74
XXIII. Roads and Bridges	I-75
XXIV. Landscape Development	I-76
XXV. Fences	I-77
XXVI. Windmills and Water Supply	I-78
XXVII. Schools and Meeting Places	I-79
XXVIII. Churches	I-80
XXIX. Cemeteries	I-81
XXX. Pattern Books	I-82
A. Houses	I-82
B. Farm Buildings	I-82
C. Railroad Structures	I-82
D. School Houses	I-83
E. Churches	I-83

I. Research Guides and General References

A. Methodology

Kyvig, David, and Myron Marty. Nearby History: Exploring the Past Around You. Nashville: American Association for State and Local History, 1982.

Stipe, Robert E., ed. New Directions in Rural Preservation. United States Department of the Interior, 1980.

B. Bibliographies

Anderson, Lorene, and Alan Farley. "A Bibliography of Town and County Histories of Kansas." Reprinted from Kansas Historical Quarterly (Autumn 1955.)

Seiler, William. "Annotated Bibliography of Magazine Articles about Kansas Published from 1854-1904." Kansas Historical Quarterly 38 (1972): 25-42.

C. General Histories

Billington, Ray Allen, and Martin Ridge. Westward Expansion: A History of the American Frontier. 5th ed. 573-662. New York: Macmillan, 1982.

Bright, John, editor. Kansas: The First Century. New York: Lewis Publishing Co., 1956.

Dick, Edward Everett. The Sod-House Frontier, 1854-1890. (1937. Reprint.) Lincoln: University of Nebraska Press, 1979.

Fite, Gilbert. The Farmer's Frontier, 1865-1900. (1966. Reprint.) Albuquerque: New Mexico University Press, 1974.

Gates, Paul. Fifty Million Acres: Conflicts over Kansas Land Policy, 1854-1890. Ithaca, New York: Cornell University Press, 1954.

Kansas State Historical Society. History of Kansas Newspapers. Topeka, 1916.

Richmond, Robert. Kansas: A Land of Contrasts. Saint Charles, Mo.: Forum Press, 1974.

C. General Histories (cont.)

Sheridan, Richard. Economic Development in South Central Kansas: An Economic History, 1500-1900. Lawrence, Ks.: University of Kansas. School of Business, Bureau of Business Research, 1956.

Webb, Walter Prescott. The Great Plains. Boston; Ginn and Co., 1931.

Zornow, William Frank. Kansas: A History of the Jayhawk State. Norman: University of Oklahoma Press, 1957.

D. Atlases and Guidebooks

The Official State Atlas of Kansas. Philadelphia: L.H. Everts and Co., 1887.

Federal Writers' Project. Kansas: A Guide to the Sunflower State. New York: Viking Press, 1939.

Socolofsky, Homer E., and Huber Self. Historical Atlas of Kansas. Norman: University of Oklahoma Press, 1972.

Whittemore, Margaret. Historic Kansas. Lawrence, Ks.: University of Kansas Press, 1954.

II. Physical Environment

Federal Writers' Project. Kansas: A Guide to the Sunflower State. New York: Viking Press, 1939.

Kuchler, A.W. "A New Vegetation Map of Kansas." Ecology 55 (1974): 586-604.

Mullenburg, Grace, and Ada Swineford. Land of the Post Rock: Its Origins, History, and People. Lawrence, Ks.: University of Kansas, 1975.

Self, Huber. Environment and Man in Kansas: A Geographical Analysis. Lawrence, Ks.: The Regents Press of Kansas, 1978.

Schoewe, Walter. "Physical Geography." Kansas Academy of Science. Transactions 52 (Sept. 1949).

Shortridge, James. Kaw Valley Landscapes: A Guide to Eastern Kansas. Lawrence, Ks.: Coronado Press, 1977.

Snowden, Flora D. "Climate of Kansas." Kansas State Board of Agriculture Report 67 (1948).

III. American Architectural History

A. Historical Studies

Clark, Clifford. "Domestic Architecture as an Index to Social History." Journal of Interdisciplinary History 7 (1976): 33-56.

Fitch, James Marston. American Building: The Historical Forces That Shaped It. 2nd ed. New York: Schocken Books, 1966.

Kidney, Walter C. The Architecture of Choice: Eclecticism in America, 1880-1930. New York: George Braziller, 1974.

Peterson, Fred. "Vernacular Building and Victorian Architecture: Midwestern American Farm Homes." Journal of Interdisciplinary History 12 (1982): 409-427.

Roth, Leland. A Concise History of American Architecture. New York: Harper and Row, 1979.

Scully, Vincent J., Jr. The Shingle Style and the Stick Style, Revised ed. New Haven: Yale University Press, 1971.

Whiffen, Marcus, and Fredrick Koeper. American Architecture, 1607-1976. Cambridge, Mass.: The MIT Press, 1981.

B. Style Guides

Blumenson, John J.-G. Identifying American Architecture, revised ed. Nashville: American Association for State and Local History, 1981.

Rifkind, Carole. A Field Guide to American Architecture. New York: New American Library, 1980.

Whiffen, Marcus. American Architecture Since 1780 - A Guide to the Styles. Cambridge, Mass.: The MIT Press, 1969.

IV. Vernacular Architecture (General)

Bastian, Robert. "Indiana Folk Architecture: A Lower Midwestern Index." Pioneer America (1977): 115-136.

Glassie, Henry. Pattern in the Material Folk Culture of the Eastern United States. Philadelphia: University of Pennsylvania Press, 1968.

Kniffen, Fred. "Folk Housing: Key to Diffusion." Association of American Geographers. Annals 55 (1965): 549-577.

Kniffen, Fred. "Louisiana House Types." Association of American Geographers. Annals 26 (1936): 179-193.

Kniffen, Fred, and Henry Glassie. "Building in Wood in the Eastern United States--A Time - Place Perspective." Geographical Review 56 (1966): 40-66.

Lewis, Peirce F. "Common Houses, Cultural Spoor." Landscape 19 (1975): 1-22.

Marshall, Howard W. American Folk Architecture: A Selected Bibliography. Washington, D.C.: Library of Congress, American Folklife Center, 1981.

Marshall, Howard W. Folk Architecture in Little Dixie: A Regional Culture in Missouri. Columbia: University of Missouri, 1981.

Moe, John. "Concepts of Space: The Folk Poetics of Space, Change, and Continuity." Journal of Popular Culture 11 (1977): 219-253.

Montell, William Lynwood, and Michael Lynn Morse. Kentucky Folk Architecture. Lexington: University of Kentucky Press, 1976.

Peterson, Fred. "Vernacular Building and Victorian Architecture: Midwestern American Farm Homes." Journal of Interdisciplinary History 12 (1982): 409-427.

Pillsbury, Richard and Andrew Kardos. A Field Guide to the Folk Architecture of the Northeastern United States. Geography Publications at Dartmouth, No. 8. Hanover, N.H.: Dartmouth College, 1970.

Richardson, Herbert. "Farm Plans and Building Types in Harrison Township, N.J." Pioneer America Society. Transactions 3 (1980): 88-120.

Upton, Dell. "Ordinary Buildings: A Bibliographical Essay on American Vernacular Architecture." American Studies International 19 (1981): 57-75.

V. Building Materials and Methods

Brandhorst, S. Carl. "Limestone Houses in Central Kansas." Journal of Cultural Geography 2 (1981): 70-81.

Gravin, James. "Mail-Order House Plans and American Victorian Architecture." Winterthur Portfolio 16 (1981): 309-334.

Gritzner, Charles. "Construction Materials in a Folk Housing Tradition; Considerations Governing their Selection in New Mexico." Pioneer America 1 (Jan. 1974): 25-39.

Hart, Arthur. "M.A. Disbrow & Company: Catalogue Architecture." The Palimpsest 56 (1975): 98-119.

Malin, James. Grassland Historical Studies: Natural Resources Utilization in a Background of Science and Technology. Lawrence, Ks.: Privately Printed, 1950.

Malin, James. "Housing Experiments in the Lawrence Community, 1855." Kansas Historical Quarterly 21 (1954): 95-121.

Masonry, Carpentry and Joinery. (1899. Reprint.) Chicago: Chicago Review Press, 1980.

McKee, Harley. Introduction to Early American Masonry: Stone, Brick, Mortar and Plaster. New York: National Trust for Historic Preservation and Columbia University, 1973.

Muilenburg, Grace, and Ada Swineford. Land of the Post Rock. Lawrence, Ks.: University of Kansas, 1975.

Perrin, Richard. "Forms upon the Land." In U.S. National Park Service, Historic American Buildings Survey, Wisconsin Architecture. 12-27. Washington, D.C.: Government Printing Office, 1965.

Walters, William D., Jr., "Nineteenth-Century Midwestern Brick." Pioneer America 14 (1982): 125-136.

VI. Ethnic Building Traditions in Kansas

Brandhorst, S. Carl. "Limestone Houses in Central Kansas." Journal of Cultural Geography 2 (1981): 70-81.

Carlson, Alvar. "German-Russian Houses in Western North Dakota." Pioneer America 13 (1981): 49-60.

Carman, J. Neale. Foreign-Language Units of Kansas: Historical Atlas and Statistics. Lawrence, Ks.: University of Kansas Press, 1962.

Clark, Carroll D., and Roy Roberts. People of Kansas: A Demographic and Sociological Study. Topeka: Kansas State Planning Board, 1936.

Jaderborg, Elizabeth. "Swedish Architectural Influences in the Kansas Smoky Valley Community." Swedish Pioneer Historical Quarterly 32 (1981): 65-76.

Jordan, Terry. "German Houses in Texas." Landscape 14 (1964): 24-26.

Long, Amos. The Pennsylvania German Family Farm. Breinigsville, Penn.: The Pennsylvania German Society, 1972. Publication no. 4.

Ostergren, Robert. "The Immigrant Church . . ." Great Plains Quarterly 1 (1981): 224-238.

Petersen, Albert. "German-Russian Catholic Colonization in Western Kansas: A Settlement Geography." Ph.D. dissertation. Louisiana State University, 1970.

Petersen, Albert. "The German-Russian House in Kansas: The Persistence of Form." Pioneer America 8 (Jan. 1976): 19-27.

Rees, Ronald, and Carl Tracie. "The Prairie House." Landscape 22, no. 3 (1978): 3-8.

Schultz, Greg. "Barns and Cultural Change in Central Kansas." M.Arch. thesis, University of Kansas, School of Architecture, 1983.

Sherman, William. "Prairie Architecture of the Russian-German Settlers." In Richard Sallet, editor, Russian-German Settlements in the United States. 185-195. Fargo, North Dakota: Institute for Regional Studies, 1977.

Shortridge, James. Kaw Valley Landscapes. Lawrence, Ks.: Coronado Press, 1977.

Van Ravensway, Charles. The Arts and Architecture of German Settlements in Missouri. 107-298. Columbus: University of Missouri Press, 1977.

VI. Ethnic Building Traditions in Kansas (cont.)

Vlach, John Michael. The Afro-American Tradition in the Decorative Arts. 122-138. Cleveland: The Cleveland Museum of Art, 1978.

Vlach, John Michael. "The Shotgun House: An African Architectural Legacy." Pioneer America 8 (1976): 47-56, 57-70.

VII. Residential Architecture

Brandhorst, S. Carl. "Limestone Houses in Central Kansas." Journal of Cultural Geography 2 (1981): 70-81.

Clark, Clifford. "Domestic Architecture as an Index to Social History." Journal of Interdisciplinary History 7 (1976): 33-56.

Desprez, Annie. "Idealism and Reality in American Farm House Architecture, 1840-1880." M.A. thesis, University of Kansas, American Studies Department, 1969.

Foley, Mary Mix. The American Home. New York: Harper and Row, 1981.

Handlin, David. The American Home: Architecture and Society, 1815-1915. Boston: Little, Brown and Co., 1979.

Jackson, J.B. "Ghosts at the Door." Landscape 1 (1951): 3-10.

Petersen, Albert. "The German-Russian House in Kansas: Persistence of Form." Pioneer America 8 (Jan. 1976): 19-27.

Peterson, Fred. "Vernacular Building and Victorian Architecture: Midwestern American Farm Homes." Journal of Interdisciplinary History 12 (1982): 409-427.

Tomlan, Michael. "Nineteenth Century Literary Sources for Domestic Design in Small Towns and Rural Areas of New York." In Farmsteads and Market Towns, 42-47. Albany: Preservation League of New York, 1982.

West, Pamela. "The Rise and Fall of the American Porch." Landscape 20 (1971): 42-47.

Wright, Gwendolyn. Building the Dream: A Social History of Building in America. New York: Pantheon Books, 1981.

SEE ALSO PATTERN BOOKS

VIII. Kansas Agriculture

- Billington, Ray Allen, and Martin Ridge. Westward Expansion. 5th ed. New York: Macmillan, 1982.
- Fite, Gilbert. The Farmers' Frontier. (1966. Reprint.) Albuquerque: University of New Mexico Press, 1974.
- Hayter, Earl. The Troubled Farmer, 1850-1900: Rural Adjustment to Industrialization. Dekalb, Illinois: Northern Illinois Press, 1968.
- Hoover, Leo. Kansas Agriculture after 100 Years. Agricultural Experiment Station Bulletin 392. Manhattan, Ks.: Agricultural Experiment Station, 1957.
- Madden, John. "An Emerging Agricultural Economy: Kansas, 1860-1880." Kansas Historical Quarterly 39 (1973): 101-109.
- Malin, James. "The Soft Winter Wheat Boom and the Agricultural Development of the Upper Kansas River Valley." Kansas Historical Quarterly 11 (1942): 370-389.
- Marple, Robert. "The Corn-Wheat Ration in Kansas." Great Plains Journal 8 (1969): 79-86.
- Parrish, Fred. "Kansas Agriculture before 1900." In John D. Bright, editor, Kansas: The First Century, 401-428. New York: Lewis Publishing Co., 1956.
- Rasmussen, Wayne. "The Impact of Technological Change on American Agriculture, 1862-1962." Journal of Economic History 22 (1962): 578-591.
- Rogers, Earl A. List of References for the History of Agriculture in the Great Plains. Davis: University of California, 1976.
- Schapsmeier, Edward, and Frederick Schapsmeier. Agriculture in the West. Manhattan, Kansas: Sunflower Press, 1980.
- Schlebecker, John. Whereby We Thrive: A History of American Farming, 1607-1972. Ames: University of Iowa Press, 1975.
- Shannon, Fred. The Farmer's Last Frontier, 1860-1897. New York: Farrar and Rinehart, 1945.

IX. Farmstead Layout

Alanen, Arnold, and William H. Tishler. "Finnish Farmstead Organization in Old and New Settings." Journal of Cultural Geography 1 (1980): 66-81.

Conrat, Maisie, and Richard Conrat. The American Farm: A Photographic History. San Francisco: California Historical Society, 1977.

Hart, John Fraser. The Look of the Land. Englewood Cliffs, N.J.: Prentice Hall, 1975.

Hutslar, Donald. "The Ohio Farmstead: Farm Buildings as Cultural Artifacts." Ohio History 90 (1981): 221-237.

Long, Amos. The Pennsylvania German Family Farm. Breinigsville, Penn.: The Pennsylvania German Society, 1972. Publication no. 4.

Petersen, Albert. "German-Russian Catholic Colonization in Western Kansas." Ph.D. dissertation, Louisiana State University, 1970.

Richardson, Herbert. "Farm Plans and Building Types in Harrison Township, N.J." Pioneer America Society. Transactions 3 (1980): 88-120.

Tishler, William. "The Site Arrangement of Rural Farmsteads." Association for Preservation Technology. Bulletin 10 (1978): 63-79.

Trewartha, Glenn. "Some Regional Characteristics of American Farmsteads." Association of American Geographers. Annals 38 (1948): 169-225.

X. Farm Buildings

Arthur, Eric, and Dudley Witney. The Barn: A Vanishing Landmark in North America. Greenwich, Conn.: New York Graphic Society, 1972.

Francaviglia, Richard. "Western American Barns: Architectural Form and Climatic Considerations." Association of Pacific Coast Geographers. Yearbook 34 (1972): 153-160.

Glassie, Henry. "Barn Building in Otsego County, New York." Geoscience and Man 5 (1974): 177-235.

Hart, John Fraser. The Look of the Land. 123-136. Englewood Cliffs, N.J.: Prentice Hall, 1975.

Klamkin, Charles. Barns: Their History, Preservation and Restoration. New York: Hawthorne, 1973.

Long, Amos. The Pennsylvania German Family Farm. Breinigsville, Penn.: The Pennsylvania German Society, 1972. Publication no. 4.

Marshall, Howard W. Folk Architecture in Little Dixie: A Regional Culture in Missouri. Columbia: University of Missouri, 1981.

Montell, William Lynwood, and Michael Lynn Morse. Kentucky Folk Architecture. Lexington: University of Kentucky Press, 1976.

Noble, Allen G. "The Diffusion of Silos." Landscapes 25 (1981): 11-14.

Noble, Allen G. "The Evolution of American Silos." Journal of Cultural Geography 1 (Fall/Winter 1980): 135-148.

Petersen, Albert. "German-Russian Catholic Colonization in Western Kansas: A Settlement Geography." Ph.D. dissertation, Louisiana State University, 1970.

Schultz, Greg. "Barns and Cultural Change in Central Kansas." M.Arch. thesis. University of Kansas, School of Architecture, 1983.

Shortridge, James. Kaw Valley Landscapes. Lawrence, Ks.: Coronado Press, 1977.

Van Ravensway, Charles. The Arts of German Settlements in Missouri. Columbia: University of Missouri Press, 1977.

Zelinsky, Wilbur. "The New England Connecting Barn." Geographical Review 48 (1958): 540-553.

X. Farm Buildings (cont.)

PRIMARY SOURCES:

Bailey, L.H. Cyclopedia of American Architecture. New York: Macmillan, 1907. 4 volumes.

Halsted, Brian. Barns, Sheds and Outbuildings. (1881. Reprint.) Brattleboro, Vermont: Stephen Greene Press, 1977.

See also publications of the U.S. Department of Agriculture and the Kansas State Board of Agriculture and periodicals such as Kansas Farmer, Rural Kansan and The Prairie Farmer.

XI. Cattle and Sheep

Billington, Ray Allen, and Martin Ridge. Westward Expansion. 5th ed. New York: Macmillan, 1982.

Dale, Edward Everett. The Range Cattle Industry: Ranching on the Great Plains from 1865-1925. (1930. Reprint.) Norman: University of Oklahoma, 1960.

Delong, David, editor. Historic American Buildings: Texas. New York: Garland Publishing Co., 1979.

Dykstra, Robert. The Cattle Towns. New York: Atheneum, 1970.

Kollmorgan, Walter and David Simonett. "Grazing Operations in the Flint Hills." Association of American Geographers Annals 55 (1965): 260-290.

Malin, James. "An Introduction to the History of the Bluestem Pasture Region in Kansas." Kansas Historical Quarterly 11 (1942): 3-28.

Muckelroy, Duncan. "Ranching History of the American West: Revitalized through the Preservation of its Architecture." Pioneer America 6 (1974): 34-42.

Richmond, Robert. Kansas: Land of Contrasts. Saint Charles, Mo.: Forum Press, 1974.

Towne, Charles and Edward Wentworth. Shepherds Empire. Norman: University of Oklahoma, 1945.

Trewartha, Glenn. "Some Regional Characteristics of American Farmsteads." Association of American Geographers Annals 38 (1948): 210-215.

U.S. National Park Service. Prospector, Cowhand, and Sodbuster: Historic Places associated with the Mining, Ranching, and Farming Frontier. Washington, D.C.: Government Printing Office, 1967.

Webb, Walter Prescott. The Great Plains. Boston: Ginn and Co., 1931.

Wood, Charles. The Kansas Beef Cattle Industry. Lawrence, Ks.: Regents Press of Kansas, 1980.

XII. Town Planning

Atherton, Lewis. Main Street on the Middle Border. Bloomington: Indiana University Press, 1954.

Hudson, John. "The Plains Country Town." In Brian Blouet and Frederick Luebke, editors, The Great Plains, 99-118. Lincoln: University of Nebraska Press, 1977.

Hudson, John. "The Towns of the Western Railroads." Great Plains Quarterly 2 (1982): 41-54.

Jacobs, Stephen. Wayne County: The Aesthetic Heritage of a Rural Area. New York: Wayne County Historical Society, 1979.

Price, Edward. "The Central Courthouse Square in the American County Seat." Geographical Review 58 (1968): 29-60.

Reps, John W. Cities of the American West: A History of Frontier Urban Planning. Princeton: Princeton University Press, 1979.

Reps, John W. The Forgotten Frontier: Urban Planning in the American West before 1890. Columbia: University of Missouri Press, 1981.

Richard, W.M. "Some Ghost Towns of Kansas." Heritage of Kansas 5 (1961): 4-32.

Rifkind, Carole. Main Street. New York: Harper and Row, 1977.

Sheridan, Richard. Economic Development in South Central Kansas. Lawrence, Ks.: University of Kansas, Bureau of Business Research, 1956.

XIII. Public Buildings

Pare, Richard, editor. Courthouse. New York: Horizon Press, 1978.

Price, Edward. "The Central Courthouse Square in the American County Seat." Geographical Review 58 (1968): 29-60.

Wichita Public Schools. Kansas Courthouse Architecture. Wichita, Ks.: 1981.

Wortman, Julie, and David Johnson. Legacies: Kansas Older County Courthouses. Topeka: Kansas State Historical Society, 1981.

Zurier, Rebecca. The American Firehouse: An Architectural and Social History. New York: Abbeville Press, 1982.

XIX. Commercial Buildings

Hart, Arthur. "M.A. Disbrow and Company: Catalogue Architecture." The Palimpsest 56 (1975): 98-119.

Riley, Robert. "Grain Elevators: Symbols of Time, Place and Honest Building." American Institute of Architects. Journal 66 (Nov. 1977): 50-55.

"The 1905 Catalogue of Iron Store Fronts, Designed and Manufactured by George L. Mesker & Co., Architectural Iron Works, Evansville, Indiana." Reprinted in Association for Preservation Technology. Bulletin 9 (1977): 3-39.

XX. Manufacturing

- Douglas, Richard. "A History of Manufacturing in the Kansas District." Kansas Historical Collections 11 (1909-1910): 81-215.
- Fornari, Harry. "Recent Developments in the American Grain Storage Industry." Agricultural History 56 (1982): 264-271.
- Malin, James. "The Kinsley Boom of the Late Eighties." Kansas Historical Quarterly 4 (1935): 23-49; 164-187.
- Middleton, Kenneth. Manufacturing in Lawrence, 1854-1900. Lawrence, Ks.: University of Kansas, School of Business.
- Riley, Robert. "Grain Elevators: Symbols of Time, Place and Honest Building." American Institute of Architects. Journal 66 (Nov. 1977): 50-55.
- Sackheim, Donald. Historic American Engineering Record Catalog. Washington, D.C.: National Park Service, 1976.
- Sande, Theodore. Industrial Archeology. Brattleboro, Vermont: The Stephen Greene Press, 1976.
- Seiler, William. "Industry and Mining." In John D. Bright, editor, Kansas: The First Century, 429-533. New York: Lewis Publishing Co., 1956.
- Sheridan, Richard. An Economic History of South Central Kansas, 1500-1900. Lawrence, Ks.: University of Kansas, School of Business, 1956.

XXI. Mining

Alanen, Arnold. "Documenting the Physical and Social Characteristics of Mining and Resource-based Communities." Association of Preservation Technology Bulletin 11 (1979): 49-68.

Clark, John G. Towns and Minerals in Southeastern Kansas: A Study in Regional Industrialization, 1890-1930. State Geological Survey of Kansas, Special Distribution Publication no. 52, 1970.

Douglas, Richard. "A History of Manufacturing in the Kansas District." Kansas Historical Collections 11 (1909-1910): 81-215.

Howell, Fred N. "Some Phases of the Industrial History of Pittsburg." Kansas Historical Quarterly 1 (1931): 273-294.

Malin, James. Grassland Historical Studies. Lawrence, Ks.: Privately Printed, 1950.

Muilenburg, Grace, and Ada Swineford. Land of the Post Rock. Lawrence, Ks.: University of Kansas, 1975.

Petersen, John. "The Logan County Nickel Mine." Kansas History 2 (1979): 26-33.

Schoewe, Walter. "The First Kansas Lead Mines." Kansas Historical Quarterly 25 (1959): 391-401.

Seiler, William. "Industry and Mining." In John D. Bright, editor, Kansas: The First Century. New York: Lewis Publishing Co., 1956.

Shortridge, James. Kaw Valley Landscapes. Lawrence, Ks.: Coronado Press, 1977.

Tolbert, Agnes. The Rock Houses of Minersville. Chicago: Adams Press, 1963.

XXII. Railroads

- Anderson, George. Kansas West. San Marino, Ca.: Golden West Books, 1963.
- Berg, Walter. Buildings and Structures of American Railroads. New York: John Wiley and Sons, 1893.
- Bohi, Charles, and H. Roger Grant. "The Country Railroad Station as Corporate Logo." Pioneer America 11 (1979): 117-129.
- Grant, H. Roger, and Charles Bohi. The Country Railroad Station in America. Boulder, Co.: Pruett Publishing Co., 1978.
- Grant, H. Roger. "The Standardized Railroad Station on the Great Plains, 1870-1920." In Brian Blouet and Frederick Luebke, editor, The Great Plains, 119-137. Lincoln: University of Nebraska, 1977.
- Hudson, John. "The Plains Country Town." In Brian Blouet and Frederick Luebke, editors, The Great Plains, 99-118. Lincoln: University of Nebraska Press, 1977.
- Hudson, John. "Towns of the Western Railroads." Great Plains Quarterly 2 (1982): 41-54.
- Meeks, Carroll. The Railroad Station. (1956. Reprint.) Secaucus, N.J.: Castle Books, 1978.
- Snell, Joseph, and Robert Richmond. "When the Union and Kansas Pacific built through Kansas." Kansas Historical Quarterly 32 (1966): 161-186, 334-352.
- Vyzralek, Frank, and H. Roger Grant and Charles Bohi. "North Dakota's Railroad Depots: Standardization of the Soo Line." North Dakota History 42 (Winter 1975): 4-26.
- Weitzman, David. Traces of the Past: A Field Guide to Industrial Archeology. New York: Scribners, 1980.
- Weitzman, David. Windmills, Bridges and Old Machines. New York: Scribners, 1982.
- White, John. "Railroads: Wood to Burn." In Brooke Hindle, editor, Material Culture of the Wooden Age, 184-224. Tarrytown, N.Y.: Sleepy Hollow Press, 1981.

XXIII. Roads and Bridges

Berkebile, Don. "Wooden Bridges." In Brooke Hindle, editor, Material Culture of the Wooden Age, 129-158. Tarryton, N.Y.: Sleepy Hollow Press, 1981.

U.S. National Park Service, Historic American Engineering Record. Historic Bridges in Montana. Washington, D.C.: Government Printing Office, 1982.

Weitzman, David. Traces of the Past: A Field Guide to Industrial Archeology. New York: Scribners, 1980.

Weitzman, David. Windmills, Bridges and Old Machines. New York: Scribner's. 1982.

Winther, Oscar. "The Transportation Frontier." Albuquerque: University of New Mexico Press, 1964.

XXIV. Landscape Development

Droze, Wilmon. Trees, Prairies and People: A History of Tree Planting in the Plains States, 1-47. Denton: Texas Women's University, 1977.

Gates, Paul. Landlords and Tenants on the Prairie Frontier. Ithaca, New York: Cornell University Press, 1973.

Hart, John Fraser. The Look of the Land. Englewood Cliffs, N.J.: Prentice Hall, 1975.

Jackson, J.B. "Ghosts at the Door." Landscape 1 (1951): 3-10.

Sutton, Richard. "The Image of a Garden Vernacular: Conifer Planting in the Rural Landscape of Otoe County, Nebraska." Pioneer America 14 (1982): 93-114.

Tishler, William. "The Role of Historic Preservation in Tomorrow's Rural Landscape." In U.S. Department of the Interior, New Directions in Rural Preservation, Washington, D.C.: Government Printing Office, 1980.

XXV. Fences

Clifton, Robert. Barbs, Prongs, Prickers and Stickers: A Complete and Illustrated Catalogue of Antique Barbed Wire. Norman: University of Oklahoma Press, 1971.

Hart, John Fraser, and Eugene Cotton Mather. "The American Fence." Landscape 6 (1957): 4-9.

Hayter, Earl. "Barbed Wire Fencing." Agricultural History 13 (1939): 189-207.

Hayter, Earl. The Troubled Farmer. Dekalb, Illinois: Northern Illinois Press, 1968.

Hewes, Leslie. "Early Fencing on the Western Margin of the Prairie." Nebraska History 63 (1982): 300-348.

McCallum, Henry, and Francis McCallum. The Wire that Fenced the West. Norman: University of Oklahoma Press, 1965.

Meredith, Mamie. "The Importance of Fences to the American Pioneer." Nebraska History 32 (1951): 94-107.

Mullenburg, Grace, and Ada Swineford. Land of the Post Rock. Lawrence, Ks.: University of Kansas, 1975.

Richards, W.M. "Fencing the Prairies." Heritage of Kansas 4 (May 1960): 7-18.

Shortridge, James. Kaw Valley Landscapes. Lawrence, Ks.: Coronado Press, 1977.

Winberry, John. "The Osage Orange: A Botanical Artifact." Pioneer America 11 (1979): 134-141.

Withers, Robert Steele. "The Stake and Rider Fence." Missouri Historical Review 44 (1950): 225-231.

Zelinsky, Wilbur. "Walls and Fences." Landscape 8 (1959): 14-20.

XXVI. Windmills and Water Supply

Baker, T. Lindsey. "Turbine-Type Windmills of the Great Plains and Midwest." Agricultural History 54 (1980): 38-51.

Baker, T. Lindsey. Water for the Southwest: Historical Survey and Guide to Historic Sites. New York: American Society of Civil Engineers, 1973. Historical Publications No. 3.

Baker, T. Lindsey. "Windmills of the Panhandle Plains." Panhandle Plains Historical Review 53 (1980): 71-110.

Billington, Ray Allen, and Martin Ridge. Westward Expansion. 5th ed. New York: Macmillan, 1982.

Fite, Gilbert. The Farmer's Frontier. (1966. Reprint.) Albuquerque: University of New Mexico, 1974.

Sorenson, Conner. "A History of Irrigation in the Arkansas River Valley in Western Kansas, 1880-1910." M.A. thesis. University of Kansas, History Department, 1968.

Torrey, Volta. Wind-Catchers: American Windmills of Yesterday and Tomorrow. Brattleboro, Vermont: The Stephen Greene Press, 1976.

Webb, Bernice. "The Deep and Hand-Dug Water Wells of Western Kansas." Pioneer America 10 (1978): 66-75.

Webb, Robert. "Deep-Dug Wells on the High Plains of Kansas." Landscape 18 (1969): 27-28.

Webb, Walter Prescott. The Great Plains. Boston: Ginn and Co., 1931.

Whittemore, Margaret. Historic Kansas. Lawrence, Ks.: University of Kansas Press, 1954.

XXVII. Schools and Meeting Places

A. Schools

Clark, T.M. "Rural School Architecture with Illustrations." U.S. Bureau of Education Circular of Information, No. 4. Washington, D.C.: Government Printing Office, 1880.

Eveleth, Samuel. Victorian School-House Architecture. (1870. Reprint.) Watkins Glen, N.Y.: American Life Foundation, 1978.

Johnnot, James. School Houses: Architectural Designs. New York: n.p., 1871.

Kansas Department of Public Instruction. Report for 1879-1880. Topeka, 1881.

B. Meeting Places

Brinkerhoff, F.W. "The Ottawa Chautauqua Assembly." Kansas Historical Quarterly 27 (1961): 457-468.

Lewis, Jim. "Beautiful Bismarck--Bismarck Grove, Lawrence, 1878-1900." Kansas Historical Quarterly 35 (1969): 225-256.

XXVIII. Churches

Carman, J. Neale. Foreign-Language Units of Kansas: Historical Atlas and Statistics. Lawrence, KS.: University of Kansas, 1962.

DeZurko, E.R. "Early Kansas Churches." Kansas State College Bulletin 33. Manhattan, Ks.: Kansas State College, 1949.

Fischer, Emil. "A Study in Types: Rural Churches of the Plains." Kansas Quarterly 6 (1974): 39-53.

Jaderborg, Elizabeth. "Swedish Architectural Influence in the Kansas Smoky Valley Community." Swedish Pioneer Historical Quarterly 32 (1981): 65-76.

Ostergren, Robert. "The Immigrant Church as a Symbol of Community and Place in the Upper Midwest." Great Plains Quarterly 1 (1981): 224-238.

Upjohn, Richard. Rural Church and Cottage Architecture. Chicago: North-Western Publishing House, [c. 1870].

XXIX. Cemeteries

Ames, Kenneth. "Ideologies in Stone: Meanings in Victorian Gravestones." Journal of Popular Culture 14 (1981): 641-656.

Chatfield, Penelope. "'Wyuka': A Rural Cemetery in Lincoln, Nebraska." Nebraska History 63 (1982): 183-193.

Dethlefsen, Edwin. "The Cemetery and Cultural Change: Archeological Focus and Ethnographic Perspective." In Richard A. Gould and Michael B. Schiffer, editors, Modern Material Culture. New York: Academic Press, 1981.

Francaviglia, Richard. "The Cemetery as an Evolving Cultural Landscape." American Association of Geographers Annals 61 (1971): 501-509.

Haseltine, Maurey. "A Progress Report on the Pictorial Documentation of Early Utah Gravestones." In Forms on the Frontier, Fife, et.al., editors, 79-88. Logan: Utah State University Press, 1969.

Jacobs, Stephen. Wayne County: The Aesthetic Heritage of a Rural Area. New York: Wayne County Historical Society, 1979. pp. 216-225.

Jeane, D. Gregory. "The Upland South Cemetery: An American Type." Journal of Popular Culture 11 (1978): 895-903.

Landes, Ruth. The Prairie Potawatomie. Madison: University of Wisconsin Press, 1970.

Osbourne, Brian. "The Cemeteries of the Midland District of Upper Canada." Pioneer America 6 (1974): 45-55.

Price, Larry. "Some Results and Implications of a Cemetery Study." The Professional Geographer 18 (1966): 201-207.

Riedesel, Gordon. "The Geography of Saunders County Rural Cemeteries from 1859." Nebraska History 61 (1980): 215.

Vlach, John Michael. "Graveyard Decoration." In The Afro American Tradition in the Decorative Arts. 139-150. Cleveland: The Cleveland Museum of Art, 1978.

XXX. Pattern Books

A. Houses

Cleaveland, Henry, and William Backus and Samuel D. Backus. Village and Farm Cottages: The Requirements of American Village Homes. New York: D. Appleton, 1856.

Downing, A.J. The Architecture of Country Houses. (1850. Reprint.) New York: Dover, 1969.

Dwyer, C.P. The Immigrant Builder. Philadelphia, 1872.

Fowler, Orson. A Home for All. New York: Fowler and Wells, 1854.

Holly, Henry Hudson. Country Seats and Modern Dwellings: Two Victorian Domestic Architectural Stylebooks. (1863. Reprint.) Watkins Glen, N.Y.: Library of Victorian Culture, American Life Foundation, 1977.

Hussey, E.C. Victorian Home Building. (1876. Reprint.) Watkins Glen, N.Y.: The American Life Foundation, 1976.

Woodward, George. Woodward's National Architect. New York: Korff Brothers, 1869.

B. Farm Buildings

Allen, Lewis. Rural Architecture. New York: O. Judd, 1865.

Bailey, L.H. Cyclopedia of American Agriculture. New York: Macmillan, 1907.

Halsted, Byron, ed. Barns, Sheds and Outbuildings. (1881. Reprint.) Brattleboro, Vermont: Stephen Greene Press, 1977.

Harney, George. Stables, Outbuildings and Fences. New York: George Woodward, [c. 1870].

Roberts, Isaac. The Farmstead. New York: Macmillan, 1900.

C. Railroad Structures

Berg, Walter. Buildings and Structures of American Railroads. New York: John Wiley and Sons, 1893.

XXX. Pattern Books (cont.)

D. School Houses

Eveleth, Samuel. School-house Architecture. (1870. Reprint.)
Watkins Glen, N.Y.: American Life Foundation, 1978.

Johnnot, James. School Houses: Architecture Designs. New York:
n.p., 1871.

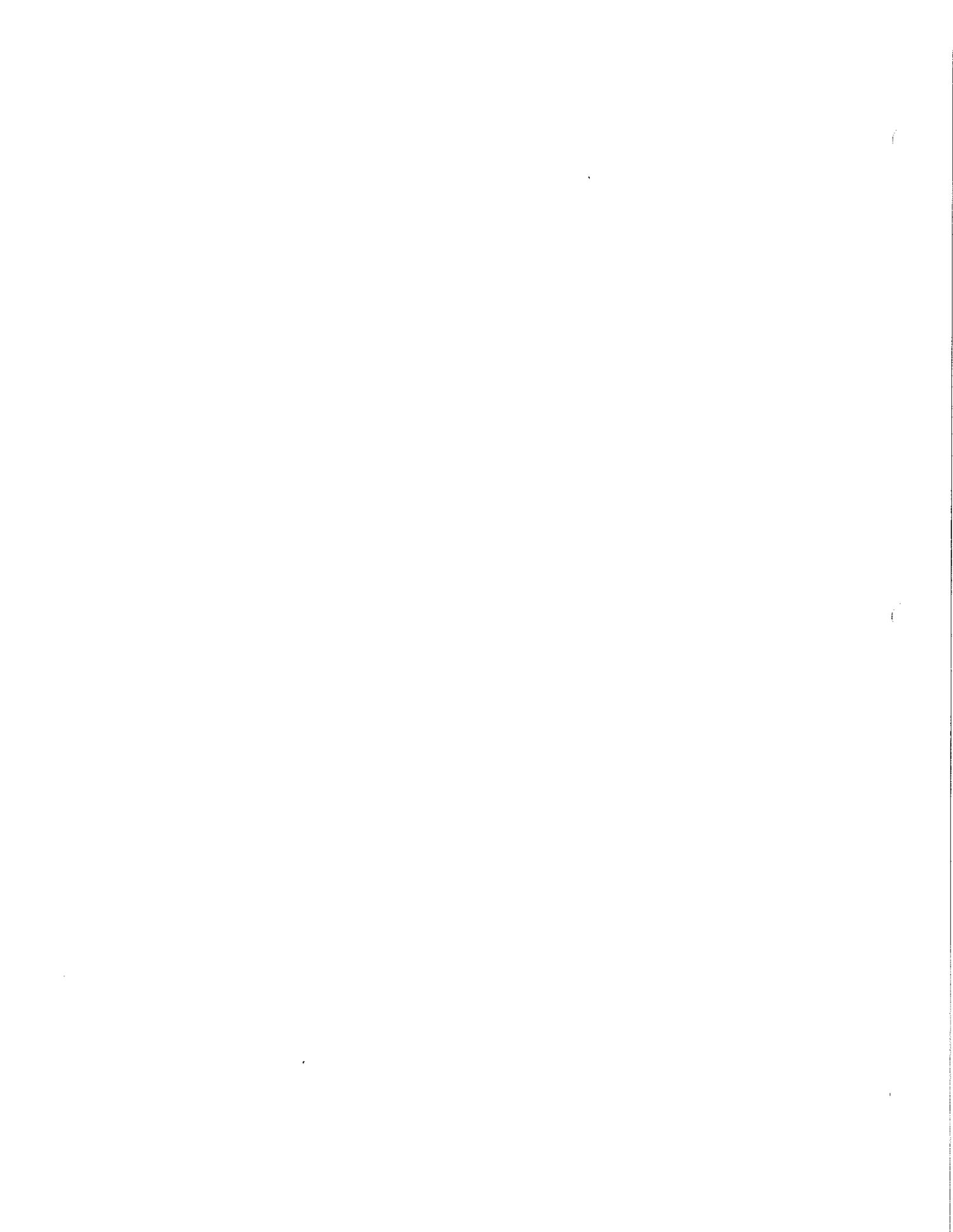
E. Churches

Dwyer, Charles. The Economy of Church, Parsonage, and School
Architecture. Buffalo: Phinney and Co., 1856.

Upjohn, Richard. et.al. Rural Church and Cottage Architecture . .
Chicago: North-Western Publishing House, [c. 1870.]

Upjohn, Richard. Upjohn's Rural Architecture. New York: Putnam,
1852.

II. PROGRAMS



PROGRAMS

The problem of rural preservation and conservation in Kansas is a complex one. Although this study unit focuses on the period of greatest statewide pre-modern agricultural activity, one cannot ignore the fact that Kansas is a modern agricultural state with all the benefits and problems that come with that status. Somehow a way must be found to accommodate both modern farming methods and preservation of historic rural resources.

Public Response

Public involvement is a vital part of the statewide preservation planning process. In order to get an idea of what concerns Kansans have regarding rural preservation a questionnaire was distributed to over three hundred groups and individuals, including county extension offices, historical societies, owners of rural properties listed on the National Register, county commissioners, and university professors. (Appendix A) The responses were enlightening. The preservation of farmsteads and cemeteries was deemed most important; the most threatened rural resources were considered to be farmhouses, followed closely by entire farmsteads, barns, and the landscape.

The threats to historic structures and landscapes that were noted by respondents fell into four categories--farming methods, new development, lack of historical perspective, and financial problems. In the first category the industrialization of agriculture and corporate farming were often cited and seem to be the catalyst for a series of other problems. As farms grow larger and machinery changes, more farmsteads and old outbuildings are abandoned. Fewer operators control more acreage than ever before. The fewer rural residents there are, the more susceptible the vacant buildings and abandoned cemeteries are to vandalism and to deterioration through natural causes. Intensified farming also leads directly to the destruction of historic landscapes as buildings, fence-lines, shelter belts, and trees are cleared from potential crop land. In addition, old farm buildings cannot accommodate modern machinery, thus the diverse rural buildings of Kansas are being replaced by uniform pre-fabricated structures. Concern was also expressed that modern farming methods are very often at variance with good soil and water conservation practices.

Modern development was frequently cited as a problem. The sprawl from urban centers adversely affects farmland and farm life as does scattered new housing placed haphazardly throughout the rural landscape.

Several different types of financial concerns were raised, but the most prevalent seemed to be the tax structure and the cost of maintaining old structures. Taxes on vacant buildings are often more than a farmer can bear. Demolition is the obvious solution. The farm economy most often does not lend itself to the maintenance of unused buildings. If these structures are not lost through demolition, benign neglect will render their preservation financially impossible after a few years.

Underlying all of these threats to rural historic resources is a lack of awareness of their historic, architectural, aesthetic, or intrinsic value. Were some of these structures recognized as important remnants of our past, their indiscriminant destruction might be checked.

The proposals for alleviating the identified threats fell within the realms of planning, conservation, education, and financial assistance. The theme that underlay most of the recommendations was local solutions should be found for local problems.

Planning was seen as a most effective local tool for combating destruction of natural and man-made resources. Local zoning, restrictions on development that affected creeks, and cooperative planning programs among farmers within a designated area were some of the specific approaches mentioned.

Conservation was an area of obvious concern, but few specific recommendations were offered. More diversified farming was proposed to combat the ill effects of intensive, specialized farming. It was suggested that significant land areas should be identified and protected from adverse uses, and that the overall problem of conservation should be dealt with through government programs.

A number of ways to combat the lack of education were suggested. These include incorporation of local rural history classes into school curricula, heritage appreciation programs for primary grades, the identification of historic resources, listing of rural resources on the State and National Registers, and establishment of historic working ranches or farms in eastern and western Kansas.

Even where knowledge of and concern for historic rural resources exists, money for preservation often does not. Tax breaks for rural historic structures were recommended, especially those that would do away with taxes on empty buildings. It was also suggested that were the overall farm economy to improve, preservation of historic structures would be more feasible.

Evaluation of Preservation Data at the State Level

The State Historical Society began its survey of the historic structures of Kansas in 1969. Since that time structures, objects, and sites have been inventoried across the state. Unfortunately, this survey is of a very uneven quality in rural areas. Of the one hundred and five counties in Kansas twenty-three have had no rural survey at all. Two of these are in the southeast portion of the state, ten are in central Kansas and eleven are in the western region. (Appendix B) Considering the amount of settlement that was going on in the rural areas of central and western Kansas in the 1880s and 1890s this is indeed a serious gap in information. A very few counties have fairly extensive rural surveys, but the material remains for the most part unanalyzed. Among these counties are Chase, Morris, Pottawatomie, and Wabaunsee. Most counties have had some selective rural coverage. Because no organized system was established for covering the rural areas of the state the inventory files at HPD are incomplete. On the positive side, the state inventory has been computerized and is being added to continually. Computerization becomes even more valuable as additional and more precise data is gathered, for it then becomes easier to evaluate the contribution a structure or a group of structures makes within a statewide or regional context.

While the survey data that has been collected over the years provides only minimal information on individual structures, the National Register nominations provide much more in-depth information and analysis. (These records are open to the public, as are the survey files.) The earliest National Register forms are much briefer and less precise than those more recently completed. There are many nominations that deal with rural structures of one type or another, including bridges, houses, and entire farmsteads. Information gathered for these very often relates to other structures in the vicinity or county, or may even have some statewide relevance.

The inventory and the nominations are the main resources that the Historic Preservation Department has to offer to anyone involved with or interested in preservation planning. In spite of the shortcomings of these documents they are a valuable base on which further work should build.

Surveys and Evaluation of Historic Structures

Rural architectural resources are all too often recorded only in the minds of local residents. When the structure disappears and the people go away, knowledge of large parts of our rural heritage is lost.

Surveys provide important data for planners, scholars, amateur historians, and others interested in this state's cultural resources. It enables the preservationist to evaluate an individual building or a group of structures. It allows him to make well thought out decisions about which structures are most valuable, which are most threatened, which are easiest to preserve, and so on. It helps avoid the last minute emotional confrontations of the developer with the preservationist.

There are many types of surveys and many ways of carrying them out. Each has its advantages and short-comings and each must be adjusted to the situation at hand. It is strongly recommended that surveys be conducted by professionals who are able to make field judgments and analysis that non-professionals would not be able to perform. If a survey team is made up of volunteers, they should be supervised by a professional. If the money is not available for a survey coordinator, the group should work closely with HPD.

All surveys carried out in the state of Kansas should use the state inventory form. (Appendix C) When completed properly, it will provide information needed for evaluation of the structure, its data can be entered onto the computerized statewide inventory, and it can be used for planning and review purposes at the local and state level.

Surveys should consist of three parts. Before any field work is done, the surveyors should familiarize themselves with the territory by reading local and county histories, talking with local historians and historical societies, reviewing old maps, plates, and photographs, and so on. The second step is the actual survey. Armed with some knowledge of what they are looking for and at, the surveyors are likely to be more observant than they would otherwise be. The final step of the survey is to evaluate what was found through the fieldwork.

The comprehensive survey is the most useful type of survey. It is also the most expensive and the most time consuming. A comprehensive survey can be conducted in a number of ways, depending on the goals of the survey. It can be an inventory of all types of resources--archeological, architectural, engineering, and natural; it can be an inventory of all architectural resources more than 50 years old, or it can be more specific yet and cover, for example, all bridges constructed before 1932 in Kansas.

The most broad-based of these comprehensive surveys is best for overall planning purposes. For instance, let's assume that a rural county is faced with possible development pressures from two urban centers between which it is situated. The economic base of the county is farming. Because of suburban areas expanding out into the county farmers are being pressured to sell out to developers, taxes are being assessed on the basis of

highest possible use of the land rather than on agricultural use, and the Main streets of the small rural towns are dying as more and more shoppers flock to the suburban malls. The preservationists' most important tool in combating these forces is a plan that evaluates the prehistoric and historic sites and structures of the county, that discusses where the most valuable soils for farming are and hence points out the areas least desirable for development, that proposes means of retaining the historic rural character of the county while allowing for controlled development. The basis for such a plan must be a comprehensive survey and the information that can be provided by professional archeologists, architectural historians, historians, landscape architects, geologists, soil conservationists, and so on. Much of the needed information may be available in written form already but will need to be synthesized.

The comprehensive field survey that inventories only architectural resources is best used when the planning scope does not need to be as large as envisioned above or when written sources cover the other areas of concern. This is the type of survey that will most likely be carried out in Kansas. Many sources on non-architectural resources are available. Archeological surveys are conducted by state archeologists and records maintained at the Kansas State Historical Society, University of Kansas, Wichita State University, and Kansas State University. If included in a comprehensive plan, archeological sites should be identified by site number or name and not by location in order to protect them from vandalism and destructive digging. Soil surveys have already been conducted for much of Kansas. Results of these are available from the Kansas Geological Survey in Lawrence. Cemeteries are shown on United States Geological Survey maps, county maps, etc. Bridges have been inventoried by the Kansas Department of Transportation and the information is on file at HPD. These sources used in conjunction with a rural architectural survey can create an accurate profile of any given area. Ideally the rural survey includes everything from chicken coops to fences to grand houses. In reality, every minor outbuilding and fence line may not be recorded due to time and money restrictions. Notes on shortcomings or gaps in the survey should be included in a description of survey methodology and analysis of survey findings.

The second kind of survey is called a windshield survey. This survey is seldom of any real value by itself. It is useful for becoming familiar with an area that is to be more intensely surveyed or where spot surveys will be conducted. The windshield survey derives its name from the method by which it is carried out. The surveyor drives systematically through an area noting on maps or in notebooks where various types or concentrations of buildings are. This can give the professional some idea of where he will have to concentrate his efforts, how much time the survey is likely to take, what types of structures are very common, and which are unusual.

A third kind of survey involves comprehensively surveying small areas within a larger region. We are referring to these surveys as spot surveys. When a large area must be surveyed but time does not allow for coverage of the entire area, this method can be used to figure out what is most likely to be found within the larger survey boundaries and which structures are the most historically or architecturally significant. The initial work involves mapping where development occurred historically, where structures are known or are likely to remain, and then surveying those areas that are likely to have the most representative types of structures. This survey method should be used only by experienced professionals and is of limited usefulness.

Once a survey has been completed the inventoried resources should be evaluated as a group and the significance of individual structures, complexes, and/or building types should be determined.

The evaluation of the survey should discuss each building type separately, addressing such questions as how many I houses or Foursquare houses were there? where were they concentrated? when were they built? (within a range of dates)? what were the most common building materials? Analysis should be both quantitative and qualitative. Reference to the historical overview in the first chapter of this study unit should help in understanding the historical context of the inventoried structures, as will the research that was conducted by the surveyors prior to beginning field work.

A set of criteria for determining the significance of structures within the survey area is absolutely necessary. HPD recommends strongly that the National Register criteria for evaluation be used. These criteria are broadly stated to allow for the recognition of properties of local, state, and national significance. They acknowledge the contributions of all aspects of American material culture, from small farm complexes to huge industrial complexes, from the old corner gas station to the Beaux Arts railroad terminal. (Appendix D) They recognize that the significance of a structure derives from its historical and physical contexts, that it can be significant on its own or as part of a larger group of structures related by proximity or by concept. For example, a three story limestone barn built by a German immigrant stone mason in 1882 would be significant even if associated structures had been destroyed. A simple privy would not have significance on its own, but as part of an intact 1870's farmstead it would contribute to the overall significance of the complex.

Preservation Options, Goals, and Priorities

In this section ideal preservation goals, practical options for preservation and preservation priorities will be discussed.

Although the comments will generally focus on the rural/agricultural resources of the 1865-1900 period, many of the concepts addressed herein can be applied to rural resources dating from before and after this period. Because the ideal goals of rural preservation and the objectives of rural preservation are by their natures intertwined, the last section of this chapter will discuss briefly the general concepts of rural conservation and what role preservation can play within that.

Identification of historic properties as discussed in the previous section is only the first step in planning for preservation. The next step for the local community or region is to write a proposal for how those historic structures will be dealt with in the future. Ideally, it should take into account such things as planned or possible future development and its impact on historic structures; the practice of knocking down old structures, fencelines, and hedgerows to add to the cultivated land area; the economic and physical decay of small towns due to growing urban centers, and farm specialization and consolidation. It should make specific proposals for the preservation of extremely significant properties, and general recommendations for groups of historic properties. Following are general suggestions for implementing preservation on the local level.

Local Programs

Nominating properties to the National Register of Historic Places is one of the most direct means of gaining recognition of a structure's historic qualities and raising the level of public awareness. Most nominations must be initiated at the local level. Only complex nominations that involve large numbers of resources or statewide surveys will be put together by HPD. A guide to the preparation of nominations is available from HPD.

Properties on the National Register are afforded a degree of protection from federal projects. Because all National Register properties are automatically listed on the State Register, they are also afforded a certain amount of protection from State and local government projects. Listing on the National Register makes properties eligible for acquisition and development grants, when they are available, and for federal tax credits in the case of income-producing properties. Information on both these programs is available from the Historic Preservation Department.

There are several types of National Register nominations. Individual nominations are used for single structures or related buildings within a complex such as a farmstead or milling operation. Historic districts are composed of contiguous structures and land areas that are somehow related. A rural historic district might consist of the contiguous farmsteads and small town that were established in western Kansas in the 1880's by a group of sheep ranchers.

The multiple resource and thematic group nominations are both more all-encompassing than the district or individual nomination. Areas that have been well surveyed lend themselves to multiple resource nominations. These are defined by the National Register as including

all or a defined portion of the historic resources identified in a specified geographical area which may be a rural area, a county, a small town, a large town or city, or a section of a town or city. The size of the area chosen should be determined by historic and/or geographic factors and by the practical factor of its manageability in the nominating process. The nomination should, if possible, be based upon the results of a comprehensive interdisciplinary survey undertaken to identify all of the resources of historic, architectural, and archeological significance within a defined geographical area. The survey data should be carefully analyzed to determine which properties are eligible for listing in the National Register.

While components of Multiple Resource nominations are related geographically, those of a Thematic Group nomination are obviously related by a theme. The guidelines published by the National Register state that resources within a thematic nomination may be

related to a single historical person, event or development force; of one building type or use, or designed by a single architect. . . . They can be located within a single geographical area such as a county, or they can be spread throughout a State . . . The nomination should include all known properties within the group that are eligible for listing on the National Register.

While National Register nominations will serve to illuminate the historic qualities of certain areas or structures, only a broader-based educational program will provide a better understanding of the series of events that made up day to day rural life. Some of the traveling education trunks available from the Kansas State Historical Society museum could easily be incorporated into classes on rural history in grade schools. Of the several trunks available from the museum, those dealing with the farm family, the Volga Germans, and Kansas Hispanics would probably be of particular interest.

Local or county historical societies could offer programs on rural life and culture, using human resources as well as artifact collections to explain various aspects of their area's rural history. As more people come to understand the role

various structures and objects played in the historical development of their community, the value of those resources will become more widely recognized, and it will become easier to encourage their preservation. In creating new programs on rural history, local preservation or conservation organizations should remember that they can draw on the various fields of expertise in the different departments of the Kansas State Historical Society as well as at colleges and universities throughout the state.

State Programs

Any type of preservation work is ultimately a local responsibility. Directives from the state or federal level will not make people anxious to implement preservation programs or make them see the value of their historic resources. At the state level we can only provide encouragement and assistance to those who are already interested and try to educate those who may not even know what historic preservation is. Following, then, are programs and projects that will be promoted by the state Historic Preservation Department in order to achieve a better understanding of the period of rural and agricultural dominance in Kansas.

Perhaps one of the easiest and most enjoyable ways to educate the general public is through informative slide programs that can be presented throughout the state under the auspices of the local Chamber of Commerce, historical society, extension program, 4-H club, etc. When funding is secured, such a slide program will be prepared. It will introduce the rural/agricultural study unit to its viewers through illustrations of rural cultural resources and discussions of rural Kansas history. Topics for debate, discussion, or research will be suggested in the accompanying script. The availability of this slide program will be announced in the Kansas Preservation newsletter.

From the state office's viewpoint, local and regional plans and surveys are the most valuable documents in carrying out our various responsibilities. Plans enable us to coordinate our efforts with those at the local level, and properly conducted and analyzed surveys enable us to evaluate proposed nominations and federal and state projects more easily. Also when local organizations are able to handle local preservation concerns the state office can turn its attention to projects, problems, or issues that can only be dealt with on the state level. For these reasons the HPD will set a high priority on passing on federal grants to projects at the local level that will fulfill survey and planning goals for this and other study units.

Professional quality nominations will, as always, receive a high processing priority. Those that complement local survey and planning efforts or the HPD study units will be especially welcome.

In order to achieve more complete and, hence, more useful study units, HPD will encourage the active participation of universities and colleges statewide in searching for answers to the research questions posed in the history section of this study unit. The study unit will be forwarded to professors of history, architectural history, architecture, landscape architecture, cultural geography, and so on. They may then pass on research topics to interested students and keep us informed of any of their work that may correspond with the goals of the study unit. It is hoped that this type of research will answer questions of statewide or at least regional significance that would assist us in figuring out the broad historical patterns of Kansas from 1865 to 1900 as they relate to the built environment.

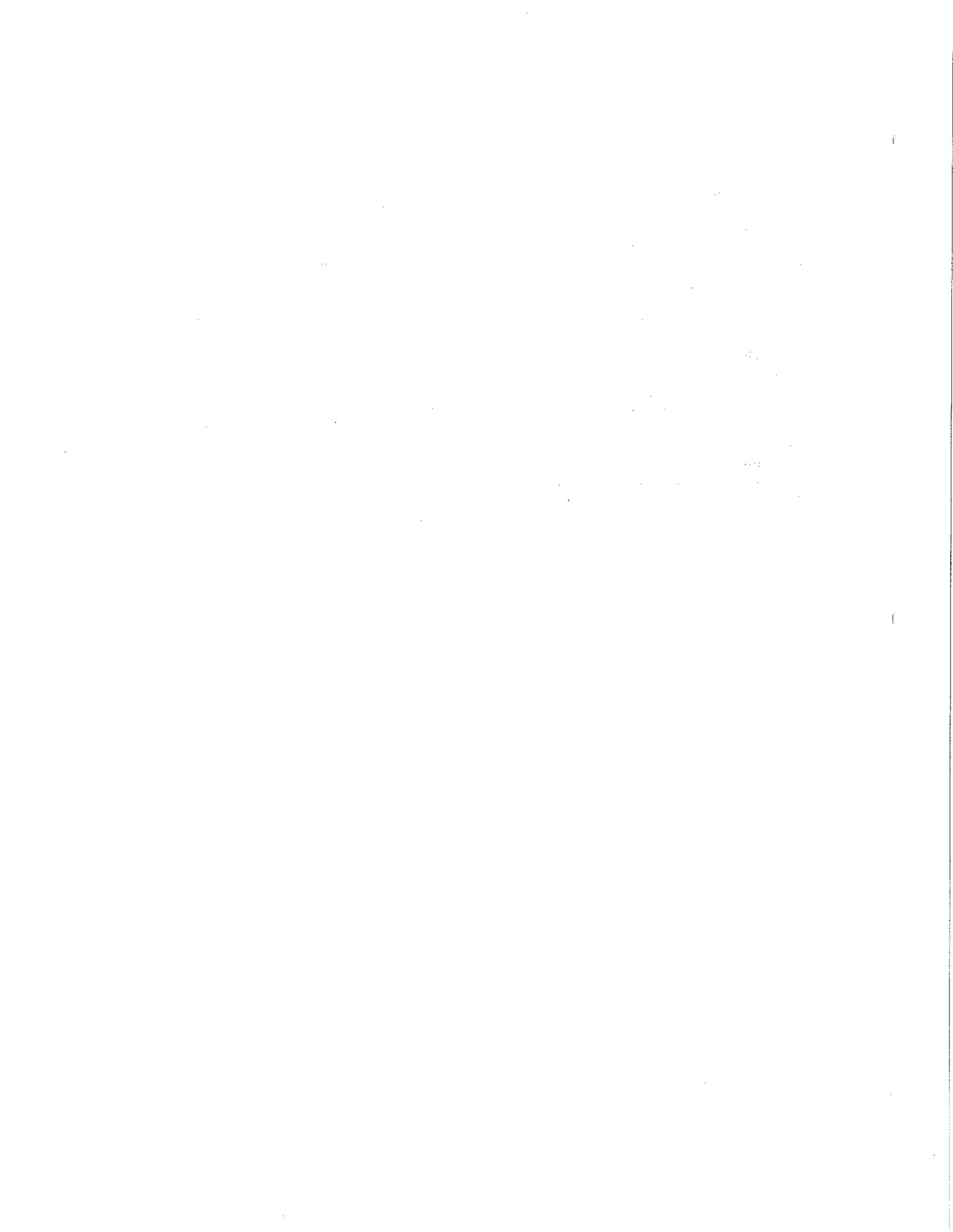
The Kansas State Historical Society has many state owned historic sites under its jurisdiction that honor prominent individuals and that recognize specific military and Indian presences in the pre-territorial, territorial or early statehood days. It now also controls a site with unlimited possibilities for educating the public about an important aspect of rural Kansas history in the late nineteenth century. The Pratt Ranch near Studley in Sheridan County was a sheep ranch built by John Fenton Pratt in the 1880s and 1890s. The individuals who lived there are not as significant as the fact that this ranch has survived virtually intact and that valuable archival material exists that should permit an in-depth interpretation of daily life. When combined with knowledge gleaned from census records, state agriculture reports, contemporary newspapers and the like, these materials provide all that is necessary for presenting the Pratt Ranch as representative of life in western Kansas in the last quarter of the nineteenth century. It would be the only state-owned historic site of that nature in Kansas. The Kansas State Historical Society will be urged to pursue the development of this site. (A slide show on the history of the ranch and the Studley vicinity became available in the fall of 1983. People interested in the slide program should contact Sara Judge in the library at the Kansas State Historical Society.)

Rural Conservation

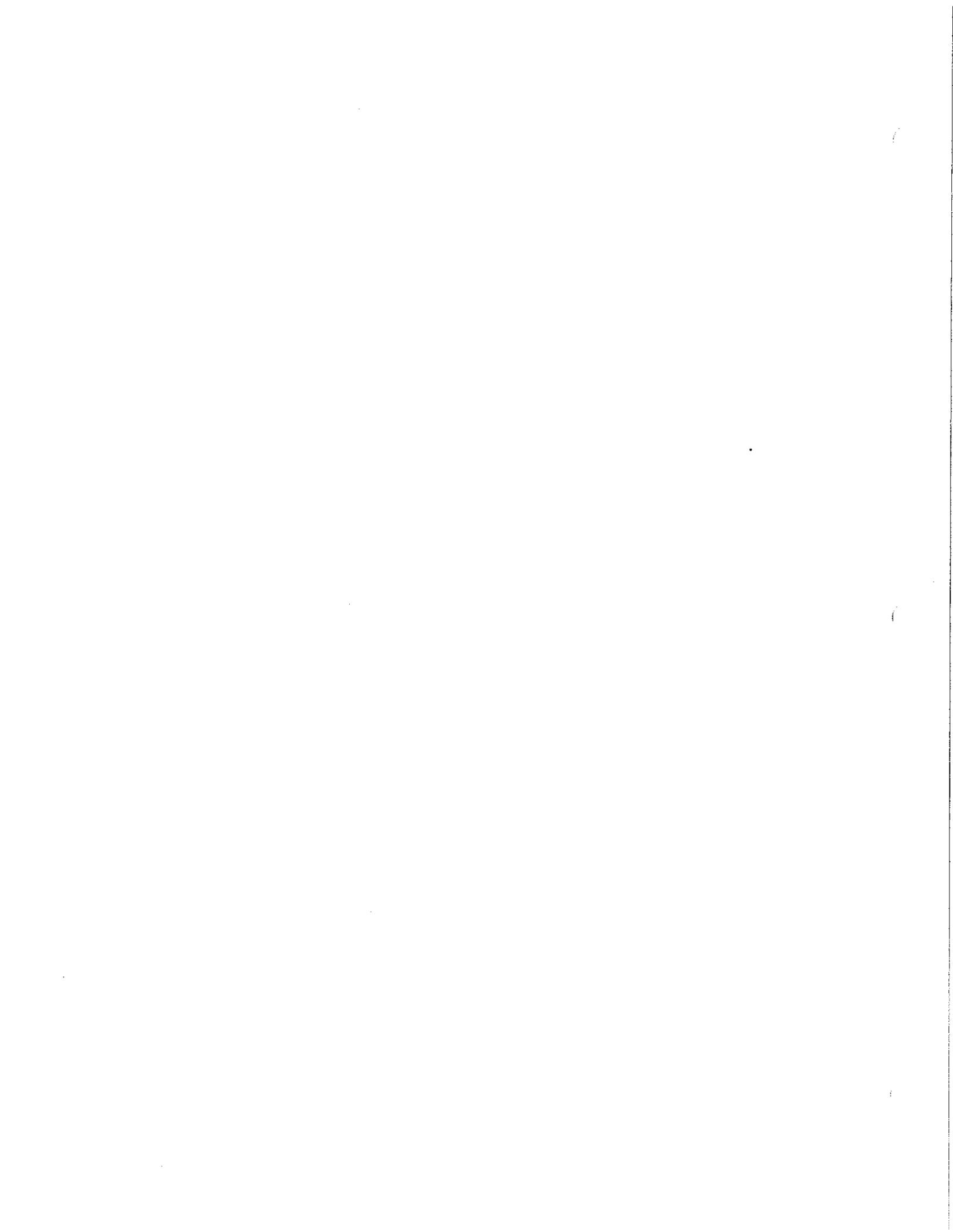
The activities described thus far have dealt with the concept of preservation of rural historic resources and the study of the period of pre-modern rural/agricultural dominance in Kansas. Rural preservation of this sort is, however, only a small part of the more encompassing field of rural conservation. Rural conservationists are concerned with both the natural and man-made environment. As defined by the National Trust for Historic Preservation rural conservation includes "the preservation of buildings and villages of cultural significance, the protection of the surrounding open space and the enhancement of the local economy and social institutions." Issues as diverse as soil conservation, suburban sprawl, taxation of farm land, and the preservation of entire historic landscapes all come under the purview of the rural conservationist.

Tools of rural conservation include agricultural districting, zoning, income tax credits, conservation easements, land trusts, and more. The benefits and problems associated with all of these are widely discussed and debated in journals and books. The issue is too broad to go into here, but rural preservationists should be aware that there are many people outside the field of preservation who share the same or similar concerns. If at all possible, rural preservation should be incorporated into conservation programs that may already exist. Rural residents, extension agents, historians, planners, and the like should all be allies in the fight to conserve rural culture, economy, landscape, and history.

There are many organizations concerned with rural conservation. In Kansas contact the Kansas Rural Center, Inc., P.O. Box 133, Whiting, Kansas 66552 or the Land Institute, Route 3, Salina, Kansas 67401. The Historic Preservation Department in Topeka has many publications on rural conservation that patrons may use in the office. The Rural Project of the National Trust for Historic Preservation, 1600 H St. N.W., Washington, D.C. 20006, has published a useful bibliography on rural conservation, and their information sheet number 19, entitled "Rural Conservation," is a very good introduction to many of the issues and problems encountered by rural conservationists.



III. RURAL PRESERVATION: A SHORT BIBLIOGRAPHY



The Development of Rural Conservation Programs: A Case Study of Loudoun County, Virginia Information Sheet #29. Washington, D.C.: National Trust for Historic Preservation, 1981.

Fletcher, W. Wendell, and Charles E. Little. The American Cropland Crisis. Bethesda, Md.: American Land Forum, 1982.

Jacobs, Stephen W. Wayne County: The Aesthetic Heritage of a Rural Area. New York: Wayne County Historical Society, 1979.

Lawson, Merlin P., and Maurice E. Baker, eds. The Great Plains: Perspectives and Prospects. Lincoln: Center for Great Plains Studies, University of Nebraska-Lincoln, 1981.

Rural Conservation. Information Sheet # 19. Washington, D.C.: National Trust for Historic Preservation, 1979.

Rusmore, Barbara, et al, eds. Private Options: Tools and Concepts for Land Conservation. Covelo, Cal.: Island Press, 1982.

Sampson, R. Neil. Farmland or Wasteland, A Time to Choose: Overcoming the Threat to America's Farm and Food Future. Emmaus, Pa.: Rodale Press, 1981.

Stovall, Allen D. The Sautee and Nacoochee Valleys: A Preservation Study. Atlanta: Georgia Department of Natural Resources, 1982.

U.S. Department of the Interior. Heritage Conservation and Recreation Service. New Directions in Rural Preservation. Washington: Government Printing Office, 1980.

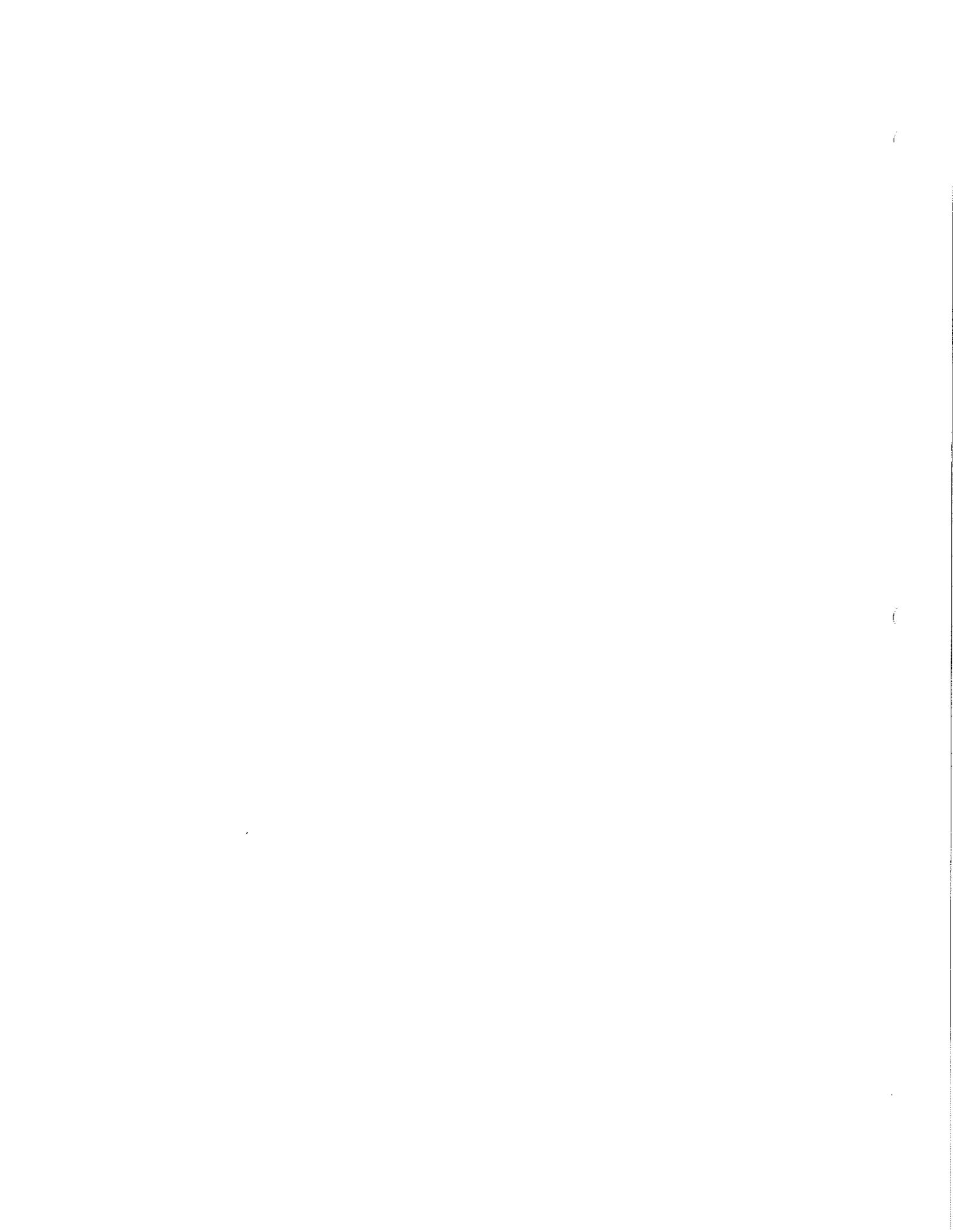
OTHER RESOURCES

The following are names and addresses of organizations that publish journals and other materials related to rural conservation.

American Farmland Trust
1717 Massachusetts Avenue, N.W.
Washington, D.C. 20036

American Land Forum
5410 Grosvenor Lane
Bethesda, MD 20814

Kansas Rural Center, Inc.
P.O. Box 133
Whiting, KS 66552



IV. APPENDICES

APPENDIX A

April 18, 1983

Dear Concerned Rural Conservationist:

The Historic Preservation Department is the state office charged with the preservation of our cultural and historical resources. In order to better fulfill our duties we are devising a statewide comprehensive preservation plan. This plan is broken down into several parts called Study Units. We hope that you will be able to help us with our Period of Rural/Agricultural Dominance (1860s - 1890s) Study Unit.

The Rural/Agricultural Study Unit will be a concise architectural and social history of Kansas during the 1860s to the 1890s. It will discuss historical activities and the types of structures that resulted from them. Emphasis will be on the rural environment of the last half of the nineteenth century. The point of this document is to identify what types of historic resources are likely to be found in a given area. That information can then be used by local governments, planners, historical societies, individuals, etc., in preservation work they may carry out that concerns the above-mentioned time period. Other study units will deal with other time periods.

In conjunction with this Rural Study Unit we are developing an operating and a management plan. The operating plan is a document that will identify on a statewide basis what the state's preservation priorities should be and what the options are. It will discuss what types of rural historic resources we need to save or document and how to go about doing that. It is intended to be used at the local or regional level to identify what problems exist in a particular locale and what solutions may be employed in resolving those problems. The management plan is a local or regional tool that looks at specific structures, sites, and landscapes and makes preservation recommendations for them.

We need your help with the operating plan. We would like it to contain long-term, perhaps idealistic, rural conservation goals and to identify more practical, immediate concerns. Our goal is not to freeze rural agricultural lands in time, but to devise means of conserving historic rural resources in Kansas in the midst of technological advances and to make that information available to concerned individuals and organizations. Because we have limited knowledge in our office of how this problem is perceived throughout the state and of what, if any, steps are being taken to conserve the historic rural/agricultural built environment, we are asking you to help us.

Please complete the enclosed questionnaire and return it to Nora Pat Small, Kansas State Historical Society, 120 W. Tenth, Topeka, Kansas 66612. If you have any suggestions, comments, or questions please feel free to add those. Also, if you know of someone else who should receive this questionnaire, please let us know.

Thank you very much for your cooperation. We look forward to hearing from you soon.

Sincerely,

Joseph W. Snell
State Historic Preservation Officer

JWS:caf

KANSAS STATE HISTORICAL SOCIETY
HISTORIC PRESERVATION DEPARTMENT
RURAL/AGRICULTURAL STUDY UNIT QUESTIONNAIRE

1. Which historic rural resources do you think it is most important to preserve? (Please number in order of priority)
 - Whole farmsteads
 - Farmhouses
 - Barns
 - Windmills
 - Privies
 - Assorted Outbuildings (please identify) _____
 - Family cemeteries
 - the landscape
 - Grain elevators
 - other
 - none

2. Which historic rural resources do you think are the most threatened? (Please number in order of greatest threat to least threat.)
 - Whole farmsteads
 - Farmhouses
 - Barns
 - Windmills
 - Privies
 - Assorted Outbuildings (please identify) _____
 - Family cemeteries
 - the landscape
 - Grain elevators
 - other
 - none

3. In your view what are the greatest threats to historic structures and landscapes in rural areas? (Continue on additional sheet if necessary.)

4. What steps do you think would be most effective in alleviating these threats?

5. Are you in any way involved in the conservation or preservation of the historic rural landscape and the structures on it? If so, how? If not, do you think there is a place for rural conservation or historic preservation in your program?

6. Do you know of a region, town, or organization in Kansas that actively supports the preservation of historic rural resources?

7. Would you like to be kept informed of the progress of this report?
YES NO (circle one)

8. Your name: _____

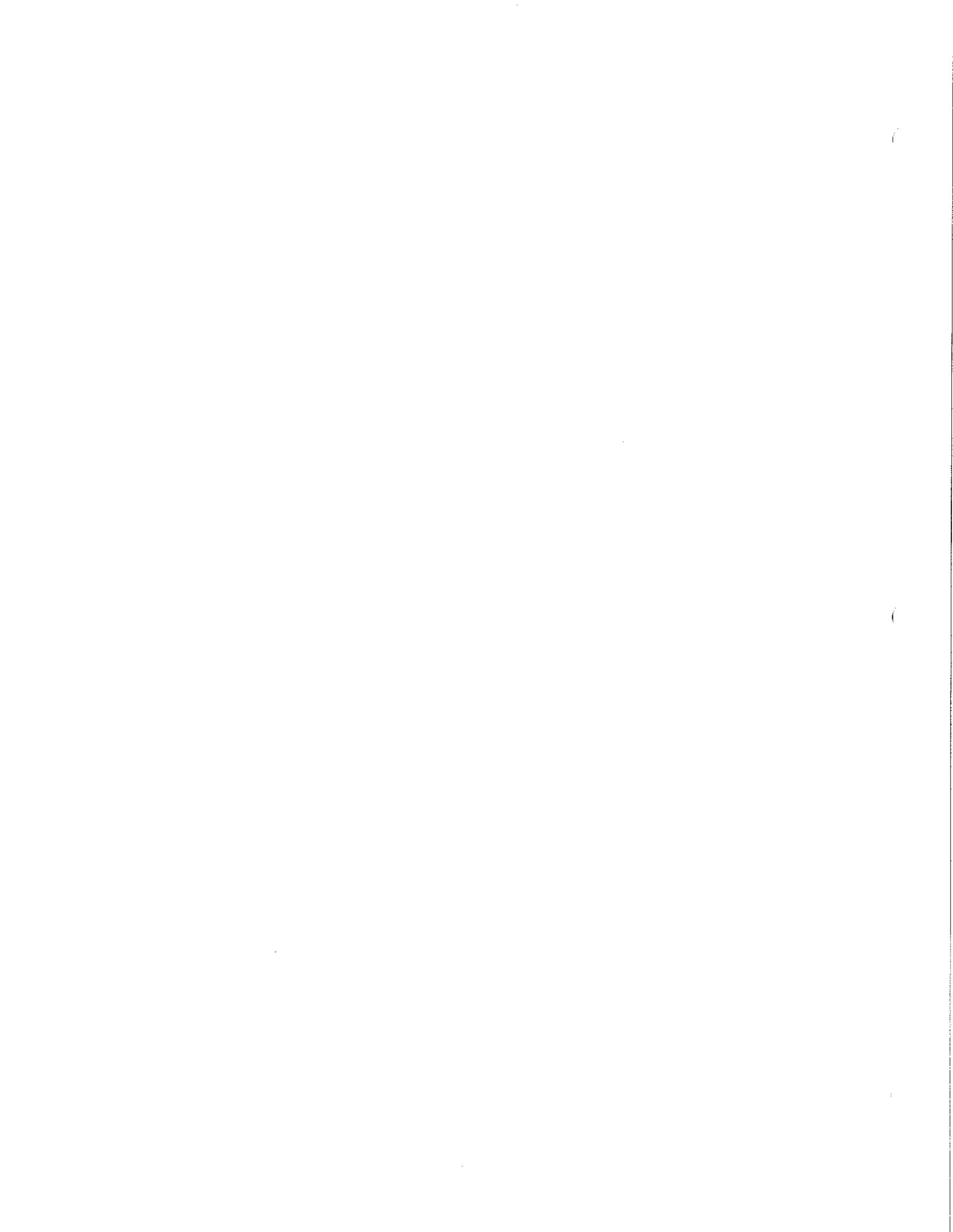
Address: _____

APPENDIX B

Counties with no rural survey

Chautauqua (E)	Neosho (E)
Comanche (C)	Norton (W)
Finney (W)	Phillips (C)
Gray (W)	Pratt (C)
Greeley (W)	Reno (C)
Harvey (C)	Rush (C)
Hodgeman (W)	Seward (W)
Kearny (W)	Stafford (C)
Kingman (C)	Stanton (W)
Kiowa (C)	Stevens (W)
Lane (W)	Thomas (W)
	Wichita (C)

C=Central E=East W=West



KANSAS HISTORIC STRUCTURES INVENTORY

PART I

1. Property Name: _____
2. Inventory No. _____
(HPD) use only
3. Address: _____

4. Legal Description:
5. Owner: _____
Owner's address: _____

- Tenant: _____
6. Property Identification:

Site	Nonsheltering structure
Building	Complex
7. Functional Type:

Commercial	Institutional
Industrial	Rural Outbuilding
Residential	Commemorative
Ecclesiastic	Storage
Government	Civil Engineering
8. Current Usage:
9. Condition:

Excellent	Good	Fair	Deteriorated
_____	_____	_____	_____
Ruins	No visible remains		
_____	_____		
10. Environment:

Rural	Industrial
Urban/dense	Government
Urban/scattered	Institutional
Residential	Other
Commercial	
11. Accessible:

Yes: Restricted	Yes: Unrestricted	No:
_____	_____	_____
12. Style:
13. Construction Date:
14. Architect/Builder:



15.

SKETCH SITE PLAN/BUILDING PLAN

Date of Inventory _____

Inventoried By _____
(Name or Organization)

PART II

Inventory No. _____
Property Name: _____

Property Description

1. Dimensions and Shape:

Height	Stories
Length	Bays
Width	Wings

2. Foundation:

Materials
Basement

3. Wall Structure:

Wood Frame
Masonry

4. Wall Covering:

Materials
Color

5. Roof:

Shape
Materials
Cornice
Dormers
Chimney location(s)

6. Windows:

Spacing
Type
Trim
Shutters

7. Door:

Spacing
Type
Trim

8. Porches:

Location(s)
Materials
Supports
Trim

9. Interior Details:



United States Department of the Interior

NATIONAL PARK SERVICE
WASHINGTON, D.C. 20240

IN REPLY REFER TO:

THE NATIONAL REGISTER OF HISTORIC PLACES

The National Register of Historic Places is the official list of historic properties recognized by the Federal Government as worthy of preservation for their significance in American history, architecture, archeology, engineering and culture. Located in the National Park Service, Department of the Interior, the program is part of a national policy to coordinate and support public and private efforts to identify, evaluate, and protect our cultural and natural resources, and is maintained by the Secretary of the Interior under provisions of the National Historic Preservation Act of 1966.

Listing in the National Register provides the following benefits to historic properties:

- Consideration in the planning for federally assisted projects. Section 106 of the National Historic Preservation Act of 1966 provides that the Advisory Council on Historic Preservation be given an opportunity to comment on projects affecting such properties.

- Eligibility for Federal tax benefits. If a property is listed in the National Register, certain tax provisions may apply. The Tax Reform Act of 1976, as amended by the Revenue Act of 1978 and the Tax Treatment Extension Act of 1980, and the Economic Recovery Tax Act of 1981, contain provisions intended to encourage the preservation of depreciable historic structures by allowing favorable tax treatments for rehabilitation, and to discourage destruction of historic structures. Beginning January 1, 1982, the Economic Recovery Tax Act replaces the rehabilitation tax incentives available under prior law with a 25% investment tax credit for rehabilitations of certain historic commercial, industrial and residential rental buildings. This can be combined with a 15-year cost recovery period for the adjusted basis of the historic building. Historic buildings with certified rehabilitations receive additional tax savings because they are exempt from any requirement to reduce the basis of the building by the amount of credit. The Tax Treatment Extension Act of 1980 includes provisions regarding charitable contributions for conservation purposes of partial interests in historically important land areas or structures.

- Consideration of historic values in the decision to issue a surface coal mining permit where coal is located, in accord with the Surface Mining and Control Act of 1977.

- Qualification for Federal grants for historic preservation when funds are available.

Listing does not mean that the Federal Government wants to acquire the property, place restrictive covenants on the land, or dictate the color or materials used on individual buildings. State and local ordinances or laws establishing restrictive zoning, special design review committees, or review of exterior alterations, are not a part of the National Register program and should be clearly separated from the function of the National Register as a tool in the Federal planning process.

The National Park Service administers the program through the professional staff of the National Register of Historic Places, State Historic Preservation Officers, and Federal Preservation Officers.

Procedures for certifying local governments to participate in the program are now being developed. Responsibilities of the State Historic Preservation Officer include conducting a statewide survey, the nomination of properties to the National Register, administration of the Historic Preservation Fund grants-in-aid program within the State, and review of federally funded or licensed projects for their effect on the State's historic properties. Federal Preservation Officers are appointed by the heads of Federal agencies to inventory and nominate to the National Register properties under the agency's ownership or control.

Historic properties of national, State, or local significance may be nominated by the States and Federal agencies for listing in the National Register. Historic components of the National Park System and properties designated by the Secretary of the Interior as National Historic Landmarks are automatically included in the National Register. Properties are listed in the National Register if they meet the National Register criteria for evaluation (see National Register leaflet).

A list of the properties entered annually in the National Register is published in the Federal Register. Issues of February 6, 1979, (vol. 44, no. 26, book 2), March 18, 1980, (vol. 45, no. 54, part 2), and February 3, 1981 (vol. 46, no. 22, part 2), which include properties listed in the National Register through 1980, are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. A list of properties nominated to the National Register is published every Tuesday in the Federal Register for comment.

Federal regulations for the National Register program can be found in the Code of Federal Regulations under 36 CFR 60 (National Register nomination procedures), 36 CFR 63 (determination of eligibility procedures), and 36 CFR 67 (certifications of significance and rehabilitation for Federal tax purposes).

For additional information, write to your State Historic Preservation Officer or to the National Register of Historic Places, National Park Service, U.S. Department of the Interior, Washington, D.C. 20240.

(12/81)

APPENDIX E

Abstract for Mo-Kan rural survey project

The Mo-Kan Regional Council is conducting a comprehensive rural survey of Doniphan county. All structures that pre-date 1930 and that retain enough of their historic fabric and historic form to convey their origins will be included. A state inventory form will be completed for each structure and a 3 x 5 print or contact print of the building will be attached to that.

Once the field work is completed, the survey materials will be analyzed. Building types and variations within types will be identified, dates of building types (within a range of dates) and conditions of classes of structures will be noted.

The last phase of this project will consist of a more in-depth study of a group of buildings associated by function or by proximity or by historic theme. This material can be used by HPD to compile a National Register nomination or be used as a source for evaluating similar structures outside of the study area.

