

<b>Between Fences</b>	
<b>Entryway / Exhibition Introduction / Credits</b>	
Exhibition title	<b>Between Fences</b>
Exhibition intro	<p>This is an exhibition about your home and the land on which it stands.</p> <p>This is a story of the settling of the United States, the establishment of its communities, and the building of its borders. It's a story of people, pigs, corn, and dirt. It's about intimacy and conflict, creativity and industry, restraint and liberation.</p> <p>In other words, this exhibition is about fences.</p> <p>[SI and state humanities councils logos]</p>
Credits	<p>Organized by the Smithsonian Institution Traveling Exhibition Service in association with the [insert name of state humanities council]</p> <p>[State] programming supported by [name of funder(s)]</p> <p>Curated by Greg Dreicer, Chicken &amp; Egg Public Projects, Inc.</p> <p>Graphic Design by Hall Smyth, Chicken &amp; Egg Public Projects, Inc.</p> <p>Designed, edited, and produced by the Office of Exhibits Central, Smithsonian Institution</p> <p>Uncredited photos courtesy Chicken &amp; Egg Public Projects, Inc.</p>
Prop Mailbox and/or bfmailboxes	
Prop Picket and/or picketDC	

<p><b>Section 1</b></p> <p><b>Side includes 1A/2A/3A</b></p>	<p><b>Final, approved script for this section.</b></p>
<p>Title text 1.1A Top 1.2A Top</p>	<p><b>This Land is My Land</b></p>
<p>Text 1.1A Top 1.2A Top 1.3A Top</p>	<p><b>Land</b> is the earth that we live on.</p> <p>People make land into <b>property</b> by owning and using it.</p> <p>Fences define <b>home</b> and <b>community</b>.</p> <p><b>Happiness.</b> A fence stands for it. Americans pursue it by making land their own.</p>
<p>Prop 1.1A Bot</p> <p>Three jars of soil samples</p>	<p>[Each exhibit copy will have three soil samples from the following group.]</p> <p><b>Utah</b> (Dark Sample) From the property of H. &amp; A. Johnson, American Fork, Utah (Red Sample) From the property of J. Lewis and M. Bickle, Moab, Utah</p> <p><b>South Carolina</b> From the property of P. Davis, Lexington County, South Carolina</p> <p><b>Iowa</b> From Southview Farm, Grundy County, Iowa</p> <p><b>Michigan</b> From the property of G. Kern, Eaton County, Michigan.</p>
<p>Background Graphic 1.1A Top/Bot 1.2A Top/Bot 1.3A Top/Bot</p> <p>Text on 1.1A Bot</p> <p>Large image of house and</p>	<p>Loudoun County, Virginia</p>

fence	
Graphics in window frame 1.3A Top  (12pt)	top: Courtesy Chicken & Egg Public Projects bottom: Courtesy Chicken & Egg Public Projects  top: Smithsonian Institution Libraries, Botany and Horticulture Library bottom: Courtesy Chicken & Egg Public Projects  top: George M. McAfee Jr., photographer Smithsonian Institution Horticulture, Archives of American Gardens bottom: Smithsonian Institution Horticulture, Archives of American Gardens, J. Horace McFarland Collection
Text 1.3A Bot	“The first man who, having fenced in a piece of land, said ‘This is mine,’ and found people naïve enough to believe him, that man was the true founder of civil society.”  Jean Jacques Rousseau, <i>A Discourse on the Origin of Inequality</i> (1754)
<b>Side includes 3B/4A/5A/6A</b>	
Text 1.3B Top/Bot	<b>Property</b>  Land. Everyone wants a piece of it.  People make land into property by owning and using it.  “Property is <i>rights</i> , not <i>things</i> ,” wrote historian Marshall Harris. <i>Rights</i> are beliefs and laws about what we are entitled to — and how we should treat each other.  Fences reveal much about relationships between people.
Graphics in Window 1.3B Top  (12pt)	top: Courtesy Chicken & Egg Public Projects bottom: Harry B. Rehder, photographer Smithsonian Institution Horticulture, Archives of American Gardens, Garden Club of America Collection  top: Shelley D. Schorsch, photographer Smithsonian Institution Horticulture, Archives of American Gardens, Garden Club of America Collection bottom: © Tony Casper, photographer. Smithsonian

	<p>Institution Horticulture, Archives of American Gardens, Garden Club of America Collection</p> <p>top: Courtesy Chicken &amp; Egg Public Projects bottom: Nebraska State Historical Society</p>
<p>Graphic 1.3B Bot</p> <p>Lot map signboard in front of tract home (upper panel)</p>	Loudoun County, Virginia
<p>Text 1.4A Top</p> <p>nativeamlc</p>	<p><b>Unfenced</b></p> <p>Fences embodied the vast difference in how Native Americans and Europeans viewed and used land. Native Americans built fences for fortifications and hunting, not for farming or keeping animals. Colonists allowed their animals to run free. Their hogs destroyed the unfenced crops of Native Americans, who were forced to build fences, move, or fight.</p>
<p>Text 1.4A Top</p>	<p>John Winthrop, head of the Massachusetts Bay Colony, believed that land became private property through the building of fences. Native Americans, he wrote in 1629,</p> <p>“ruleth over many lands without title or property . . .they inclose no ground.”</p> <p>Europeans occupied, bought, or took land by force, and enclosed their crops with fences.</p>
<p>Graphic 1.4A Bot</p> <p>Secoton image</p>	<p>John White, <i>Indian Village of Secoton</i>, watercolor drawing, 1585-86</p> <p>Licensed by the Trustees of the British Museum. © The British Museum</p>
<p>Text 1.5A Top</p>	<p><b>Claiming the Land</b></p> <p>To Europeans who sailed across the Atlantic Ocean, America meant land. Colonists used fences to take land from Native Americans. The colonists’ fences prevented their hogs from eating their crops. They fenced in their sheep to keep them safe from wild animals. Native Americans did not traditionally fence in their crops or use fences to claim ownership of the land.</p>

Text 1.5A Top	In new settlement, fences played a central role in the lives of the colonists. The stumps in the fields are all that remains of the trees cut for house, fence, and firewood. Already in the 1700s, the destruction of forests resulted in wood shortages.
Graphic 1.5A Top  campbell	From Patrick Campbell's <i>Travels in the Interior Inhabited Parts of North America</i> (1793)  Library Company of Philadelphia
Text 1.5A Top	Savannah's layout was an ideal vision of fenced rectangular city planning. The fence at the left edge of the settlement is under construction.
Graphic 1.5A Top  savannahoglethorpeplan	From Peter Gordon's <i>A View of Savannah</i> (1734)  Library of Congress
Pop-off Panel 1.5A & 1.6A Top	The picket fence may have its origins in defensive structures such as the <i>palisade</i> , a wooden wall of pointed stakes. Settlers from Europe brought this military tradition to America.
Graphic 1.5A Bot	Jamestown 1614, Aerial View by Sidney King National Park Service, Colonial National Historic Park
Text 1.6A Top	<b>The Rectangular Land Survey</b>  Conflicting property claims and a lack of information about the frontier led Congress in 1785 to declare that all public land had to be surveyed before it could be offered for sale.  Surveyors created townships of six-mile squares, which were cut into one-mile square sections of 640 acres each. The grid began at the western border of Pennsylvania and eventually covered almost 70% of the 48 continental states.
Text 1.6A Top	The rectangular survey had no relationship to the geography of North America. Rectangles drawn on maps were made real by fences and roads that gave order to 1.3 billion acres of a continent up for sale. The rectangular grid turned the land into standard parts, suitable for enclosure by fence.

Graphic pop-off 1.6A Top	This 1885 map shows newly established counties in Kansas and Nebraska. Library of Congress
Graphic 1.6A Top  OttawaTwnWaukeshaCty.jpg	From <i>Wisconsin Past and Present: A Historical Atlas</i> by the Wisconsin Cartographic Guild ©1998. Reprinted by permission of the Guild and The University of Wisconsin Press
Text 1.6A Bot	Geographer John Fraser Hart wrote that the grid plan  “conveys a sense of neatness, order, and stability.”  Sociologist T. Lynn Smith called the plan  “one of the most vicious modes devised for dividing lands”  because it encouraged isolation of individuals and raised the cost of roads and power lines.
Background Graphic 1.6A Bot  Aerial View of gridded landscape INMacleanLS6042-18.jpg	Texas farmland with center-pivot irrigation  ©Charles O’Rear/CORBIS
Graphic 1.6A Bot Slider Interactive  grundyiowafarmstead LC-UJSF34-029420-D	Grundy County, Iowa, 1940  Photograph by Arthur Rothstein. Library of Congress
<b>Side includes 6B/5B/4B/2B/1B</b>	
Text 1.6B Top	<b>Home</b>  Fences run through the American landscape, defining home and community.  Early Americans believed that land ownership was a natural right of white men, 75% of whom owned land in 1763. Owning and farming land represented economic

	<p>independence — the ability of a man to provide for himself and his family. It also meant political independence — a landless man was not permitted to vote or hold public office.</p> <p>A fence stood for the freedom that went with land ownership.</p>
<p>Text 1.6B Top</p>	<p><b>Front Yard Fence</b></p> <p>The age of the fenced front yard peaked during the 19th century. Later, fences were less often required to keep animals away from the house. Although designers called for unobstructed lawns around suburban houses in the mid- to late 20th century, many owners kept their property fenced.</p>
<p>Graphic pop-off 1.6B Top</p> <p>Smithboneco</p>	<p>Boone County, Missouri, 1875</p> <p>Library of Congress</p>
<p>Graphic 1.6B Bot</p> <p>lawnfence</p>	<p>Catalogue, Pittsburgh Steel Company</p> <p>Warshaw Collection, Smithsonian Institution Libraries</p>
<p>Text 1.6B Bot on Slider Interactive</p>	<p>Fences can express homeowner confidence and contentment. They send messages about social status and wealth. Manufacturers produce styles of fence that enable homeowners to construct open-air portraits of family character.</p>
<p>Text 1.5B Top</p>	<p><b>Urban Suburban</b></p> <p>The picket fence is so strongly associated with property and pride that suburban real estate developers use it to evoke a small-town ambiance. In “new urban” towns such as Seaside, Florida, fences define space and serve as symbols of tradition.</p>
<p>Text 1.5B Top</p>	<p><b>Seaside</b></p> <p>The Architectural Code of Seaside, designed by architects Andres Duany and Elizabeth Plater-</p>

	<p>Zyberkamd and built during the 1980s, strictly regulates the appearance of picket fences throughout the town:</p> <p>“White painted wood picket fences are required at the street front and path front property lines . . . . Individual fence patterns shall not replicate another on the same street. . . . White paint shall be selected from one of the following manufacturers' stock numbers....”</p>
<p>Graphic 1.5B Top</p> <p>T.3.5 (Seaside, FL)</p>	<p>Seaside, Florida</p> <p>© Steven Brooke Studios. All rights reserved.</p>
<p>Text 1.5B Top</p>	<p>The fence at the edge of the yard leaves no question about where the private world begins. It sets the stage for a public audience or blocks private activity from view.</p>
<p>Graphic 1.5B Bot</p> <p>Picketsatevpo</p>	<p>© 1957 SEPS: Curtis Publishing Company, Indianapolis, IN</p>
<p>Text 1.4B Top</p>	<p>“Place is security, space is freedom: we are attached to the one and long for the other.”</p> <p>Yi-Fu Tuan, <i>Space and Place</i> (1977)</p>
<p>Graphic 1.4B Top</p> <p>Lady w/ poodle, chainlink Poodlefencechs</p>	<p>Chicago, Illinois 1955</p> <p>Photograph by Ken Hedrich. ©Chicago Historical Society</p>
<p>Text 1.4B Top</p>	<p><b>Security</b></p> <p>The home fence is a symbol of self-sufficiency and stability. The fence stands for security, order, and privacy in a country that seems to offer these things to anyone willing to work for them.</p>
<p>Graphic 1.4B Bot</p> <p>queensfence</p>	<p>Queens, New York City</p> <p>© 2004 Chicken &amp; Egg Public Projects, Inc.</p>

Text 1.2B Top	<b>Happiness</b>  Ownership, particularly land ownership, is a foundation of the American Dream. For many, it cannot be separated from happiness. By proclaiming ownership, fences allow Americans to pursue happiness, and sometimes find it.
Text 1.2B Top	When Thomas Jefferson in 1776 described men's "unalienable rights" in the Declaration of Independence, he changed the traditional English expression "life, liberty, and property" to read "life, liberty, and the pursuit of happiness."
Graphic 1.2B Top/Bot 1.1B Top/Bot	Wayne County, Ohio  © Bruce Burkhardt/ CORBIS

<b>Section 2</b>  <b>Side includes 1A/2A/3A/4A</b>	<b>Final, approved script for this section.</b>
Title text 2.2A Top	<b>Farm and Fence</b>
Text 2.2A Top	Fences organized the rural landscape and reflected how farmers used the land. Wire fences bounded an increasingly industrialized way of life.
Text 2.1 A Top	"Good and secure fences are better than a hot toddy, or all the soporific drugs of Turkey or Arabia, to sleep upon; you not only know where your cattle are, but where they are not."  <i>Rural New Yorker</i> (1856)
Text 2.1 A Top	Around 1860, farm fences represented one of the largest investments by U.S. citizens.  They lasted from 10 to 30 years and were worth as much as \$1.35 billion — at a time when the value of all farms was \$6.65 billion.  To raise crops, a farmer needed to invest two dollars in

	fences for every dollar in land.
Text 2.2A Top	<p>“Wherever a farm may be located, or whatever may be its production, <i>fence, fence, fence</i>, is the first, the intermediate, and the last consideration in the whole routine of the operations of the farm.”</p> <p>Edward Todd, <i>The Young Farmer's Manual</i> (1860)</p>
Text 2.1A Bot	<p><b>Livestock versus Crops</b></p> <p>Fences kept crops and animals apart. They also allowed farmers to alternate plants and livestock on the same fields.</p>
Text 2.2A Bot	<p><b>Farmstead Fences</b></p> <p>A variety of fences framed the traditional farmstead, arranging living and working spaces into an orderly landscape.</p>
Text 2.2A Bot	<p><b>Good Fences and Good Farmers</b></p> <p>Fences required a substantial investment of money and labor. Like the barn, the style and condition of the farm fence said a lot about the farmer.</p>
Text 2.4A Top	Edward Hicks, one of America’s greatest folk artists, painted this idealized portrait of harmony and wealth within a fenced Pennsylvania farmstead.
Background Graphic 2.1A Top – 2.4A Top 2.1A Bot – 2-4A Bot	Edward Hicks, <i>The Leedom Farm</i> , 1849. © Abby Aldrich Rockefeller Folk Art Center, Colonial Williamsburg Foundation
Text 2.3A Top	<p><b>Worm Fence</b></p> <p>A worm fence is made of stacked rail sections whose ends overlap. Seen as an American invention, it was also known as the Virginia and zigzag fence. It was the most widely built type in the United States through the 1870s. In that decade, the Commissioner of the Department of Agriculture, Horace Capron, called the worm fence America’s “national fence.”</p>
Graphic	West Virginia, 1938. Photograph by Marion Post Wolcott.

<p>2.3A Top</p> <p>WVAwormwolcott8a39739rfsa.jpg</p>	<p>Library of Congress</p>
<p>Graphic 2.3A Top</p> <p>SnJnCtyCOleefsa.jpg</p>	<p>San Juan County, Colorado, 1940. Photograph by Russell Lee. Library of Congress</p>
<p>Graphic 2.3A Top</p> <p>warrentonVAworm8c11358rfsa.jpg</p>	<p>Warrenton, Virginia, 1940. Photograph by Marion Post Wolcott. Library of Congress</p>
<p>Graphic 2.3A Top</p> <p>LC-USF34- 029228-D</p>	<p>Rappahannock County, Virginia, 1940. Photograph by Arthur Rothstein. Library of Congress</p>
<p>Model 2.4A Top</p>	<p>Labor and Materials</p> <p>The worm fence was easy to build. It required extraordinary quantities of wood but did not require posts, pegs, or nails. Labor-intensive post preparation and hole digging could be avoided. Diagonal stakes at each intersection were often added for stability.</p>
<p>Text 2.4A Top</p>	<p>The worm fence took less time to build but consumed more wood. Building a post-and-rail fence was more labor intensive but required far less material.</p> <p>A square 160-acre field (each side a half-mile long), enclosed by a 10-rail high worm fence, required 15,000 ten-foot long rails. A man might split 100 rails a day. The same field with a post-and-rail fence required 8,800 rails and 200 posts.</p> <p>A team of four men could build up to 40 post-and-rail fence panels — or 100 worm fence panels — per day.</p>
<p>Graphic 2.4A Top</p> <p>Langewormfencefsa.jpg</p>	<p>Idaho, 1939. Photograph by Dorothea Lange. Library of Congress</p>

<b>Side includes 5A/4B/3B/2B/6B</b>	
Text 2.4B Top	<p><b>The Great Rail Splitter</b></p> <p>Splitting rails for fences was a typical workingman's occupation during the 1860s, when 75% of Americans lived in the countryside. By promoting Abraham Lincoln as "The Great Rail Splitter," the 1860 Republican presidential campaign identified the lawyer-candidate as one of the common men. Manual labor, however, was not characteristic of his background.</p> <p>While in office, the "Great Rail Splitter" had an impact on fence building. In 1862, he signed the Homestead Act, which gave 160 acres to heads of family older than 21 who remained on the land at least five years. Much of the land in the west was arid and treeless, so settlers built fences out of materials such as hedges and earth.</p>
Graphic 2.5A Top/Bot  Abeaxe.jpg LC-USZC4-2472	J. L. G. Ferris, 1909. © F. A. Schneider
Text 2.3B Top	<p><b>Fence Crisis</b></p> <p>In order to clear the land for farming — and build homes and fences — early Americans slaughtered their forests. By the mid-1800s, a fence crisis gripped the U.S. Without a cheap source of wood, a fence cost more than the land it would enclose. This made settlement difficult if not impossible.</p> <p>The solution to the fence crisis came in a slender form — wire.</p>
Text 2.3B Top	<p><b>End of the Rail</b></p> <p>In 1950, near Circleville, Ohio, this farmer replaced his 400-yard worm fence with a woven-wire fence. Wire allowed farmers to transform their rail fences into firewood.</p>

Graphic 2.3B Top  Railpile.jpg	Library of Congress
Text 2.3B Top	<p>"I am not surprised that our mode of fencing should be disgusting to a European eye; happy would it have been for us, if it had appeared so in our own eyes; for no sort of fencing is more expensive or wasteful of timber."</p> <p>George Washington, letter to William Strickland, July 15, 1797</p>
Graphic 2.3B Bot  StAugustineTXleefsa8b21539r.jpg	San Augustine County, Texas, 1939. Photograph by Russell Lee. Library of Congress
Graphic 2.3B Bot  Utahboxelder8b25798rfsa.jpg	Box Elder County, Utah, 1940. Photograph by Russell Lee. Library of Congress
Graphic 2.3B Bot  PersonCtyNCLangefsa8b3	Person County, North Carolina, 1939. Photograph by Dorothea Lange. Library of Congress
Graphic 2.3B Bot  wormfielddiag.jpg	Nicholas County, West Virginia, 1927. Photograph by J. S. Cotton. National Archives
Text 2.3B Bot	<p>"When one has roamed, as I have, over those boundless and woodless prairies, extending thousands of miles away to the west, and south of us, the question of almost painful interest arises, how are these vast plains to be peopled? How are they to be tamed, subdued, and brought into proper use and cultivation? <i>How are they to be FENCED?</i>"</p> <p>Horace Capron, 1856, future U.S. Commissioner of Agriculture</p>

Graphic 2.3B Bot  Manboyfarmfencefsa.jpg	Iowa, 1942 Photograph by Jack Delano. Library of Congress
Text 2.2B Top	Wire Fence  The mass-production of woven-wire fence accompanied the increasing industrialization of farming.
Graphic 2.2B Top  Ellwoodposter.jpg	Collection of the Ellwood House Museum, DeKalb, Illinois
Graphic 2.2B Top	Pittsburgh Steel Company
Text 2.2B Bot wirepanel 4	Frontier Invention  Many of the inventors who worked on wire fences were born on farms and lived near the edge of the frontier in states such as Illinois and Michigan. Businessman Isaac L. Ellwood and inventor Jacob Haish made DeKalb, Illinois, the center of the barbed-wire industry. Ellwood's residence, now a museum (top right corner of poster at left), stands as a monument to their success.
Graphic 2.2B Bot wirepanels 1,2,3  Ellwoodhousehorseposter.jpg Pagedon'tstopthegame.jpg Aswdouble.jpg	Graphics courtesy of Warshaw Collection, Smithsonian Institution Libraries
Text 2.6B Top wirepanel 5	<b>Fence Building</b>  Fence building involves a significant investment of time, labor, and money. Farmers need fence that is reliable, durable, rapidly built, and does not require much maintenance. Wire-fence building at its most basic includes digging holes, installing posts, and mounting and stretching the fence fabric so that it does not sag in

	the heat or yield to livestock or people.
Graphic 2.6B Top wirepanel 1  Mlbdgfncewolcot8c10913rfs .jpg	Sunflower Plantation, Merigold, Mississippi, 1939. Photograph by Marion Post Wolcott. Library of Congress
Graphics 2.6B.top  buildingfences giese building1.jpg building2.jpg building3.jpg building4.jpg building5.jpg	From Henry Giese's <i>Farm Fence Handbook</i> . Chicago, Ill., Agricultural Extension Bureau, Republic Steel Corporation, around 1938
Text 2.6B Bot wirepanel 1	<b>Woven-wire Fence</b>  The appearance of barbed wire in the late 1870s caused alarm because it injured livestock. Some states passed laws against its use. Barbs drove inventors to develop a gentler, woven-wire fence. Various types were perfected during the 1890s, and by 1906, 80% of hardware stores in the West carried woven-wire fence as standard stock.
Graphic 2.6B Bot wirepanel 2  Silver~1.jpg (Bleeding horse) Pagepostcard.jpg (Gibson girl & buffalo)	Graphics courtesy of Warshaw Collection, Smithsonian Institution Libraries
<b>Side includes 6A/1B</b>	
Text 2.1B Top	<b>Production</b>  Mass-production machinery enabled barbed wire, woven wire, and chain link to shape American life and landscape.

	Inventors began to develop woven-wire fabrics and looms in the 1880s. By the end of the 1890s, they had created high-speed fence-making machines that continuously performed multiple tasks, such as cutting, weaving, bending, and tying. Woven-wire fence became popular after manufacturers convinced farmers that the product was strong and durable.
Graphic 2.1B Top  Wirefencemachinepatent.jpg	above: Patent 414,844, November 12, 1889 Baker Library, Harvard Business School
Graphic 2.1B Top  Wovenwiremachine.jpg	below: Woven-wire fence machine Baker Library, Harvard Business School
Props and labels 2.1B Top	[TBD. Each exhibit copy will have a different selection of brochures]
Text 2.1B Top	“It is characteristic of great and useful inventions that their simplicity and perfect adaptation to the desired end at once suggest the question, ‘Why was not that thought of before?’”  First sentence of one of the earliest barbed-wire fence catalogues, 1877
Graphic 2.1B Bot  wire factory	Coils of wire stacked at the American Steel & Wire Company in Worcester, Massachusetts, around 1934. Baker Library, Harvard Business School
Text 2.6A Top wirepanel 5	<b>Invention</b>  The fence crisis stimulated inventors. Between 1801 and 1881, they filed more than 1,200 fence patents. Inventors knew that a rapid and cheap method of fence manufacturing could be worth a fortune. Most of the patents, however, did not earn much.
Graphics 2.6A Top	Fence patents National Archives

Fencepatents.jpg Wovenfencepatent.jpg Wovenwirepatent.jpg Fencepatents.jpg	
Text 2.6A Bot wirepanel 1	<b>Posts</b>  Without posts most fences cannot stand.  Around 1900, steel posts joined wooden posts as the fence builder's stock-in-trade. These posts were made of a small quantity of metal and could be rapidly produced. Superior posts would not rust in the ground or be displaced by frost, and would resist the pull of a stretched wire fence and the push of hungry animals.
Graphic 2.6A Bot  amsteelfenceposts.JPG	Fence-post patent drawing, 1904  National Archives
Graphic 2.6A Bot	From George A. Martin's Fences, Gates, and Bridges (1887)
Text 2.6A Bot	Philip J. Harrah of Bloomfield, Indiana, a father of the galvanized steel fence post, sold his patents in 1911 to the American Steel and Wire Company. The next year, the firm produced ten thousand tons of posts. The year after, it doubled its output, producing 5.6 million tubular steel posts.
Graphic 2.6A Bot  Harrah patent drawing	National Archives

<b>Section 3</b>  <b>Side includes 1A/2A/3A/4A</b>	
Title text 3.2A.top 3.3A.top	<b>Don't Fence Me In</b>
Background Graphic	Nebraska, 1903

3.2A.top, 3.3A.top, 3.4A.top	Photograph by Solomon D. Butcher, Nebraska State Historical Society, [nbhips 11967]
Text 3.3A.top	Livestock: fenced in or fenced out? This question stood at the center of land wars fought by farmers, ranchers, and lawyers.  Fences reflect beliefs about who has rights to use land and its resources. Deciding whether to fence in crops or fence in cattle meant deciding what was public land and what was private property — and who had to pay for the fences.
Text 3.3A.top	“The fencing system is one of differential mortgages, the poor man in this case being burdened with an extra mortgage . . . which his richer neighbor is not compelled to bear . . . and the whole expense may be for protection against trespassing cattle owned by others.”  Report of the Commissioner of Agriculture for the Year 1871
Graphics 3.3A.top  Gang Label  Sign on Fence LC-USF34-033287-D top left of 6  Dense herd of cattle LC-USF33-012307-M5 top right of 6  Scattered herd of cattle LC-USF34-033311-D Marfaroundup.jpg Middle left of 6  Fence Juncture LC-USF34-033304-D Middle right of 6  4 grazing cows	Marfa, Texas, 1939  Photographs by Russell Lee. Library of Congress

<p>LC-USF34-033297-D Bottom left of 6</p> <p>Gate in wire fence LC-USF34-033303-D Bottom right of 6</p>	
<p>Text 3.2A.top</p>	<p><b>Conflict</b></p> <p>According to historian Everett Dick, four types of fence wars were fought on the range between 1870 and 1920 — all involving destruction of fences, physical violence, and, sometimes, even murder.</p> <p>Cattlemen who drove herds 1,000 or more miles from Texas to the Northern Plains vs. the farmers whose fields they trampled</p> <p>Homesteaders vs. ranchers on whose grazing grounds they settled</p> <p>Small ranchers vs. the large ranchers who controlled waterholes and vast areas of land</p> <p>Ranchers vs. sheepherders whose animals competed for grazing land</p> <p>When large numbers of farmers settled in the West, they succeeded in closing much of the range — that is, in forcing ranchers to fence in their livestock. Ranchers, however, continued to control vast areas of land.</p>
<p>Graphic 3.2A.top</p> <p>Fencewarriors55fs.jpg</p>	<p>Fence cutting reenactment, Nebraska, 1900. Photograph by Solomon D. Butcher, 1903. Nebraska State Historical Society, [nbhips 12299]</p>
<p>Text 3.4A.top</p> <p>Kearney1903NBsheep1213</p>	<p><b>Herders</b></p> <p>Fences were not necessary in areas with herd laws. During the 1870s, legislation in Nebraska and Kansas required the herding of cattle and confinement of hogs. This solution gave people who lacked the resources to build fences the opportunity to settle and begin farming.</p> <p>Conflicts were heightened by ethnic biases. Often the</p>

	cattle ranchers were Anglo-Americans while the shepherders were Mexican Americans or immigrants.
Text 3.4A.top	<b>Range</b>  <i>Free range</i> refers to land on which anyone can hunt and allow cattle to graze. Range laws determined opportunities available to rich and poor, landed and landless, European-American and African-American.
Graphic 3.4A.top  Wagon heading down road LC USF34-029599	Sweetwater ,Wyoming, 1940  Photograph by Arthur Rothstein, Library of Congress
Graphic 3.4A.top  Herding Sheep Wyoming 1.jpg Shepherd on horseback	Library of Congress
Graphic 3.4A.top flip panel  Sheep Kansas - LC.jpg Spinner panel – close-up of sheep	Library of Congress
Text 3.1A.bot	<b>Barbed Wire</b>  Barbed wire was a tool for taking and using land. With it, farmers and ranchers could quickly and cheaply fence millions of acres. By fencing animals in or fencing them out, by destroying or maintaining these fences, individuals proclaimed their beliefs in how American land should be used.
Graphic 3.1A.bot  Earlybarbsample.jpg	Harvard Business School
Graphic 3.1A.bot	© Peter Beeson

beesonBetween Fences2.PDD	
Prop 3.2A.bot  early barb sample	
<b>Side includes 4B/5A</b>	
Text 3.5A.top	<p><b>“Infinite hogges in heards all over the woods”</b></p> <p>Colonists brought their animals with them from Europe to North America. In 1614 the Jamestown colony contained horses, chickens, turkeys, peacocks, pigeons, cows, goats, and "infinite hogges in heards all over the woods," according to one account. Many of the animals ran free.</p> <p>By the 1830s, in much of the Northeast, the law said that each property owner was responsible for fencing in his livestock so that they would not damage others' property.</p>
Graphic 3.5A.top  pig line drawing	Robinson-Pforzheimer Collection, New York Public Library
Text 3.4B.top	<p>“You may as well think of stopping a crow as those hogs. They will go to a distance from a fence, take a run, and leap through the rails three or four feet from the ground, turning themselves sidewise.”</p> <p>Richard Parkinson, <i>Tour of America in 1798, 1799, and 1800</i> (1805)</p>
Graphic 3.4B.top  Whiteface cattle being driven down road	<p>Hall County, Nebraska, 1903</p> <p>Photography by Solomon D. Butcher. Nebraska State Historical Society, [nbhips 12776]</p>
Text 3.4B.top	<p><b>Free Range</b></p> <p>When animals roamed freely, the law dictated the height and other characteristics of a “sufficient” fence. If a landowner did not maintain a legal fence, he could not</p>

	<p>sue for damages if roving animals damaged his property, ate his crops, or trampled his fields.</p> <p>Before railways, cattle were driven — on public roads between private farms — from the South and West to be sold in the North and East. A sufficient fence was vital.</p>
<p>Graphic 3.4B.top</p> <p>Corn behind rail fence</p>	<p>Lancaster County, Pennsylvania, 1938.</p> <p>Photography by Sheldon Dick. Library of Congress</p>
<p>Text 3.4B.top.flip_panel</p>	<p>“Under the laws of Idaho, live stock...may run at large and roam and graze over and upon any of the uninclosed lands of the state.”</p> <p><i>Swanson v. Groat</i> (Idaho, 1906)</p>
<p>Text 3.4B.bot</p>	<p><b>Fence Defendants</b></p> <p>In 1860, only seven states required owners to fence in their animals. Pennsylvania retained its free-range law of 1700 until 1889. Conflict over fences has a long history. These excerpts of court decisions give a glimpse of the debates surrounding relationships between people, animals, and fences.</p>
<p>Text 3.4B.bot</p>	<p>“Where there was no stock law in effect in Nacogdoches County, defendant was under no obligation to fence out plaintiff’s cows who died after allegedly licking paint which had been spilled on land of defendant.”</p> <p><i>Southern Pine Lumber Co. v. Seelbach</i> (Texas, 1952)</p>
<p>Text 3.5A.bot</p>	<p>“Where one whose land is inclosed in a lawful fence is damaged by repeated trespasses by the cattle of another, he may destroy the trespassing animals.”</p> <p><i>Harman v. Patterson</i> (Kentucky, 1828)</p>
<p>Text 3.5A.bot</p>	<p>“Owner of animals must restrain them from going on another’s land and this applies to pigeons flying over or landing on land of another person.”</p> <p><i>Ferrari v. Harter</i> (Pennsylvania, 1936)</p>
<p>Graphics</p>	<p>USDA</p>

3.4B.bot and 3.5A.bot Color: herd of sheep	
<b>Side includes 5B/3B/2B/6B</b>	
Text 3.3B.top	<p><b>Fence Me In?</b></p> <p>Fence questions continue to structure American life at the beginning of the 21st century. The answers will shape environment, economy, and lifestyle.</p> <p>Can we adequately protect vegetation, water resources, and wildlife from free-roaming livestock?</p> <p>Should issues of public health, environmental quality, and the preservation of natural resources outweigh private property rights?</p> <p>Should public property be leased to private businesses?</p> <p>Can diverse activities co-exist on one piece of land?</p> <p>Who should pay for the fences?</p>
Graphic background on all panels on this side	© CORBIS
Text 3.5B.bot	<p><b>Public Beaches</b></p> <p>The California Coastal Act guarantees public access to its 1,160-mile shoreline. Some of the celebrities who own homes along the 27-mile long Malibu coast, however, fenced out the public. A series of court cases resulted in the affirmation of public access. Similar conflicts have occurred in Hawaii, Texas, and Massachusetts.</p>
Graphic 3.5B.top  CSMmalibu.jpg	A Malibu Beach fence divides public and private land. © Reed Saxon/AP
Text 3.2.B.top	<b>Clean Streams</b>

	<p>Fences can help protect the environment. The enclosure of livestock can preserve vegetation and water sources for plants and fish.</p> <p>In 1996, Oregon's voters considered a "Clean Streams Initiative" to save the state's 9,000 miles of stream from pollution. It would have allowed citizens to bring suit against livestock owners who violated water quality standards. Ranchers feared lawsuits and claimed that the cost of fencing would drive many out of business. Voters rejected the initiative.</p>
<p>Graphic 3.2B.top</p> <p>Oregonstream.jpg</p>	<p>Dairy farm cows graze along a river in Tillamook, Oregon, 1995. Photograph by Peter Essick/Aurora</p>
<p>Text 3.3B.bot</p>	<p><b>Methane</b></p> <p>Fences stand on the surface of the land. They may not indicate who controls the ground beneath.</p> <p>In Rocky Mountain West states such as New Mexico and Wyoming, ranchers own the land but the federal government owns the minerals beneath.</p> <p>Using a very low-cost technique called "coal-bed methane extraction," producers are reaching this natural gas by pumping out enormous quantities of water. By lowering water tables and sending salt and gas onto the land and into waterways, wells and springs that sustain the ranches and wildlife on the surface are contaminated or run dry.</p>
<p>Graphic 3.3B.bot</p> <p>Methane.jpg</p>	<p>Gillette, Wyoming, 2002. © New York Times</p>
<p>Text 3.6B.bot</p>	<p><b>Sprawl</b></p> <p>The population in the western U.S. increased almost 20% between 1990 and 2000. More Americans who are neither farmers nor ranchers now live in rural and remote areas.</p>

	<p>Thirteen states still have open range laws in some areas. New residents often feel, however, that they should not be responsible for keeping livestock out of their gardens and that cars should have priority over cattle.</p>
<b>Side includes 7A</b>	
Text 3.7A.top	<p><b>The Forty</b></p> <p>In the rectangular land survey, 640 acres — one square mile — is known as a <i>section</i>. A quarter section, 160 acres, was the amount of land promised to settlers by the Homestead Act of 1862. This was more than a farmer could clear and fence in a lifetime. Forty acres — known as a <i>forty</i> to farmers — became a standard unit of land. It symbolized an ideal of self-sufficiency, although this was something a farmer of 40 acres could rarely achieve.</p>
Graphic 3.7A.top  Fieldplan.jpg	
Text 3.7A.top	<p>One spool contains 1,320 feet of barbed wire, equaling a quarter mile, or one side of a forty-acre field — a <i>forty</i>. Twelve of these spools were enough to enclose a forty with a three-wire barbed fence.</p>
Graphic 3.7A.top  Barbspool.jpg	<p>From <i>Barb Fence: Its Utility, Efficiency and Economy</i>. Worcester: Noyes, Snow &amp; Co., 1877</p> <p><i>(no credit required)</i></p>
Text 3.7A.top	<p><b>Monopoly</b></p> <p>The fence industry typified the turn-of-the-century transformation of small trade into big business. Fence manufacturers became part of corporations that owned their own mines, raw-material production plants, and transportation facilities.</p> <p>Smaller barbed- and woven-wire fence and wire nail companies merged to create The American Steel and Wire Company. By 1899, the company had a monopoly on barbed wire.</p>

Graphic 3.7A.top line drawing of factory	American Steel and Wire factory  Harvard Business School
Text 3.7A.bot	<b>Barbed-wire Kings</b>  Joseph F. Glidden's patent of November 24, 1874, became one of the most successful. His invention had a wire barb coiled into a double strand of twisted wire, keeping the barb stationary against charging cattle.  Glidden became partners with businessman Isaac L. Ellwood and then sold his share to wire manufacturers Washburn & Moen. Their purchase of almost all related patents and the efforts of lawyers over many years ensured the manufacturers big profits.
Graphic 3.7A.bot  Gliddenphoto.jpg	Portrait of Joseph Glidden. Collection of the Ellwood House Museum, DeKalb, Illinois
Graphic 3.7A.bot  Barbfencecover.jpg	C&E to provide caption/credit.
Graphic 3.7A.bot  Glidden Steel Barb Wire Poster	(No caption required.)  Collection of the Ellwood House Museum, DeKalb, Illinois
<b>Inside case 7B</b>	
Text 3.7B.top	<i>Stretchers</i> are used to install wire fences of all kinds. They allow the fence builder to pull the fence tightly between posts so that it remains rigid.  <i>Crimpers</i> remove slack from individual wires by putting a bend in the wire.  <i>Splicers</i> are used for connecting strands of wire.
Graphics 3.7B.top	From J. Bucknall Smith, <i>A Treatise on Wire, Its Manufacture and Uses</i> . New York: John Wiley & Sons,

top: man stretching fence, with cows and dog	1891.
Graphics 3.7B.top  middle left: man stretching fence next to fence post	From <i>The Fence Problem in the United States as Related to Husbandry and Sheep Raising</i> . Worcester, Mass: Washburn & Moen Manufacturing Company, 1882.
Graphics 3.7B.top  middle center: hands with two tools	From J. Bucknall Smith, <i>A Treatise on Wire, Its Manufacture and Uses</i> . New York: John Wiley & Sons, 1891.
Graphics 3.7B.top  middle right: hands with fence stretcher & fence post	From J. Bucknall Smith, <i>A Treatise on Wire, Its Manufacture and Uses</i> . New York: John Wiley & Sons, 1891.
Graphics 3.7B.top  bottom: completed fence	From <i>The Fence Problem in the United States as Related to Husbandry and Sheep Raising</i> . Worcester, Mass: Washburn & Moen Manufacturing Company, 1882.
Props Inside case  Stretcher, crimper, splicer	

<b>Section 4</b> (will be built by OEC)	
Title text Side 1	<b>Good Fences Make Good Neighbors</b>
Text Side 1	Americans define themselves, their neighborhoods, and their country. . .  . . . beginning with their yards.  Love thy neighbor? You may think that your property line runs from the center of the planet to the clouds, but the

	<p>person next door may disagree. Fences can cause or resolve disputes with the people next door.</p> <p>Fences include and exclude. They can build unity and they can be tools of intolerance. Fences are two-faced structures that draw people together and keep them apart.</p>
Text Side 1	<p>“One who extends her arm over a fence dividing her own premises from those of another is a trespasser, though her body remains on her own side of the fence.”</p> <p>Conclusion reached by the Supreme Court of Iowa in 1902, concerning a dispute between neighboring families, the Hannabalsons and Sessionses of Pottawattamie County, Iowa</p>
Text Side 1	<p>“It was enough that she thrust her hand or arm across the boundary to technically authorize the defendant to demand that she cease the intrusion, and to justify him in using reasonable and necessary force required for the expulsion of so much of her person as he found upon his side.”</p> <p><i>Hannabalson v. Sessions</i> Supreme Court of Iowa April 12, 1902</p>
Graphic Side 1	Neighbors talk over the fence in Laurium, Michigan, 1941. Photograph by John Vachon. Library of Congress
Two men talking over fence [LC-USF34- 063476-D]	
Text Side 1	<p><b>On the Fence</b></p> <p>In “Mending Wall,” poet Robert Frost expressed conflicting feelings about the need for fences.</p>
Text Side 1	<p>My apple trees will never get across And eat the cones under his pines, I tell him. He only says, “Good fences make good neighbors.”</p> <p>Before I built a wall I’d ask to know</p>

	<p>What I was walling in or walling out,          And to whom I was like to give offense.          Something there is that doesn't love a wall,          That wants it down.</p> <p>Excerpts from "Mending Wall" (1913) by Robert Frost</p>
<p>Text          Stone Wall</p> <p><a href="http://www.rgs.uky.edu/ca/o/dyssey/fall98/update.html">http://www.rgs.uky.edu/ca/o/dyssey/fall98/update.html</a></p>	<p>Stone</p> <p>Stone fences are still found in areas such as New England, where masons could use stone removed from farmers' fields. The origin of Kentucky's limestone fences, built without mortar, has been traced to Irish masons who emigrated to the U.S. in the early 19th century.</p>
<p>Graphic          Stone Wall</p>	
<p>Text          Side 2</p>	<p><b>Beyond the Pale</b></p> <p>The origin of the words <i>town</i>, <i>pale</i>, and <i>bourgeoisie</i> demonstrate the close historical connection between fences and communities.</p> <p>The word <i>town</i> developed from an Indo-European root that meant "enclosed, fortified place." In Old English, <i>town</i> meant "enclosure" or "fence." <i>Town</i> shares its root with the current German word <i>Zaun</i>, which means "fence."</p> <p><i>Pales</i> are pointed stakes that were set into the ground in rows as a means of defense. The territory within such a fence came to be known as a <i>pale</i>. <i>Beyond the pale</i> came to mean "outside of civilized behavior."</p> <p>The term <i>bourgeoisie</i>, which means "middle class," comes from the word <i>bourg</i> — an Old French word for "walled town," which is where the medieval middle class lived.</p>
<p>Graphic          Side 2</p> <p>Palmanova.gif</p>	<p>A defensive wall protected the town of Palmonova, Italy, built in 1593. From Georg Braun's <i>Civitas Orbis Terrarum</i>, 1540. Library of Congress</p>
<p>Interactive Peepholes</p>	

Side 2	
Text Side 2	<p><b>Spite</b></p> <p>Spite fences are tall, tight structures that block views, light, and air. Their main purpose is to annoy the person next door. Judges have banned spite fences, ruling them a nuisance. Yet fences of all sizes and types continue to play a central role in neighborly relations.</p>
Graphic Side 2  MinnSpitepf061987.jpg	A property line dispute led to this spite fence in Lanesboro, Minnesota, around 1908. Photography by Gilbert B. Ellestad. Minnesota Historical Society
Text Side 2	<p><b>Defined by Fences</b></p> <p>A growing number of Americans are living in fenced-in communities, where public spaces are made private. Why?</p> <p>They want an environment that promotes a particular lifestyle; for example, retirement communities with a focus on golf. The community's fence seems to promise greater security as well as an increased social status.</p> <p>Social groups have always defined themselves by including and excluding. Are the residents of gated neighborhoods creating community or withdrawing from American society?</p>
Graphic Side 2  Windstargatedcomm.jpg	Naples, Florida. Courtesy Gate Packages Unlimited, Sebring, Florida
Graphic Side 2  Gatedcomm2.jpg	Naples, Florida. Courtesy Gate Packages Unlimited, Sebring, Florida
Text Side 2	<p>"Privacy is becoming the new status symbol in a society that is increasingly crowded."</p> <p>Virginia Scott Jenkins, <i>The Lawn</i> (1994)</p>
Graphic	Naples, Florida. Courtesy Gate Packages Unlimited,

<p>Side 2</p> <p>Gatedcomm1.jpg</p>	<p>Sebring, Florida</p>
<p>Graphic Side 2</p> <p>Neighbordispute.jpg</p>	<p>A dispute between these neighbors led them to court in 1990. © John Butterill International Photography</p>
<p>Text Side 2</p>	<p><b>Race</b></p> <p>Racial attitudes have shaped environments that reinforce divisions in American society. Fences, as well as markers such as railroad tracks and highways, serve as barriers to equal opportunity. These boundaries are instrumental in defining how we perceive race and ethnicity.</p>
<p>Graphic Side 2</p>	<p>Children next to concrete wall built by whites to keep black Americans out of their neighborhood in Detroit, 1941.</p> <p>Photograph by John Vachon. Library of Congress</p>
<p>Interactive Brick Wall</p> <p>Binder with fence laws and legal rulings</p> <p>PAGE 1</p>	<p>Illinois CHAPTER 765. PROPERTY REAL PROPERTY FENCE ACT 765 ILCS 130/2. [Height of fences] Sec. 2.</p> <p>Fences four and one-half feet high, and in good repair, consisting of rails, timber boards, stone, hedges, barb wire, woven wire or whatever the fence viewers of the town or precinct where the same shall lie shall consider equivalent thereto suitable and sufficient to prevent cattle, horses, sheep, hogs and other stock from getting on the adjoining lands of another, shall be deemed legal and sufficient fences: Provided, that in counties under township organization, the electors, at any annual town meeting, may determine what shall constitute a legal fence in the town; and in counties not under township organization, the power to regulate the height of fences shall be vested in the county board.</p> <p>765 ILCS 130/4. [Costs of maintenance and repair]</p>

Sec. 4. When any person wishes to inclose his land, located in any county having less than 1,000,000 population according to the last preceding federal census and not within the corporate limits of any municipality in such county, each owner of land adjoining his land shall build, or pay for the building of, a just proportion of the division fence between his land and that of the adjoining owner and each owner shall bear the same proportion of the costs of keeping that fence maintained and in good repair. The provisions of this Section shall not apply to fences on lands held by public bodies for roadway purposes.

765 ILCS 130/20. [Civil liability for animals]  
Sec. 20. If any horse, mule or ass, or any neat cattle, hogs or sheep, or other domestic animals, shall break into any person's inclosure, the fence being good and sufficient, the owner of such animal or animals shall be liable, in a civil action, to make good all damages to the owner or occupier of the inclosure. This section shall not be construed to require such fence, in order to maintain an action for injuries done by animals running at large contrary to law.

Alabama  
*TITLE 3. ANIMALS*  
*CHAPTER 4. FENCES AND LIVESTOCK*

3-4-1. Requirements as to construction of lawful fences -- Generally  
All inclosures and fences must be made at least five feet high, unless otherwise provided in this chapter. If the fence is made of rails, the rails must be not more than four inches apart from the ground to the height of every two feet. If the fence is made of palings, the palings must be not more than three inches apart. If the fence is made with a ditch, such ditch must be four feet wide at the top and the fence, of whatever material composed, at least five feet high from the bottom of the ditch and three feet high from the top of the bank and so close as to prevent stock of any kind from getting through.

3-4-2. Requirements as to construction of lawful fences -- Rail fences for cattle, horses and mules

PAGE 4

A rail fence five feet high, with the rails not more than 18 inches apart from the ground to the height of every three feet, shall be a lawful fence so far as cattle, horses and mules are concerned.

3-4-3. Requirements as to construction of lawful fences --  
Fences of three or more wires for cattle, horses and mules A fence made of three or more wires securely fastened to trees or posts not more than eight feet apart, the wires being not more than 15 inches apart and the top wire at least four feet from the ground, shall be a lawful fence so far as concerns mules, horses and cattle.

3-4-6. Liability of owner of animal breaking into lands not enclosed by lawful fence for trespass or damages; liability of person injuring or destroying such animal.

(a) If any trespass or damage is done by any animal breaking into lands not enclosed by a lawful fence as defined in this chapter, the owner shall not be liable therefor.

(b) If any person injures or destroys any such animal, he shall be liable to the owner for five times the amount of injury done, to be recovered before any court of competent jurisdiction.

Massachusetts

PART I. ADMINISTRATION OF THE GOVERNMENT  
TITLE VII. CITIES, TOWNS AND DISTRICTS  
CHAPTER 49. FENCES, FENCE VIEWERS, POUNDS  
AND FIELD DRIVERS  
FENCES AND FENCE VIEWERS

1. Fence viewers; appointment; tenure

The mayor of each city, subject to confirmation by the city council, and the selectmen of each town shall annually appoint two or more fence viewers, to hold office for one year and until their successors are qualified.

2. Definition of fences

Fences four feet high, in good repair, constructed of rails, timber, boards, iron or stone, and brooks, rivers, ponds,

creeks, ditches and hedges, or other things which the fence viewers consider equivalent thereto, shall be deemed legal and sufficient fences.

3. Maintenance of partition fences

The occupants of adjoining lands enclosed with fences shall, so long as both of them improve the same, maintain partition fences in equal shares between their enclosures, unless they otherwise agree.

4. Failure to maintain partition fence; proceedings by adjoining occupant

If a person refuses or neglects to repair or rebuild the part of a partition fence which under this chapter he is required to maintain, any person aggrieved may complain to the fence viewers, who, after notice to each party, shall view the fence; and if they determine that it is insufficient and that a partition fence is required, they shall so state in writing to the delinquent occupant, and direct him to repair or rebuild his part within such time as the fence viewers may determine; and if the fence is not so repaired or rebuilt, the complainant, after having repaired or rebuilt his part of said fence, may repair or rebuild the part of such occupant.

5. Remedy for repair of deficient fence

If a deficient fence which has been built up or repaired by a complainant is, after due notice to each party, adjudged sufficient by the fence viewers, and the value of the part of the delinquent occupant, together with the fees of the fence viewers, has been ascertained by a certificate under their hands, the complainant may demand either of the owner or of the occupant of the land where the fence was deficient double the amount so ascertained; and upon the neglect or refusal to pay the same for one month after demand, he may recover the same, with interest at one per cent a month, in an action of contract.

NEW MEXICO  
CHAPTER 77. LIVESTOCK CODE  
ARTICLE 16. FENCES

77-16-1. [Necessity for fence.]

Every gardener, farmer, planter or other person having lands or crops that would be injured by trespassing

animals, shall make a sufficient fence about his land in cultivation, or other lands that may be so injured, the same to correspond with the requirements of the laws of this state prescribing and defining a legal fence.

77-16-3. [Damages on fenced lands; right of action; lien on animals.]

When any trespassing shall have been done by any cattle, horses, sheep, goats, hogs or other livestock upon the cultivated or enclosed ground of any other person, when the same is fenced as provided by Section 77-16-1 NMSA 1978, but not otherwise, such person may recover any damage that he may sustain by reason thereof by suit in any court having jurisdiction and a person so damaged is hereby given a lien on all livestock of the same kind and brand, belonging to the owner of such trespassing animal or animals for security of his damages and costs; but in no case shall he have such lien nor shall he be entitled to recover any damages, under any circumstances, for such trespass, unless he has such lands and crops enclosed by a legal fence as provided by the preceding section [77-16-1 NMSA 1978].

77-16-10. Injuring fence

Any person who is found guilty of wilfully [sic]cutting or otherwise destroying a fence or any part thereof is guilty of a petty misdemeanor.

77-16-11. [Injuries by animals; liability; minors.]

When any animal, of whatsoever class or species it may be, [shall] break, obstruct or injure any rail, post, stake or any material of which a fence is constructed, the owner of such animal shall be compelled to pay the damages occasioned to the owner of the fence, according to the damages sustained and suffered: provided, that if any animal be taken near any fence, and it shall result in his injuring it, then the person who ordered the animal to be placed there shall pay the damage, and if the herder who has the care of the animal, shall take them there without order from the owner of them, in such case, the father, mother or guardian of him who drove the animals there, if the herder be a minor, shall pay the damages, and if he be of age, he himself shall pay it when he does it without the express order of the owner.

PAGE 7

77-16-14. [Failure to close gate; liability for damages.]  
That any person, or persons, who open the gate of any fence, or fences, of any person or persons, the same being private property, for the purpose of passing as aforesaid, [and] shall neglect to close the gate of any fence or fences after having opened the same, shall be subject to and responsible for the damage to the land, crop or grass of the owner, or owners, of such land, through such neglect; and such damage shall be appraised as provided by law.

Missouri  
Chapter 569  
Robbery, Arson, Burglary and Related Offences  
Section 569.145

Posting of property against trespassers, purple paint used to mark streets and posts, requirements--entry on posted property is trespassing in first degree, penalty. 569.145. In addition to the posting of real property as set forth in section 569.140, the owner or lessee of any real property may post the property by placing identifying purple paint marks on trees or posts around the area to be posted. Each paint mark shall be a vertical line of at least eight inches in length and the bottom of the mark shall be no less than three feet nor more than five feet high. Such paint marks shall be placed no more than one hundred feet apart and shall be readily visible to any person approaching the property. Property so posted is to be considered posted for all purposes, and any unauthorized entry upon the property is trespass in the first degree, and a class B misdemeanor.

PAGE 8

Kaplan v. Johnson County  
Kansas Supreme Court  
269 Kan. 122, 3 P.3d 1270  
April 21, 2000  
*Summary of Opinion*

Plaintiff Kaplan built several fences along the boundary between his property and the property of the defendant Pieczentkowski. Plaintiff kept cattle and horses on his property. He asked the defendant to pay part of the cost of the fence he had constructed but defendant refused. The county commissioners, acting as fence viewers,

looked at the fence and concluded that the defendant should not be required to pay any of the cost of the fence.

Plaintiff filed a lawsuit to overturn the commissioners' decision, which the trial court refused to do. On appeal, in this opinion, the Kansas Supreme Court refuses to decide the appeal because the plaintiff did not follow the correct procedures in filing the lawsuit.

In dismissing the appeal, the Supreme Court commented at length of the need for the legislature to review and revise the fence laws of the state in view of the changes in the population and land uses during the past 100 years.

*Iowa*  
*Iowa Code 1999*  
*CHAPTER 359A FENCES*  
*359A.18 Lawful fence.*

A lawful fence shall consist of:

1. Three rails of good substantial material fastened in or to good substantial posts not more than ten feet apart.
2. Three boards not less than six inches wide and three-quarters of an inch thick, fastened in or to good substantial posts not more than eight feet apart.
3. Three wires, barbed with not less than thirty-six iron barbs of two points each, or twenty-six iron barbs of four points each, on each rod of wire, or of four wires, two thus barbed and two smooth, the wires to be firmly fastened to posts not more than two rods apart, with not less than two stays between posts, or with posts not more than one rod apart without such stays, the top wire to be not more than fifty-four nor less than forty-eight inches in height.
4. Wire either wholly or in part, substantially built and kept in good repair, the lowest or bottom rail, wire, or board not more than twenty nor less than sixteen inches from the ground, the top rail, wire, or board to be between forty-eight and fifty-four inches in height and the middle rail, wire, or board not less than twelve nor more

	<p>than eighteen inches above the bottom rail, wire, or board.</p> <p>5. A fence consisting of four parallel, coated steel, smooth high-tensile wire which meets requirements adopted by the American society of testing and materials, including but not limited to requirements relating to the grade, tensile strength, elongation, dimensions, and tolerances of the wire. The wire must be firmly fastened to plastic, metal, or wooden posts securely planted in the earth. The posts shall not be more than two rods apart. The top wire shall be at least forty inches in height.</p> <p>6. Any other kind of fence which the fence viewers consider to be equivalent to a lawful fence or which meets standards established by the department of agriculture and land stewardship by rule as equivalent to a lawful fence.</p>
Text Brick Wall	<p>Legal Fence</p> <p>Most states have detailed fence laws and records of innumerable court cases involving neighbor versus neighbor. Fence laws are a prime concern of farmers and ranchers, but ownership and use issues touch everyone. As one law book states, "humans have a way of becoming greatly aroused over a few inches of land."</p>

<p><b>Section 5</b></p> <p><b>Side includes 1A/2A/5A/6A</b></p>	<p><b>Final, approved script for this section.</b></p>
Title Text 5.1A Top	<b>Building Borders</b>
Text 5.1A Top	<p>Our perceptions of America and its neighbors are reflected in the way we build our boundaries.</p> <p>A 20-foot-wide corridor, marked by obelisks, defines the Canadian line, "the longest undefended border in the world," separating two nations of comparable social and economic character.</p> <p>Dissimilar nations meet on the dangerous, mostly desert</p>

	<p>terrain at the Mexican boundary. A steel fence divides about 1% of the border area. The rest of the southern line, like the northern one, is marked by obelisks and barbed-wire fences that contain cattle.</p>
<p>Background Graphic 5.1A Top/Bot</p> <p>canadianaerial.jpg</p>	<p>49th Parallel. International Border Commission, United States and Canada</p>
<p>Text 5.1A Bot</p>	<p><b>49th Parallel</b></p> <p>The first northern border survey took place in 1798. Most of the line was marked by 1874. The 647-mile-long portion of the border at the 49th parallel is the world's longest straight-line international boundary. It runs from the Great Lakes to the Pacific Ocean.</p>
<p>Text 5.1A Bot</p>	<p>“Framed by the cleared vista of otherwise empty plains, popping up in town squares or along rustic backyard fences, the sharp lines of the obelisks seem disjointed, out of place, even a little surreal.</p> <p>But they are all that stand between the dictates of diplomacy and the oblivion of nature.”</p> <p>International Boundary Commission, United States and Canada, <i>Annual Report</i> (1989)</p>
<p>Graphic pop-off 5.1A Top</p> <p>inset monument 515112-11#1mon.jpg</p> <p>text not on pop-off panel</p>	<p>Monument at Derby Line, Vermont, and Stanstead, Quebec</p>
<p>Graphic 5.2A Bot</p> <p>photo of fence/obelisk/house Housemonfence.jpg</p>	<p>Border at Churubusco, New York, and Franklin, Quebec</p>

Text 5.4A Top (inside case)  Prop Obelisk	During the mid-1800s, border maintenance crews began to install <i>obelisks</i> , symbolic shafts that date back to ancient Egypt. These obelisks, made of granite, cast iron, and concrete, still mark the southern and northern borders. Today, they are usually made of stainless steel or aluminum bronze.
Text 5.6A Top	<p><b>Building the Northern Border</b></p> <p>The construction and maintenance of the 5,526-mile Canadian border — 3,145 on land and 2,381 on water — are monumental tasks.</p> <p>A 20-foot-wide “vista” is kept clear of trees and structures over four feet tall. Monuments are placed every mile or mile and a half. The International Boundary Commission, United States and Canada, maintains the border and discourages the construction of fences, which hinder the progress of surveyors and workers.</p> <p>Areas close to towns and farms are inspected every few years. Remote areas are checked every 15 to 30 years. Between spring and fall, five-man teams with chainsaws and bulldozers clear one mile per week.</p>
Background Graphic 5.6A Top  border in woods Swath.jpg	U.S./Canadian border at Derby Line, Vermont, and Stanstead, Quebec
Text 5.5A Bot	<p>Twenty-two treaties between the United States and Canada define the northern boundary. It has no fence, despite concerns about economic competition. Terrorist threats, however, have led to stringent security measures at border crossings.</p> <p>All photographs by Ben Stechshulte/Redux, except as noted.</p>
Interactive Graphic 5.5A Top  Flipper panel caption - top Woods at border	Canada
Interactive Graphic	Canada

<p>5.5A Top</p> <p>Flipper panel caption - middle truck at border truckmonchainlink.jpg</p>	
<p>Interactive Graphic 5.5A Top</p> <p>Flipper panel caption - bottom Bridge at border Borderbridgejpg.jpg</p>	Canada
<p>Text 5.6B Top</p>	<p><b>Building the Southern Border</b></p> <p>The 2,000-mile Mexican border begins at the Pacific Ocean south of San Diego and runs through mostly rocky or desert land to the Gulf of Mexico, near Brownsville, Texas.</p>
<p>Text 5.5B Top</p>	<p>Originally, workers constructed border markers out of loose stones. Sometimes they built monuments with cut stone and mortar. During the 1850s, border caretakers began to install six-foot-tall cast-iron obelisks. This type of marker is still used.</p> <p>In 1935, about 91 miles of fence were built west of El Paso. There were two types of fence: chain-link and barbed-wire. These were not the first fences — about 35 miles had already been put up near Laredo by ranchmen, who feared the spread of cattle disease.</p>
<p>Text 5.5B Top</p>	All color images depict the westernmost section of the border, 1996. International Boundary & Water Commission, United States and Mexico, U.S. Section
<p>Text 5.5B Bot</p>	The economy, politics, and beliefs about who and what is “foreign” determine how we build our borders. A fenced area near the West Coast — about 1% of the border — is a symbol of the relationship between neighbors.
<p>Interactive Graphic 5.5B Top</p>	Mexico

Flipper Panel People @ border	
Interactive Graphic 5.5B Top  Flipper Panel – Upper right Green border	Mexico
Interactive Graphic 5.5B Top  Flipper Panel - Lower right Brown/Arid border	Mexico
Graphic 5.5B Bot  nogales postcard	“A boundary is not that at which something stops, but . . . that from which something begins.”  Martin Heidegger, “Building, Dwelling, Thinking,” 1954
Text 5.4B Top	<b>Chain Link</b> Chain-link fence fabric was devised in Germany around 1859. It consists of a series of vertical zigzag wires threaded into each other. Around the turn of the century, inventors created automatic chain-link manufacturing machines. Since then, chain link has woven itself through the U.S. landscape. It was once used to close portions of the southern border, but was frequently cut by people coming north.
Graphic 5.4B Top  Photo: oldestchainpatent	National Archives
Text 5.1B Top	The International Boundary and Water Commission, United States and Mexico, inspects the border every five years, repairing monuments as necessary and conducts routine maintenance every ten years.
Text 5.1B Top	Mexico has been an important source of raw materials and low-cost labor for the United States. Fears that illegal aliens take jobs from American citizens, as well as the risk of the spread of cattle disease, have led to periods of fence construction and increased border

	patrols during the early 1930s, the late 1940s, and the 1990s.
Background graphic 5.1B Top	Mexican-American boundary monument maintenance, around 1893. National Archives
Graphic pop-off attaches to 5.1B Top/Bot	<p>It was estimated in 1947 that a chain-link fence at the border would cost \$15,000 per mile. A 2,000-mile fence would have cost about \$30 million.</p> <p>In 1996, <i>The New York Times</i> asked building experts to estimate the cost of building various types of fences along the Mexican border. Estimates ranged from \$166 million to \$45 billion.</p>
Text 5.1B Bot	©New York Times
Prop Obelisk with text	<p>Pickets surrounding a yard, gates enclosing a neighborhood, and walls bounding a nation express the values of individuals and communities.</p> <p><b>How do you build your fences?</b></p>