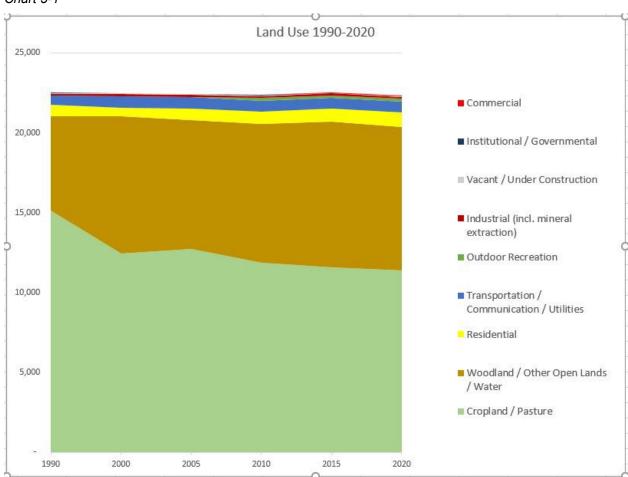
Chapter 5: AGRICULTURAL, NATURAL AND CULTURAL RESOURCES

I. Agricultural Resource Inventory

Chart 5-1

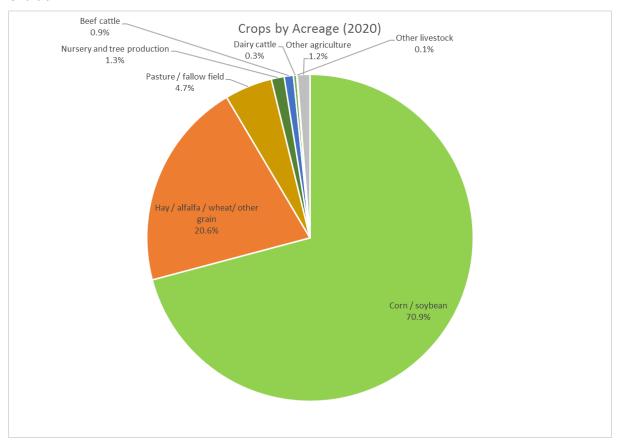


Historical Trends:

In the Town of Cross Plains, land in crop and pasture declined by 1,049 acres between 2000 and 2020 (*Dane County Land Use Inventory*). Woodland/other open land and water increased by 397 acres, while outdoor recreation increased by 153 acres over the same time period. Land devoted to residential use increased by 359 acres from 2000 to 2020.

Farming Today:

Chart 5-2



Fifty one percent of the Town's land was in agricultural use in 2020. Over seventy percent of the farmland in the Town was dedicated to traditional corn/soybean rotational crops, with another 25% in other grain, pasture or fallow land. Small, but growing, acreages of tree farming, floriculture, community supported agriculture, horse farms and fruit and vegetable farming also occur throughout the town.

Table 5-1

Town of Cross Plains					
Land in Agricultural Use 2010-2020					
DESCRIPTION	2010 Acres	2020 Acres	Change 2010-2020		
Corn farming	4,691.5	5,174.4	482.9		
Soybean farming	2,906.4	2,903.3	-3.1		
Hay/Alfalfa farming	2,659.6	2,004.0	-655.6		
Pasture (fenced areas for grazing, often near existing farm buildings)	901.4	534.5	-366.9		
Wheat farming	229.5	276.4	46.9		
Nursery and tree production	108.5	145.7	37.2		

Chapter 5: Agricultural, Natural & Cultural Resources

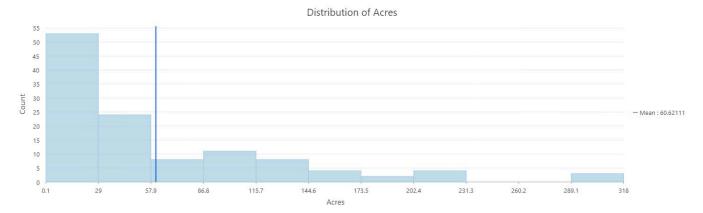
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Beef cattle ranching and farming, including feedlots	18.3	103.6	85.3
All other farm related buildings	87.8	70.1	-17.7
Other grain farming (barley, rye, milo, oat, wild rice		68.6	68.6
etc)			
Dairy cattle and milk production	108.5	35.8	-72.8
Apple orchards	18.3	26.9	8.6
Farm related outbuildings detached from primary farm	10.0	19.5	9.6
Other vegetable (except Potato) and melon farming		18.1	18.1
Horses and other equine production		7.4	7.4
Grape vineyards	1.6	5.0	3.4
Fallow Farm Field	3.8	3.2	-0.7
Large scale grain elevators, Co-op, Cooperative	1.0	1.6	0.6
Agricultural manure pit/farm pond		0.9	0.9
Vegetable garden (plots less than [one / one-half acre])		0.3	0.3
Dry pea and bean farming	25.1		-25.1
Noncitrus fruit and tree nut farming	19.9		-19.9
Total land in agricultural use	11,791.45	11,399.35	-392.1

Farm Size, Scale, and Type:

The Dane County Zoning Ordinance (Chapter 10, Dane County Code) defines a "farm" as "All land under common ownership that is primarily devoted to agricultural use." In 2020, there were 117 landowners who had a majority of their property in agricultural use and would be considered a "farm" under this definition. Town of Cross Plains farms ranged from one-tenth of an acre to 318 acres in size, with an average area of 60.6 acres.

Chart 5-3



Town of Oregon			
Land in Agricultural Use 2010-2015			
DESCRIPTION	2010 ACRES	2015 ACRES	Change 2010- 2015
Corn farming	6,081.9	5,249.6	-832.4
Soybean farming	3,140.3	3,461.5	321.2
Hay/Alfalfa farming	1,247.1	1,373.1	126.1
Pasture (fenced areas for grazing, often near existing farm buildings)	294.5	441.3	146.8
Wheat farming	308.8	426.6	117.8
Fallow Farm Field	70.3	167.6	97.3
Other grain farming (barley, rye, milo, oat, wild rice etc)	47.1	155.0	107.9
Nursery and tree production	47.6	131.8	84.2
Polyculture/CSA (community supported agriculture)		67.2	67.2
Farm-related buildings	65.3	50.0	-15.2
Dairy cattle and milk production	26.0	49.5	23.5
Strawberry farming		44.6	44.6
Horses and other equine production		33.8	33.8
Other vegetable (except Potato) and melon farming		18.7	18.7
Greenhouse, nursery and floriculture production (nursery stock, shrubbery, cut flowers, and other products produced primarily for non-food uses, such as landscaping)		18.5	18.5
Vegetable and melon farming		15.4	15.4
Beef cattle rancing and farming, including feedlots		10.1	10.1
Berry (except strawberry) farming		9.0	9.0
Other field farming NEC	4.8	7.9	3.1
Vegetable garden (plots less than [one / one-half acre])		3.6	3.6
Sheep farming		1.0	1.0
Dry pea and bean farming	8.6	0.6	-8.0
Hoop house, greenhouses or other building used primarily for growing vegetables	1.0	0.6	-0.5
Fruit and tree nut farming	22.4		-22.4
Large scale grain elevators, Co-op, Cooperative	13.7		-13.7
All other animal production	1.8		-1.8
Total land in agricultural use	11,381.1	11,736.8	355.7

Future Prospects:

Because of the Town's strong density policy, agricultural practices will likely continue over the next twenty years. National and regional market factors may affect the type of farming in the Town.

II. Natural Resources Inventory

Environmentally Sensitive Areas:

The Town of Cross Plains sits atop the terminal Johnstown Moraine of the Wisconsin glacier, and at the intersection of three ecological landscapes, as recognized by the Wisconsin Department of Natural Resources. These landscapes include: the Central Sand Hills, Western Coulees and Ridges, and the Southwest Savanna. In the east, along the moraine, the 1,500-acre Ice Age Complex features nationally significant examples of glacial landforms, and a National Park Service interpretive site for the Ice Age National Scenic Trail. The Ice Age Complex at Cross Plains General Management Plan details the joint management of this area and includes lands owned by the National Park Service, the U.S. Fish and Wildlife Service, the Wisconsin Department of Natural Resources, the Dane County Land and Water Resources Department, the Ice Age Trail Alliance and others. Extensive stands of mature oak woodlands persist throughout the town, particularly west of the terminal moraine. Native prairie remnants and restored prairies also dot the landscape of the town

The northeastern portion of the town falls within the watershed of the Black Earth Creek, a world famous Class I Trout Stream. The southwestern portions of the town fall within the watershed of the Sugar River watershed, which has been the subject of extensive fisheries and landscape restoration efforts. Designated Resource Protection Corridors (see Chapter 8, Land Use) provide protection for critical resources associated with shorelands, wetlands, floodplains and steep slopes.

Soils:

Cross Plain's geological and glacial history have left it with a complex mix of soil types. Under the Soil and Water Conservation Society's Land Evaluation and Site Assessment classification, the most agriculturally productive soils (Class I and II) lie primarily in the valley floors of the town's two major river systems. Poorer soils are associated with the slopes and peaks.

Hydric soils and soils with hydric inclusions also follow the streams and rivers, especially in the Black Earth Creek and Sugar River valleys. Once no longer actively drained or cropped, areas with hydric soils may, in time, revert to wetland conditions. Hydric soils present a variety of practical difficulties for construction, and should be avoided when planning any new development. The Dane County Zoning Division typically requires wetland delineations for proposed fill or construction near hydric soils.

Wetlands:

With the exception of large potholes in and near Shoveler's Sink on the eastern side of the town, nearly all the town's wetlands lie in the valleys of the Black Earth Creek, the Sugar

River and their tributaries. Dane County's Shoreland and Wetland Zoning Ordinance (Chapter 11, Dane County Code) regulates development in and near wetlands.

Groundwater:

Like most of Dane County, the Town of Cross Plains sits atop two underground aquifers:

- 1. A regional aquifer in the Mount Simon sandstone formation, approximately 850 feet below the surface. This deep aquifer provides the primary source for municipal water systems in the Village of Cross Plains. In most portions of the county, the Mount Simon aquifer is isolated from the surface by a layer of impervious rock.
- 2. A shallow aquifer, approximately 50-100 feet below the surface. This groundwater resource, tapped through private wells, provides the primary source of drinking water to Town of Cross Plains residents. Except in steam and creek valleys, groundwater typically lies more than 6 feet below the surface throughout most of the town. However, with permeable layers of soil between it and the surface, this shallow aquifer is particularly susceptible to contamination from the surface.

In Dane County, groundwater supplies nearly all the water for domestic, commercial and industrial uses. Therefore it is extremely important to protect the quality of our groundwater. Excessive use of road salts, fertilizers, and pesticides and poor maintenance of some animal waste and septic systems can hurt groundwater quality.

Wildlife and Endangered Species:

The Wisconsin DNR Natural Heritage Inventory identifies the following endangered or threatened species or species of special concern as potentially present in the Town of Cross Plains.

			Federal	
Common name	Scientific name	WI Status	Status	Group
Abbreviated Underwing Moth	Catocala abbreviatella	SC/N		Moth
Acadian Flycatcher	Empidonax virescens	THR		Bird
Blanding's Turtle	Emydoidea blandingii	SC/P	SOC	Turtle
Cerulean Warbler	Setophaga cerulea	THR	SOC	Bird
Columbine Dusky Wing	Erynnis lucilius	SC/N		Butterfly
Glade Mallow	Napaea dioica	SC		Plant
Heart-leaved Skullcap	Scutellaria ovata ssp. ovata	SC		Plant
Henslow's Sparrow	Centronyx henslowii	THR	SOC	Bird
Hooded Warbler	Setophaga citrina	THR		Bird
Leadplant Flower Moth	Schinia lucens	SC/N		Moth
North American Racer	Coluber constrictor	SC/P		Snake
Ottoe Skipper	<u>Hesperia ottoe</u>	END		Butterfly

Chapter 5: Agricultural, Natural & Cultural Resources

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Pale Soil Ruby	Heppia lutosa	SC		Lichen
Pickerel Frog	<u>Lithobates palustris</u>	SC/H		Frog
Plains Gartersnake	Thamnophis radix	SC/H		Snake
Prairie False-dandelion	Nothocalais cuspidata	SC		Plant
Prairie Parsley	Polytaenia nuttallii	THR		Plant
Prairie Vole	Microtus ochrogaster	SC/N		Mammal
Rusty Patched Bumble Bee	Bombus affinis	SC/FL	LE	Bee
Springwater Dancer	Argia funebris	SC/N		Dragonfly
Woolly Milkweed	Asclepias lanuginosa	THR		Plant
Yellow Bumble Bee	Bombus fervidus	SC/N		Bee

In addition, the Town of Cross Plains is also home to remnants of three different native ecological communities, including:

- Dry prairie
- Southern dry-mesic forest
- Southern dry forest

Woodlands:

In 2020, the Town of Cross Plains had approximately 9,000 acres of woodland, slightly more than in 2010. Forested land comprises 40% of the land area in the Town. Blocks of woodlands, including areas that have been forested since at least 1939, are scattered throughout the town.

Metallic / Non-Metallic Mineral Resources:

The 2020 Land Use Inventory identified 5 mineral extraction sites within the town boundaries. These include 3 under active conditional use permits, and 5 legal, nonconforming sites.

III. <u>Cultural Resources Inventory</u>

Historic Sites:

The Wisconsin Historical Society's Architectural Heritage Inventory (AHI) identifies fourteen existing structures of historic interest in the Town of Cross Plains (Table 5-2). No sites are listed on the National and State Register of Historical Places, but some may be of regional or local significance.

Resources in the AHI were last surveyed in 2017. The Wisconsin Historical Society provides grants to communities for historic survey research.

Table 5-2: Historic Architectural Resources

Section	AHI#	Last Surveyed	Historic Name	Other Name	Year Built	Historic Use	Style
04	136938	2005			1899	house	Queen Anne
04	136939	2005			1900	barn	Astylistic Utilitarian Building
11	4789	Unknown	Berry Haney Tavern		1840	tavern/bar	Other Vernacular
13	4791	2006	Lowe, Richard and Elizabeth, House; Wilkie House	Wilkie, Dr. James and Jane, House	1864	house	One Story Cube
14	4792	2006	Margaret and Peter Zander House		Unknown	house	Gabled Ell
21	4793	Unknown	Peter Paltz House		Unknown	house	Other Vernacular
22	4794	2008	John and Theresia Kalscheur House		1852	house	Front Gabled
23	4795	Unknown			Unknown	house	Other Vernacular
24	4796	2008	Cleveland School		1871	one to six room school	Other Vernacular
27	4797	2008	St. Mary's R. C. Church	ST. MARY'S CHURCH	1889	church	Gothic Revival
29	4798	Unknown			Unknown	cheese factory	Other Vernacular
34	4799	Unknown	Shady Bend Cheese Factory		Unknown	cheese	Astylistic Utilitarian Building
36	4800	2006	Ray and Jean Thurow House		1972	house	Other Vernacular

Archaeological and Burial Sites:

Under Wisconsin law, Native American burial mounds, unmarked burials, and all marked and unmarked cemeteries are protected from intentional disturbance. The Wisconsin Historical Society maintains a list of archaeological sites and cemeteries referred to as the Archaeological Site Inventory (ASI). The Archaeological Site Inventory (ASI) is the most comprehensive list of archaeological sites, mounds, unmarked cemeteries, marked cemeteries, and cultural sites available. The ASI does not include all of the sites and cemeteries present in the state, however. It includes ONLY those sites that have been reported to the Wisconsin Historical Society.

Detailed ASI information is confidential and is not subject to Wisconsin's open records law (Wis. Stats. §§ 44.48 and 157.70). This information is also protected by Federal law (Section 304 of the National Historic Preservation Act, Section 9(a) of the Archaeological Resources Protection Act of 1979). This caution not only helps protect archaeological sites but also protects landowners since private landowners own the majority of archaeological sites in the Town.

Since only a small portion of the Town has been surveyed for the presence of archaeological sites and cemeteries, the sites listed in the inventory represent only a fraction of the sites that are actually present. Local residents and American Indian communities who have and do live and work in the area possess much additional information on other archaeological sites and cemeteries. Steps should be taken to have this information incorporated into future updates of the *Town of Cross Plains Comprehensive Plan*.

Up to this point in time, thirty four (34) archaeological sites and cemeteries have been reported for the Town (Table 5-3).

ASI_ID	Name	Site Type	Culture Name	Section
67784	Lamboley	Campsite/village	Early	19
	Site		Woodland;Middle	
			Woodland;Early	
			Archaic;Middle	
			Archaic;Late	
			Archaic;Paleo-	
			Indian;Late Paleo-	
			Indian	
67784	Lamboley	Campsite/village	Early	24
	Site		Woodland;Middle	
			Woodland;Early	
			Archaic;Middle	
			Archaic;Late	
			Archaic;Paleo-	
			Indian;Late Paleo-	
			Indian	

12647	Site A	Campsite/village	Historic Indian;Woodland	4
12285	Burke 1	Campsite/village	Unknown Prehistoric	8
12286	Burke 2	Campsite/village	Unknown Prehistoric	8
12287	Burke 3	Campsite/village	Unknown Prehistoric	9
12646	GEORGE	Campsite/village	Unknown Prehistoric	26
12284	REINER	Campsite/village	Unknown Prehistoric	28
12291	BADFISH	Campsite/village	Unknown Prehistoric	30
12283	Arrowleaf	Campsite/village;Farmstead	Historic Euro- American;Early Woodland;Middle Woodland	4
13691	LAKE HARRIET CEMETERY	Cemetery/burial	Historic Euro-American	9
13689	Putnam Hill Cemetery	Cemetery/burial	Historic Euro-American	15
13690	STORYTOWN CEMETERY (AKA STORY CEMETERY)	Cemetery/burial	Historic Euro-American	20
21543	Oregon Mound Group	Mound(s) - Other/Unk;Mound(s) - Linear	Woodland;Late Woodland	4

No sites are listed on the National and State Register of Historical Places, but some may have local or regional significance.

Community Design:

The town incorporates community design guidelines. When reviewing development proposals, the Town and property owners will consider the following objectives of the Town:

- Avoid disturbance of productive agricultural land;
- Avoid disturbance of floodplains, wetlands and steep slopes;
- Minimize number and length of driveways, and;
- Avoid fragmentation of existing contiguous wood lots of 20 acres or more.

See Chapter 8: Land Use for detailed design and siting criteria.

IV. Agricultural Resource Goals, Objectives and Policies:

Goals

- 1. Preserve productive farmlands in the town for continued agricultural use.
- 2. Keep farming economically viable in the Town of Cross Plains through the 21st century.
- 3. Maintain the rural character of the town.

Supporting Objectives:

- 1. Protect farm operations from conflict with incompatible uses.
- 2. Limit nonfarm development consistent with town density policies.
- 3. Direct nonfarm development away from productive agricultural lands.
- 4. Support efforts to expand economic opportunities for farmers.
- 5. Maintain large, contiguous blocks of farmland in sufficient acreages to support farm-related businesses, allow for movement of equipment and environmentally safe disposal of manure.

Policies

- 1. Limit nonfarm uses in agricultural preservation districts to one unit per 35 acres owned as of 12/26/1981.
- 2. Minimize conflicts with agriculture by directing development away from productive agricultural lands and environmental resources.
- 3. Direct development incompatible with agricultural use away from farming areas and toward areas with appropriate public services.
- 4. Cooperate with other units of government to make local farmers eligible for the farmland tax credit and other programs that encourage continued farming.
- 5. Town ordinances that restrict noise, odors, keeping of animals, etc. shall not apply to farming activities in agricultural preservation districts.
- 6. Support farmer participation in cost-share and other programs as described in the Dane County Land & Water Resources Plan.
- 7. Encourage and participate in farmer education programs provided through UW Extension.
- 8. Consider new tools, such as TDR and PDR, to help protect agricultural lands and provide financial alternatives to developing farmland (See details in Land Use).

- 9. Work with Dane County to revise county zoning and land division ordinances to support farm operations and agriculture-related businesses.
- 10. Support livestock operations that meet county, state and federal requirements.

V. <u>Mineral Resource Goals, Objectives and Policies:</u>

Goals

- 1. Make sure mineral extraction operations protect public health, safety and the environment and are consistent with the goals and objectives of this plan.
- 2. Limit conflicts between mineral extraction and incompatible uses.

Supporting Objectives:

- 1. Establish clear, consistent policies for conditional use permits for mineral extraction operations. See Chapter 8, Land Use.
- 2. Work closely with Dane County to review and provide appropriate conditions for proposed mineral extraction operations. See Chapter 8, Land Use.
- 3. Discourage development that would conflict with existing mineral extraction operations.
- 4. Prevent new mineral extraction operations in voluntary conservation areas, planned public acquisition areas, or areas identified as TDR Super Sending Areas.

Policies

- 1. Help identify significant mineral deposits within the town and inventory inactive unreclaimed mineral extraction sites.
- 2. Review conditional use permits for new or expanded mineral extraction sites and develop recommended conditions based on the nature of the proposed operation, the location, topography, environmental features of the site, and public comment received. Work with Dane County as necessary to develop specific conditions related to, at a minimum:
 - Hours of operation;
 - Conditions on schedule, notification and nature of blasting (if any);
 - Truck traffic and safe routes for material hauling;
 - Other uses on the site, such as crushing or asphalt production;
 - Fencing, screening and warning signs on the site, and;
 - Final use of any reclaimed sites, consistent with other goals, objectives and policies of this plan.

VI. Natural Resource Goals, Objectives and Policies:

Goals

- 1. Protect important natural features such as significant woodland and grassland areas, floodplains, wetlands, endangered species habitat and steep slopes.
- 2. Provide sufficient parks and outdoor recreation areas to meet the needs of town residents.
- 3. Preserve the rural and scenic character of the town.
- 4. Protect and where possible, improve surface and groundwater quality.
- 5. Provide for sustainable, diverse hunting, fishing, wildlife observation and other outdoor activities within the town.
- 6. Support and encourage voluntary stewardship of private and public lands and respect private property rights.

Supporting objectives

- 1. Establish a resource protection district, with policies to help protect sensitive environmental areas, including floodplains, wetlands and steep slopes.
- 2. Establish a public lands district, with policies to help foster cooperation with public agencies owning lands in the town and promote consistency with this plan.
- 3. Make sure development uses best practices to minimize impacts to natural land and water resources.
- 4. Direct development requiring public sewer and water to designated Urban Service Areas.
- 5. Where possible, limit fragmentation of valuable natural resources and try to connect separated wildlife habitats to maintain robust viable populations.

Policies

- 1. Guide the location and design of development in a manner that will minimize any adverse impact on the quality of surface waters, aquifers, wetlands, woodlands, and agriculture.
- 2. Support and coordinate with Dane County on erosion control, stormwater, floodplain, wetland and shoreland regulation.
- 3. Support cost-share, farm conservation plans and other efforts described in the Dane County Land & Water Resources Plan.
- 4. Identify funding sources for development and ongoing maintenance before creating any new town parks.

- 5. Consider TDR, PDR and other programs to protect natural resources and give landowners alternatives to development.
- 6. Consider using the county's NR-I zoning to identify areas where additional information, site planning or mitigation measures are needed prior to development.
- 7. Review town siting criteria, design and development guidelines to make sure they adequately protect the rural character of the town, and avoid environmental impacts. The town should consider whether future amendments to the *Town of Cross Plains Comprehensive Plan* should address issues such as:
 - Development, landscaping or design guidelines on steep slopes to reduce impacts to scenic vistas and prevent erosion.
 - Establishing limits on tree removal to protect woodlands and avoid fragmentation of habitat.
 - Using downward-directed lighting to protect dark skies and avoid unnecessary light pollution.

VII. Cultural Resource Goals, Objectives and Policies:

Goals and Objectives:

- 1. Encourage identification, protection, interpretation and maintenance for all significant archaeological sites in the town.
- 2. Encourage identification, protection, preservation and restoration of buildings, structures and sites which represent or reflect elements of the town's cultural, social, economic, political and architectural history.
- 3. Help increase public awareness and appreciation of the town's historic and archaeological resources.
- 4. Preserve and protect the physical spaces which support and house cultural resources and practices of interest to residents of the Town of Cross Plains.

Policies and Programs:

- 1. Support local, county, state and federal historic preservation efforts.
- 2. Work with the State Historic Preservation Office, the Dane County Heritage Preservation Commission and the National Park Service to explore the potential for the Town of Cross Plains to become a Certified Local Government partner with the State Historic Preservation Office.
- 3. Consult with the Dane County Department of Development, the Dane County Heritage Commission and the State Historic Preservation Office to take historic or

- archaeological significance into account when reviewing development proposals and to prevent inadvertent destruction of cultural resources.
- 4. Support efforts to help provide restoration grants to willing owners of historic properties. Provide information about grants, technical assistance and recognition programs to town residents.
- 5. Support efforts to document and research historic and archaeological sites in the town. Work with the Wisconsin Historical Society to provide interpretative materials, plaques or markers for Town of Cross Plains sites of, local statewide or regional interest.
- 6. Work with the Village of Cross Plains Historical Society, other historical societies, Native American tribes and residents to educate and provide interpretation of town historic sites, rural schools, and document the written and oral history of the town.
- 7. Support local festivals, ethnic celebrations, farm tours, farm breakfasts, and markets that celebrate the town's history, heritage and rural way of life.
- 8. Conduct regular surveys of county and town residents about types of activities, pastimes, hobbies, sports, performances, handiwork, music, art, dance, theater, religion or other cultural practices, including information about the physical locations where such activities take place.