INTRODUCTION

Door County's soils, topography, and moderate climate are the foundation for its diverse agricultural products, ranging from dairy to a variety of fruits and vegetables. Dairy contributes the most to the county's farm product sales, followed by grains, cattle and calves, vegetables, and tart cherries and apples. While Door County continues to evolve as a diverse agricultural producer, the county's total number of farms and farm acreage, including orchards, has trended downward. Agricultural acreage has decreased from roughly 219,000 acres in 1964, or 70% of the county's total area of land, to 108,658 acres in 2022, or approximately 34% of the county's total area of land. Agricultural losses have coincided with the increase in seasonal and year-round population, particularly in the northern part of the county. Towns in northern Door County that experienced high population and seasonal home growth also had some of the greatest percentage declines in dairy farm numbers, with some towns losing all of their dairy farms.

While there has been a decrease in the number of farms, Door County has a variety of agricultural resources, from various agricultural product processing facilities and educational programs to farmers markets and the Door County Seed Library. Agricultural tourism has become more popular in the county as well. Various dining establishments partner with farms across the county to provide a farm-to-table menu, multiple orchards offer "pick-your-own" experiences during harvest times, and residents and visitors alike can explore the many wineries, breweries, distilleries, and cideries that use locally grown products in their production processes.

This chapter covers information required by both the comprehensive and farmland preservation planning laws. The first section gives an overview of Wisconsin's Farmland Preservation Program and the history of farmland preservation planning and zoning in Door County, which is then followed by discussion on agricultural land use and specialties, key resources and infrastructure, trends, anticipated changes, and key issues and proposed actions.

WISCONSIN'S FARMLAND PRESERVATION PROGRAM

OVERVIEW

Wisconsin adopted its original Farmland Preservation Act (Ch. 91, Wis. Stats.) in 1977 with the aim to retain the state's farmland by providing state income tax relief to farmland owners and operators. County and local governments were able to create farmland planning and zoning programs that allowed farmers the opportunity to receive income tax credits. According to the Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP), in order for these tax credits to be available to farmers in a municipality, that municipality must have adopted a farmland preservation plan and ordinance certified by DATCP. With a plan certified by DATCP, a municipality could have an Exclusive Agricultural (EA) zoning district where farmers with land zoned EA could automatically qualify to earn income tax credits without entering into a DATCP contract. If a farmer was in another zoning district or an unzoned area, they could

only earn income tax credits only upon entering into individual contracts with DATCP. In addition to the preservation of farmland, the program enforced soil and water protection standards with which all farmers receiving income tax credits must comply.

In July 2009, Wisconsin Act 28 changed the law under which farmland preservation agreements/contracts are adopted. This was the "Working Lands Initiative" (WLI), which aimed to focus on preserving larger and more contiguous areas of agricultural land and more diverse agricultural uses. Many new uses were added to the list of qualifying agricultural uses, including:

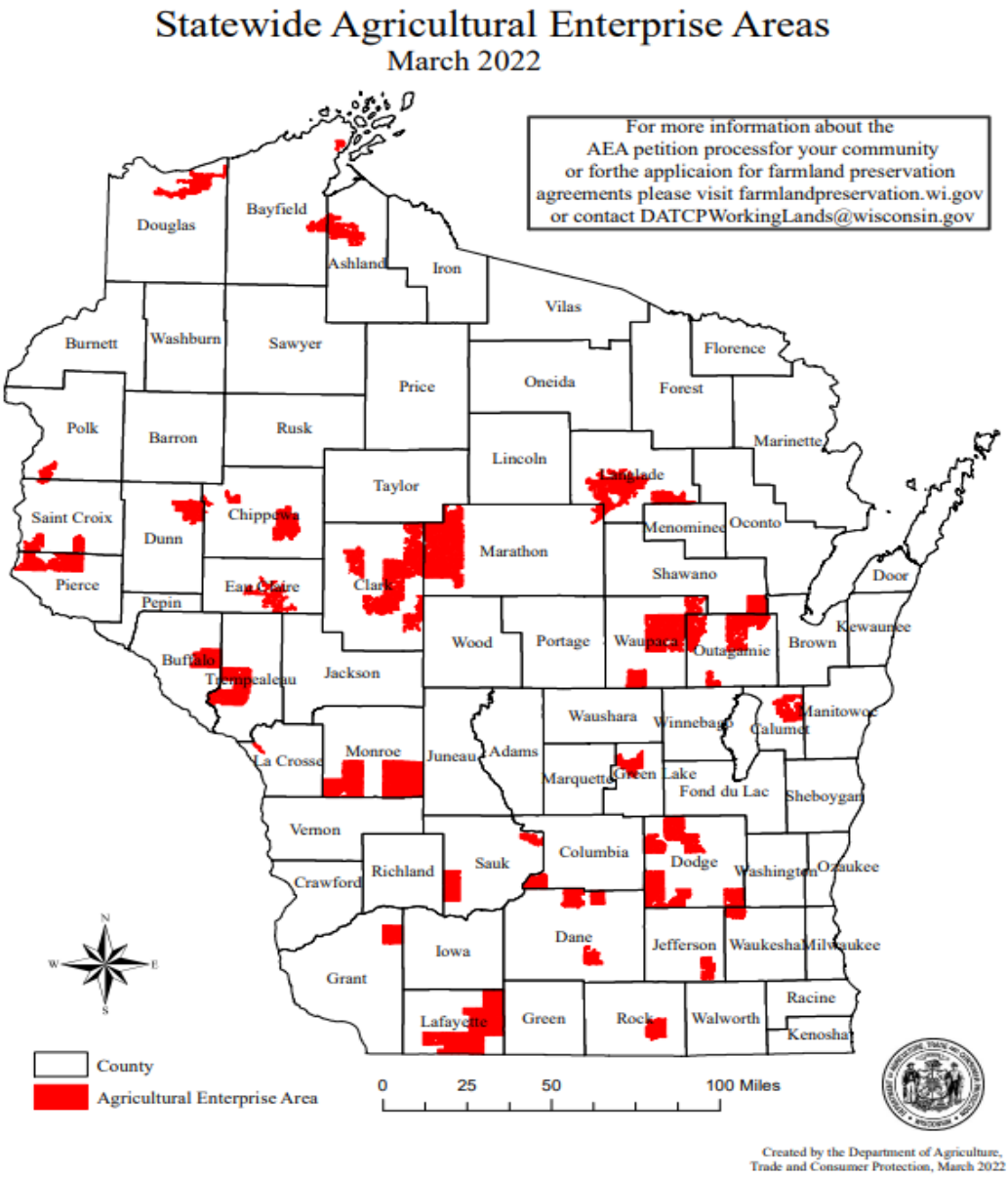
- Crop or forage production (including orchards)
- Keeping of livestock, and horses/ponies
- Beekeeping
- Nursery, sod, or Christmas tree production
- Forest management
- Floriculture
- Aquaculture
- Fur farming
- Enrollment in federal agricultural commodity payment program or federal or state agricultural land conservation payment program
- Maple syrup production

For property owners to become eligible to receive income tax credits, their land must have been zoned EA and/or be located within a state-designated Agricultural Enterprise Area (AEA). If the land was located within an AEA area, the owner was required to enter into an individual 15-year contract with DATCP to be eligible to receive tax credits.

The AEA program was created with the goal of targeting financial resources to larger and more contiguous agricultural land, as opposed to widely dispersed farms with individual contracts. In order for farmland to qualify for AEA income tax credits, the municipality's farmland preservation plan must meet the most updated statutory requirements and be certified by DATCP. Once a plan is certified, a consortium of five or more farms with 1,000 acres or more of contiguous land that is designated on the municipality's farmland preservation plan map as farmland area can qualify to become an AEA by submitting an application to DATCP through their municipality. Prior to December of 2023, if the application was approved, farmers in the AEA were then eligible for income tax credits after entering into individual, 15-year contracts with DATCP. DATCP no longer enters into individual contracts unless the farm is located within an AEA.

As of March 2022, there are 45 designated AEAs covering over 1.5 million acres state-wide. Currently, DATCP has the authority to designate up to 2 million acres in total. Door County does not have any AEAs. (See Figure 7.1.)

Figure 7.1: Statewide AEAs



Source: Wisconsin Department of Agriculture, Trade, and Consumer Protection, Farmland Preservation Program, 2022.

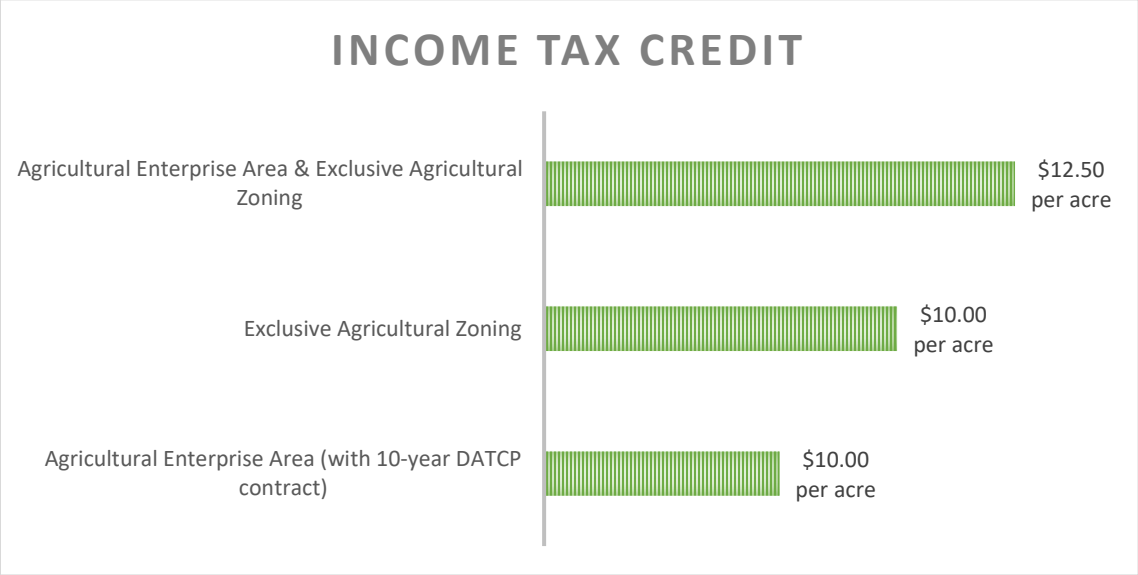
Prior to 2024, income tax credit amounts were as follows:

- Agricultural Enterprise Area (with 15-year DATCP contracts) -- $5.00 per acre
- Exclusive Agricultural Zoning -- $7.50 per acre
- Agricultural Enterprise Area & Exclusive Agricultural Zoning -- $10.00 per acre

In December of 2023, Wisconsin Act 42 changed the farmland preservation agreements' minimum term lengths and increased farmland preservation tax credits for all current participants. The law decreased the minimum term of a farmland preservation agreement from 15 years to 10 years for new agreements signed after December 8, 2023. Income tax credit amounts were also increased as follows and as shown in Figure 7.2:

- Agricultural Enterprise Area (with 10-year DATCP contracts) -- $10.00 per acre
- Exclusive Agricultural Zoning -- $10.00 per acre
- Agricultural Enterprise Area & Exclusive Agricultural Zoning -- $12.50 per acre

Figure 7.2: Farmland Preservation Tax Credits



Source: Wisconsin Department of Agriculture, Trade, and Consumer Protection, Farmland Preservation Tax Credits, 2024.

There are other tax credit eligibility requirements as well. All owners/operators must also:

- Earn at least $6,000 per year in gross farm revenue (or $18,000 over a 3-year period);
- Be in compliance with NR 151 Agricultural Performance Standards and Prohibitions;
- Use the land primarily for agriculture; and
- Have paid property taxes for the previous year.

To qualify for EA zoning income tax credits, a municipality's farmland preservation plan and zoning ordinance must meet the new farmland preservation statutory requirements and be

certified by DATCP. Once the plan and ordinance are certified and the property is following the new zoning and other requirements outlined in the farmland preservation, the farmer is then eligible to receive the income tax credits. The Town of Clay Banks is the only town in Door County that has EA zoning.

HISTORY OF DOOR COUNTY'S FARMLAND PRESERVATION PLANNING AND ZONING

In 1978, Door County contracted with DATCP and the Department of Local Affairs and Development (now the Department of Development) to develop a farmland preservation plan showing which land should be considered for agricultural preservation. Participants in the planning process consisted of a farmland preservation planning committee that oversaw the work of the Door County Land Use Services Department (then called the Door County Planning Department), town committees, and a technical advisory committee. The resulting Door County Farmland Preservation Plan (FPP) was adopted by the Door County Board of Supervisors in 1982 and subsequently certified by DATCP. Administered by the Land Use Services Department and in effect in all 14 towns, the plan identified areas of prime agricultural importance within which farmers could enter into contracts with DATCP, qualifying them for income tax credits under the state's Farmland Preservation Program. As previously discussed, it also required soil and water conservation standards were also established within the plan.

Door County amended its zoning ordinance in 1984 to include an EA zoning district, which was then implemented only in the Town of Clay Banks. Currently, the Town of Clay Banks is still the only town in the county with EA zoning. In order for property owners with EA zoning to continue to receive income tax credits, Door County is required to have a new, certified farmland preservation plan in place by December 31, 2024 and a certified zoning ordinance in place by December 31, 2025.

AGRICULTURAL LAND USE AND SPECIALTIES

AGRICULTURAL LAND USE

The amount of land deemed agricultural in Door County depends on the source and varies based on the definition of agricultural land that is used by the reporting agencies. Per the County of Door website, the county covers 492 square miles, or nearly 315,000 acres. Listed below are estimates from two sources:

- **United States Department of Agriculture (USDA).** The USDA reported in its 2022 Census of Agriculture that Door County had 108,658 acres of farmland, consisting of 34% of the total land area in the county.
- **Door County Real Property Listing**. According to Real Property's 2022 real estate valuation summary, there are 103,351 acres of farmland in the county, approximately 33% of the total land area of the county. State law states that only land currently in agricultural production can be assessed as agricultural; fallow agricultural land is

categorized as undeveloped. More discussion on property assessment for agricultural uses is provided below.

AGRICULTURAL PROPERTY TAX ASSESSMENT

An assessment is the value placed upon property, which in turn determines how much property tax will be owed for that property. Definitions for the land use assessment categories relevant to agriculture – Agricultural, Agricultural Forest, and Undeveloped Land – are listed below. More information on property tax assessment can be found in Chapter 10, Land Use, of this volume.

- **Agricultural** – used for farms, ranches, dairies, nurseries, orchards, and other land devoted primarily to the production of crops, plants, vines, or trees (excluding forestry operations). It also applies to the keeping, grazing, or feeding of livestock and animal specialties such as horses, rabbits, bees, pets, and fish.
- **Agricultural Forest** – land that is producing or is capable of producing commercial forest products if the land is: contiguous to a parcel that has been classified in whole as agricultural land (than contiguous agricultural parcel must have the same owner); located on a parcel that contains agricultural land; or located on a parcel where at least 50% of the acreage was converted to agricultural land.
- **Undeveloped Land** – includes areas commonly called marshes, swamps, thickets, bogs, or wet meadows. This class also includes fallow tillable land (assuming agricultural use is the land's highest and best use), road rights-of-way, ponds, depleted gravel pits, and land that, because of soil or site conditions, is not producing or capable of producing commercial forest products.

The assessed value of agricultural land is based on its use in agriculture, its ability to generate agricultural income, rather than what the land would sell for on the open market. This valuation standard is referred to as "use-value" assessment. Agricultural land is exclusive of buildings and improvements that are devoted primarily to agricultural use; buildings and improvements on a farm, such as barns, houses, and silos, are separately classified and assessed at fair market value. Assessment amounts for agricultural land are generally well below the potential sale value.

Table 7.1 shows the number of parcels, acreage, and valuation of agricultural property in Door County in 2002 and 2022. Over the last twenty years, the total number of agricultural parcels have increased by 11.87%. However, the total acreage of assessed agricultural land declined by 8.82%. The total value of agriculturally assessed land also decreased during this timeframe, falling by 49.19%, inflation-adjusted to 2022.

Table 7.1: Agricultural Land Use Assessment

Tax Year	# Parcels	Acres	$ Land Assessment*
2002	4,758	113,351	$38,695,515*

2011	5,210	105,717	$22,894,313*
2022	5,323	103,351	$19,661,200
# Change	**565**	**-10,000**	**($19,034,315)**
% Change	**11.87%**	**-8.82%**	**-49.19%**

Source: Door County Real Property Listing, for the years listed.

**Inflation-adjusted to 2022.*

Table 7.2 below shows the total value, total acres, and average value per acre of agriculturally assessed land for Door County and its sub-areas in 2022. Door County had 103,351 acres of agricultural land with a total assessed value of $19,661,200. The average assessed value per acre of agricultural land was just over $190. Southern Door had the most agricultural acreage, at 37,134, and the highest total land value of $8,841,200. Northern Door had 26,630 acres of agricultural land with a total land value of $5,503,500. Central Door had 29,587 acres of agricultural land with a total land value of $5,316,500. Average agriculturally assessed land value per acre was the highest in Northern Door, at $206.67, followed by Southern Door, $187.58, and Central Door, $179.69.

Table 7.2: Agriculturally Assessed Land Values

Area	Total Agriculturally Assessed Land Values	Total Agriculturally Assessed Acres	Average Agriculturally Assessed Land Values per Acre
Northern Door	$5,503,500	26,630.04	$206.67
Central Door	$5,316,500	29,587	$179.69
Southern Door	$8,841,200	37,133.91	$187.58
Door County	$19,661,200	103,350.95	$190.24

Source: Door County Real Property Listing, 2022.

AGRICULTURAL SPECIALTIES

According to the 2022 US Census of Agriculture, Door County's top five commodities by market value of sales are: milk from cows (55.2 mil.); grains (27.2 mil.); nursery, greenhouse, floriculture, sod (7.0 mil.); fruits, tree nuts, berries (6.8 mil.); and cattle and calves (6.1 mil.).

AGRICULTURAL RESOURCES AND INFRASTRUCTURE

KEY AGRICULTURAL RESOURCES

General information regarding Door County's climate, geology and topography, soils, groundwater, and water supply can be found in Chapter 6, Natural Resources, of this volume.

KEY AGRICULTURAL INFRASTRUCTURE

Door County's key agricultural infrastructure includes a cooperative, a variety of food processing plants, and one cold-storage business. Also, discussed at the end of this section are waste management and efforts to improve communications in rural areas.

DOOR COUNTY COOPERATIVE

The Door County Cooperative, located in the City of Sturgeon Bay, consists of 10 member-owned businesses and offers the following agricultural products and services:

Pictured: Door County Cooperative Logo
(*Source: Door County Cooperative)*

- Agronomy services, including custom spray application, nutrient management planning, soil and tissue testing, and fertilizer recommendations;
- Seeds, pet and farm feed, and fertilizer and crop-protection products; and
- Agrobusiness equipment, including bee-keeping supplies, canning and preserving supplies, and beer and wine making supplies.

In addition to the products and services listed above, the Shirley Feed Mill, a division of the Door County Cooperative located in De Pere, Wisconsin, offers full-service feed manufacturing, grain merchandising and storage, grain drying, and nutrition consulting.

PROCESSING AND STORAGE

Cherry Processing

- *Tart Cherry Processing Plant at Seaquist Orchards (Town of Egg Harbor)*. Door County sees 8 to 12 million pounds of cherries harvested annually; about 6 million (50-75%) are raised, processed, and packed at Seaquist Orchards and its processing plant. Tart Cherry Processing Plant is certified Kosher and Safe Quality Food (SQF) certified, a leading global food and safety program based on Hazard Analysis and Critical Control Points (HACCP). HACCP is a management system in which food safety is addressed through the analysis and control of biological, chemical, and physical hazards from raw material production, procurement, and handling, to manufacturing, distribution, and consumption of the finished product**.**
- *Country Ovens (Town of Forestville)*. Country Ovens processes fresh cherries into dried cherries, syrup, and cherry juice.

Meat Processing

- *Marchant's Foods, Inc. (Town of Brussels)*. Marchant's is a state-inspected meat processing plant. It is HACCP certified.

- *Door County Custom Meats (Town of Sevastopol)*. Door County Custom Meats is also a state-inspected custom meat processing plant.

Fish Processing & Cold Storage

- *Baileys Harbor Fish Company (Town of Baileys Harbor)*. Baileys Harbor Fish Company is a local fish market which specializes in the processing and wholesale of locally caught fish.
- *Lindal Fisheries (Town of Nasewaupee)*. Lindal Fisheries offers full service fish cleaning, processing, and packaging for fisherman.

Cheese Processing

- *Renard's Cheese (Town of Clay Banks)*. Renard's Cheese produces a variety of cheese and cheese spreads.

Waste Facilities and Communications

All of Door County is served by Door County Hauling, located in the City of Sturgeon Bay. Door County Hauling provides the following services: trash, recycling, roll off containers, dumpster rentals, compactors, and construction waste. Note that the County does not issue outdoor and refuse burning permits. Most, if not all, towns issue their own outdoor and refuse burning permits, however, the number of permits issued is not available to the County.

Door County has intensified broadband expansion efforts among the communities throughout the county. A county-wide effort began in 2021 to ensure that the County leveraged all opportunities for increased internet capabilities. Now, in 2024, most of the County's 19 communities have created task forces to study the effort and many have contracted with Internet Service Providers (ISPs) to invest in infrastructure to ensure that all residents have the ability to connect to enhanced internet capabilities. Leveraging local and federal grants in this effort has played a valuable role in this effort.

OTHER AGRICULTURAL RESOURCES AND INFRASTRUCTURE

Door County has a variety of enterprises involved in agricultural-related research, promotion, and education.

Community Gardens

- *Beach Road Community Garden (Town of Liberty Grove)*. The Beach Road Community Garden is part of Hidden Acres Farm located just outside downtown Sister Bay. The garden consists of 26 raised beds with a variety of herbs and vegetables. There is a weekly garden "chore" sign up to ensure the watering, weeding, and any other gardening activities are completed each week by the garden community.
- *The Community's Garden (City of Sturgeon Bay)*. The Community's Garden is a non-profit community garden located on the Door County Memorial Hospital campus. The

garden includes an area for the hospital to raise produce for the cafeteria and 45 plots of land that are rented out to community members. In addition to the garden plots, the Community's Garden offers agricultural-related activities, including:
    - Nutrition classes for children and families, which include learning where food comes from, harvesting of food, hands-on cooking and canning classes, and utilizing foods when in season
    - Gardening classes and work projects
    - Classes focusing on land and water preservation
    - Senior citizen gardening classes and activities
    - Physical therapy, including horticultural therapy
- *The Garden Door (Town of Sevastopol)*. The Garden Door is located at the University of Wisconsin Peninsular Agricultural Research Station and is maintained by members for the Door County Master Gardeners Association (DCMGA). The Garden Door is a one-acre educational and show garden which has over 350 varieties of plants. DCMGA volunteers and UW Extension staff plant and harvest crops each summer in the community garden. The Garden Door is open to the public.

Community Supported Agriculture

Community Supported Agriculture (CSA) is described by the USDA as a community of individuals who pledge support to a farm operation so that the farmland becomes, either legally or culturally, the community's farm, with the growers and consumers providing mutual support and sharing the risks and benefits of food production. Membership in the CSA provides the farmer with working capital in advance of the growing season, typically giving the farmer better prices for their corps and some financial security. Membership also relieves the farmer of most direct marketing costs. Typically, members of the farm sign up in advance of the growing season at a specified dollar amount and in return receive shares in the farm's produce throughout the season. Members get the satisfaction of reconnecting to the land and participating directly in food production, while also sharing in the risks of farming, including poor harvests due to weather or pests. Listed below are the CSAs currently operating in Door County.

- Cloverleaf Farms (Town of Nasewaupee)
- Periwinkle Moon Farm (City of Sturgeon Bay)
- Emerald Acres Farm (Town of Nasewaupee)

Culinary Schools

- *Northeastern Wisconsin Technical College (NWTC), (City of Sturgeon Bay)*. NWTC offers a variety of cooking and food preservation classes, including a local foods cooking class.
- *Savory Spoon Cooking School (Town of Liberty Grove)*. The Savory Spoon Cooking School is a seasonal school open from June to October.

Door County Master Gardeners Association, Inc.

The Master Gardener program, conducted throughout the United States and Canada, is an educational and volunteer program that provides horticulture training through local university extensions in exchange for volunteer work. Entry into the Door County Master Gardener Association (DCMGA) requires 36 hours of education and 24 hours of volunteer work, as well as an exam at the end of the training period. Thereafter, members need to have 10 hours of education and 24 hours of volunteer time per year to remain a certified Master Gardener. Master Gardeners assist with garden lectures, exhibits, demonstrations, school and community gardening, diagnostic servicing, research, and other projects.

Pictured: Door County Master Gardeners Association Logo (*Source: DCMGA)*

DCMGA conducts several events and activities throughout the year, in addition to maintaining The Garden Door. DCMGA hosts educational "Summer Safaris" to members and the public to learn about various gardening and agricultural practices. DCMGA also propagates seeds every spring in a greenhouse donated by the Peninsular Agricultural Research Station, ending in a plant sale in late May or early June. In addition, DCMGA participates in various community projects with non-profit, religious, or government organizations, ranging from a Boys and Girls Club Youth Garden Project to overseeing the Door County Seed Library, and more.

Door County Seed Library

The Door County Seed Library is a free community resource that allows residents to "check out" a variety of vegetable, herb, and flower seeds that can be then planted and grown at home. Since its launch in 2019, the Seed Library has distributed over 25,000 packets of seeds. There are eight Seed Libraries located at each of the Door County Library branches, located in the following municipalities:

- Baileys Harbor
- Egg Harbor
- Fish Creek (Town of Gibraltar)
- Forestville
- Sister Bay-Liberty Grove
- Sturgeon Bay
- Washington Island

Farmers Markets

Farmers markets are described by the USDA as an integral part of the urban/farm linkage. They have continually risen in popularity, mostly due to the growing practice of "shopping local"

where consumers prefer to buy seasonally and locally produced products. Farmers markets give consumers access to locally grown, farm-fresh produce, and the opportunity to cultivate relationships with the farmers who grow the produce. Farmers markets continue to be an important sales outlet for agricultural producers nation-wide (total annual sales are estimated at $1 billion); as of early 2022, there were 8,720 farmers markets operating throughout the US, an increase of 21.53% since mid-2011. Listed below are the farmers markets that operate in Door County during the growing season.

- Baileys Harbor Farmers Market at the Town Hall Lawn (Town of Baileys Harbor)
- Egg Harbor Farmers Market at Harbor View Park (Town of Egg Harbor)
- Fish Creek Farmers Market at the Settlement Shops (Town of Gibraltar)
- Jacksonport Farmers Market at Lakeside Park (Town of Jacksonport)
- Washington Island Gathering Grounds Farmers Market at KK Fiske & Washington Island Electric Cooperative (Town of Washington)
- Ephraim Bondemarked (Village of Ephraim)
- Sister Bay Farmers Market at Corner of the Past Museum (Village of Sister Bay)
- Sturgeon Bay Farmers Market on 3rd Avenue, between Michigan & Oregon (City of Sturgeon Bay)

Gathering Ground – Ground School Internship

Gathering Ground is a 40-acre farm on Washington Island that serves as living laboratory. They focus on sustainable farming practices with diverse fruit and nut orchards, vineyards, and grazing sheep, and promote biodiversity, offer community composting, and put on the local farmers market. In addition, Gathering Ground started their Ground School summer internship program in 2018, and it continues today. It is a paid 10-week program focusing in the areas of environmental studies, food justice, communal & ecological living, sustainable agriculture, and conservation. Interns participate in farm work and intensive hands-on education in regenerative agriculture, as well as agroecology seminars and farm-to-table dinners.

Northeastern Wisconsin Technical College

NWTC offers multiple agricultural-related technical and associate degree programs, as well as certificate programs, with many classes offered at the Sturgeon Bay campus.

NORTHEAST
WI Technical College

Pictured: NWTC Logo (*Source: NWTC)*

- *Dairy Science Technical Diploma*. The Dairy Science technical diploma is aimed to prepare workers for entry-level dairy industry positions. The program provides knowledge and experience with dairy management techniques and animal husbandry skills.
- *Farm Business and Production Management Technical Diploma*. The Farm Business and Production Management program covers basic farming production and business management principles needed to compete and be profitable in the agricultural

economy. Students learn to calculate production costs and prepare and implement agricultural business plans.

- *Farm Hand Dairy Science Certificate*. The Farm Hand Dairy Science certificate program provides an overview of the basic skills and science behind the dairy industry.
- *Farm Production Dairy Science Associate Degree*. The Farm Production Dairy Science degree prepares graduates to work in management positions in the dairy industry. The program provides the communication, technical hands-on, and business skills to be successful in the agricultural industry.
- *Sustainable Agriculture Certificate*. The Sustainable Agriculture Certificate program teaches students the introductory skills, science, and art of producing crops, livestock, and foods using organic and sustainable principles.
- *Sustainable Food and Agriculture Systems Associate Degree*. The Sustainable Food and Agriculture Systems degree provides graduates with the necessary knowledge and qualifications for employment in sustainable agriculture, including commercial gardens, livestock operations, farmer support, and other local and seasonal food system efforts.
- *Vineyard Management (Viticulture) Associate Degree or Certificate*. The Viticulture certificate program highlights the basics of vineyard operations and teaches how to establish and maintain vineyards. The Associate Degree program provides training in planting, pruning, harvesting, gathering, sustainability, integrated pest management, and storing of grapes. In addition, graduates leave with the business and operations skills needed to own or be employed at a vineyard.
- *Winemaking (Enology) Associate Degree or Certificate*. There are two Enology certificate programs, beginner and advanced. Both teach the basics of winemaking, but the advanced certificate provides more in-depth and technical knowledge of the winemaking processes and the possibility for hands-on internship experience. The Enology Associate Degree provides skills in fermentation, clarification, and aging of wine; lab methodologies; sanitization; quality control; winery equipment operation; grape maturity testing; and wine and must analysis. Associate Degree students also participate in an internship at a local winery to prepare themselves for a successful career as a winemaker, winemaking assistant, cellar worker, or tasting room host.

Peninsular Agricultural Research Station

Scattered throughout the state, the College of Agricultural and Life Sciences (CALS) at the University of Wisconsin-Madison operates 12 agricultural research stations. Each station's emphasis relates to the needs of agriculturists in the area who encounter environmental conditions (climate and soil) similar to those at the station. Located in the Town of Sevastopol and in existence since 1922, the Peninsular Agriculture Research Station (PARS) of Door County is primarily a field laboratory for fruit specialists to develop pest control programs and conduct other research and outreach efforts to support local and state fruit industries. PARS has been growing different varieties of red and white grapes in attempt to harvest for winemaking. So

far, no season has been successful, but each year has shown significant progress in cold climate grape cultivar development. Additionally, the station conducts grain and vegetable research and is home to the NRSP-6 US Potato Genebank, the world's largest collection of wild and cultivated potato species. The US Potato Genebank's mission is to collect, classify, preserve, evaluate, and distribute nearly 5,000 samples of more than 150 potato species.

Quality Market Animal Sale

The Door County Quality Market Animal Sale (QMAS) takes place annually at the county fair. The mission of the QMAS is to provide a place for youth to experience the various stages of an agribusiness project, while providing buyers with a quality, local product. Youth exhibitors can choose from a variety of animals to raise for auction at the county fair.

Pictured: QMAS Logo
(*Source: QMAS)*

University of Wisconsin-Extension Door County

The University of Wisconsin-Extension Door County employs two full time agricultural agents, a Regional Dairy Education and a Regional Crops Educator. Dairy and crop production are the largest agricultural industries in the state and the regional educators of northeast Wisconsin (Brown, Door, and Kewaunee Counties) offer specific expertise that can serve these industries. The regional educators provide research-based education to dairy and crop producers by:

- Assessing the needs of farmers in the region
- Designing and delivering educational meetings and field days
- Providing consultation on production challenges to farmers and agricultural consultants
- Contributing to digital outreach opportunities on agricultural topics through email, websites, and social media
- Collaborating with other educators and specialists across the state
- Engaging with Extension Committees on progress and planning

Wisconsin Cherry Growers, Inc.

Based in the Town of Egg Harbor, the mission of the Wisconsin Cherry Growers, Inc. is to bring together those interested in the production, research, utilization, and marketing of Wisconsin cherries. Membership includes growers, associate members, raw product processors, and area food manufacturers producing cherry products for wholesale and/or retail sale.

AGRICULTURAL TRENDS

As reported in the 2022 Census of Agriculture and past censuses, the economic impact of agriculture in Door County continues to trend upward. The total market value of agricultural products sold increased by over 19% between 2017 and 2022. Also, as reported in the current and past censuses, dairy still contributes the most to farm product sales.

Despite increasing economic value, the overall number of farms, farm acres, and animals in Door County has trended downward since the late 1980's, including dairy. There are still some upward trending products including layers, corn for both grain and silage, soybeans, wheat, and raspberries/strawberries/grapes. These products combined contribute $26.2 million in market value of product sold.

ECONOMIC IMPACT AND BUSINESS DEVELOPMENT

Economic Impact

Table 7.3 compares agriculture data for the years 2017 and 2022, with 2017 dollar values inflation-adjusted to 2022, as published by the USDA in its 2022 Census of Agriculture. The total market value of agriculture products sold totaled $108.8 million in 2022, up over 19% from the 2017 total of $91.2 million. The average value of agriculture products sold per farm totaled $172,437 million in 2022, up over 18% from the 2017 total of $145,628.

Table 7.3: Market Value of Agricultural Products Sold, Door County

Agriculture	2017* ($)	2022 ($)	% Change
Total Market Value of Agricultural Products Sold	91.2 mil.	108.8 mil.	19.3%
Average Per Farm	145,628	172,437	18.4%

Source: USDA, 2022 Census of Agriculture*, 2017 & 2022.*

**Inflation-adjusted to 2022.*

Dairy contributed $55.2 million in market value of products sold in 2022, over one-half of the total value of all products sold. The top four product categories following dairy are listed below.

- Milk, $55.2
- Grain, $27.2
- Nursery & greenhouse, $7.0
- Fruits, nuts, berries, $6.8
- Cattle & calves, $6.1

Business Development

The Door County Economic Development Corporation (DCEDC) recognizes that family-owned farms, food processors, and agriculture-related businesses are vital to Door County's economy, generating jobs and supporting local income and tax revenues. Agriculture in the region not only sustains local markets but also plays a key role in maintaining the county's cultural and economic heritage. DCEDC predicts

that the agricultural industry will remain generally steady over the next ten years in terms of amount and type of production, as well as employment growth. DCEDC continues to foster communications within the agriculture industry and assist with efforts to attract agricultural workers.

TRENDS IN AGRICULTURAL LAND USE

According to the USDA Census of Agriculture, in 2017 Door County had 631 farms and 108,658 acres of farmland, consisting of over 34% of the county's total land. (See Figures 7.3 and 7.4 below.) The USDA defines a farm as any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the census year. Land in farms includes crop and livestock acreage, pasture, land in summer fallow, idle cropland, and land enrolled in the Conservation Reserve Program or other set-aside or commodity acreage programs. Acreage of woodland and wetland adjacent to farmland are included in the Census of Agriculture count, although it is not used for pasturing or to produce anything.

Figure 7.3: Total Number of Farms

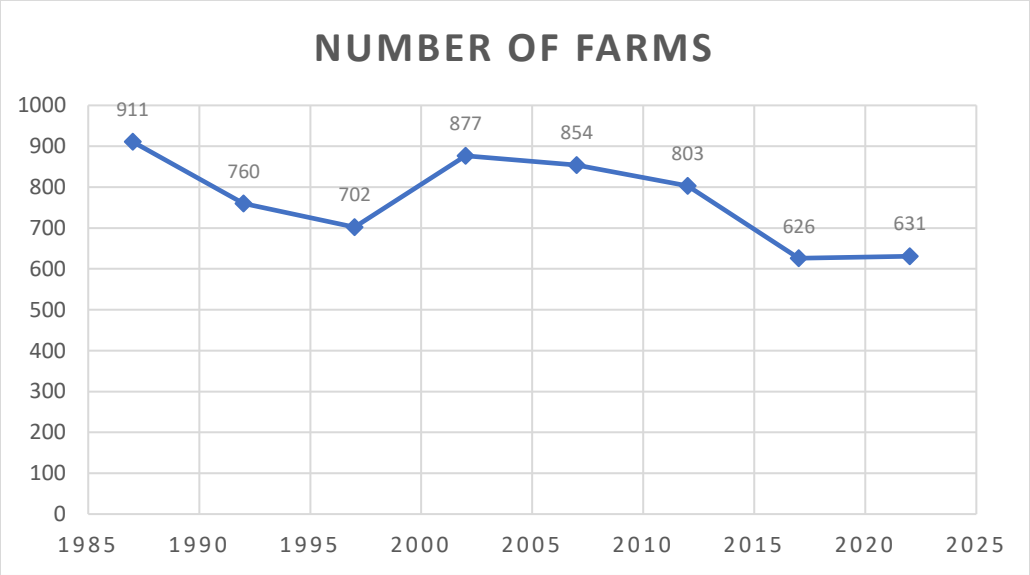
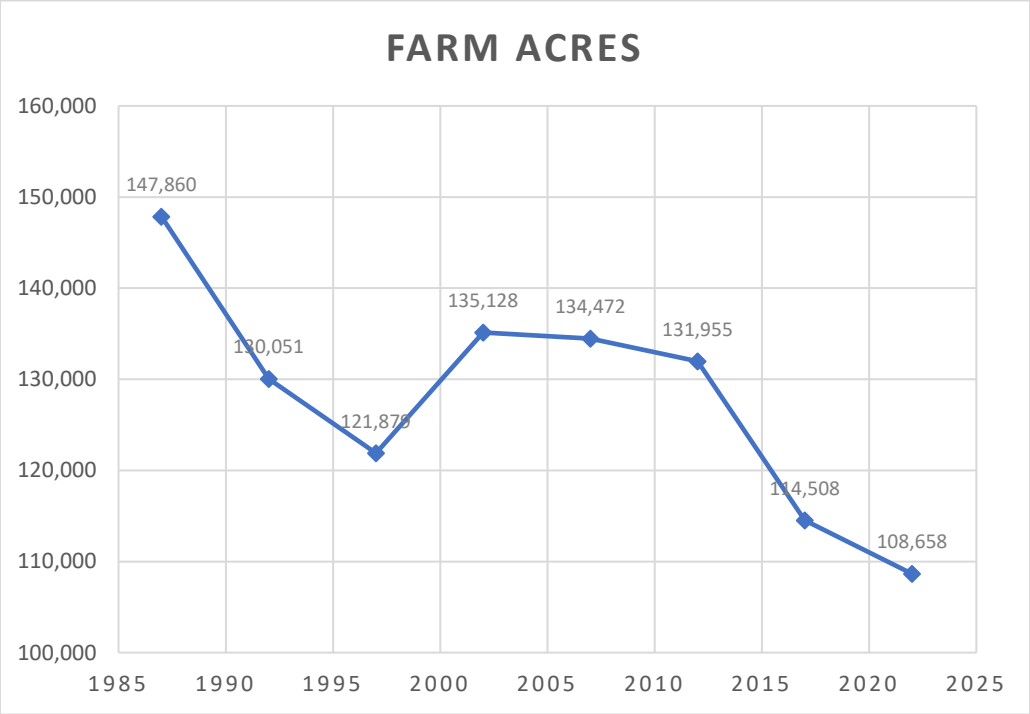


Figure 7.4: Total Farm Acres



Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

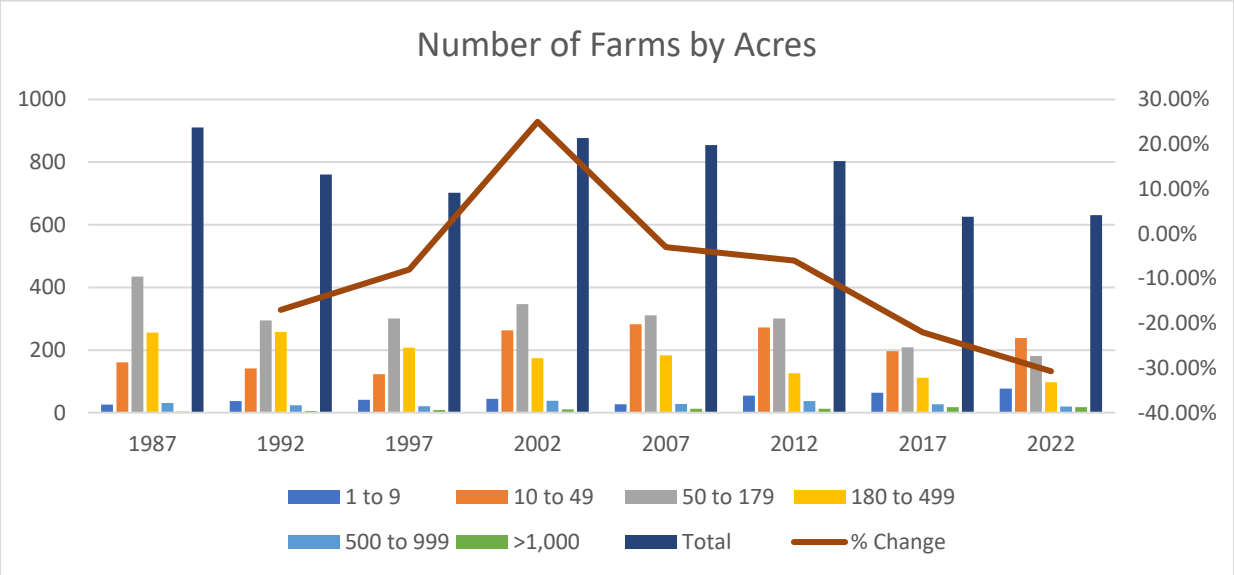
Between the 1987 and 2022 Censuses, Door County lost 39,202 acres (-27%) of its farmed land and 280 (-31%) of its total number of farms. Though farm numbers in Door County have been in decline overall, between 1997 and 2002 the number of farms actually increased by 175. The UW-Extension Door County office attributed this, at least in part, to the change in classification of farms by the USDA for the 1997 Census, which added operations having five or more horses or ponies, including those with no agricultural sales. Prior to the 1997 Census, farms with horses and ponies were counted as farms only if they had $1,000 or more in agricultural sales. Another change in classification of farms made by the USDA for the 1997 Census was to include Christmas tree farms, farms wholly enrolled in the Conservation Reserve Program (land conservation), and two other industries—maple syrup production and short rotation woody crops, such as aspen and other fast-growing trees—in farm counts. In 2022, Door County farms sold $51,000 worth of maple syrup. Short rotation woody crops are grown for the paper and biofuel industry; as of 2017, none are produced in Door County.

Between the 1987 and 1997 Censuses, the county lost 18% of its farmland and 23% of its total number of farms. A surge in farmland and number of farms occurred between 1997 and 2002, when there was an 11% gain in farmland and a 25% increase in number of farms, which UW-Extension Door County partially attributes to the way USDA counts farms (described above). Then between the 2002 and 2022 Censuses, the county lost almost 20% of its farmland and 28% of its number of farms. A significant portion of overall agricultural land loss is attributable

to the loss of dairy operations in northern Door County, coinciding with large seasonal population increases in the same area.

In addition to the loss of dairy farms, the decline in total number of farms could be attributed to the absorption of some mid-sized farms by large farm operations. Between 1987 and 2022, the number of mid-sized farms (50-499 acres) declined by 60%. (See Figure 7.5.) During the same timeframe, the number of large farms (500+ acres) increased by 12%; thus, the decline in mid-size farms appears to have been, at least in part, due to farm consolidation. Small farms, or "hobby" farms (less than 50 acres), in Door County increased by 68% during that same timeframe, indicating a growing niche market, as discussed in more detail later.

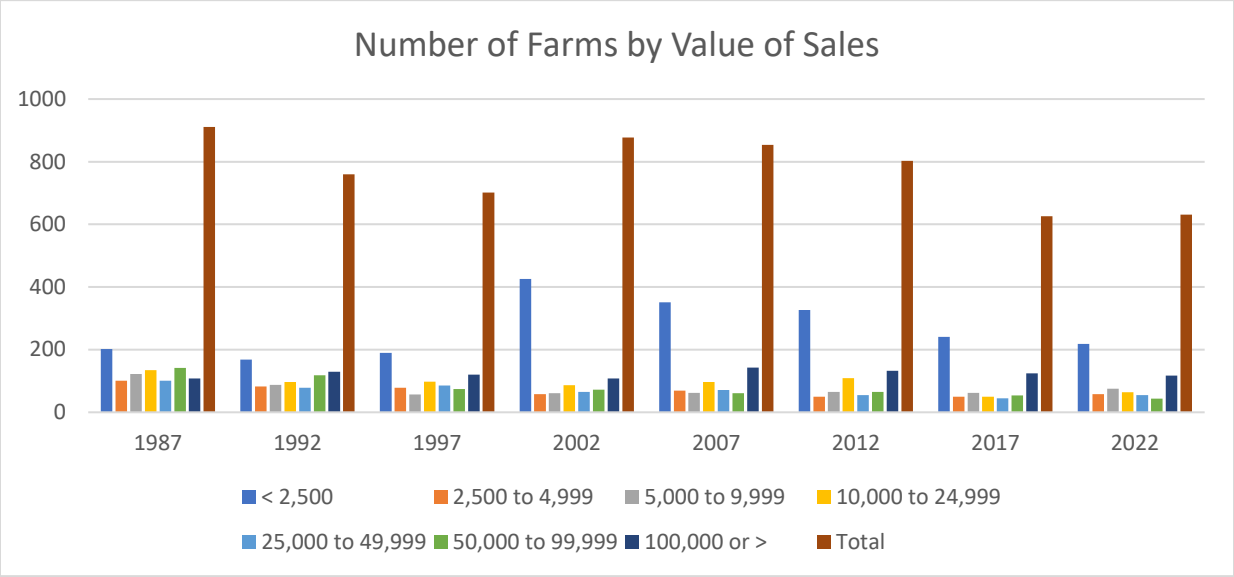
Figure 7.5: Number of Farms by Acres, Door County



Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for years cited.

Grouped by value of sales, the number of farms decreased in all categories between 1987 and 2022, except for those with less than $2,500 in sales and those with $100,000 or greater in sales. (See Figure 7.6.) Farms with sales of less than $2,500 consisted of 22% of the total number of farms in 1987, increasing to 38.5% in 2017. Farms with sales of $100,000 or greater consisted of 12% of the total number of farms in 1987, increasing to 19.8% in 2022.

Figure 7.6: Number of Farms by Value of Sales, Door County



Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for years cited.

TRENDS IN AGRICULTURAL PRODUCTION AND ENTERPRISES

Livestock and agronomic crops are down county-wide, but dairy still continues to contribute the most in farm product sales. Cherry production is also down county-wide, but the county is experiencing some growth in grape production as viticulture and enology grow in popularity. Snap beans and green peas have historically done well in the county, but have experienced declines in acreage and farms in the last 5 years. Door County agriculture has also some farms practicing organic methods.

LIVESTOCK AND DAIRY FARMING

Livestock farming has trended downward for all categories, in terms of both number of farms and number of animals, except for the "layers" category. (See Table 7.4.) Between 1997 and 2022, the number of layer farms increased by 62 farms, from 30 to 92, and the number of animals increased by 5,392 layers, from 946 to 6,338.

Beef cow farming had been trending upward but took a downturn between 2017 and 2022. Between 1997 and 2017, the number of beef cow farms had increased by 36 (59%) and the number of animals by 725 (119%). Between 2017 and 2022, however, the number of farms dropped down to 67 and the number of animals dropped down to 879.

In 2022 there were 39 dairy farms housing 9,396 milk cows. (See Table 7.4.) Drastic declines in dairy operations occurred between 1997 and 2007 when the number of dairy farms fell by over 43%, from 201 to 114, and the number of dairy cows fell by over 23%, from 10,615 to 8,141, with losses occurring primarily in northern Door County. Between 2007 and 2017, the number of dairy farms continued to drop by over 43%, from 114 to 64, but the number of dairy cows

increased by over 18%, from 8,141 to 9,645. Between 2017 and 2022, however, both the number of farms and animals have declined. The number of dairy farms declined by 25 (39%) and the number of animals declined by 249 (2.6%).

Table 7.4: Livestock and Other Animals, Door County

Animal	#	1997	2002	2007	2012	2017	2022
Cattle & Calves (includes beef & milk cows)	Farms	306	307	247	212	171	121
	Animals	23,038	22,489	23,647	23,852	21,079	20,826
Beef Cows	Farms	61	103	97	100	97	67
	Animals	608	840	1,170	1,129	1,333	879
Milk Cows	Farms	201	151	114	72	64	39
	Animals	10,615	9,286	8,141	9,864	9,645	9,396
Hogs and Pigs	Farms	17	29	22	9	13	14
	Animals	910	423	264	38	79	79
Sheep & Lambs	Farms	21	31	29	23	28	46
	Animals	910	714	717	499	369	580
Layers	Farms	30	50	49	60	74	92
	Animals	946	1,036	1,391	1,287	2,356	6,338

Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

Door County has two Concentrated Animal Feeding Operation (CAFO), S&S Jerseyland Dairy located in the Town of Forestville and Brey Cycle Farm located in the Town of Nasewaupee. A CAFO is defined by the Wisconsin Department of Natural Resources as a farm with 1,000 or greater animal units, with one animal unit the equivalent of a 1,000-pound animal. Chickens, turkeys, hogs, beef, or dairy animals, when combined to weigh 1,000 pounds, constitute one animal unit. According to their nutrient management plans, S&S milks around 6,000 cows and Brey Cycle Farms milks around 1,300 cows.

AGRONOMIC CROPS

Door County produces a variety of agronomic crops (see Table 7.5), or feed-stock for dairy production such as forage (hay, haylage, and grass hay) and corn silage. Total acreage of agronomic crops have declined by over 16% between 1987 and 2022. Forage crops are produced on more acres than any other crop, composing over 26% of the total acreage of agronomic crops.

From 1987 to 2012, cash-cropping – the production of grains such as corn, soybeans, and wheat – had been steadily increasing. (See Table 7.5.) Then, between 2012 and 2017, corn and wheat acreage fell by 13.8% and 29%, respectively. Both have increased since then with corn growing by 3.2% and wheat growing by 16%. Acreage for soybeans had increased by 56% between 2012 and 2017 but then dropped by 3.8% between 2017 and 2022.

Table 7.5: Major Agronomic Crops, Door County

Crop (acres)	1987	1992	1997	2002	2007	2012	2017	2022
Corn (grain)	12,179	11,769	12,006	12,864	16,910	17,848	15,371	15,857
Corn (silage)	7,283	9,917	6,997	6,366	7,167	8,041	9,314	8,224
Forage	49,384	43,064	36,225	27,779	26,383	22,819	25,197	20,500
Oats	16,373	11,489	7,900	5,388	3,669	2,993	2,610	2,566
Soybeans	326	1,213	2,756	8,764	8,866	10,757	16,790	16,154
Wheat (all)	2,112	3,147	6,094	8,121	12,013	12,389	8,790	10,201
Total	**87,657**	**80,599**	**71,978**	**69,282**	**75,008**	**74,847**	**78,072**	**73,502**

Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

FRUIT CROPS

Door County produces several fruit crops on nearly 1,939 orchard acres, with a long-standing tradition and reputation for tart cherries. The cooling effects of Green Bay and Lake Michigan result in the delay of spring, which slows down the budburst of cherries, thereby reducing the potential for frost damage to blossoms. While Door County produces the highest number of tart cherries of any county in Wisconsin by far, both the acreage and number of farms producing cherries are in decline.

In the mid-1940s, there were roughly 700 cherry growers in the county. By 2007, however, there were only 60 farms producing tart cherries on 2,516 acres. In 2017, only 24 tart cherry farms remained on 1,945 acres, a decline of nearly 20% from 2012. (See Table 7.6.) The number of farms that produce tart cherries, however, increased by three (1.3%) between 2017 and 2022.

The production of sweet cherries had grown overall between 1987 and 2012, from 17 farms and 49 acres in 1987 to 28 farms and 87 acres in 2012. Between 2012 and 2017, however, there has been a large drop to only 8 farms producing sweet cherries, on 46 acres (-47%). Then, between 2017 and 2022, the number of sweet cherry farms increased by 10 (125%) and the number of acres increased by 10 (22%).

Table 7.6: Tart and Sweet Cherries, Door County

Type	#	1987	1992	1997	2002	2007	2012	2017	2022
Tart	Farms	134	124	90	65	60	53	24	27
	Acres	3,622	3,113	2,638	2,249	2,516	2,429	1,945	1,883
Sweet	Farms	17	13	24	22	27	28	8	18
	Acres	49	24	30	46	54	87	46	56

Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

In 1992, there were 93 apple farms with 1,274 acres; in 2017 there were only 53 apple farms with 410 acres. Perhaps mitigating these losses are two newer hybrids, the SweeTango® and

Honeycrisp. The main apple varieties grown in Door County include Honeycrisp, Cortland, McIntosh, and Zestar.

A number of minor fruit crops are also produced in Door County, including raspberries, strawberries, and grapes. (See Table 7.7.) More discussion on grape growing, wineries, and the Wisconsin Ledge Viticultural Area can be found in the next section. Other orchard fruit grown in Door County include apricots, peaches, pears, and plums.

Table 7.7: Raspberries, Strawberries, and Grapes, Door County

Crop	#	1987	1992	1997	2002	2007	2012	2017	2022
Raspberries	Farms	11	13	17	16	20	18	18	19
	Acres	ND	13	12	ND	14	12	5	10
Strawberries	Farms	6	11	20	13	15	9	10	10
	Acres	8	16	27	ND	21	13	14	7
Grapes	Farms	ND	3	4	12	11	17	19	26
	Acres	ND	ND	ND	20	56	78	40	63

Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

ND = No Data.

VEGETABLE CROPS

According to UW-Extension Door County, snap beans and green peas do well in Door County because of its well-drained soils and cool summers. Between 1992 and 2002, the production of snap beans in Door County grew from 1,263 acres to 3,476 acres, but the 2017 Census showed that production had significantly declined, a decrease of 52% in 15 years. In 2012, there were 3,316 acres of snap beans; in 2017, there were only 1,660 acres. (See Table 7.8.) A slight increase occurred between 2017 and 2022 when the number of farms went up by one and the number of acres went up by 65 (3.9%).

From 1987 to 2002, the production of green peas doubled, but fell to 4,614 acres in 2012 and experienced a steep drop by 2017, with only 5 acres producing green peas. The 2022 Census shows those numbers dropped even further, with the number of farms decreasing by eight and the number of acres decreasing by three.

Table 7.8: Snap Beans, Green Peas, and Beets, Door County

Crop	#	1987	1992	1997	2002	2007	2012	2017	2022
Snap Beans	Farms	41	25	29	51	46	46	38	39
	Acres	2,065	1,263	1,806	3,476	3,441	3,316	1,660	1,725
Green Peas	Farms	49	42	56	84	48	70	18	8
	Acres	2,247	1,777	2,480	5,517	3,735	4,614	5	2

Source: USDA Census of Agriculture, National Agricultural Statistical Survey, for the years cited.

SUSTAINABLE, ORGANIC, AND LOCAL AGRICULTURE

In general, the terms sustainable, organic, and local agriculture mean the following:

- Sustainable agriculture is the practice of farming which seeks to optimize skills and technology to achieve long-term stability of the agricultural enterprise, environmental protection, and consumer safety.
- Organic means crops grown without artificial pesticides, fertilizers, GMOs, irradiation, or sewage sludge, and animals raised without hormones or antibiotics. Certified Organic methods follow specific rules established by USDA.
- Local means foods grown or raised within a given radius that can range from a few miles to hundreds of miles.

The US Congress addressed sustainable agriculture in a 1990 Farm Bill, defining the term as an integrated system of plant and animal production practices having a site-specific application that will, over the long term:

- Satisfy human food and fiber needs;
- Enhance environmental quality and the natural resource base upon which the agricultural economy depends;
- Make the most efficient use of nonrenewable resources and on-farm resources and integrate, where appropriate, natural biological cycles and controls;
- Sustain the economic viability of farm operations; and
- Enhance the quality of life for farmers and society as a whole.

Today, sustainable farming practices commonly include:

- Use of biological control, crop rations, and other techniques to manage weeds, insects, and diseases.
- An emphasis on biodiversity of the agricultural system and the surrounding environment.
- Use of rotational grazing and mixed forage pastures for livestock operations and alternative health care for animal wellbeing.
- Reduction of external and off-farm inputs and elimination of synthetic pesticides and fertilizers and other materials, such as hormones and antibiotics.
- Awareness and use of fair labor practices and worker treatment.
- A focus on renewable resources, soil and water conservation, and management practices that restore, maintain, and enhance ecological balance.

While no agency reports on the sustainability of agricultural operations in Wisconsin, the UW-Extension contains a Wisconsin Sustainable Agriculture Research and Education (SARE) Program which offers information, provides grants, and supports professional development in sustainable agriculture. Additionally, many producers in Door County use a combination of the activities described above, whether they are certified organic or not. The USDA National Organic Program is explained in more detail below, as well as figures on organic production in the county. Grass farming taking place in the county is also discussed below, since it is a well-known example of a sustainable agricultural technique.

USDA National Organic Program

Organic farming was the original type of agriculture and was practiced for thousands of years until it was virtually wiped out after the industrial revolution. Its practice involves many sustainable farming techniques such as crop rotation, composting, and biological pest control. Organic farming was formally recognized by the US under the 1990 Organic Foods Production Act, which outlines the principal guidelines for organic production as the use of materials and practice that enhance the ecological balance of natural systems and that integrate the parts of farming system into an ecological whole. Accordingly, the primary goal of organic agriculture, as defined under the 1990 Farm Bill, is to optimize the health and productivity of interdependent communities of soil life, plants, animals, and people.

The USDA National Organic Program defines organic food as that which is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water of enhance environmental quality for future generations. Organic meat, poultry, eggs, and dairy products come from animals that are given no antibiotics or growth hormones. Organic food is produced without using 1) most conventional pesticides, 2) fertilizers made with synthetic ingredients, or sewage sludge, 3) bioengineering, or 4) ionizing radiation.

Products certified as organic under the USDA organic certification program may have the term "organic" on their labels. Before a product can be certified "organic," a government-approved certifier inspects the farm where the food is grown to make sure the farmer is following all the rules necessary to meet USDA organic standards. Organic agriculture practices cannot ensure that products are completely free of synthetic residues, but methods are used to minimize cross-pollution via air, soil, and water. Organic food handlers, processors, and retailers adhere to standards that maintain the integrity to organic agricultural products. Note that not all farmers practicing organic farming techniques choose to become certified due to the cost and rigorous certification requirements.

According to the 2022 Census of Agriculture, Door County had 5 farms that sold organic products with a market value of $1.4 million. The 2017 Census showed that Door County had 10 certified organic farms selling a market value of $1.7 million. For information on organic farms and local producers in Door County, contact the UW-Extension office listed in the Resources and Further Information section at the end of this chapter.

Grass Farming

The USDA defines grass farming and grass-based farming as agricultural production that relies on pasture or rangeland to supply the protein and energy requirements of livestock. Grazing and forage feeding replaces high grain diets, close confinement, and feedlot-finishing during most or all of an animal's lifetime. The producer focuses on pasture plant and soil management, and proper stocking density and rotational grazing. Pasture-based animal agriculture promotes environmental stewardship and community development owing to certain sustainable management practices.

According to the USDA, there are two types of grass-based products: grass-fed animals fed solely on grass and hay, and grass-finished animals pastured long enough to create intermuscular marbling, but which have also been fed non-grass food. One farm in Door County has been certified by the non-profit organization Eat Wild as meeting their criteria for grass-fed products, Narrow Gate Farm, which is located in the Town of Liberty Grove and produces grass-fed beef, chicken, turkey, pork, and eggs. Additionally, Waseda Farms is a certified organic farm located in the Town of Jacksonport.

AGRICULTURAL TOURISM

FARM-TO-TABLE

Farm-to-table is a social movement which promotes serving fresh, locally sourced foods at your table, in restaurants, or school cafeterias. The movement has been growing over the last two decades, and Door County's agricultural landscape allows its residents to utilize the farm-to-table movement as a draw for tourists to dine in the county. This section highlights various farm-to-table initiatives and partnerships that are currently taking place in Door County.

- *Door County Underground*. Door County Underground brings chefs, farmers, makers, and the many ranges of local craftspeople together through food and dining experiences. The chefs co-host signature "Farm Dinners" with local farms the first Saturday and Sunday every month, May to December, with local and seasonal menus, which feature ingredients grown by Door County Underground and local gardeners and farmers on the peninsula. Reserved seats for the Farm Dinners are available for sale on their website, which can be found in the Resource and Further Information Section of this chapter.
- *Restaurant Supported Agriculture.* Restaurant Supported Agriculture (RSA) is a similar concept to Community Supported Agriculture (CSA). RSA allows farmers to create a better cash flow by having restaurants pre-pay a portion of their fees. This way farmers receive upfront payments to create better efficiencies on their farms, and restaurants gain a steady supply of products at a better cost. Door County's restaurant scene is thriving with over 2 million visitors annually and loyal local communities. The following farms (and more) participate in RSA in the county:
    - *Hidden Acres Farm*. Hidden Acres Farm, located in the Village of Sister Bay, has a mission to build a community around local, healthy food. Hidden Acres Farm provides a local source of produce to various restaurants throughout the county.
    - *Waseda Farms*. Waseda Farms is a certified organic farm in the Town of Baileys Harbor, specializing in meat and eggs, and provides several Door County establishments with these products.

  The following establishments (and more) participate in RSA in the county:
    - *Waterfront* – Village of Sister Bay
    - *Blue Bear* – Ellison Bay (Town of Liberty Grove)

  - *Della Porta* – Ellison Bay (Town of Liberty Grove)
  - *Door County Underground* – Door County
  - *Ohana Hospitality* – Village of Sister Bay
  - *Roots Inn and Kitchen* – Village of Sister Bay
  - *Osteria Tre Tassi* – Ellison Bay (Town of Liberty Grove)
  - *The Fashionable* – Village of Ephraim
  - *Hotel Washington* – Washington Island
  - *Shoreline Restaurant* – Gills Rock (Town of Liberty Grove)
  - *Pearl Wine Cottage* – Village of Ephraim
  - *Door County Creamery* – Village of Sister Bay
- *Farm-to-School*. The Gibraltar School District (GSD) participates in the USDA Farm to School Program. This program helps schools to incorporate nutritious, local foods in its school lunch program, as well as associated programs such as summer food services and child and adult care food programs. Since 2012, GSD has bought and served local, organic beef, and has continued to grow its use of local produce and other foods in its school meals.

"PICK-YOUR-OWN" EXPERIENCES

Pick-your-own farms and orchards mean a system in which commercially grown fruit or vegetables are picked by the customer for purchase at the place of production. The following establishments in Door County have pick-your-own offerings, mainly for cherries and apples:

- Alexander's Cherry Orchard (Town of Brussels)
- Cherry Lane Orchards (Town of Forestville)
- Choice Orchards (Town of Sevastopol)
- Door County Fruit Connection (Town of Egg Harbor)
- Hyline Orchard (Town of Gibraltar)
- Kielar Akers Orchard (Town of Forestville)
- Lautenbach's Orchard (Town of Gibraltar)
- Meleddy Cherry Orchard (Town of Forestville)
- Paradise Farms Orchard (Town of Brussels)
- Robertson Orchards (Town of Sturgeon Bay)
- Schartner's Farm Market (Town of Egg Harbor)
- Seaquist Orchard (Town of Liberty Grove)
- Soren's Valhalla Orchards (Town of Forestville)

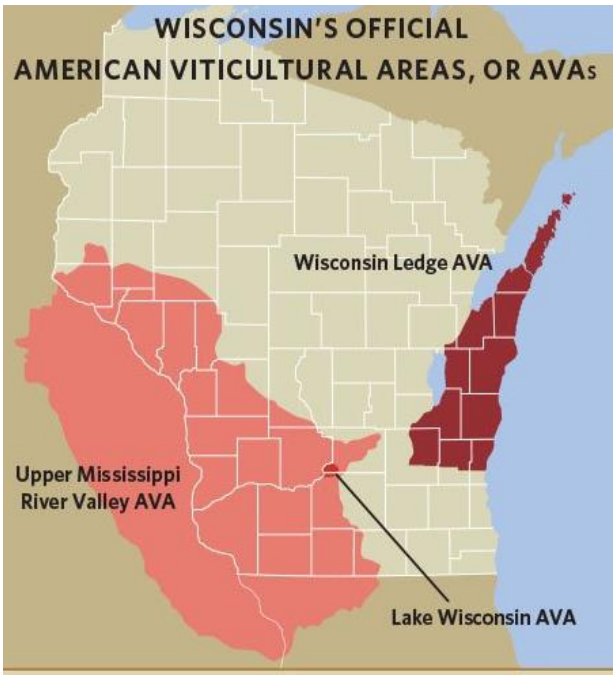
"WISCONSIN LEDGE" VITICULTURAL AREA

In 2012, the Alcohol and Tobacco Tax and Trade Bureau (ATTB) approved an application proposing to establish an approximately 3,800 square mile viticultural area in northeast Wisconsin, including all of Door County, called the "Wisconsin Ledge" (see Figure 7.7).

Viticultural areas are designated by the ATTB t o allow vintners to better describe the origin of their wines and to allow potential consumers better identification. Petitions to become a viticultural area are rigorous in that every claim in the application has to have substantial documentation backing it up. Approximately 198 viticultural areas now exist in the United States, with the majority of them in California. Only two other viticultural areas are designated in Wisconsin, called "Lake Wisconsin" and "Upper Mississippi River Valley," located in the south-central and southwest parts of the state, respectively.

The Wisconsin Ledge application included over 200 pages of factual data relating to geography, climate, soils, hydrology, and distinguishing features, as substantiated by numerous scientists and experts. The geography of the area includes most of the Wisconsin portion of the Niagara Escarpment ridgeline, the highest elevations of the broader cuesta landform. The northernmost portion of the area lies at the tip of Door County, the southern-most portion lies in Dodge County and the western-most portion lies in Fond du Lac County. The area forms a general triangle shape, varying in width from 750 miles and extending 172 miles from north to south. It includes nearly 2.5 million acres, crossing 11 counties. The area has grown significantly over the past decade is now home to 44 wineries growing cool-climate, American hybrid grape varieties, such as Frontenac, Niagara, and Marechal Foch.

Figure 7.7: Wisconsin AVAs



Source: Madison Isthmus, 2019.

Underlying the Wisconsin Ledge viticultural area is the Eastern Dolomite Aquifer, consisting of dolomitic limestone and porous karst features that enhance the delivery and availability of water and nutrients to grapevines. This aquifer maintains a constant temperature of 50 degrees Fahrenheit, which keeps the soils at more consistent temperatures. Soils in the Wisconsin Ledge viticultural area were deposited by glacial drift and consist of unsorted till and thin layers of stratified gravel, sand, and clay. In addition to well-suited soils, marine influences from Lake Michigan, Lake Winnebago, and Green Bay create a generally longer and warmer growing season that averages three weeks longer than nearby areas, resulting in additional time for grapes to reach maturity before harvesting.

DOOR COUNTY WINE TRAIL

There are nine wineries participating in the Door County Wine Trail, including von Stiehl winery in Algoma (Kewaunee County). Below is a list of the eight wineries located in Door County.

These wineries offer cherry and other fruit wines, cold-hardy grape varietals produced on-site, and wines made off-site. Most offer tours and tastings.

- Door 44 Winery (City of Sturgeon Bay)
- Door Peninsula Winery/Door County Distillery (Carlsville, Town of Egg Harbor)
- Harbor Ridge Winery (Town of Egg Harbor)
- Anchored Roots Winery & Vineyard (Town of Egg Harbor)
- Orchard Country Winery (Town of Gibraltar)
- Red Oak Vineyard (Town of Egg Harbor)
- Simon Creek Vineyard & Winery (Town of Jacksonport)
- Stone's Throw Winery (Town of Baileys Harbor)

BREWERIES/DISTILLERIES/CIDERIES

There are various breweries, distilleries, and cideries located in Door County, all using or planning to begin using locally grown products in the production process.

- Shipwrecked Brew Pub (Town of Egg Harbor)
- Bridge Up Brewing Company (City of Sturgeon Bay)
- Door Peninsula Winery/Door County Distillery (Carlsville, Town of Egg Harbor)
- Island Orchard Cider (Town of Liberty Grove)
- One Barrel Brewing Company (Town of Egg Harbor)
- Peach Barn Farm House & Brewery (Village of Sister Bay)
- Door County Brewing Company (Town of Baileys Harbor)
- Hatch Distilling Company (Town of Egg Harbor)
- Starboard Brewing Company (City of Sturgeon Bay)
- Sway in Baileys Harbor

In addition, over 1,200 acres of certified organic wheat grown annually on Washington Island is shipped to Madison, Wisconsin where it is made into beer and spirits (Death's Door Spirits).

TRENDS IN CONVERSION OF AGRICULTURAL LAND TO OTHER USES AND HOUSING DEVELOPMENT

Trend in Conversion of Agricultural Land to Other Uses

According to the Real Property Listing database, the total acreage of assessed agricultural land in Door County declined by 10,517, approximately 9%, between 200 and 2020. For the same timeframe, the total acreage of assessed undeveloped land increased by 8,736 acres (~39%). It is likely that the large majority of the 10,517 acres previously assessed as agricultural became "undeveloped," if a fallow field, or converted to DNR forest crop land, in order to take advantage of lower taxes. See pp. 283 – 284, Chapter 10, Land Use, Volume II for more detailed information on agricultural and undeveloped assessment categories.

Trend in Housing Development as Related to Agriculture

Also according to the Real Property Listing database, the total assessed residential acreage in the county decreased by 8,623, approximately 13%, between 2000 and 2020. It is likely that many of the 8,623 residential acres "lost" during this timeframe were enrolled in the DNR Managed Forest Law program in order to take advantage of lower taxes.

While the acreage of residentially assessed land has gone down, the number of housing units county-wide increased between 2000 and 2020. All three sub-areas of the county saw a growth in the number of housing units, as shown below in Table X.x. All three sub-areas also lost acreage of agriculturally assessed land. Some of this loss in agriculturally assessed land can be attributed to housing growth, however, both Northern Door and Central Door also lost acreage of residentially assessed land. Again, this is likely due to land being enrolled in the DNR Managed Forest Law program in order to take advantage of lower taxes.

Northern Door lost the highest percentage of acres of residentially assessed land at -17% but lost the lowest percentage of acres of agriculturally assessed land at -1.0%. Central Door lost the second highest percentage of acres of residentially assessed land at -8.0% and the second highest percentage of acres of agriculturally assessed land at -10.0%. Southern Door was the only area to experience growth in both housing units and residentially assessed land while also losing acreage of agriculturally assessed land. Southern Door lost the highest percentage of acres of agriculturally assessed land at -13.0% while also seeing the only positive percentage growth in acres of residentially assessed land at 25%. This indicates that Southern Door may be converting to housing at a faster rate than the other two areas of the county.

	% Change 2000 - 2020		
Sub-areas	**#HU**	**Ac. Of Res. Ass'd**	**Ac. Ag. Ass'd**
Northern Door	34.8%	-17.0%	-1.0%
Central Door	22.2%	-8.0%	-10.0%

Southern Door	19.3%	25.0%	-13.0%

TRENDS IN DEMOGRAPHICS OF AGRICULTURAL PRODUCERS

According to the USDA National Agricultural Statistics Survey, the majority of principal agricultural producers in Door County are white. Just under 2% of principal producers identify as American Indian or Alaskan Native, followed by Latinx, 0.8%, and Asian, 0.3%. There are no Black principal producers in the county. Just over 6% of principal agricultural producers are classified as "young producers," defined by the USDA as 35 years of age or younger. Over one-third (37%) of principal agricultural producers in the county are female.

ANTICIPATED CHANGES IN THE NATURE, SCOPE, LOCATION, AND FOCUS OF AGRICULTURAL PRODUCTION, PROCESSING, SUPPLY, AND DISTRIBUTION

The overall decrease of agriculture in the county has been typical in Northern Door County, however, now the trend seems to be affecting Central Door as well. Central Door was the only sub-area of the county that experienced growth in the number of seasonal units between 2010 and 2020, increasing by 11.4% between those years. Central Door also had the second highest median and average inland home sale price in 2021. See Chapter 4, Housing Characteristics for more information about housing trends.

Municipal expansion has not occurred in the county in over at least the past 20 years. None of the City or Village comprehensive plans target specific areas for annexation, however, some plans do mention annexation as a possibility in the event more land supply is needed. Any potential conflicts in the event of annexation is discussed on pp. 40 – 41, Chapter 8, Land Use, Volume II.

Regarding production, agricultural specialties will likely continue to be milk, grain, nursery & greenhouse, fruits and berries, and cattle and calves. Southern Door will likely continue to be the center of this activity as that is where the large producers are located and much of the area is zoned for agriculture in the Towns of Forestville and Clay Banks. Regarding processing, supply, and distribution, the County does not anticipate significant changes.

KEY LAND USE ISSUES AND OPPORTUNITIES

The key land use issues, opportunities, goals, and policies related to agriculture are listed below, verbatim from Chapter 11, Implementation, Volume I, Vision and Goals.

ISSUES

1. ***General agricultural issues:***
    a. ***Consolidation and downsizing of farms***
        i. ***Increasing input and operation costs***
        ii. ***Aging population; younger generation of farmers cannot take over all work***
    b. ***Land impacts from agricultural operations and practices that are not environmentally sound***
        i. ***Lack of nutrient management implementation and enforcement***
        ii. ***Use of pesticides and fertilizers***
    c. ***Industrialized farming makes it hard for small farmers and producers to be suppliers for most grocery stores and restaurants; small farms can't compete with larger "factory" farms***
    d. ***Lack of knowledge and education about agricultural communities and practices, leading to a decrease in agricultural preservation and the redevelopment of agricultural lands***
    e. ***Regulatory issues – forestry uses vs. agricultural production, etc.***

OPPORTUNITIES

1. ***Sustainable agricultural practices and operations are becoming more mainstream among farmers.***
2. ***Ecotourism, agritourism, and geo-tourism capitalize on the County's natural resources*** *and agricultural character and support the local economy*
    a. *Ecosystem services such as outdoor recreation are major draws to the County*
    b. ***Agribusinesses – orchards, vineyards, farms – opening operations to the public for educational and interactive experiences***
3. *Habitat, natural feature, and agricultural land restoration and protection*
    a. *Preservation through land conservation easements and trust purchases*
    b. *Endangered species and natural resource protection efforts pursued by various community organizations and non-profits*
    c. *State and regional programs to maintain agricultural lands and preserve natural resources*
    d. *Increase in public awareness and educational opportunities around sustainability*
4. *Implementation of and improvement to infrastructure for stormwater, coastal erosion, and renewable energy*

GOALS AND POLICIES

Chapter 11, Implementation in Volume I, Vision and Goals includes the complete set of goals, policies and action items for this Plan. Listed below are just the goals, policies, and action items

specific to agriculture and housing. Goal 3 is geared towards promoting agricultural development and Goal 6 broadly discusses housing, economic development, and agricultural preservation. The items specific to agriculture and housing density are shown in **bold**.

GOAL 3. Protect existing agriculture and promote sustainable agricultural innovations, operations, and techniques, providing local food sources to serve present and future generations.

Objectives

1. *Coordinate with county municipalities to develop plans, ordinances, and programs to protect existing agricultural areas and encourage further agricultural uses*
2. *Minimize conflicts between agricultural and non-agricultural uses by supporting a compact land use pattern that directs future development to smaller, less productive land parcels*
3. *Develop zoning policies and other programs that encourage local and small specialty farming operations and help grow the County's agribusiness sector*
4. *Support sustainable agricultural practices that improve the health of soils, protect water quality, and expand local food source options*

Policies

Time Frame: Ongoing

1. *Research and pursue incentives to retain the most protective farmland – as determined by factors such as soil type – in agricultural use*
    a. *Promote best management in agricultural practices, such as limiting pesticide use, crop rotation, and soil and water conservation techniques*
2. *Perform cost/benefit analyses on all future agricultural land conversion proposals*

Time Frame: 1 – 5 Years

3. *Review new development proposals for potential negative impacts on farming and establish mitigation standards for developers*
4. *Develop mandatory buffers/setbacks between farm operations and adjacent developments to minimize conflict*
    a. *Examine zoning maps for high-density residential uses adjacent to agriculture and revise if appropriate*
5. *Support the growth of agribusiness, and promote connections between local food and agriculture producer and consumers*
    a. *Ensure zoning regulations do not impede the establishment of new agricultural uses, the expansion or maintenance of existing operations, or the development of businesses needed to support agriculture*

GOAL 6. Facilitate a diverse variety of quality, year-round and seasonal affordable housing for all income levels for the current and future population, and support economic opportunities that attract and retain residents, particularly young people and their families, to provide an adequate workforce and activate economic growth

Objectives:

1. *Develop and enforce policies and programs that provide a range of affordable, quality housing to meet the needs of citizens of all income levels, age groups, and those with disabilities.*
2. ***Maintain and rehabilitate the existing housing stock while promoting infill (re)development to enhance established neighborhoods and encouraging a mix of housing types in newly developed areas.***
3. ***Promote existing and encourage new housing and commercial/industrial developments that have minimal negative impacts on the environmental and surrounding land uses such as resource protection and agricultural areas.***
4. *Utilize existing and pursue new partnerships between government agencies, local neighborhood associations, nonprofit agencies, and private sector industries to expand county-wide solutions to seasonal and year-round housing challenges, and educate the public on ways they can support housing challenges.*
5. *Invest in the development of new and existing programs, strategies, and resources that diversify and grow the County's economy by retaining and recruiting employers that offer a variety of employment opportunities.*
6. *Expand efforts to provide the County with a skilled workforce by supporting trade and technological education programs, facilitating job training assistance, and creating opportunities to attract skilled workers to the area.*
7. ***Continue to encourage year-round and recreation-based tourism by promoting local, regional, and state-wide marketing efforts that highlight the County's rich cultural, natural, and agricultural resources.***

Policies

Timeframe: Ongoing

1. *Continually monitor local population characteristics as to changing demographics and distribute any relevant information to housing agencies and organizations.*
2. *Identify preferred growth areas to site new businesses that offer access to the community facilities, services, and infrastructure needed to foster economic growth.*
3. *Regularly review zoning regulations to ensure they do not prohibit or excessively restrict desirable economic development opportunities.*

Timeframe: 1 – 5 Years

4. ***Support programs that help maintain and rehabilitate the County's existing housing stock and/or redevelop vacant non-residential buildings into affordable workforce housing.***
5. ***Research and adopt zoning amendments to encourage more affordable, alternative, and denser housing options***

   a. ***Explore reducing minimum lot sizes and allowing more units per lot, particularly to core areas of municipalities***
   b. ***Reduce the reliance on the zoning districts that only allow for single-family residential and incorporate an appropriate level of multi-unit residential in County zoning***
6. *Encourage recruitment of employers in key industries and partner with educational institutions to diversify the economy and create career and workforce development pathways for residents.*
7. *Work with the Door County Economic Development Corporation and County municipalities to further identify economic development targets and promote a vibrant business community.*

RESOURCES AND FURTHER INFORMATION

Alcohol and Tobacco Tax and Trade Bureau (TTBGov - Home)

- **Wisconsin Ledge Viticultural Area (**Federal Register :: Establishment of the Wisconsin Ledge Viticultural Area)

Baileys Harbor Fish Company (Seafood market Baileys Harbor Fish Company LLC United States)

Cloverleaf Farms (Cloverleaf Farms - Cloverleaf Farms (cloverleaffarmsdc.com))

Country Ovens Cherry Processing Factory (Door County Cherry Processing Factory)

Door County Cooperative (Door County Cooperative - We believe in building a better world)

Door County Custom Meats (Door County Custom Meats (dcmeats.com))

Door County Master Gardeners Association, The Garden Door (Door County Master Gardeners Association - Home (dcmga.org))

Door County Quality Market Animal Sale (Door County Quality Market Animal Sale (dcqmas.org))

Door County Real Property Listing (Real Property Listing | Door County, WI)

Door County Seed Library (Welcome to the world of gardening and seed saving! (doorcountyseedlibrary.org))

Door County Underground (Home | DCUnderground (doorcountyunderground.com))

Door Karma Farms (Door Karma Farms Door County Organic Farming | Raising More Than Standards (doorcountyorganicfarms.com))

Emerald Acres Farm (Emerald Acres Farm, LLC - Home)

Gathering Ground (Home - Gathering Ground (gatheringgroundwi.org))

Gibraltar School District (Gibraltar School District / Homepage)

Hidden Acres Farm (Hidden Acres Farm (hiddenacresdoorcounty.com))

- **Beach Road Community Garden (**Community Garden — Hidden Acres Farm (hiddenacresdoorcounty.com))

Lindal Fisheries (Lindal Fisheries - Home | Facebook)

Marchant's Meats, Inc. (Marchant's Meats & Sausage)

North Central Sustainable Agriculture Research and Education (North Central SARE Home - SARE North Central)

Northeast Wisconsin Technical College (Northeast Wisconsin Technical College (nwtc.edu))

Periwinkle Moon Farm (PeriWinkle Moon Farm)

Renard's Cheese (Renard's Cheese Store | Home (renardscheese.com))

Savory Spoon Cooking School (For People Who Are Passionate About Food - Savory Spoon Cooking School)

Seaquist Orchards Tart Cherry Processing Plant (Processing Plant - Seaquist Orchards)

The Community's Garden (Home - The Community's Garden (thecommunitysgarden.com))

Waseda Farms (Organic Grass Fed Beef, Pork, Chicken & Turkey (wasedafarms.com))

Wisconsin Cherry Growers Association (Door County Cherries and Cherry Picking (wisconsincherrygrowers.org))

Wisconsin Department of Agriculture, Trade, and Consumer Protection (DATCP Home Homepage (wi.gov))

University of Wisconsin-Extension, Agriculture (Agriculture – Extension (wisc.edu))

- **Peninsular Agricultural Research Station (**Peninsular Research Station – University of Wisconsin-Madison)

U.S. Department of Agriculture (USDA)

- **Farm to School Program (**Farm to School Grant Program | Food and Nutrition Service (usda.gov))
- **National Agricultural Statistics Service, Census of Agriculture (**USDA - National Agricultural Statistics Service - Census of Agriculture)
- **National Organic Program (**National Organic Program | Agricultural Marketing Service (usda.gov))