Web 57DHYAFZZFLiB March 29 2026 Up to 1 point 2 million trees yearly for Wisconsin Biomass Energy

In this Webisode 0 Up to 1 point 2 million trees burned yearly for Wisconsin Biomass Energy 1 Wisconsin List of biomass wood burning power stations in Wisconsin 2 Wisconsin Renewable Power Stations 3 Wisconsin Wind Power Stations 4 Wisconsin Solar Power Stations 5 Wisconsin When trees are cut down in Wisconsin how much wood is burned in Wisconsin biomass power plants? 6 Wisconsin When trees are cut down in Wisconsin how much wood is burned for home heating or home cooking? 7 Wisconsin Appleton Wisconsin does not make as much printing and for writing paper as it used to Here is why a few local mills still do 8 What is the history of the paper industry in Wisconsin since 1848? 9 The lumber industry in Wisconsin since 1848 has produced a variety of products including 10 What farming methods have been used since Wisconsin Statehood in 1848? 11 Wisconsin Windicator Newsletter Windicators Wisconsin Farming Insights from the 2022 Census of Agriculture Main Content

0 RAWSEP View Up to 1 point 2 million trees burned yearly for Wisconsin Biomass Industry Energy Production How long could it take to replace this dirty energy with the clean energy sources of wind solar and geothermal with this clean renewable energy reliably stored on batteries for emergencies and this energy available through a smart electric grid to all rural areas of Wisconsin in order to power clean home heating though Heat Pumps that work down to 40 degrees below zero and double as Air Conditioners? Looking at solutions to the air pollution from indoor residential wood burning and from biomass burning in Wisconsin what is the future of trees as a commodity in Wisconsin if not for wood burning for home heating or cooking or wood burning for biomass energy? Are living trees still needed as a carbon sink and to produce Oxygen through photosynthesis? Are trees still needed for paper making industries in Wisconsin? Yes. Are trees still needed for nut and berry production on farms in Wisconsin? Yes. Are trees still being cut down for Biomass Burning in industries in Wisconsin? Yes. How much cord wood is used for Biomass Burning in Wisconsin? Approximately 2 hundred thousand cords. How many average size trees is 2 hundred cords? Are Wisconsin farmers generally dependent on growing trees outside of the niche market of Christmas Tree Farms? Should Christmas Tree Farms continue to produce highly disposable products used only one day of the year when there are alternatives such as artificial trees? No to the first question. Wisconsin Farmers are not financially dependent on growing trees for and not dependent financially from selling Christmas Trees to any great extent No to the second question Artificial trees should be used one day a year and use of live trees cut down for a short term purpose should not be a tradition that should continue Christmas trees that end up as logs used for indoor wood burning should not be used Both the tradition of live Christmas trees cut down and wood burning used in modern homes are modern hobbies that are not needed and that needlessly pollute the air at a time when everyone is now aware of the adverse health effects of wood burning from experiencing the air pollution from wildfire smoke that can travel hundreds of miles and arrive in the yards of neighbors near and far emitting PM 2 point five which produces adverse health effects ranging from cancer to heart attacks and longer term can lead to early deaths Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization How much PM 2 point 5 is emitted when burning 200 thousand cords of wood? The answer from Artificial Intelligence uses calculations based on EPA certified stoves EPA certification of stoves is questionable The United Kingdom estimates that their EcoDesign Wood Burning Stoves the cleanest burning wood stoves in the UK emit 450 times the PM 2 point 5 as natural gas burning and those EcoDesign stoves emits 2 point 8 times as much PM 2 point 5 and CO2 as the fossil fuel coal burning The difference is that wood is designated as a renewable although it is a dirty renewable and coal is a fossil fuel of which there is a finite supply In the era of the close of the Strait of Hormuz it is more imperative than ever that the United States and the World quickly transition to the clean renewables of Wind Solar and Geothermal for home heating and cooking and charging electric cars and for all other ways we now use fossil fuels In this emergency it only adds problems to turn for human health and hastening climate change to turn to burning more wood AI Overview Final Answer after calculations below Burning hundred thousand cords of wood a year emits between 4 thousand and 10 thousand tons of PM 2 point 5 with a likely average of approximately 6 point 5 thousand tons of PM 2 point 5 for a typical mix of residential heating equipment Based on estimates that a single cord of wood typically requires roughly 4 to 6 average-sized

trees 2 hundred thousand cords of wood would equal approximately 8 hundred thousand to 1 point 2 million trees This figure depends on tree size species and whether branches are used Average Trees per Cord Generally, 4 decently sized trees can make one cord Total Calculation Density Factors Smaller trees require more while larger mature trees for instance 30 inch diameter can yield 1 to 2 cords per tree Therefore for an average sized tree roughly 1 million trees is a reasonable estimate for 2 hundred thousand cords of wood AI Overview The total amount of fine particulate matter PM 2 point 5 emitted from burning hundred thousand cords of wood is approximately 6 thousand 5 hundred to 14 thousand tons depending on the efficiency of the wood stoves or fireplaces used. Key Data Points for Calculation To calculate the total emissions, we must establish standard weights and emission factors EF Weight of 1 Cord of Wood A cord of seasoned hardwood typically weighs approximately 1 point 5 to 2 tons roughly 3 thousand to 4 thousand pounds Emission Factors Uncertified or Old Stoves Approximately 14 point 6 grams per kilogram of wood roughly 29 point 2 pounds per ton EPA Certified Non Catalytic Stoves Approximately 8 point 98 grams per kilogram roughly 18 pounds per ton EPA Certified Catalytic Stoves Approximately 3 point 38 grams per kilogram roughly 6 point 8 pounds per ton Open Fireplaces or Pits Can range significantly but often average 23 point 6 pounds per ton. Step-by-Step Calculation Averaged Convert Cords to Tons Apply Emission Factors Scenario A Old Stoves or Fireplaces At an average of 40 pounds of per cord common estimate for mixed older equipment the total is Scenario B Standard Mix Using the EPA recreational factor of 23 point 6 pounds per ton Scenario C High-Emission Uncertified Using 14 point 6 grams per kilogram approximately 29 point 2 pounds per ton Summary of Impact Total Estimated Emissions Between 4 thousand and 10 thousand plus tons of PM 2 point 5 Comparative Context: For perspective, 2 hundred thousand cords of wood burned in residential settings can contribute significantly more than the annual exhaust from hundreds of thousands of cars in the same region. Residential wood burning is estimated to contribute nearly 22 percent of winter pollution in the contiguous US. Answer Burning 2 hundred thousand cords of wood emits between 4 thousand and 10 thousand tons of with a likely average of approximately 6,500 tons for a typical mix of residential heating equipment.

1 Wisconsin List of biomass wood burning power stations in Wisconsin Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Wikipedia as of March 29 2026 This is a list of electricity generating power stations in the US state of Wisconsin sorted by type and name In 2024 Wisconsin had a total summer capacity of 17 point 4 GW through all of its power plants and a net generation of 65 thousand 276 GigaWatt Hour The electrical energy generation mix in 2025 was 35 point 6 percent natural gas 35 percent coal 15 point 3 percent nuclear 6 percent solar 3 point 3 percent hydroelectric 2 point 9 percent wind 1 point 8 percent biomass including refuse derived fuel 0 point 1 percent petroleum and less than 0 point 1 percent other

2 Wisconsin Renewable power stations Wisconsin wind power map Data from the US Energy Information Administration serves as a general reference Renew Wisconsin maintains additional data on Wisconsin renewable generation resources RAWSEP View this includes polluting renewables such as wood burning also called Biomass Burning

Biomass and refuse

Name	Location	Capacity MW	Fuel type	Year opened
Ameresco Janesville	Rock County	3 point 0	landfill gas	2004
Bay Front Plant	Ashland County	47 point 0	Wood and wood waste and cofired with natural gas	1952

Name	Location	Capacity MW	Fuel type	Year opened
Berlin Landfill	Green Lake County	2 point 4	landfill gas	2001
Dairyland WTE Plant	Brown County	1 point 4	biogas	2012
Dane Community Digester	Dane County	2 point 0	biogas	2011
Deertrack Park Landfill	Jefferson County	6 point 4	landfill gas	2006 2007
FCPC Renewable Generation	Milwaukee County	2 point 0	biogas	2013
Fiber Recovery Landfill	Marathon County	2 point 4	landfill gas	2008
Flambeau River Papers	Price County	5 point 7	wood wood waste	1982
French Island Generating Plant	La Crosse County	16 point 0	wood wood waste refuse	1940 1948
GL Dairy Biogas	Dane County	2 point 0	biogas	2013
Green Whey Energy	Polk County	3 point 2	biogas	2013
Holsum Dairy	Calumet County	2 point 2	biogas	2001 2006
Kaukauna Paper Mill	Outagamie County	32 point 6	wood wood waste	1951 1962 1977
Manitowoc Power Plant	Manitowoc County	44 point 0	wood wood waste	1955 1962
Metro Landfill GR	Milwaukee County	3 point 2	landfill gas	2 thousand
Mosinee Mill	Marathon County	48 point 0	wood wood waste	1951 1976
MMSD Wastewater	Milwaukee County	5 point 0	biogas	2000 2009 2010

Name	Location	Capacity MW	Fuel type	Year opened
Nekoosa Paper Mill	Wood County	12 point 5	wood wood waste	1991
Outagamie Landfill Cogen	Outagamie County	6 point 4	landfill gas	2007 2016
Pheasant Run Landfill GR	Kenosha County	8 point 8	landfill gas	1992 1996 2000 2002
Richland Center	Richland County	1 point 6	biogas	2013
Ridgeview Landfill GR	Manitowoc County	6 point 4	landfill gas	2002 2006
Rothschild Biomass Cogen Facility	Marathon County	46 point 1	wood wood waste	2013
Timberline Trail Landfill GR	Rusk County	4 point 0	landfill gas	2006
Winnebago Landfill GR	Winnebago County	3 point 9	landfill gas	2000 2007 2010 2019
Wisconsin Rapids Pulp Mill	Wood County	64 point 7	wood wood waste	1968 1991

3 Wisconsin Wind Power Stations

Wind

See also Wind power in Wisconsin

Project name	Location	Capacity MW	Year opened
Blue Sky Green Field Wind Energy Center	Towns of Marshfield and Calumet in Fond du Lac County	145	2008
Butler Ridge Wind Energy Center	Dodge County	54	2009
Cashton Greens Wind Farm	Cashton Wisconsin at the Organic Valley corporate headquarters	5 point 0	2012
Cedar Ridge Wind Farm	Towns of Eden and Empire in Fond du Lac County	68	2008

Project name	Location	Capacity MW	Year opened
Forward Wind Energy Center	Near Brownsville Wisconsin in Dodge and Fond du Lac Counties	129	2008
Galactic Wind Farm	Near Waunakee Wisconsin in Dane County	10	2012
Glacier Hills Wind Park	Towns of Randolph and Scott in Columbia County	162	2011
Monfort Wind Energy Center	Town of Eden in Iowa County Wisconsin	30	2002
Quilt Block Wind Farm	Lafayette County	98	2017
Rosiere Wind Farm	Towns of Lincoln and Red River in Kewaunee County	11	1999
Shirley Windpower	Brown County	20	2010

4 Wisconsin Solar Power Stations
Solar

Project name	Location	Capacity MW_{AC}	Year opened
Arcadia Solar	Trempealeau County	5 point 0	2019
Cashton Solar	Monroe County	2 point 0	2019
Cumberland Solar	Barron County	2 point 5	2019
Eau Claire Solar Garden	Eau Claire County	1 point 0	2018
Fennimore Solar	Grant County	3 point 0	2019
Flambeau Solar	Price County	2 point 5	2017
Hodag Solar	Oneida County	7 point 5	2022
Medford DPC Solar	Taylor County	2 point 0	2017
New Auburn DPC Solar	Chippewa County	2 point 5	2018
New Lisbon Solar	Juneau County	2 point 5	2019

Project name	Location	Capacity MW$_{AC}$	Year opened
Rock River Solar	Rock County	2 point 1	2016
Strix Solar	Dane County	6	2025
Two Creeks Solar Park	Manitowoc County	150	2020
Tyto Solar	Dane County	6	2024
Warren DPC Solar	St Croix County	2 point 2	2017

5 Wisconsin When trees are cut down in Wisconsin how much wood is burned in Wisconsin biomass power plants? Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization University of Wisconsin Madison As of March 29 2026 Two hundred thousand cords In Wisconsin approximately two hundred thousand cords of wood are burned annually as biomass fuel which contributes to about 1 point 5 percent of the energy used in the United States This wood primarily comes from forestry operations and is used in various energy production facilities 6 Wisconsin When trees are cut down in Wisconsin how much wood is burned for home heating or home cooking? Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Wisconsin dot gov and the US Energy Information Administration EIA as of March 29 2026 Wood and wood derived materials are used in as many as ten thousand products and they are a renewable resource when harvested sustainably Burning waste wood for fuel eliminates having to put it in landfills which is a significant environmental benefit In Wisconsin the amount of wood burned for home heating or cooking varies significantly According to the University of Wisconsin Madison Extension Forestry about two thirds of the forested land in Wisconsin is productive enough to grow commercially valuable trees The forest products industry consumes almost two thirds of all fuel wood and nearly twenty percent of US homes get some heat from burning wood The US Energy Information Administration EIA reports that in 2023 about 2 point 1 percent of US annual total energy consumption was from wood and wood waste with the industrial sector accounting for about 64 percent of total US consumption of wood and wood waste

7 Wisconsin Appleton Wisconsin does not make as much printing and writing paper as it used to Here is why a few local mills still do Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Appleton Post Crescent March 22 2023 There are not as many companies as there used to be that make the kind of paper you would find in a copier at an office In Wisconsin alone there are only a few paper mills that still produce printing and writing grade paper and some of them are focused on niche products Over the last couple of decades there has been a general decline in printing and writing papers in an increasingly digital age As a result some companies have chosen to idle machines or change what they make turning to more promising segments of the paper industry such as packaging and corrugated boxes These trends have occurred across North America but Wisconsin is one of the states that has really felt the effects Then came the COVID 19 pandemic At first demand for printing and writing paper continued to slide downhill But by 2021 it actually saw an uptick and paper shortages followed The paper frenzy appears to have calmed down in more recent months Going forward though there is still a need for some places to make printing and writing paper Some facilities in Wisconsin are helping fill that role Where do we see printing and writing paper in our everyday lives? The first thing that probably comes to mind for people is copy paper Copy paper is an example of uncoated freesheet which makes up a large portion of the printing and writing grades made in North America The printing and writing segment also includes glossy paper used for products like magazines and brochures as well as paper used for directories or catalogs that

people find in their mailbox Generally the category covers things that communications happen on and includes birthday cards wedding invitations and books Which Wisconsin mills still make printing and writing paper and why? There are at least three companies that making printing and writing paper that have mills in Wisconsin Two of those companies manufacture specialized products which they say show growth Mativ focuses on premium niche products at Wisconsin mills Last year Neenah Incorporated merged with Schweitzer Mauduit International Incorporated to form Mativ Holdings Inc Today the company has two Wisconsin mills The mills one in Neenah and the other in the Stevens Point area make the colorful paper and cardstock for the Astro brights brand that are sold online and in big box stores That brand is popular among teachers and crafters as well as businesses looking to create flyers The facilities also produce fine paper used for marketing and advertising materials For example the company has made a direct mail advertisement for a new credit card In the past employees have also made the high end paper for presidential inauguration invitations as well as the 2018 White House Christmas What effect did the COVID 19 pandemic have? The years of decline in printing and writing paper accelerated tremendously during the pandemic Early in 2020 lockdowns went into place to curb the spread of COVID 19 and people started working and attending school remotely and they used less paper That summer Verso announced it would indefinitely idle its paper mill in Wisconsin Rapids citing a decline in demand for graphic paper due to the pandemic as retail sports entertainment and tourism industries reduced their use of print advertising The following year though when vaccines rolled out and people returned to work and school in person demand shifted in the opposite direction Retailers and brands also came back with a vengeance sending people catalogs in the mail When those things happened there was simply not enough inventory or materials available to meet that demand Part of the reason for the shortages was that so many paper companies had either previously idled machines or switched to making products predicted to have better long term growth But shipping containers were hard to come by during the pandemic and this affected the import of paper making the market feel really tight Looking back one could argue that domestic printing and writing producers may have overshot the runway in closing the amount of capacity that they did since they struggled to fill orders during the uptick Still this increase appears to have been a temporary phenomenon as paper imports have since started to return Some of the most popular books are printed in Wisconsin Here is why these companies are getting more work in recent years What will happen long term? Printing and writing paper demand is not expected to return to what it once was or to keep up with the pace that other segments in the industry such as specialty papers and corrugated cardboard are growing Rather the decline in demand will continue into the foreseeable future until it flattens out It is not thought to reach zero though It may pick up again at some point in the future but it certainly will reach a bottom We are not close to that bottom yet but close Meaning not in the next few years Even so there will still be a need for some companies to continue make printing and writing grades in the future

8 What is the history of the paper industry in Wisconsin since 1848? Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization The paper industry in Wisconsin has a rich history dating back to 1848 when the first paper mill opened in Milwaukee Initially made from rags straw and waste paper the industry evolved to focus on wood pulp production in the late 19th century The Milwaukee early papermaking industry was followed by the Beloit area and the Fox River Valley which became the Midwest center for paper production The Neenah Paper Mill opened in 1865 became the most successful and profitable early mill eventually being purchased by Kimberly Clark Over the years the industry has seen significant technological advancements and the introduction of new paper products including tissue paper and specialty papers for various applications Despite some closures and shifts in demand Wisconsin remains a leader in the paper industry producing over 5 million tons of paper annually and employing over thirty thousand people

9 The lumber industry in Wisconsin since 1848 has produced a variety of products including Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Hardwood lumber Used for furniture flooring and building materials Plywood A composite material made from layers of wood veneer Wood products Such as cabinets millwork and doors Building materials Including pressure

treated lumber and other engineered wood products Custom architectural elements Such as trusses and wall panels These products have contributed significantly to the Wisconsin economy and infrastructure development

10 What farming methods have been used since Wisconsin Statehood in 1848? Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization Wisconsin State Historical Society As of March 29 2026 Since statehood in 1848 Wisconsin farming methods have evolved significantly Initially the state was known for its wheat production making it the breadbasket of America for the first few decades However as the century progressed farmers began to diversify their crops turning to dairy farming cranberry industry apple and cherry orchards and tobacco production The introduction of mechanization particularly the use of tractors marked a pivotal change in farming practices leading to a shift from horse drawn equipment to tractor powered machinery This transition not only improved efficiency but also transformed the rural communities of Wisconsin as farms grew in size and fewer people lived on them The Wisconsin agricultural landscape remains diverse with a focus on both traditional crops and modern agricultural practices

11 Wisconsin Windicator Newsletter Windicators Wisconsin Farming Insights from the 2022 Census of Agriculture Excerpts edited by Residents Against Wood Smoke Emission Particulates a 501C3 nonprofit organization University of Wisconsin Extension April 2024 Every five years the United States Department of Agriculture USDA undertakes a detailed inventory of farming operations across the country The most recent the 2022 Census of Agriculture aims to provide a detailed snapshot of the American farming economy including information on farm demographics production practices land use and economic trends Overview of recent trends in Wisconsin farming using the Census of Agriculture We pay particular attention to the changes since the last Census in 2017 to understand trends in key metrics for Wisconsin agriculture with some references to longer term trends 1997 to 2022 Number of Farms and Dairies The 2022 Census revealed the continuation of a longer term trend of the decline in the number of Wisconsin farms From 1997 to 2007 the number of Wisconsin farms was relatively stable with modest declines but after 2007 the pattern of steady decline returned In 2022 there were 58 thousand 5 hundred 21 farms in Wisconsin a decline of 9 point 7 percent 6272 fewer farms from 2017 point Over the 25 year period 1997 to 2022 Wisconsin went from 79541 farms to 58521 a loss of 21 thousand and 20 farms or 26 point 4 percent This rate of decline in the number of Wisconsin farms was faster than the national average which experienced a 14 point 2 percent decline between 1997 and 2022 or 6 point 9 percent between 2017 and 2022 point A more rapid decline continued specifically in the number of dairy operations in the state In 1997 there were 24 thousand and 65 dairy farms in Wisconsin and in 2022 that number declined by 74 point 2 percent to 6216 point The rate of decline in the number of dairy farms appears to be accelerating The five year average rate of decline over since 1997 was 23 point 5 percent but the decline between 2017 and 2022 was 31 point 2 percent with a loss of 2821 dairy farms Indeed in 1997 dairy farms accounted for almost one in three farms 30 point 2 percent but that share declined to almost one in ten farms 10 point 6 percent in 2022 point The distribution of farms across Wisconsin showed some clear patterns for example the very northern part of the state the North Woods contained a modest number of farms relative to the southern part Here Florence Iron and Vilas counties each had less than 100 farms whereas Dane Grant and Marathon counties each had more than two thousand farms On average Wisconsin counties had 824 farms Given the geographic characteristics of Wisconsin and differences in growing conditions this distribution of farms across Wisconsin is easily understood The change in the number of farms between 2017 and 2022 appears to be consistent across Wisconsin with a handful of very northern counties that declined at a slightly higher rate While the decline in the number of farms in Wisconsin could be considered alarming this shift coincided with changes to the distribution of farm size For example while the number of dairy farms significantly declined over the past 25 years the number of milk cows declined more modestly While the number of milk cows dropped noticeably between 1997 and 2002 the number of cows actually grew from 2002 to 2017 point Between 1997 and 2022 the total decline in number of milk cows was 96 thousand 7 hundred 69 or 7 point 1 percent The average change between Census years was only 1 point 4 percent which was largely driven by the drop between 1997

and 2002 point The 2022 Census revealed a break in that trend with Wisconsin milk cows declining by sixteen thousand one hundred twenty three 1 point 3 percent In the simplest sense the average size of the typical dairy farm steadily increased from 55 point 6 cows per farm in 1997 to 203 point 4 cows per farm in 2022 with the average rate of increase accelerating over time For example the five year average increase in dairy herd size was 29 point 4 cows 29 point 4 percent but between 2017 and 2022 the increase was 61 point 7 cows 44 point 0 percent In other words the rate of consolidation in dairy farming increased It is important to note that milk productivity per cow steadily increased In 2017 the average cow produced 23725 pounds of milk but by 2021 they produced 24 thousand 3 hundred 85 pounds per cow Another method to look at the shift in the size of farming is to explore the distribution of farms by the number of acres being operated by the farm For example in 1997 the average farm size in terms of acres was 204 but by 2022 that size increased to 236 acres an increase of 15 point 7 percent By examining the distribution of farms by difference in sizes acres over time we gain a finer insight into the shifting nature of Wisconsin farming There is a unique pattern in the distribution of farms by size acres that has played out across Wisconsin for a number of years There is growth in the number of small and large farms and a decline in the number of average or middle size farms In essence there is a hollowing out of the middle in the distribution of farms by size The growth in the larger end reflects consolidation and the economies of scale and size associated with large farms while the growth in the smaller end reflects growth in specialty foods farms targeting the local foods market and hobby farming Farm demographics Given that the number of farms declined between 2017 and 2022 it is not surprising that the number of farm operators also decline going from 110347 in 2017 to 105920 point The median age of Wisconsin farm operators continued to increase going from 56 point 0 years in 2017 to 56 point 7 years in 2022 point While this increase may appear modest 1 point 3 percent looking at the change in the distribution of operators by age categories presents a clearer picture of the aging of Wisconsin farmers Much like the loss of medium sized farms we saw a similar pattern across age groups Growth in the youngest and oldest categories and a decline of those who could be considered middle age In essence there was modest growth in the number of young operators 1 point 6 percent increase for 34 years of age or younger and a more noticeable growth in those age 35 to 44 10 point 3 percent but a decline of 25 point 6 percent in those that would be considered middle aged 45 to 54 Following national trends the share of farm operators that are women increased Specifically in 2017 34 point 9 percent of all Wisconsin operators were women in 2022 the share increased to 35 point 5 percent Still despite the growth in the share of women farmers relative to men the absolute number of women farmers declined from 38509 on 2017 to 37600 in 2022 point Women farmers however were full owners of 71 point 0 percent of the farms in which they were involved as an operator which was higher than their male counterparts 65 point 2 percent in 2022 While the distribution of women and men operated farms by size followed similar patterns women operated farms tended to be slightly smaller This was also reflected in the market value of agricultural products sold where the typical male operated farm generated 295 thousand 4 hundred and 6 dollars while female operated farms generated 228 thousand 2 hundred 5 dollars in 2022 point Of those with internet access 53 point 5 percent had broadband for example DSL cable fiber optic and 18 point 9 percent used satellite technology and 4 point 9 percent still relied on dial up modems which cannot meet the modern demands for connectivity Cellular technologies and smart phones were a popular method of connectivity and 60 point 0 percent of Wisconsin farmers with internet access used them Unfortunately cellular is not always reliable for instance bandwidth limitations limited coverage data caps reliability and costs or suitable for all broadband connectivity needs While Wisconsin expects to see over one billion dollars investment in broadband infrastructure through the federal BEAD Broadband Infrastructure Investment Program There is no guarantee that this will connect all Wisconsin farmers to reliable and affordable broadband internet types of farms While Wisconsin is known as the Dairy State unlike many other Midwestern states such as Illinois and Iowa where the row crops corn and soybeans dominate the Wisconsin farm economy is highly diversified In addition to ranking only behind California for dairy milk production although Wisconsin ranks first in cheese production Wisconsin ranked first in the nation for milk goats corn for silage snap beans cranberries and even mink pelts and ranked second for forage and third nationally for potatoes carrots green peas and sweet corn In 2022 total revenue from milking cows was 7 point 35 billion dollars accounting for 44 point 0 percent of total farm revenues but there were only 5676 farms with milk cows or 5 point 1 percent of all farms In other words the typical dairy farm

had total revenue from sales of almost 1 point 3 million dollars which compares to typical Wisconsin farm which had revenue from sales of 151 thousand 2 hundred 87 point dollars The second largest single commodity category was sales for corn which were just under 3 point 1 billion dollars 18 point 5 percent of total farm sales of which 21 thousand and 45 farms 19 point 1 percent of all farms reported revenues This means that the typical farm with corn sales had revenues of 146 thousand 9 hundred 78 dollars from corn The next highest single category was sales of cattle and calves 1 point 76 billion dollars 10 point 5 percent with 19 thousand 6 hundred 61 farms 17 point 8 percent reporting sales with the typical farm having sales of 89 thousand 4 hundred 68 dollars followed by soybean sales 1 point 44 billion dollars 8 point 6 percent with 16 thousand 5 hundred and 9 farms 15 point 0 percent with average sales of 87 thousand 2 hundred and 3 dollars It is important to note that a single farm may have multiple commodities for example a dairy farm that also grows corn and soybeans that are sold on the open market While dairy farms had the single largest sales per farm the second largest sales per farm commodity category were vegetable including potatoes sweet potatoes and melons farmers There were 3 thousand and 95 farms reporting sales of 763 point 9 million dollars or about two hundred forty six thousand eight hundred dollars per farm Of the 960 farms that grew berries which in Wisconsin is dominated by cranberries reported 174 point 8 million dollars in sales which means that the typical farm had sales of 182 thousand 1 hundred 39 dollars Poultry and egg production was also a significant part of the Wisconsin farming economy with 5 thousand 8 hundred 34 farms 5 point 3 percent reporting 7 hundred 80 point 4 million dollars in sales 4 point 7 percent or 133 thousand 7 hundred 69 dollars per farm Also included in the Census of Agriculture were firms that were classified as nurseries greenhouses and floriculture farms of which there were 1thousand 5 hundred 53 such farms reporting sales of 274 point 3 million dollars in sales or 176 thousand 6 hundred 58 dollars per farm While the overall number of farms declined in Wisconsin between 2017 and 2022 one sector that experienced an increase was aquaculture which grew from 119 in 2017 to 172 in 2022 an increase of 44 point 5 percent Total revenues from aquaculture increased by 59 point 6 percent going from 13 point 9 million dollars in 2017 to 22 point 3 million dollars in 2022 point Sales per aquaculture farm increased from 117 thousand 1 hundred 60 dollars to 127 thousand 3 hundred 90 dollars over the 2017 to 2022 period Another sector that experienced growth in the number of farms is fruit and tree nut farms which went from 1 thousand 2 hundred 14 to 1 thousand 4 hundred 24 or an increase of 17 point 3 percent and sales went from 31 point 9 million dollars to 53 point 0 million dollars an increase of 66 point 0 percent While dairy still dominates the growth in these alternative types of agricultural commodities is accelerating the diversity of Wisconsin agriculture summary The 2022 Census of Agriculture highlighted the continuation of many historical and national trends for the Wisconsin farming economy Many operators continued to exit and this happened rapidly among Wisconsin dairy farms At the same time the farms that remained were increasing in size as both the share and number of farms producing over five hundred thousand dollars in annual revenue increased since 2017 point Still smaller farms those with sales under one hundred thousand dollars accounted for the majority of all Wisconsin farms Land values in Wisconsin grew 24 point 2 percent since 2017 which signals positive economic growth in the sector but also presents a challenge for new and beginning farmers to obtain access to capital and land moving forward The Wisconsin farming economy remained diverse outside major row crop and dairy operations Wisconsin ranked in the top 3 states in production of cranberries potatoes sweet corn carrots and green peas In terms of demographics while farm operators remained predominantly white and male the share of women and nonwhite producers increased since 2017 point In sum the 2022 Census of Agriculture revealed that the shape of Wisconsin agriculture who farms what they farm how they farm continued to transform These trends have important implications for the Wisconsin economy and the demands and support that farmers need For example the expansion of internet infrastructure can support more technological advances and adoption in agricultural production Moreover the growth in the number of older farmers emphasizes the future need to support farm succession planning in the state