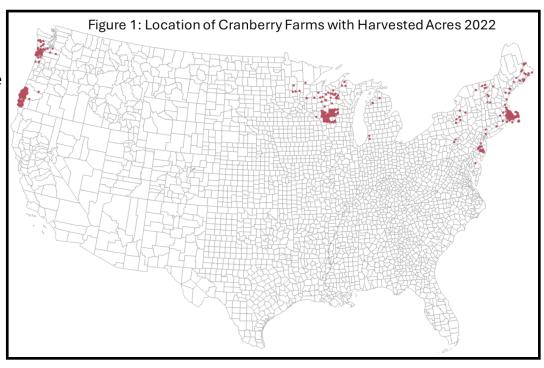
Wisconsin Cranberry Industry



Cranberry farming in Wisconsin dates back to the mid-1800s. Early farmers discovered that the state's natural wetlands and climate were ideal for growing the native North American fruit. The state has acidic soils, abundant fresh water, and a growing season with the right mix of cool nights and warm days, which is perfect for cranberries. Indeed, the Wisconsin cranberry industry is a major player in the global cranberry market, with the state being the largest producer of cranberries in the United States.

Cranberry production in the United States is geographically distinct. Aside from the Great Lakes Region, the **Pacific Northwest** and New England regions also have a concentration of cranberry production (Figure 1). Prior to the late 1990's, the U.S. cranberry industry was historically



concentrated in Massachusetts, and while still important there, urban development and land use pressures resulted in a shift in production concentrations to Wisconsin and certain coastal regions of Washington and Oregon.

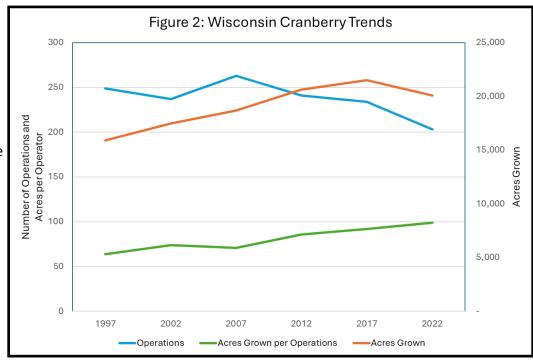
Using data from the 2022 Census of Agriculture, the highest concentration of cranberry farms remains in Massachusetts (41.4%) while Wisconsin accounts for 21.3% of all cranberry farms in the U.S., which is fewer than the combination of Washington and Oregon that account for 26.5% of all cranberry farms. But, when considering fruit bearing acreage, Massachusetts accounts for 29.7% of all acres, Washington/Oregon accounts for only 13.2% of acreage, and Wisconsin accounts for 48.3%. Clearly, Wisconsin devotes more total acreage to cranberries, and those acres tend to be more productive (i.e. higher yielding acres) than other regions.





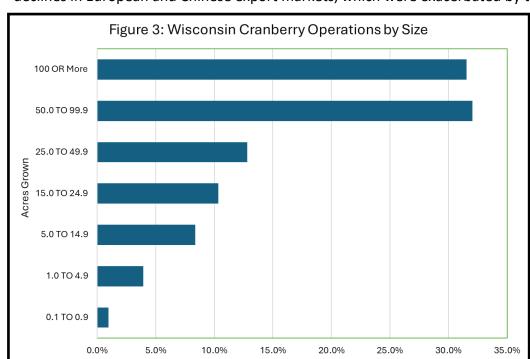


Over the last 25 years, the number of cranberry operations in Wisconsin has trended downward (249 in 1997 to 203 in 2022), but the average size of farm operation has steadily increased (Figure 2). In 1997, the average cranberry farm in Wisconsin had about 64 acres. By 2022, the average size increased to 99 acres. In 2022, 63.5% of



cranberry farms operated 50 or more acres, with 31.5% operating 100 or more acres (Figure 3). This growth in average cranberry farm size was largely driven by a steady increase in the number of acres in production, which went from 15,917 in 1997 to a peak of 21,514 in 2017. There was, however, a decline of about 6.6% between 2017 and 2022, or 1,415 acres.

There are several factors that contribute to the recent modest decline. First, recent years have seen declines in European and Chinese export markets, which were exacerbated by tariffs and increased



competition from countries such as Canada. Second, growth in demand for cranberry products has slowed. Despite these recent challenges, the cranberry industry is important to Wisconsin agriculture and makes significant contributions to the Wisconsin economy.

Using methods outlined in The Contribution of Agriculture to the Wisconsin Economy: An Update for 2022, we estimated the economic impacts of cranberry production to the Wisconsin economy. We consider both cranberry farms and processing separately and combined.

Processors include both wholesalers that act as intermediaries between farmers and manufacturers who produce cranberry juice and cranberry juice blends, sweetened dried cranberries, and the holiday staple cranberry sauce. There are several Wisconsin headquartered processors, such as Habelman Brothers in Tomah, Wis., as well as multiple processing and manufacturing facilities in the state that are owned and operated by the Massachusetts-headquartered Ocean Spray Cranberries.

According to the most recent data from the Wisconsin Department of Agriculture, Trade and Consumer Protection, the value of cranberry farm production was \$187,374,000 in 2023. We separately estimate processor revenues of \$287,877,000 from cranberry wholesaler and processing facilities located in Wisconsin. Using an economic model of the Wisconsin economy reflecting the economy in 2022 (the most recent year available and coincides with the 2022 Census of Agriculture) we estimated the economic impact of the industry through labor income and input purchasing. The full economic contributions of the cranberry sector to the Wisconsin economy is summarized in Table 1. The total economic impact is about 4,270 jobs, \$233.0 million in labor income (wages, salaries, proprietor income plus employer provided benefits), \$397.2 million in total income (labor income plus all other sources of income such as transfer payment, including social security, dividends, interest, and rental income), and \$782.9 million in industrial sales or revenue. Farm operations account for the majority of employment impacts, whereas processors account for a majority of industrial sales contributions. The impacts on income are close to evenly divided between cranberry farms and processors.

| Table 1: Contribution of Cranberries to Wisconsin Economy | | | | | | | | |
|---|--------------|------------------------|-------|------------------------|-------|--------------------------|-------|--|
| | Employee ont | Labor Income (MM\$) | | Total Income (MM\$) | | Industry Sales (MM\$) | | |
| | Employment | | | | | | | |
| Cranberry Farms | 2,644 | \$ | 111.1 | \$ | 203.3 | \$ | 300.4 | |
| Cranberry Processors | 1,623 | \$ | 121.9 | \$ | 193.9 | \$ | 482.5 | |
| Cranberry All | 4,267 | \$ | 233.0 | \$ | 397.2 | \$ | 782.9 | |

The economic multipliers are provided in Table 2. Note that the multipliers for cranberry processing tend to be larger than farm operations, this is because of the backward looking linkages the multipliers capture. Here, processors impact farmers, but farmers do not impact processors. In aggregate, if the cranberry industry grew by 100 jobs, the total impact on the economy would be 159 jobs: The original 100 jobs in the cranberry industry plus an additional 59 jobs generated elsewhere in the local economy (i.e. the multiplier effect). If those 100 jobs paid a total of \$5 million (i.e., \$50,000/job), the total impact on the Wisconsin economy would be \$8.5 million in labor income, the original \$5 million plus an additional \$3.5 million through the multiplier effect. Similar analysis can be undertaken for cranberry farmers using the appropriate multipliers as well as cranberry processors.

| Table 2: Economic Mulipliters for the Wisconsin Cranberry Industry | | | | | | | |
|--|------------|--------------|--------------|----------------|--|--|--|
| | Employment | Labor Income | Total Income | Industry Sales | | | |
| Cranberry Farms | 1.36 | 1.53 | 1.46 | 1.60 | | | |
| Cranberry Processors | 2.20 | 1.88 | 2.01 | 1.68 | | | |
| Cranberry All | 1.59 | 1.70 | 1.69 | 1.65 | | | |

In addition to economic impacts involving industry sales (or revenues), employment and income, the economic activity generated by the cranberry industry also is associated with tax revenues flowing to local, state and federal governments. This includes income taxes paid on wages and other sources of income associated with the industry, sales taxes, property taxes, and corporate income taxes along with miscellaneous fees and charges. In aggregate, a total of \$78.66 million in government revenues is generate via the economic activity supported by the Wisconsin cranberry industry. A little less than one-third of this flows to state and local governments with most of that allocation going to state government. This is largely consistent with the general distribution of taxes (and other revenue sources) across federal, state and local governments in most industries.

| Table 3: Contribution of Cranberries to Government Revenues | | | | | | | | |
|---|---------------------|------|---------------------|-------|-----------------------|-------|--------------|-------|
| | Local Government | | State Government | | Federal Government | | | |
| | | | | | | | Total (MM\$) | |
| | (MM\$) | | (MM\$) | | (MM\$) | | | |
| Cranberry Farms | \$ | 4.49 | \$ | 9.11 | \$ | 24.90 | \$ | 38.50 |
| Cranberry Processors | \$ | 3.51 | \$ | 7.94 | \$ | 28.71 | \$ | 40.16 |
| Cranberry All | \$ | 8.01 | \$ | 17.05 | \$ | 53.60 | \$ | 78.66 |

The Wisconsin cranberry industry has become integral to the identity of Wisconsin agriculture, and a leader in the national cranberry market more broadly. Beyond what is considered here, many of Wisconsin's cranberry farms also contribute positively to the agritourism industry (which has its own economic impacts beyond the analysis in this study), showcasing Wisconsin's agricultural diversity to visitors around the globe. Farmers and processors work symbiotically to support the industry as a whole. Moving forward, there is opportunity for these two supply chain stages to continue working in tandem to generate additional market demand (e.g. advertising, new products, export marketing), lower production costs to remain competitive, and remain resilient through macroeconomic fluctuations.

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