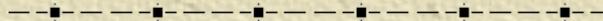




Mann Farms Inc.
Keith Mann

- Cranberry Industry in MA
- Personal Renovation Experience



Cranberry Industry in MA

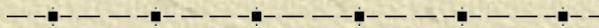
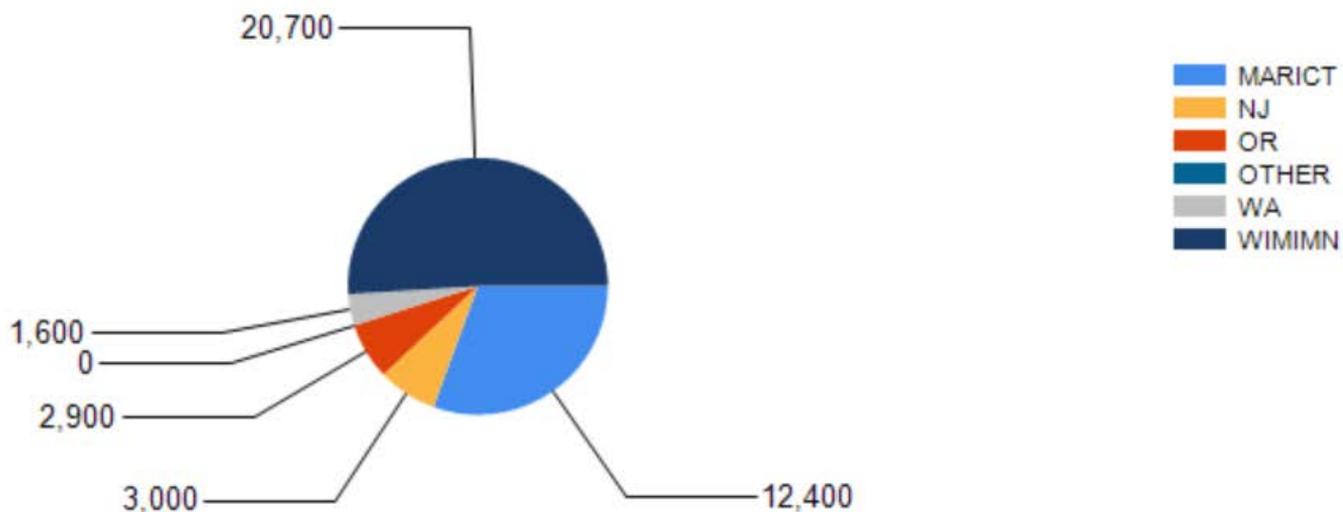
- ✦ \$1.4 Billion Economic Benefit in MA
- ✦ 6,900 Jobs
- ✦ 13,500 Acres of Cranberries in MA
- ✦ 60,000 Acres of Open Space
- ✦ Cranberry Industry is Important to MA



2014 Crop Year U.S. Harvested Acreage

by production areas

(barrels)



1,800 less acers are being Harvested in MA

2005 - 2014 U.S. Harvested Acreage (By Production Areas)

Crop Year	MA, RI CT District	NJ District	WI, MI, MN District	OR District	WA District	Other States	Total Production
2005	14,200	3,100	17,400	2,700	1,700	0	39,100
2006	14,000	3,100	17,500	2,700	1,700	0	39,000
2007	13,700	3,100	17,600	2,700	1,700	0	38,800
2008	13,000	3,100	17,700	2,700	1,700	0	38,200
2009	13,000	3,100	18,000	2,700	1,700	0	38,500
2010	13,000	3,100	18,000	2,700	1,700	0	38,500
2011	13,000	3,000	18,000	2,800	1,700	0	38,500
2012	13,000	3,000	19,700	2,900	1,700	0	40,300
2013	13,200	3,000	21,100	3,000	1,700	0	42,000
2014	12,400	3,000	20,700	2,900	1,600	0	40,600

*Cranberry Marketing Committee

Massachusetts Cranberry Outlook

- ✦ Massachusetts has been a leader since 1816
- ✦ Wisconsin past MA production in early 1990's
- ✦ Quebec surpassed MA production in 2014
- ✦ Newer growing regions utilize newer technology
- ✦ Massachusetts has some of the oldest bogs
- ✦ Renovation can make MA competitive
- ✦ Renovation is an expensive long term investment

Production in MA

- ✦ MA has the ability to be equally efficient
- ✦ MA must become competitive to survive
- ✦ Growers need to invest into the future
- ✦ Ag Innovation/Renovation Grant played an important role in 2008

Ag Innovation/Renovation 2008

- ✦ 2008 study found renovation costs
\$33,317/A
- ✦ Since 2007 1,849 acers have been renovated
- ✦ Over \$61 million invested in renovation
since 2007

Mann Farms AI Grant

Cost

- ✦ 2008 MF's 14 acre project cost \$711 K
- ✦ Lost production typically 2-3 years \$95 K
- ✦ Break Even in 5 years
- ✦ Renovation is very challenging economically

Mann Farms 2008 Renovation



Image USDA Farm Service Agency













Mann Farms AI Grant Benefit

- ✦ Grant funds were important for my farm
- ✦ Many new technologies utilizes
- ✦ Yields increased from 140 Bbls to 352 Bbls
- ✦ Created infrastructure for more cost effective renovation in subsequent years
- ✦ MF has renovated 5% per Yr. ever since
- ✦ MF retains more year round employees

Lessons learned

- ✦ Renovation greatly improves efficiency
- ✦ Renovations are very expensive, long term investment
- ✦ For MA to remain a viable producing region renovation will be a critical component
- ✦ Cost sharing grants are a huge incentive