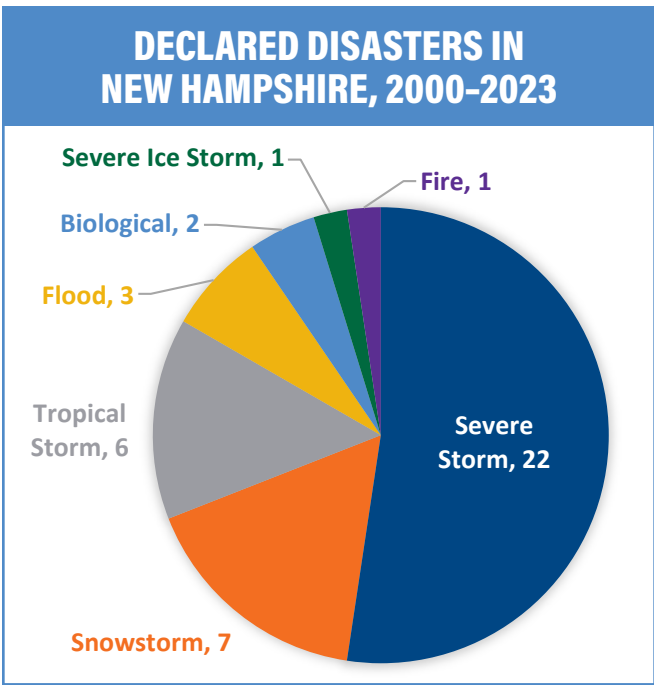


ENVIRONMENT & AGRICULTURE

The U.S. Federal Emergency Management Agency (FEMA) has the authority to declare a disaster when the damage caused by an event (usually severe weather) means an effective response is beyond the capabilities of the state and local governments. FEMA's National Risk Index, which evaluates an area's risk of negative impacts from natural disasters, rates New Hampshire's risk as 31 percent lower than the U.S. average. Between 2000 and 2023, there were 42 declared disasters that affected New Hampshire, an average of 1.8 disasters per year. Storms were the most common type of disaster, accounting for 86 percent of all declared disasters in New Hampshire. This included 22 severe storms, seven snowstorms, six tropical storms, and one severe ice storm. Other disasters included three floods, one fire, and two declared disasters associated with the coronavirus pandemic.

inflation) has increased substantially, from 3.3 per year in the 1980s to 13.1 per year in the 2010s. The average cost for disaster response increased from \$21.4 billion per year in the 1980s to \$96.8 billion in the 2010s. To date, the 2020s are on pace to have more billion-dollar disasters than any other decade. Between 2020 and 2023, there was an average of 22 disasters per year, costing \$137.2 billion per year.

In New Hampshire, the 2020s are on pace for more billion-dollar disasters than any previous decade, with four disasters within four years. Three of those disasters occurred in 2023, a winter storm and cold wave in February, and storm and flooding events in July and December. These storms caused a combined \$5.3 billion of damage, although damage in New Hampshire was estimated to be between \$100 million and \$250 million.



Source: U.S. Federal Emergency Management Agency

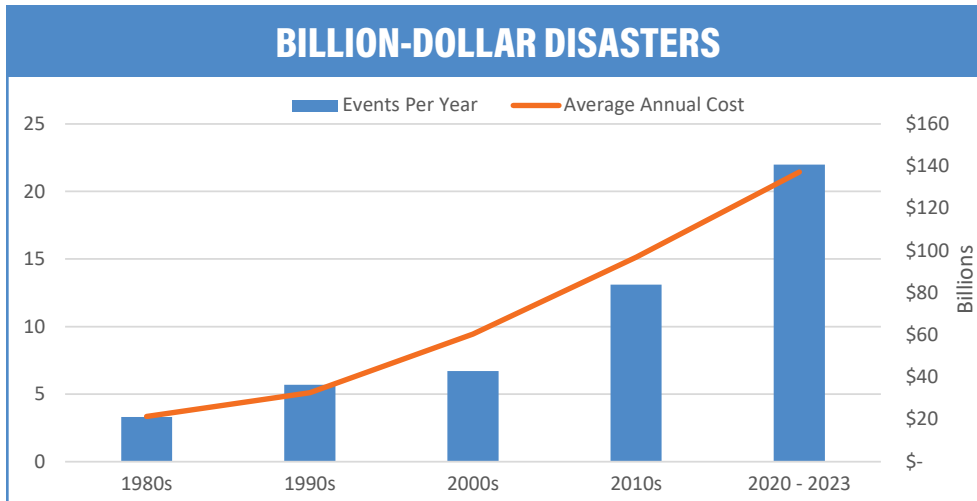
While the number of disasters declared varies substantially from year to year, the long-term national trend has changed little since the 1990s. However, the number of disasters that cause more than one billion dollars of damage (adjusted for

Agricultural Census Results

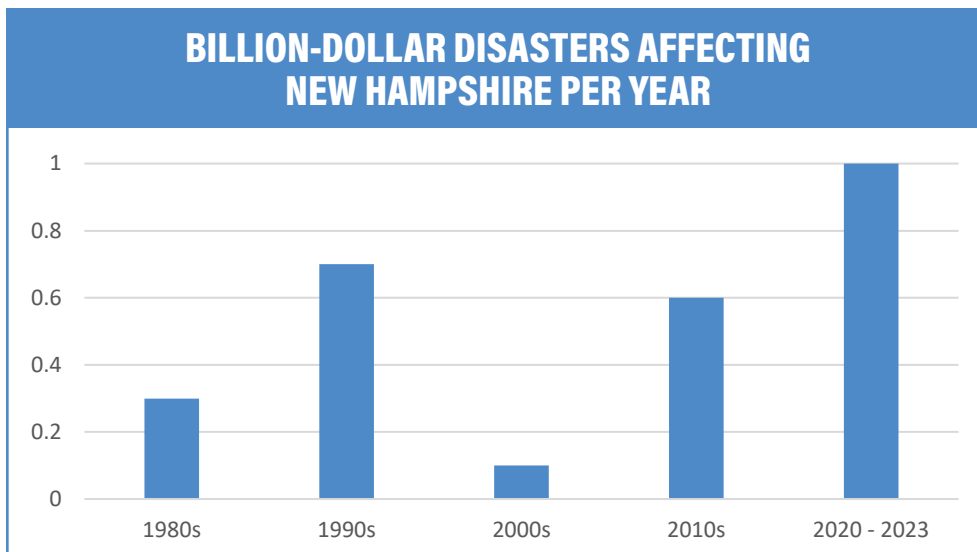
The U.S. Department of Agriculture produces the Census of Agriculture every five years, with results of the 2022 Census released in early 2024. The Census of Agriculture is a complete count of farms and ranches in the U.S. that produce at least \$1,000 of agricultural goods during the census year.

The number of farms in New Hampshire declined from 4,123 in 2017 to 3,949 in 2022, a 4.2 percent decline. Farmland declined 2.0 percent, and the average farm size increased slightly, from 103 acres in 2017 to 106 acres in 2022. The decline in farms was primarily among those with less than ten acres, which declined 18 percent, from 1,081 in 2017 to 891 in 2022. The number of farms with between ten and 179 acres was essentially unchanged, declining from 2,416 in 2017 to 2,393 in 2022. The number of farms with between 180 acres and 1,999 acres increased from 615 in 2017 to 658 in 2022, while those with 2,000 acres or more fell from 11 to seven.

Farms with fewer than ten acres would not be large enough to provide a primary income for their owner(s); these farms would be considered hobby farms, operated either recreationally or as



Source: National Oceanic and Atmospheric Administration



Source: National Oceanic and Atmospheric Administration

Even prior to the coronavirus pandemic, the economic environment for farms had been challenging. Farm commodity prices declined since 2013 as global supply outpaced demand.¹ The coronavirus pandemic was disruptive to farms as well, resulting in large fluctuations in crop prices (both up and down) and affecting the methods farms use to sell their products.

Social distancing restrictions and remote learning resulted in a large decrease in crop demand from schools and restaurants, but demand via direct-to-consumer sales channels, such as farmers' markets and community supported agriculture (CSAs) increased. Researchers who studied the impact of the pandemic on farmers

a secondary source of income. The decline in these farms suggests that operating a hobby farm has become increasingly challenging since 2017.

While hobby farms struggled, larger, professionally operated farms appeared to have more success. The number of farm owners whose primary income was from farming increased slightly between 2017 and 2022, and the number of hired farm managers increased 20 percent, from 369 to 442. In addition, there was an increase in farms organized as corporations, while the number of farms owned by families, individuals, partnerships, and all other ownership types declined.

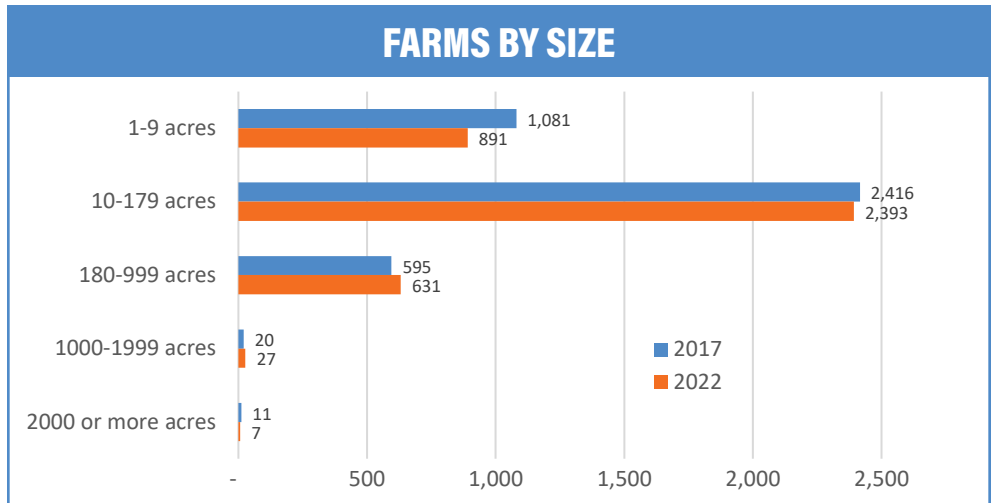
in California found that farms that were larger, had a more diverse range of crops and relied more on online sales and marketing during the first year of the pandemic were more resilient to the challenges of the pandemic.² New Hampshire farms appeared to follow a similar trend.

More than 80 percent of the harvested cropland on New Hampshire farms grew animal feed, either forage (hay and grass) or corn. Corn harvested for human consumption increased 500 percent, from 40 thousand bushels in 2017 to 241 thousand bushels in 2022, but still accounted for just 13 percent of all corn harvested in the state.

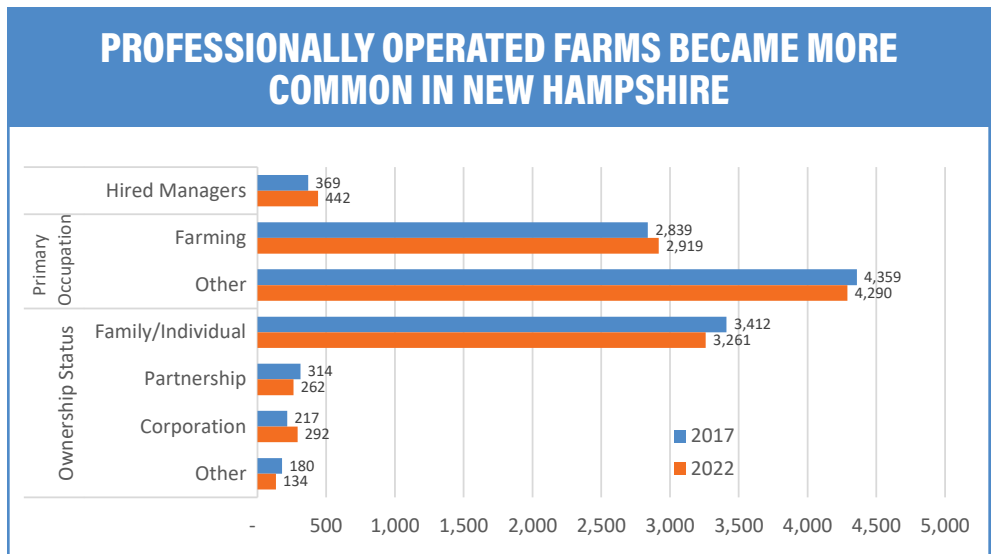
¹ Robert Johansson, "America's Farmers: Resilient Throughout the COVID Pandemic," <https://www.usda.gov/media/blog/2020/09/24/americas-farmers-resilient-throughout-covid-pandemic>.
² Jennie L. Durant et al., "Farm resilience during the COVID-19 pandemic: The case of California direct market farmers," *Agricultural Systems* 204. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9550669/>.

Although they accounted for just 1.1 percent of all crops harvested in New Hampshire, the quantity of soybeans harvested in New Hampshire increased substantially in recent years. In 2012, three farms devoted 18 acres to soybean production. This declined to two farms in 2017, but increased to nine farms in 2022, growing soybeans on more than 900 acres. Orchards were another fast-growing use of cropland. The number of farms with orchards increased from 306 in 2017 to 371 in 2022, while acreage increased from 1,703 to 2,318, a 36 percent increase.

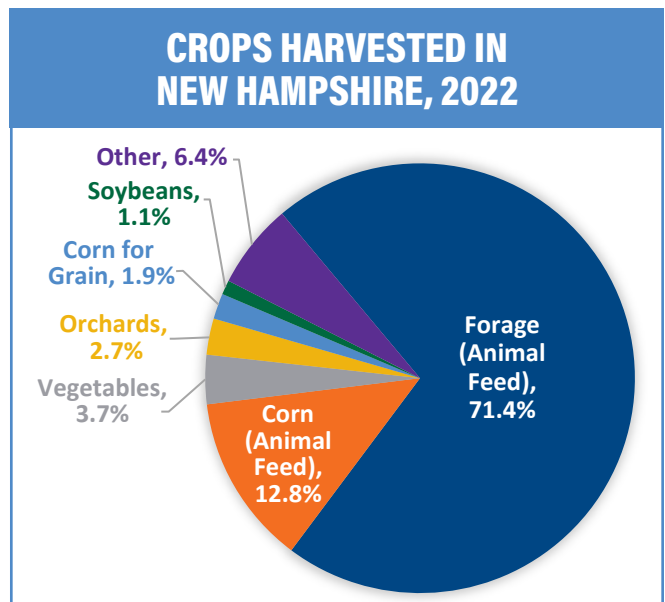
– Greg David



Source: National Oceanic and Atmospheric Administration



Source: National Oceanic and Atmospheric Administration



Source: U.S. Federal Emergency Management Agency

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TOXIC RELEASE INVENTORY	2018	2019	2020	2021	2022
On-site Disposal or Other Releases (Pounds)					
New Hampshire	208,475	145,104	99,828	143,775	181,545
Annual percent change	40.6%	-30.4%	-31.2%	44.0%	26.3%
New England	11,134,950	8,965,965	7,456,340	7,286,423	7,574,061
Annual percent change	-10.5%	-19.5%	-16.8%	-2.3%	3.9%
U.S. (1,000 pounds)	3,280,003	2,965,186	2,709,190	2,838,211	2,872,555
Annual percent change	-7.7%	-9.6%	-8.6%	4.8%	1.2%

Off-site Disposal or Other Releases (Pounds)					
New Hampshire	233,165	250,503	349,397	263,095	219,227
Annual percent change	40.9%	7.4%	39.5%	-24.7%	-16.7%
New England	6,998,894	7,016,560	6,489,317	6,130,852	6,247,107
Annual percent change	9.6%	0.3%	-7.5%	-5.5%	1.9%
U.S. (1,000 pounds)	431,603	427,132	348,246	396,317	407,077
Annual percent change	10.9%	-1.0%	-18.5%	13.8%	2.7%

Total On-site and Off-site Disposal or Other Releases (Pounds)					
New Hampshire	441,640	395,607	449,225	406,871	400,772
Annual percent change	40.8%	-10.4%	13.6%	-9.4%	-1.5%
New England	18,133,844	15,982,525	13,945,656	13,417,274	13,821,168
Annual percent change	-3.7%	-11.9%	-12.7%	-3.8%	3.0%
U.S. (1,000 pounds)	3,711,606	3,392,318	3,057,436	3,234,528	3,279,632
Annual percent change	-5.9%	-8.6%	-9.9%	5.8%	1.4%

Source: U.S. Environmental Protection Agency, ELMI Analysis. Last Update 10/23/2023

FOREST INVENTORY DATA	2018	2019	2020	2021	2022
Number of all live trees on forest land by Species group and Tree class code (in number)					
Growing stock	3,735,483,767	3,733,910,625	3,704,467,769	3,738,131,126	
Rough cull	500,825,911	469,425,181	452,077,727	457,037,207	
Rotten cull	22,536,693	21,223,651	21,009,569	20,811,710	
Total	4,258,846,371	4,224,559,456	4,177,555,065	4,215,980,042	

Source: U.S. Forest Service, ELMI Analysis. Last Update 10/23/2023

MAPLE SYRUP PRODUCTION	2018	2019	2020	2021	2022
New Hampshire (1,000 gallons)	163	148	154	127	154
United States (1,000 gallons)	4,199	4,180	4,111	3,721	4,943

FRUIT AND VEGETABLE CROPS	2018	2019	2020	2021	2022
Apples ¹ Yield per Acre ² (Bushels)					
New Hampshire	314	321	302	312	250
New England	NA	324	269	310	331
Strawberries Yield per Acre ³					
New Hampshire	5,900	5,700	5,800	5,800	6,200
New England	2,490	1,700	5,500	5,300	4,620
Pumpkins Yield per Acre ⁴					
New Hampshire	12,500	18,000	11,700	9,800	7,500
New England	8,900	9,800	10,300	9,300	8,400
Tomatoes Yield per Acre ⁴					
New Hampshire	13,700	11,600	13,000	15,200	12,400
New England	10,600	9,100	9,400	10,300	8,600
Sweet Corn Yield per Acre (Dozen ⁵)					
New Hampshire	800	824	776	812	847
New England	800	765	718	753	765
¹ Apple production from commercial orchards with 100 or more trees.					
² Yield based on total production, which includes unharvested production and fruit production but not sold due to market conditions					
³ Total tabulated pounds produced per bearing acre harvested.					
⁴ Total tabulated pounds produced per acre harvested.					
⁵ Standard weight used for a dozen ears is 8.5 pounds					
Source: USDA - National Agricultural Statistics Service, ELMi Analysis. Last Update 10/23/2023					
Prepared by: New Hampshire Employment Security, Economic and Labor Market Information Bureau					
www.nhes.nh.gov/elmi (603) 228-4124					