

# 2020 NEWA AGRICULTURAL OUTREACH REPORT FOR MASSACHUSETTS

## PROJECT LEADERS

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## INTRODUCTION

The Network for Environment and Weather Applications (NEWA) is a collection of online insect pest and plant disease management tools build to provide MA growers with short-term crop risk assessments. Each tool or resource uses real-time weather data streamed from 52 weather stations across the state and can be accessed at <http://newa.cornell.edu>. NEWA is made possible in MA through a partnership with UMass Extension and the New York State IPM Program at Cornell University.

## DEFINITIONS

**User.** A visitor who has initiated a session on the NEWA website for more than 0.5 seconds to exclude web bots and crawlers. These small web programs are often used by search engines to catalog websites, for example. Unfortunately, they are sometimes mistaken for real ‘Visits’ or ‘Users’.

**Returning user.** A visitor who has previously viewed the NEWA website within the past two years from the same device without clearing their cache where a unique ‘cookie’ id is stored.

**Contact hours.** The sum total of time spent, across all users, interacting with a specified NEWA resources. This value follows a HH:MM:SS second format where HH are hours, MM are minutes, and SS are seconds.

## MASSACHUSETTS STATIONS OVERVIEW

<b>Active Stations (as of 12/31/20)</b>	<b>52</b>
Stations added in 2020	4
Stations removed in 2020	0

## ANNUAL SITEWIDE USAGE SUMMARY FOR MASSACHUSETTS

<b>Year</b>	<b>Users</b>	<b>Returning users</b>	<b>Contact hours</b>
2020	1181	203	256:30:44
2019	1220	217	226:59:05
2018	1186	221	226:25:03
2017	960	179	186:26:37

## APPLE RESOURCES

<b>Resource</b>	<b>Year</b>	<b>Users</b>	<b>Returning users</b>	<b>Contact hours</b>
Apple Diseases	2020	215	65	45:48:34
	2019	172	63	34:55:45
	2018	130	48	36:29:08
	2017	117	53	33:09:31
Apple Insects	2020	101	46	16:53:26
	2019	76	39	12:03:05
	2018	62	29	15:13:34
	2017	56	30	15:12:44
Apple Carbohydrate Thinning	2020	69	37	19:58:58
	2019	56	33	13:15:47
	2018	34	24	06:20:11
	2017	35	23	06:26:16
Apple Irrigation	2020	17	10	03:08:47
	2019	17	10	03:15:09
	2018	15	10	03:15:09
	2017	13	8	01:32:23

## GRAPE RESOURCES

<b>Resource</b>	<b>Year</b>	<b>Users</b>	<b>Returning users</b>	<b>Contact hours</b>
Grape Diseases/Insects	2020	38	13	04:38:53
	2019	22	8	04:53:02
	2018	29	13	03:46:37
	2017	22	5	02:28:00

## VEGETABLE RESOURCES

<b>Resource</b>	<b>Year</b>	<b>Users</b>	<b>Returning users</b>	<b>Contact hours</b>
Cabbage Maggot	2020	28	10	03:21:04
	2019	30	12	04:47:17
	2018	23	10	05:50:59
	2017	30	8	04:39:58
Onion Diseases	2020	8	3	01:32:59
	2019	10	8	01:57:18
	2018	11	4	01:44:24
	2017	12	3	02:12:40
Onion Maggot	2020	19	7	02:45:37
	2019	19	12	02:54:45
	2018	24	6	05:03:41
	2017	22	7	03:36:45
Potato Diseases	2020	5	2	01:00:35
	2019	4	3	00:45:53
	2018	12	5	00:57:56
	2017	6	1	00:56:03
Tomato Diseases	2020	21	10	03:23:41
	2019	22	11	02:44:00
	2018	44	16	06:33:43
	2017	38	11	05:21:44

## WEATHER RESOURCES

<b>Resource</b>	<b>Year</b>	<b>Users</b>	<b>Returning users</b>	<b>Contact hours</b>
Daily Summaries	2020	60	36	08:32:47
	2019	77	35	13:08:39
	2018	47	30	11:40:20
	2017	27	17	05:24:16
Hourly Data	2020	99	37	11:50:35
	2019	89	34	14:47:19
	2018	73	27	11:20:25
	2017	53	29	09:54:47
Degree Day Monthly Summaries	2020	96	38	24:51:36
	2019	89	33	23:23:08
	2018	120	49	21:22:11
	2017	27	17	05:24:16
Degree Day Calculator	2020	75	36	19:44:01
	2019	78	32	18:29:38
	2018	46	19	11:55:00
	2017	40	16	07:35:26

## USER DENSITY AND GEOGRAPHY

This map shows the distribution and density of all users who accessed NEWA within Massachusetts from 2018 to 2020. Darker symbols indicate higher user density. Locations are generated using the latitude and longitude of internet service provider routing hubs. These are aggregated results and no personal information is revealed in this map.

