### **UMass Extension Pollinator Survey Summary**

December 2021-January 2022

### **Summary**

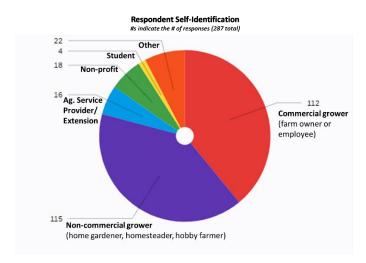
The survey was distributed December 2021-January 2022. It was sent out through veg notes, as well as the other extension teams, MDAR, CISA and SEMAP. The survey is available for viewing <a href="here">here</a>.

Overall, growers are most interested in learning how to establish pollinator habitat and assess bee abundance/diversity on farm. They are also interested in understanding the general status of bees.

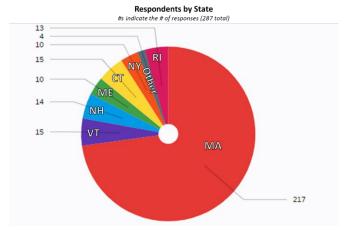
Their preferred extension activities are research, fact sheets/articles, and videos.

#### About growers

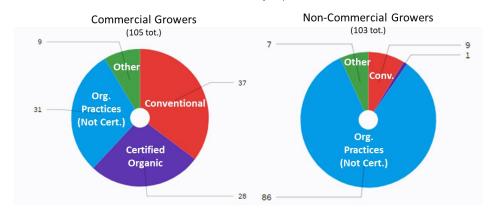
- 314 total responses
- 112 respondents were commercial growers (39%)



• 73% of respondents were from MA (76% of commercial growers), with an even distribution among counties



- Among commercial respondents, 35.24% were conventional, 26.2% were certified organic, 29.5% were organic but not certified, and 8.5% indicated "other" (incl. IPM, no-till, etc.)
  - **Growing Practices** #s indicate the # of responses



- 4,305 acres managed by commercial respondents (on average, 42 acres per respondent)
  - 2,150 of those acres are pollinator-dependent, averaging 21 acres per respondent
- >90% of commercial respondents grow solanaceous crops or cucurbits. About half grow small fruit or tree fruit, and very few grow cranberries or grapes.

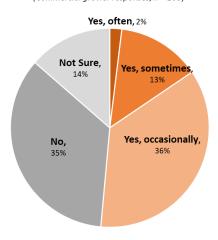
#### grown by Commercial Respondents 100% 90% 80% % of Commercial Respondents 70% (A) 60% 50% 93% 40% 30% 58% 20% 10% 10% 0% Cucurbit crops Solanaceous crops **Small Fruit** Tree Fruit Grapes Cranberries

**Pollinator-Dependent Crops** 

- 35% of commercial respondents keep honey bees (average 11 colonies, range 1-45). Only 14% rent honey bees, and 3% rent bumble bees.
- 51% of commercial respondents occasionally-sometimes have issues with fruit or seed set
  - 2% often, 13.6% sometimes, 36% occasionally, and 35% no. 14% weren't sure.
  - Most common issues are with cucurbits

## In the past few years, have you had any issues with **fruit or seed set**, such as stunted or misshapen fruit?

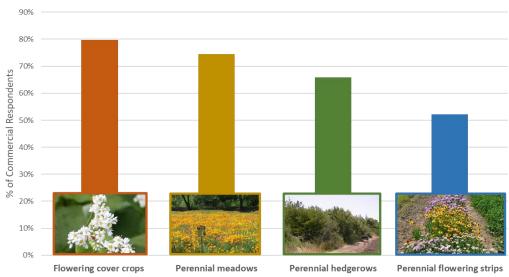
(Commercial grower responses, n = 103)



- Most commercial respondents already maintain some pollinator habitat:
  - 80% have flowering cover crops, 75% have perennial meadows, 66% have hedgerows,
    52% have flowering strips

# Does your farm contain any of the following types of **pollinator habitat**?

(Commercial growers, n = 94)



#### Interest in pollinator-related topics

- Commercial respondents are more motivated by environmental/ethical concerns and pollination services than publicity or public perception
- 86.75% of commercial growers are interested in learning how to establish pollinator habitat
- 95.18% of commercial growers are interested in learning how to assess native bee abundance/diversity
- Interest in general pollinator topics (% = very interested)
  - Growers are most interested in:
    - \*Enhancing wild bees through habitat and farm practices (72%)
    - \*Assessing on-farm wild bee diversity and abundance (67%)
  - Middle interest:
    - Pollinator-friendly pesticide use (54%)
    - Diagnosing pollination problems (47%)
  - Least interest:
    - Cost sharing for pollinator habitat projects (34%)
    - Bee-friendly certifications (28%)
  - Very little interest:
    - Determining when to rent pollinators (7%)
- Interest in habitat enhancement strategies
  - Flowering cover crops (61%)
  - Perennial hedgerows or flowering strips on margins (52%)
  - Intercropping (49%)
  - Meadows (40%)
- Interest in pollinator biology topics
  - Status of bee health (57%)
  - Bee biodiversity and ecology (54%)
  - Impacts of climate change on bees (48%)
  - Pollination services of wild and managed bees (40%)
- What type of extension work do they want to see?
  - o Growers are most interested in:
    - Research (43% very interested)
    - Fact sheets/articles (43%)
  - Middle Interest
    - Videos (34%)
    - Virtual Workshops/talks (34%)
  - Least Interest
    - In person workshops/talks (22%)
    - On-farm twilight presentations (20%)
    - Podcasts (19%)

