2016/2017 Maine Honeybee Survey Results

Demographics

172 respondents, representing 1122 hives. Most (98%) identified as backyard/hobby beekeepers (<30hives) and 85% have their apiaries registered with the state of Maine. Most (81%) are also members of a beekeeping organization (MSBA, local MSBA chapters, EAS). Respondents keep bees for a variety of reasons, the top of which are hobby/enjoyment (75%), personal backyard pollination (73%), and bee product production for personal use (65%). The average number of years of beekeeping experience was 6.8 years (range 1-50).

Table 1: Beekeeping experience.

Years Beekeeping	N
1 to 3	76
4 to 6	46
7 to 9	20
10 to 20	20
20 to 50	10

Practices

The majority (96%) of beekeepers use Langstroth hive equipment, either as 5, 8, or 10 frame equipment. The majority of hives owned by respondents are less than 2 years old. Participants started colonies by buying nucs (40.7%), buying packages (43.6%) and/or splitting already existing hives (36%). 14% reported collecting swarms to start new colonies. The majority of beekeepers (64.5%) did not replace any of their queens between April 2016 to April 2017.

7% of respondents use their hives for agricultural pollination. The 172 participants reported approximately 12,900 lbs of honey harvested (average 75lbs per beekeeper, 11.5lbs per hive).

Hive losses

Respondents reported a 53% loss between April 2016 and April 2017 (summer: 5.9%, winter: 47.1%).

Table 2: Average losses by county from April 2016-April 2017.

County	N	Average Loss (%)
Androscoggin	7	52.7
Aroostook	1	100.0
Cumberland	57	47.8
Franklin	4	43.5
Hancock	9	50.1
Kennebec	13	53.9
Knox	3	3.0
Lincoln	2	75.0
Oxford	7	69.0
Penobscot	22	63.8
Piscataquis	1	50.0
Sagadahoc	6	62.5
Somerset	5	85.0
Waldo	8	65.2
Washington	1	94.1
York	26	64.7

The most common cause of summer loses were queen loss/failure (11.6%), unknown (8.7%), environmental factors (7.6%) and Varroa mites (7.3%). One hundred twenty-three (71.5%) respondents reported no summer losses.

The most common cause of winter loses were Varroa mites (29.7%), environmental factors (24.4%), starvation (22.1%), unknown (16.9%) and queen loss/failure (15.7%). Forty-six (26.7%) respondents reported no winter losses.

Pest and Diseases

Varroa: Half (50.6%) of respondents monitored for Varroa mites (31.4% using a sticky board and 30.8% use alcohol and/or sugar rolls). Beekeepers report using screen bottom boards (20.3%) and brood disruption (8.1%) as part of their varroa mite management strategy. The most common miticides used were Mite-Away-Quick-Strips (39%), oxalic acid (19.8%) and Hopguard (19.2%). No varroa mite management was reported by 15.7% of respondents.

Other Pests/Diseases: Most respondents (67.4%) report using no treatments in their hives, while 27.3% used fumagillin and 5.8% used terramycin.