Colony Losses Continue for MD/DE beekeepers  

by Dewey M. Caron

I have been surveying DE and MD beekeepers about their colony losses and what they are using for Varroa control and IPM management practices for the past 10 seasons. This past spring 98 MD beekeepers and 10 DE beekeepers returned loss surveys. They reported loosing 152 colonies (of 416 going into winter) for a 36.4% loss rate. During the active season, survey respondents reported losing an additional 27 colonies (7%) so in summary colony losses for small scale beekeepers in MD/DE this past year exceeded 40%.

I also surveyed 20 semi-commercial beekeepers (managing more than 50 but less than 300 colonies) using their colonies to pollinate at least one crop in the mid-Atlantic region and 9 commercial beekeepers (individuals managing more than 300 colonies). Semi-commercial beekeepers reported losing 523 colonies (of 1912 going into winter) or 27.3% and commercial beekeepers reported losing 3773 colonies of 20,181 managed in the fall for an 18.7% loss rate. (see website ag.udel.edu/maarec/ 2010 Eastern Beekeepers Pollination for a full report). In MD/DE these 29 individual larger scale beekeepers participated in pollination of 8 different commodities.

I also helped conduct a national loss survey with electronic submission (See van Engelsdorp et al 2011. Jan JAR). DE, with 15 respondents (104 colonies), had the highest average loss (54.8%) in the Mid-Atlantic region; MD with 171 beekeeper responses (4763 colonies) totaled a 38.7% loss rate. Overall weighted loss rate for DE/MD was 39%. The different loss rates are illustrated in graph below
I began asking DE/MD and MAAREC region beekeepers about losses during the 2000-2001 winter, when losses were heavy and widespread. Since then losses have been as low as 15% and have twice exceeded 35%, including this past season. A summary of the losses for the past 10 years is shown below. Note: 2007 losses exclude 3 beekeepers w/ CCD symptoms.

In survey of losses I have been also asking what was being used for varroa control and what IPM techniques were in use (See Caron, et al 2009 Mar ABJ). It is clear that no one single management choice or combinations of techniques/materials has provided adequate protection from the heavy losses. With persistent losses each year for the last 10 years, a solution still is not available to enable MD/DE beekeepers to avoid losses averaging one of every three colonies.

I sincerely thank all the DE/MD beekeepers who participated in this past season or previous surveys. See April AMERICAN BEE JOURNAL for a more complete report.