



Good beekeeping practices

Source	Apimondia, IZSLT - Istituto Zooprofilattico Sperimentale del Lazio e della Toscana "Mariano Aleandri"
Keywords	Beekeeping, beehives, honey bees
Country of first practice	General
ID and publishing year	8409 and 2015
Sustainable Development Goals	No poverty, decent work and economic growth and life on land

Summary

This practice describes good beekeeping practices that should be adopted in the apiary. Among others, these practices include appropriate location scouting, numerical and graphical identification of hives, adequate hive inspection as well as the proper use of bee smokers.

Description

1. Best management practice for beekeeping to prevent bees diseases and allow high quality products

Good beekeeping practices that normally should be adopted in the apiary involve

1. Inspection the surroundings to place the apiaries in appropriate areas: non-humid, not exposed to cold winds, not subject to pollution sources such as intensive agriculture and industrialization (Figure 1); selection of suppliers, of bees and beekeeping equipment and verification of the health status of swarms, colonies and queen bees.
2. Observation of quarantine measures for all new introductions that have to be made in the apiary.
3. Identification of each hive by applying a unmistakable numerical code for purposes of hive individuation and subsequent documentation (Figure 2).
4. Regular verification of the health status of the colonies during the year through

the inspection of the bees, the new combs. The frequency of these checks depend on the season: reduction of the inspections during winter time and under unfavourable weather conditions (Figure 3).

5. Controls on the productivity and resistance to illness.
6. Frequent renewal of honeycombs (every two years) and regular replacement of queens (every one to two years), selection of queens who show resistance to diseases, hygienic behaviour, docility, low tendency to swarm and high productivity.
7. Maintenance of colonies at similar strength, ensuring that hive capacity is sufficient to discourage swarming; preventing acts of looting (not having in apiary highly diseased, weakened colonies that are more subject to be sacked; perform maintenance of hives).
8. Adoption of appropriate techniques to ensure the welfare of colonies, especially those younger / weaker (feeding colonies having no food stocks or in case of unfavourable weather conditions as in autumn, winter and excessively cold or rainy spring; ensuring good wintering; providing adequate



Beekeeping

water supplies particularly in hot periods, etc.).

9. Provision of candy or glucose / fructose syrup avoiding the use of honey to feed the bees. Verification of origin and wholesomeness of supplies provided to the bees.
10. Appropriate use of the bee smoker (respecting the bees welfare and avoiding using toxic material that can contaminate the honey).
11. Elimination of the use of toxic substances or paints for hives (e.g. disinfectants, chemical treatments for wood, etc.).
12. Elimination of the transfer of honeycombs from one colony to another if the health status of the colonies is unknown. Separation of the sick from the healthy hives; destroying, if necessary, infected colonies.
13. Exclusive application of drugs registered for use in bees respecting instructions and guidelines and recording drug use in the logbook. Improper and untimely use of chemicals during honey production may lead to its contamination.
14. Periodic mowing of grass in front of the hives.
15. Maintenance of the apiary and the beekeeping equipment in good order and clean; ensuring the required maintenance and, when necessary, renewing the materials.
16. Referral to expert assistance in case of anomalies, whenever necessary.

Please note that applying good beekeeping practices in the apiary does not mean the bees will not get sick any more, but the incidence of diseases decreases.

Figure 1. Choice of the appropriate area for the Apiary



Figure 2. Hives identification with numerical and graphical signs



Figure 3. Hives inspection





2. Further reading

- Maine State Beekeepers Association, Inc. 2007. Best Management Practices for Beekeeping, [Link](#)
- Dr Somerville D. 2007. National Best Management Practice for Beekeeping in the Australian Environment, The Australian Honey Bee Industry Council : [Link](#)
- Ritter W. 2013. Good Beekeeping practice - knowledge in a Nutshell, Bees for Development Journal 107, Veterinary Institute Freiburg (CVUA-Freiburg): [Link](#)
- Heintz C., Ribotto M., Ellis M., Delaplane K. S., 2011. Best Management Practices (BMPs) for Beekeepers Pollinating California's Agricultural Crops, Jointly published in the American Bee Journal and in Bee Culture, March 2011: [Link](#)
- Formato G., Vari G., Le buone prassi di allevamento in apiario. In "Aspetti igienico-sanitari in apicoltura" published by Istituto Zooprofilattico Sperimentale del Lazio e della Toscana "M. Aleandri", Italy. August 2007, 8-10

- Formato G. (IZSLT, Italy), Smulders F.J.M. (Department of Production Animal Medicine and Veterinary Public Health, University of Veterinary Medicine, Vienna, Austria), Risk management in primary apicultural production, Part 1: bee health and disease prevention and associated best practises.

3. Related/Associated Technologies

- Main diseases of honey bees: TECA ID 8412
- Nosemosis: TECA ID 8413
- Varroa mites (Varroatosis or Varroosis): TECA ID 8416
- AFB (American Foulbrood): TECA ID 8417
- EFB (European foulbrood): TECA ID 8418
- Bee viruses: TECA ID 8419
- Buenas Prácticas Apícolas - Chile: TECA ID 8217

4. Objectives fulfilled by the project

- Women-friendly;
- resource use efficiency; and
- pro-poor technology.