

Mid-Atlantic Apicultural Research & Extension Consortium

Delaware, Maryland, New Jersey, Pennsylvania, West Virginia and the USDA cooperating

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REMOVING BEES

The natural nesting site of the honey bee is a sheltered, darkened enclosure. Beekeepers keep their colonies in boxes called hives. Besides the hives of beekeepers, "wild" or "escaped" bee colonies nest in tree hollows or in structures such as attics, between the wall studs of houses, garages, or other buildings, within porch roofs or in similar areas. Bees also nest in tree hollows and dry caves.

Whether living in a hive or the side of a building, when a bee colony becomes too large it divides by swarming. A honey bee swarm contains thousands of workers and their queen. A swarm of bees will cluster temporarily at one location while a few scout bees locate a new home. When a suitable location is found the swarm moves as a group into its new quarters.

Bees nesting in locations inconvenient to humans are considered pests. Although valuable to a beekeeper, the homeowner has little need for a swarm that might land and cluster on his/her property. Likewise, few people want a bee colony nesting in their house or another structure on their property. Some beekeepers earn extra income in removal of unwanted bee colonies though many states label this as pest control which is strictly regulated and often requires training, license, insurance, etc.

SWARMS

A swarm of honey bees is a temporary inconvenience that may last a few hours or days. Honey bees in a swarm are usually gentle because they have full honey stomachs. If left undisturbed, a swarm will locate new quarters and often disappear as quickly as they appeared.

Local beekeepers collect swarms to put into their unused hives. They seldom demand a fee for their effort since the bees from the swarm will grow when captured in a hive and usually produce honey the next season. Beekeepers leave their names and phone numbers with local county Extension agents or local police. Some bee associations produce lists of members who are interested in swarm capture.

It is not always possible to locate a beekeeper or practical for the beekeeper to capture a swarm. REMEMBER a swarm is only temporary and will move away as soon as the bees find a new home. In only unusual situations will a swarm remain to build comb and not move from a cluster site.

BEES IN BUILDINGS

Bees nesting in buildings, unlike swarms, are a great problem. There is no easy, convenient method of removing the bees. It may be necessary to kill the bees and, if the bees have been using the same location for awhile, the nest itself needs to be removed. Although killing the bee colony may be a disagreeable task for some people who know the honey bee as an important insect helper of man, in some nesting locations bees are pests and, unfortunately, must be treated accordingly.

ELIMINATING THE BEES

The first step in eliminating the pest problem is locating the nest and getting rid of the adult bees. Several materials may be used to poison honey bees.

1. Aerosol sprays. Aerosol sprays are available specifically to eliminate hornets, wasps, and bees. Other aerosols such as those for ants or roaches also will kill honey bees.

2. Spray concentrates or dusts. Some insecticide liquids or dusts are also very effective for controlling bees and wasps. Equipment to mix and apply such formulations is necessary.

The insecticide should be applied at the entry/exit area of the nest and, if feasible, directly onto the nest (drilling small holes to the nest may be necessary). The nest itself may be some distance upwards from the entry/exit and is always suspended from some overhead support. Several repeat applications of insecticides are usually necessary to kill the bees. Whenever using an insecticide check the container label for proper concentration, safe use and to be certain it can be used as you intend to do.

REMOVAL OF THE COMB

Soon after moving into a new home, honey bees build beeswax comb to store honey and rear their young. After the adult bees have been eliminated, their nest should be removed. If this is not done, the honey and beeswax comb of the nest will attract other insects and animals and the odor of decaying and fermenting honey will become quite evident. Beeswax comb left unattended by bees will break and be attacked by wax moth; if honey soaks into walls it will become impossible to paint or wallpaper over the stain which will remain moist to the touch for a considerable period of time and appear unsightly.

In some instances, it will be quite expensive to attempt to remove the nest; the homeowner may be willing to put up with the smell and take his/her chances of damage from honey soaked walls. For nests in trees or garages, nest removal usually is not necessary.

Once exposed, the beeswax comb of the nest can be cut or broken from its overhead attachment points. If a poison spray has been used directly on the nest do not attempt to salvage the honey. Otherwise the honey can be cut from the nest and consumed in the comb or drained to provide the familiar liquid honey.

After removal of the beeswax combs and the bees, the former entry/exit area should be washed with soapy water to help remove residual odors. The nest area should be filled with insulation or blocked off with a similar material. Any future entry must be blocked (as well as other potential areas) to insure that another swarm does not select the same location.

TRANSFER OF BEE COLONIES

It is sometimes possible to remove bee colonies from houses, trees or other natural dwellings by transferring them into beekeeper hives. Bee colonies that inhabit box hives, log gums or other equipment in which the combs are crosswise or otherwise not contained properly by the frames might also be transferred to hives with movable frames so they can be properly managed. In most states it is illegal to keep bees in box hives, gums or crosscomb hives because such colonies cannot be inspected for disease.

It is preferable to transfer bees during the spring or early summer. Colony populations will be smaller and the bees will have less honey stores and brood comb than later in the year. Transferring a colony early in the active season will also allow the bees time to build up their colony population following transfer and leave them enough time to collect sufficient stores for successful wintering.

If a bee colony cannot be fully exposed, the adult bees may be trapped into a dummy hive. To trap a colony, close all entrances except one. Fashion a screen cone over the single remaining entrance that will permit the exit but not a return entry of the bees to their old home. This cone can be made of wire screening and should extend 12-18 inches outward, narrowing from several inches in diameter to an outer opening of 3/8ths inch. Place a dummy hive supplied with foundation or preferably a hive with one or more drawn combs adjacent to the screen cone opening and hold it in place by a temporary scaffolding. As the foraging bees exit their nest they will be unable to return to their home and most will adopt the substitute hive. After two or three days of trapping place a caged queen in the dummy hive in her cage. Release her or allow the bees to release her after several more days so

the substitute hive may function as a normal hive. In about two months, the substitute hive will be a normal functioning colony and it can be removed from its temporary position. Most of the bees from the original nest will have been trapped with this arrangement and will have become inhabitants of the new hive.

Removing bees from buildings or trees may sometimes be accomplished by direct exposure and transferred to a movable frame hive. After nest exposure, the bees should be shaken or brushed into a new hive. Pieces of comb with brood should be placed in frames and held by string or rubber bands. This last transfer procedure is best done on a cool day or night when the cool weather will help make them less active. Hopefully, the queen can be transferred without injury. Check the new hive in a couple of weeks to be sure a queen is present. If not, introduce a new queen because your effort will be for naught unless the new hive has a functioning queen.

Transferring bees from buildings or trees is always messy and frequently results in numerous stings. Queens are often lost and many workers crushed or drowned in honey. It is suggested that this last technique be tried at least once and then a decision made as to its value in transfer of bee colonies. To eliminate problem bees in structures or bee trees it is usually much easier to kill the adult bees and then expose their comb to wax moth and other pests for practical removal.

TRANSFERRING BEES FROM NON-STANDARD BOXES OR GUMS

Several methods may be used to transfer bees from crosscomb hives, log gums, or other similar structures. Bees do not necessarily have to be transferred with comb from their own home. Generally, however, transferring first the bees and then including some of their comb, especially brood comb, results in a more rapid recovery and population increase in their new home.

TRANSFER VIA EXPANSION

The easiest method to accomplish transfer of bees into standard movable comb equipment involves placing a standard hive body with drawn comb, or foundation if comb is not available, on top of the box, gum, etc. you wish to transfer. This can be done if the top from the old colony can be removed or when you can somehow provide large holes to permit bees access from old hive to new. With tape or other material, close the area between box, gum, etc. below and standard hive body above. Eventually the colony below will expand upwards and begin rearing brood and storing honey in the upper hive body. If done in the spring, the upper hive body should be nearly filled with honey for winter. During the winter and early spring of the next season, the cluster of bees will gradually move upward while consuming the honey. Due to the normal decline in colony population before the spring buildup, most of the bees will be in the upper hive body next spring. At this time the lower crosscomb hive or box can be removed.

You may not have to wait until the following spring in all instances. If you inspect the top hive body during the summer and find the queen in the movable comb hive above, you can place a queen excluder between the top hive body and the bottom box and provide an entrance directly into the upper box. In three weeks all the brood will hatch in the box below and the adult bees can be shaken or driven from the lower box onto the ground or directly into the movable comb hive and the transfer will be complete. Any honey remaining can be cut and the bees allowed to rob *if no disease is present*. Alternately, honey can be fitted into frames as described above and given to the bees in their new home now properly supplied with movable comb.

The main advantage of transferring by expansion is that there is little or no disturbance to the bee colony and it requires few manipulations by the beekeeper. A disadvantage is that transferring is a slow process.

DRUMMING

Another method of transferring bees is by drumming them out of the old hive. To drum bees, remove the bottom of the old hive and turn it upside down. Place a new hive with drawn comb or foundation on top of the inverted box and close all openings. Drum vigorously with a rubber mallet, stick or hammer on the side of the old hive continuously for eight to ten minutes. This causes the bees and queen to move upward. Smoking the old colony before drumming is also helpful in starting the bees upward. When most of the bees have moved up into the new hive, a queen excluder is then placed between the new and old equipment and an upper entrance provided. After several days, the new hive should be checked for evidence of the queen. If the queen is not above, the queen excluder must be removed and the drumming process repeated. Three weeks later, after the queen has been confined above and all the brood has emerged below, the old hive may be removed and discarded.

A variation of the above procedure would be to remove the combs from the old nest immediately after drumming the adult bees out and piecing the comb into empty frames for the new hive. This is accomplished by cutting large pieces of brood comb and then arranging them on a flat surface in empty frames. The pieces are held in place by wrapping string or stretching rubber bands around the frames. It is advisable to transfer only comb containing worker brood. Empty comb or comb with drone brood should be discarded. Comb with honey can be cut so the bees may rob it or pieced into frames as above for worker food.

The advantage of drumming is that it is quick and requires little manipulation by the beekeeper. When brood comb is cut and placed into frames the colony will expand quickly in its new home and have a good chance of winter survival. MAAREC, the Mid-Atlantic Apiculture Research and Extension Consortium, is an official activity of five land grant universities and the U.S. Department of Agriculture. The following are cooperating members:

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Participants in MAAREC also include state beekeeper associations, and State Departments of Agriculture from Delaware, Maryland, New Jersey, Pennsylvania and West Virginia.

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