Honey Bees
In A Wall!!
What Can Be Done??
Removing Honey Bees From Walls
Honey bees are occasionally found nesting where they are unwanted, such as inside the wall of a home.

**Should you be concerned?**

Yes

**Why did bees “choose” your wall?**

For a home
What can be done?
Several options available, depending on your unique situation

Can the bees be saved?
Usually
Tell him not to shoot

What is the situation?
Unique

Must the wall be opened?
Sometimes
Will honey and wax that remain inside the wall be a problem?

Yes

This publication can assist the Extension agent, homeowner and beekeeper in deciding what needs to be done and what is involved in removing honey bees from walls. Bee removal will require a beekeeper to handle the bees, and will sometimes require a carpenter to dismantle/reassemble the wall, and/or a pest control person might be employed to kill the bees if no other alternative is possible.

These general guidelines must be modified to apply to each situation. We have no magic wand, quick fix or flute to play like the pied piper to lure bees out and away. Honey bees are extremely valuable as pollinators of fruits and vegetables, as well as providers of honey and wax. They should be destroyed only as a last resort.

Should I be concerned about bees inside my wall?

Yes!

You should be concerned, especially if someone living in the house is allergic to honey bee stings. Only a small percentage of people are allergic; however, to these people, the venom from one sting can be life threatening. These people should avoid unnecessary contact with honey bees.

Honey bees will sting to defend their colony. Avoid walking in front of the entrance because you will block the flight path of the bees as they come and go while collecting food.

What have they put inside?

Honey, wax and brood

Other concerns include the remnants of the colony inside the wall. When honey bees move inside a wall, they cluster and build wax comb. They will fill a vacant cavity with comb and fill the comb with brood (immature bees) and food, including pollen and large amounts of honey. The wax comb and contents inside the wall can create a sticky situation if the temperatures inside the wall increase enough to melt the wax, which may then flow down the wall and drip upon a ceiling or wall below. The comb and contents will increase in size the longer the colony remains inside. The comb could also be a fire hazard if it is located near a heat source, such as a chimney. If the bees die, the comb contents may ferment and rot, producing an odor that can be objectionable as well as attracting vermin. Decaying bees and brood attract flies, wax moths and fruit moths that can infest the home and damage furnishings and stored food.
Why did the bees choose this wall?

When honey bee colonies reproduce in the spring, a swarm searches for and occupies any suitable cavity which can afford protection, including those inside walls of buildings. The chosen wall had an outside opening with a diameter larger than 5/16 inch, leading to a hollow cavity. If bees had ever been in this wall before, the odor of comb or honey may have attracted them.

Could I have prevented bees from occupying my wall?

Yes; if you had sealed all holes 5/16 inch or larger in diameter that led to or opened into empty cavities. If bees had previously occupied the wall, the odor from the old comb could have attracted swarms to occupy the space again; therefore, any entrance holes should have been sealed tightly.

What do I do now?

Define the situation with the help of your Extension agent and/or an experienced beekeeper. This information will be valuable to decide what should be done, how soon and by whom.

Situation Checklist:

☐ 1. Make sure these are honey bees before calling a beekeeper. Most beekeepers will not consider dealing with yellowjackets, wasps or bumble bees.

☐ 2. Are the bees an immediate danger to people or animals? Has anyone been stung? Is the entrance to the wall near a place where people must walk? (If the entrance is not in a trafficked area, it might be possible to trap the bees into another hive.)

☐ 3. Where is (are) the entrance(s)? (Do you have one colony or two?)

☐ 4. How long have the bees been there? (Longer time usually means more bees, more comb and more honey.)

☐ 5. How high off the ground is the entrance? (Higher up means more preparation and equipment.)

☐ 6. What is the wall constructed of? (Some materials are easier to dismantle; others difficult, such as brick.) Is this an outside wall?

☐ 7. What direction does the wall face? (South-facing walls heat up more quickly and usually combs inside them will melt if unattended by bees.)

Can the bees be saved?

The bees should be saved by removing them or by trapping them out of the wall, if they are not causing immediate danger. If the bees must be killed, take care when using insecticides to avoid environmental contamination by using the least quantity necessary according to directions on the label. (See section below, “If bees are a threat...”)

If there is no immediate threat, when should the bees be removed?

Late winter/early spring is a good time, because the bees have consumed a large amount of their stored honey during the winter. Also, the number of bees present is lower than it will be later in the spring.

Can the bees and comb be removed immediately?

Yes; if the situation permits. The ideal situation for immediate removal would be one where the wall is easily dismantled, exposing the
comb and contents enough to be physically removed. The homeowner must pay the expense of dismantling the wall and then having the wall rebuilt. This operation requires both a beekeeper and a carpenter or a carpenter who keeps bees. Both should view the situation and plan whatever action is required. The homeowner should fully understand what needs to be done and agree to pay for materials and labor. Few beekeepers will volunteer to remove bees from walls without payment, because the work is difficult, time-consuming and may result in nothing for the beekeeper.

A vacuum may be useful to remove bees if you make a few modifications to collect the bees. (Source: Charles Martin Simon from personal communication and article in Bee Culture, July, 1993, pp. 379-381):

Use two plastic five-gallon buckets. Place one bucket inside the other. Insert the suction hose from the vacuum into a hole (tight fit) in the bottom of the outer bucket. Drill several hundred 1/8-inch diameter holes into the sides and bottom of the inner bucket, and place a lid on this bucket. Make a hole in the center of the lid and fit a hose or tube into it. When the vacuum is turned on, the bees are sucked through the tube and into the inner bucket. The bees do not pass through the vacuum and are relatively unharmed. They can then be taken away and poured into another hive elsewhere.

No; if the situation is not ideal. The type of building materials and the physical location of the comb may not allow immediate removal. A stone, brick or block wall would be difficult and too costly to dismantle. The combs are often positioned inside the wall, where it is impossible to remove them. A combination method involving partial removal and trapping can be successful.

While removing two colonies from a house constructed of mixed stone masonry/wood sheathing, John Kelley, a Sevier County beekeeper, (Figs. 1 and 2) removed part of the siding, but the comb was not accessible, so he decided to trap the bees. He took advantage of the exposed beams where he had removed sheathing and laid wooden studs on the beams to make his platform for the trap hive. He later covered the opening and used an exit cone as explained below.

**Could I just plug the hole and walk away?**

Yes, but please do not! Bees will search for another exit, including holes leading inside the house such as sometimes found around air conditioning ducts, ceiling and wall fixtures. You could end up with bees inside your house. If the bees cannot escape, they will die inside the wall and the comb will remain. The wax comb can melt if exposed to warm temperatures because there are no bees to keep the wax cool.
If bees are an immediate threat to health and safety:

To destroy bees that are an immediate threat, a pest control company may be called, especially if the location of the colony puts the homeowner at risk. If the wall has been dismantled and the comb and bees are exposed, a detergent solution can be sprayed on the bees to kill them. The solution contains one cup liquid dishwashing detergent per gallon of water. Detergent solutions are effective only when sprayed directly onto the bees.

Aerosol pesticides containing pyrethroids labelled to kill wasps and hornets can be used and are effective because they kill the insect immediately on contact. These products break down chemically after being sprayed and leave very little residue behind. Other insecticides including Malathion®, Sevin® and Dursban® can also be used. The pesticide must be sprayed close to the comb to be effective. Spraying the entrance may be ineffective if the comb is located far inside the wall. In this case, the wall should be dismantled before spraying.

It is relatively easy to kill the bees; however, do not forget that the hive products remain behind and could cause additional concerns as mentioned previously.

LEGALITY? It is not unlawful to destroy honey bees, although many pest control companies tell homeowners they cannot kill honey bees according to “the law.” Bees in a wall have a dual role as a beneficial insect and as a pest.

Trapping Bees From The Wall:

Summary - If the bees are not an immediate threat and it is not necessary to remove them quickly, a beekeeper can be contacted to trap the
bees from the wall and collect them in a trap hive (Fig. 3). This method saves the bees. Once the bees have "claimed" the trap hive as their new home, they can be used to rob (remove) the honey that remains inside the wall. Often a fee must be paid to the beekeeper to cover costs of travel, equipment and time. This method may require up to six weeks, including numerous "quick" visits from the beekeeper. The trap colony must be positioned near the entrance, which may require a platform be constructed or a scaffold be erected.

**Method To Trap Honey Bees From A Wall**

**Equipment You May Need**

If the entrance(s) are located more than 6 feet above the ground, you will need one or more ladders (Fig. 4) or a scaffold (Fig. 5) to work from. Since you are working with a colony of bees that have brood and their home to defend, you should wear protective clothing, including a veil, coveralls and gloves. Make sure your trouser legs are taped or secured to prevent bees from entering. While working on a ladder, you do not want to feel invited visitors crawling up your legs.

Locate all entrances to the wall and close all but one. Holes with diameters 5/16" and larger should be sealed up using caulking, wood, tape or other materials. This sounds easy, but can be a challenge depending upon the material used for construction. Openings in a shake roof are hard to seal because they are numerous and you can not use nails. Duct tape, a universal tool for beekeepers, can be used if the wood is dry enough to allow it to adhere. High winds and wet conditions could cause the tape to come off.

Select one entrance and leave it open. This entrance should be the one having the largest number of bees coming and going. Hopefully, it will be possible to attach the trap hive nearby.

**Build a platform or frame** for the trap hive to sit upon as close as possible to the entrance and slightly above it if you have an option. You will need to open the hive top cover, so be sure to leave enough space to do so. A scaffold, if available, can also serve as a platform and a work area (Fig. 5).

The trap hive will become increasingly heavy as bees occupy it and may weigh between 40 to 80 pounds. You will need sturdy materials and tools to construct the frame, such as 2-by-4s or 2-by 6s. This frame should be supported from below with a pole or post angled to the wall, or in the case of a stone wall, the post could extend from hive base to ground (Fig. 6). You may need ropes to lower the heavy hive to the ground.

---

*Figure 3. Generalized situation of honey bee colony in wall with equipment in position to catch bees in a trap hive. Exit cone tip should be elevated to prevent clogging.*
Figure 4. One or more ladders may be needed when the wall entrance is high off the ground.

Figure 5. A scaffold can serve as support and safe work area for any required manipulations made by the beekeeper.
Install an exit cone. You must construct a cone or funnel to allow bees to exit the wall, but prevent them from returning. Place the large opening or base of the cone over the wall entrance and securely attach it. This will force all exiting bees to leave through the narrow end of the cone (Figs. 3 and 7). The size of the cone at the base can vary (4-5" diameter is ideal), but the small opening at the tip of the cone should be no larger than 3/8" diameter. Bees will easily exit, but have difficulty finding their way back, making the cone a one-way exit. The tip of the cone should point upward to prevent bees from clogging the exit. If the tip is not elevated, bees which die from natural causes can plug up the hole. The tip of the cone should be positioned from 6 inches to a foot away from the wall opening to allow any necessary manipulation of the hive later.

To avoid being stung when you attach the cone, have your materials ready and work quickly, especially if it’s not possible to wear gloves. An alternative would be to attach the cone when bees are less active, in early morning or at night.

Cones made of aluminum window screening are easy to make because the material is easy to form into a shape that conforms with varying entrance shapes. You will need to remove any obstruction from the tip of the cone frequently, which will require almost a daily inspection. A willing homeowner with binoculars positioned a “safe” distance away may be able to detect a blockage which might save a visit. The homeowner may not be able to see the tip clearly if bees cluster on the tip, as they may do in warm weather.

On rare occasions, the bees will be able to re-enter through the small tip of the cone. To circumvent this, a second, larger cone can be positioned and sealed over the original cone.

Position the trap hive. The size of the trap hive to be used varies, depending on the suspected size of the colony inside the wall. If the bees have only been residents for a couple of weeks, then a five-frame nucleus hive body could be used. If you suspect a larger colony, for example if the bees have been there for a long time and you see a steady stream of bees entering and exiting, then a standard 10-frame hive body should be used. The hive body should be nailed onto the bottom board to prevent accidental separation later.

Inside the trap hive, place a frame of brood minus adult bees between two frames of drawn comb and position these near to the entrance in the wall. If you leave bees on the brood, they keep it warm, but they may fight with bees coming from the wall. The frame must not be chilled during transfer from the donor hive or the brood may die. A frame of honey can be added, especially if the removal is being done when bee food is limited.

The remaining space in the box should be filled with frames containing wax foundation. You want to provide the trap occupants with something to keep them busy. The bees will be attracted to the brood and readily cluster on it. After the cluster expands over the brood as more bees arrive, the
bees will start other hive duties, such as producing wax and building comb onto the wax foundation you provided.

With large colonies, an additional super (box with frames placed above the hive body) may be supplied to allow honey storage if space allows, but remember that whatever goes up must come down. If space is tight above the hive body, frames of honey can be routinely exchanged for frames of foundation. If your box is too small, replacing frames will be necessary to provide space, because you do not want your trap colony to swarm.

Usually, the queen will exit the wall and move into the trap colony when there are few bees remaining. If the queen fails to move into the trap colony, then you must supply the colony with a new one. Usually the worker bees and the queen from the wall colony will transfer into the trap colony. When the queen starts laying eggs and brood production is underway, the bees have made the transfer complete and they will defend this colony.

When bees have stopped exiting from the wall for a couple of days during fair weather (with temperatures above 60 degrees and cloudless skies), the trapping is complete. The cone should be removed for a couple of days, to allow the bees in the trap colony to rob the honey that remains in the wall. The colony will not move back into the wall because it now has a home with queen and brood to defend. The cone is then replaced to prevent other bees from occupying the wall until the trap hive can be removed and the wall opening sealed.

**Acknowledgements**

The author extends appreciation: to John Kelley for permission to photograph and participate in a removal situation; to Marlene and Glendon Thomas for use of photographs and a fine trap colony; to Charles Simon for information and to Jean Ledbetter and Gary Dagnan for layout and graphics.
**a U.T. Extension Reminder...**

**Did You Know?**

If you like to eat, then you need bees!

<table>
<thead>
<tr>
<th>Why are bees important?</th>
<th>Bees pollinate, which starts the fruit or seed to form in many plants.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the annual value of fruits and vegetables that benefit from pollination?</td>
<td>$118 Million in Tennessee</td>
</tr>
<tr>
<td>What fruits and vegetables are included?</td>
<td>Apples, peaches, pears, plums, strawberries, blackberries, blueberries, raspberries, cantaloupes, cucumbers, pumpkins, squash, beans, peppers, tomatoes, watermelons, and others.</td>
</tr>
</tbody>
</table>