# The Beeline Pollen Trap

Thank-you for choosing the Beeline Pollen Trap. Several years have gone into prototyping a trap that is versatile, effective, and productive. To achieve some of the versatility features that make this trap a good choice, we could not use the screen type of trapping system that traps like the Sundance use and hence can hardly expect those kind of high yields. However, we believe that some of the advanced features of this trap and the fact we do not want to trap 100% of the pollen anyway, makes this trap a tool that many beekeepers will find useful and most bees will find tolerable.

We recommend that you take a few minutes to read the following descriptions and directions carefully and that you follow them for best results.

## Features of your trap

- **Single entrance.** Because the trap uses a trap strip, the entrance remains the same for trapping and not trapping. The bees do not need to "learn" a new entrance every time you switch between trapping and not trapping. The pathway for the bees remains the same at all times.
- **Easy switching.** To trap the pollen, simply remove the drawer, insert the strip through the slot, and close the drawer. When you want to discontinue trapping for a time, simply open the drawer, gently remove the strip (give time for bees to get out of the strip) and close the drawer. You might be able to do this, as well as gather pollen without smoke, hive tool, or protective clothing—but it's your risk!
- **Large drawer.** The trap's large ventilated drawer is capable of handling large pollen flows, however, it should not be expected that a day's worth of trapping will yield huge amounts. Amounts are dependent on many factors and a small amount in such a large drawer should be considered good. Also, for best pollen quality, it is recommended to remove and properly process pollen often.
- **Weatherproof.** The beveled edges of the drawer front and opposite side panel help to divert most of rain water. However, as a second line of defense against rain moisture, we have incorporated a space between the outside panels and the pollen cavity. Under severe circumstances some water may still get into the pollen, but if care is taken to harvest pollen before severe rainstorms, loss will be minimal.
- **Bee proof.** By having the trap strip and drawer area completely covered on both sides, bees will not be as likely to try to get in and out of the hive at other cracks and openings.
- **Easy cleaning.** The plywood on the top of the trap can be removed and the trap area can be easily cleaned of all debris.
- **Reversible drawer and strip.** With the possibility that commercial beekeepers with clipped pallets may want to trap pollen or that a hobbyist may prefer a different side of the hive to access the drawer, and strip, these traps are designed so that the drawer and trap strips can be inserted from the opposite side and still allow the cone end of the trap be toward the front of the hive.
- **Well ventilated.** Screen on the bottom of the trap and on the floor of the drawer allows air to circulate up through trapped pollen to minimize damp pollen.
- **Clean pollen.** The plywood cover over the trap and drawer area minimizes debris from getting into the trapped pollen. This does not mean that the pollen will not need to be cleaned, but this plywood keeps brood chamber debris from contaminating the trapped pollen and hence reduces the cleaning process.
- **Easy exit of bees and drones.** The red cones at the front of the hive makes it so that bees and drones can get out of the hive without going back through the trap strip. Of course, bees will come back through the strip, drones will be excluded until you remove the trap strip.

## Learning to know your trap

- Hold the pollen trap so that the end with the red cones is toward you. This end is the entrance end.
- The trap, as you buy it, is set up with the drawer and strip removable from the left side. Unless you have reason to change it to the right side, the trap is ready to use as it is.
- The right side of the trap is covered with a panel that is screwed in place. If you desire for the drawer and strip to be removed from the right instead of the left, you will remove that panel, insert the drawer and strip from the right side and screw the panel back the left side.

- Handholds on all four sides make the trap as easy to handle as any super.
- The red cones make it easier for the bees to exit the hive rather than returning through the trap strip. These cones also allow drones to get out, but unfortunately, once out, the drones will not be able to return to the brood chamber because they are two big to get through the holes in the strip. This is the case with any pollen trap and is true for a queen too. It is very important to choose a hive to trap that is not in the process of making a new queen.
- The plywood top can be unscrewed for easy cleaning of dead bees and debris that may accumulate in the trapping area. WARNING: The groove for the trap strip makes a weak spot that can break if not removed carefully.
- The beveled edges on the top of the drawer front and panel on the right divert most of rain water, however, we designed the drawer with a space between the outside panels and the pollen collection areas so that if any water gets inside it runs out the bottom of the box instead of into the pollen. However, it is still a good idea to collect pollen before a big rainstorm so that your crop does not get wet and worthless.
- Your trap comes with two strips—one inserted in the trapping slot and the other lying in the pollen drawer. You will only use one, the other is a spare. When not in use, the strips should be stored flat and away from heat and sun.
- If you turn your trap upside down with the drawer still to the left, you will notice a narrow groove running length wise on the right hand side. This groove allows a commercial beekeeper to use the trap on a pallet with clips. If you are not using pallets, this groove will be ignored.

## How the trap works.

- The bees will enter the entrance of the hive as they normally would. There is no "retraining" to a different entrance to use this trap.
- The bees travel to the back of the trap underneath the drawer area and up the back of the trap.
- From there they come forward into the trapping area above the pollen drawer.
- If the trap strip installed, the bees struggle through the holes in the strip and loose their pollen as they do so. The pollen drops through the screen and collects in the drawer below.
- The bees continue to the front of the trap until they reach the gap that leads into the brood chamber.
- When the bees leave the hive, they will tend to go down through the red cones and out through the entrance of the hive.

## Instructions for using and caring for your trap

- If you have bought an unpainted trap, we recommend putting a coat of paint on it before you use it. This will keep the parts from swelling and warping and potentially ruining your trap. Use latex primer and at least one top coat. Spraying the paint on is best because it allows good coverage of hard-to-get-to places of the trap but brushing can also work very well. In either case, paint all of the surfaces that will be exposed to the weather and the inside of the drawer front. It would be good to remove the panel that is screwed on the right side paint the back side of it. This will keep it from warping. You may also paint any of the inside of the trap that you care to, but be careful not to allow very much paint build-up that will make it difficult to get the drawer open or closed or difficult to put the trap strip in and out.
- Choose a fairly strong hive to trap pollen from during a time of the season that has a good pollen flow. Spring and fall are optimal. Choose a hive that has a lot of brood, a queen that is doing well, no queen cells and no obvious potential for swarming and a fair amount of stored pollen. Do not attempt to trap pollen during a low pollen-producing time of the year. Collecting pollen always stresses a hive and you do not want to do so unnecessarily.
- Place the trap at the very bottom of the hive, right on top of the bottom board (reversible or screened bottom boards can be used) with the cone end toward the entrance (front of the hive). Stack the rest of the boxes back on top and put the inner cover and lid back on the hive.
- Open the drawer and remove the strip from its trapping slot. Lay the strip in the bottom of the drawer for storage. Close the drawer and wait at least two days before inserting the strip back into the trapping slot. This allows the bees to get used to the new part of their hive and the new pathway from the entrance to the brood chamber before starting to trap. If you want to get the most advantage out of a pollen flow you should put the trap on several days in advance so that when bees start collecting pollen

everything is ready to insert the strip.

- Make sure the rest of the hive is completely closed up. If bees can find any other way to go in and out of the hive than through the trap, they will. Use only hive boxes that have no holes or use duct tape to tape over cracks and holes that bees might try to use instead of the normal entrance.
- Choose a day to insert strip that looks like it will yield a good pollen flow. Make sure that there are flowers that yield a lot of pollen blooming and the day is a good flying day. You might even want to observe the bees at the entrance and wait to insert the strip until you see a lot of pollen coming into the hive on their legs.
- Insert one of the strips with the pointed end first and the smallest angle at the top. If you insert it upside down, it will probably get stuck before it is all the way in. The square end of the strip should be at least flush with the surface of the board that has the slot and finger hole in it and the drawer should be able to close completely flush with the outside of the hive.
- The strip can be left in for a length of time but for best maintenance of the hive, we do not recommend trapping for longer than a week at one time. We also recommend removing and reinserting the strip every so often to prevent it from becoming too stuck with propolis. However, WARNING!, when you remove the strip, do so gently to give the bees time to get out of the holes as you remove it. You do not want to destroy more bees than you have to in the process!
- The drawer has a large capacity and is well ventilated, but we do not recommend allowing pollen to accumulate in the drawer for a long period of time. For optimal pollen quality, we recommend removing accumulated pollen every other day and process it according to good procedures (freezing, cleaning, refreezing, etc). Except when working with the trap on the hive, keep the drawer in place at all times. Bees will try to get into the hive at places other than the entrance. To leave the drawer out will create quite a mess!
- We also recommend removing the strip for days that do not have a pollen flow. Night times during a flow will be OK since bees are not flying at night anyway.
- For optimal hive health during the trapping period, give several days between trapping times and monitor the health of the hive. Open and check the hive occasionally. If you see evidences that the hive is weakening or that the hive is in the process of requeening or getting ready to swarm, at least remove the strip. Better, remove the whole trap. NOTE: You may trap a hive as much as you want, but be aware that the harder you trap, the more you will degrade the hive. The hive still needs pollen for itself and subjecting the bees to the grueling work of going through the holes in the trap strip can be very hard on a hive.
- Remove the trap as soon as a pollen flow is over or you are finished trapping a hive for an extended period of time. We do not recommend leaving a trap on a hive more time than what you will be using it to trap.
- When the trap is removed from a hive, unscrew the plywood cover and clean out any accumulated dead bees and debris. Make sure the trap strip can move in and out easily (scrap out any buildup of propolis). Screw the plywood back on. NOTE: If you have more than one trap, do not interchange the plywood panels. The screws will not go back in the same holes and can change the position of the groove that the strip slides in in relation to the slots. The drawers and strips should be able to be interchanged.
- Store your trap in a dry place and keep mice from finding them and using them for their nests. Letting the trap in the weather will deteriorate it and potentially render it unusable.
- A word about the strips. When not using strips to trap, store in a place away from direct sunlight and in a flat position, such as on the bottom of the drawer. Storing them on vehicle dashes, buckets, etc., will most likely distort them beyond usability. New strips are available from Beeline. Call us at 269-496-7001.

Happy trapping!