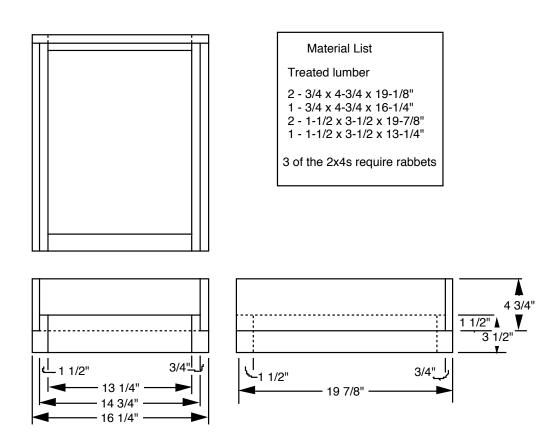
# Multi-bottom 1 of 3

Drawn by Gary S. Reuter University of Minnesota Dept. of Entomology 12-07-01

The hive bottom design shown is designed to use drawers that are put in for different purposes. A pollen trap is used when ot trapping pollen from a colony. Otherwise a drawer that has four options is used. One design has a screened bottom board for varroa control. The drawer has 4 options: 1) A "normal" 3/4" summer opening; 2) a screened opening for moving the colony with the drawer leaving extra space for bees to congregate; 3) a closed hive for times when no bees are in the hive; and 4) a winter opening with the drawer providing space for dead bees to fall and easy method to clean them out in the spring.

This trap is designed for pollen to be used to feed back to the bees. Pollen collected for human use will usually have a screen to catch falling hive debris before it gets into the pollen drawer.

### Base



# Multi-bottom 2 of 3

Drawn by Gary S. Reuter University of Minnesota Dept. of Entomology 12-07-01

### Pollen Trap

#### Material List

a - 1 - 3/4 x 3/4 x 11-1/2"

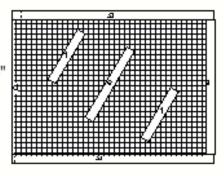
b - 2 - 3/4 x 3/4 x 17-3/8"

c - 1 - 8x8 mesh 17 x 12-3/4"

d - 1 - 3/8 x 3/4 x 13"

e - 1 - 3/4 x 3/4 x 7"

f - 2 - 3/4 x 3/4 x 5"



Nail corners b to a.

Staple screen c to the bottom of a&b.

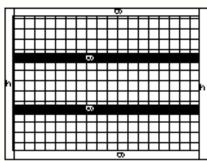
Nail on part d to bottom of b.

Staple screen c to d.

g - 4 - 1/4 x 3/4 x 15-7/8"

ň - 2 - 1/4 x 3/4 x 13"

i - 2 - 5x5 mesh 17 x 12-3/4"

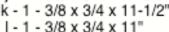


Staple one screen i to e & f.

staple mesh to both sides then nail to top of the section above

Staple e & f to screen c

j - 2 - 3/8 x 3/4 x 17-3/8" k - 1 - 3/8 x 3/4 x 11-1/2"





Nail to section above as shown. Note 1/4" space on each side of I to allow drones to escape.

This completes the trap portion. This trap will set into the pollen trap drawer drawer.



### Pollen Trap drawer

m - 2 - 3/4 x 3 x 18-1/4"

n - 1 - 3/4 x 3 x 13-1/8"

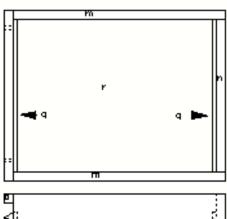
o - 1 - 3/4 x 3/4 x 14-5/8"

p - 1 - 3/4 x 1-1/2 x 14-5/8" (30 deg bevel)

q -2 - 3/8 x 3/4 x 13"

r -1 - 1/8 x 19 x 14-5/8"

3/8" hole



Nail or screw & glue drawer together as shown. Pieces q support trap and should be placed to hold trap flush with top of drawer.

Note 3/8" hole in part o lined up with slot in pollen trap for drone escape.

## Multi-bottom 3 of 3

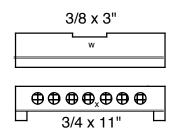
Drawers

Drawn by Gary S. Reuter University of Minnesota Dept. of Entomology 12-07-01

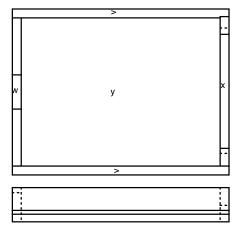
#### Material List

## no pollen drawer

v - 2 - 3/4 x 3-1/8 x 19" w - 1 - 3/4 x 3-1/8 x 13-1/8" x - 1 - 3/4 x 2-1/4 x 13-1/8" y -1 - 1/8 x 19 x 14-5/8"



1" holes, 1-1/2" on center covered with 8x8 screen



Nail or screw and glue drawer together as shown.

This drawer to be in base when not trapping pollen. The drawer can be inserted 4 ways, 1. summer entrance, 2. closed, 3. screened entry for moving providing air entry and extra space for bees to congregate, 4. winter entrance with drawer to collect dead bees for easy spring cleaning.

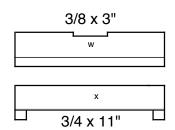
## no pollen drawer with screened bottom

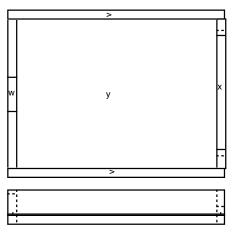
v - 2 - 3/4 x 3-3/16 x 19"

w - 1 - 3/4 x 3-3/16 x 13-1/8" x - 1 - 3/4 x 2-1/4 x 13-1/8"

y - 1 - 8x8 hardware cloth 19 x 14-5/8"

z - 1 - 1/8 x 13 x 17-3/8"





Nail or screw and glue drawer together as shown.

The screened bottom can be used to aid in control of varroa mites. When screened bottom is not desired place board z in drawer.

This drawer to be in base when not trapping pollen. The drawer can be inserted 4 ways,

- 1. summer entrance, 2. closed,
- 3. screened entry for moving providing air entry and extra space for bees to congregate.
- 4. winter entrance with drawer to collect dead bees for easy spring cleaning.

