Build It and They Will Come By Ann Caudell and Susie Sonflieth

We know how important bees are to our food supply and gardens. But how do we support bees? If we supply them the proper habitat, they will take advantage of favorable conditions and enhance our gardens, too.

# **Building a Native Bee House**

Before you build a bee house, consider your garden, its size, sunlight exposure and plant varieties. Do you want a complex, artistic bee house or a simple one? How skilled are you (or a good friend) at carpentry? It takes between two and three years for the bees to come, so don't give up!



Simple Bee House



More Complex



Native bee house completed at the Audubon workshop.

# How to Build a Native Bee House

- 1. Considerations
  - Garden size and shape
    - Small garden smaller house
    - Large garden larger house or several small ones
  - Exposure to sunlight Houses should face east by southeast
  - Types of plants
    - o Vegetables will you rotate crops?
    - Perennials those that can stay in one place
    - Pollinator Plants to attract native bees, butterflies, birds
  - Type of bee house Complexity
    - Simple easy to make
    - Complex requires woodworking skills
  - Draw your plans
    - o Determine size
    - o Draw the frame with lengths for roof, sides, bottom and interior dividers
    - A bee house can be made of 2" x 6" untreated lumber or 1" x 6" lumber. Note that a 2" x 6" board is really 1½" x 5½"
  - Build the frame
    - Protects bee house frame from weathering
    - Apply shellac on the inside and outside
      - Shellac a resin secreted by the female lac bug from Southeast Asia
      - Is "edible" used for sheen in some pills and jelly beans (please don't try this!)
      - Non-toxic to insects and birds
      - Odorless after drying
    - Apply more shellac if it is breaking down due to sunlight/weather exposure.
    - o Consider copper or metal sheets along the top of the roof
  - Nail rust-proof hardware cloth or screen to back of frame.



- Ways to mount your bee house
  - If your bee house is small and light-weight, you can attach to it to a tree or 4 X 4 post.
    - Dig a 1 foot hole
    - Place 4 X 4 in hole and refill with removed dirt.
    - Attach bottom to top of 4 X 4 with either sturdy nails or lag bolts.
    - Insert logs, bamboo, etc.
  - o If the completed bee house is larger and heavier
    - Dig a 2 foot hole
    - Place 4" x 4" in hole and pour in a bag of quick-drying concrete. Wet with water and stir in place.
    - Mount the house directly to the pole.

- Bee House Logs (with tiny holes drilled lengthwise and inserted into the frame)
  - o Drill a variety of hole diameters 1/8, 3/16, ¼, or 5/16 inch
  - o Depth should be roughly 4"
  - Mason bees require 1/2" diameter holes
- Bee House Fillers
  - Bamboo segments can be wedged around the logs to create a solid-looking structure.
     (Order on-line.)
  - o Cut to the same length as logs
  - o Bamboo segments must be closed in the back—the front is open.
  - o Female encloses openings with resin after depositing eggs
  - o With warmer spring temperatures, the resin will soften and the bees will emerge!

When completed, just sit back and enjoy your bees and your artwork!

### **References and Resources**

# Books

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# Websites

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