

Protecting our Pollinators: How to Make a Milk Carton Newspaper Tubes Bee Nest



Want to learn a fun way to help protect our pollinators? Learn how to build a bee nest out of newspaper in this fun craft! All you need is some cardboard, newspaper and white paper or craft paper to get started.

Thank you to 4-H Ontario and their Pollinator Project for this activity!

ACTIVITIES

Activity #7 - Milk Carton Newspaper Tubes Bee Nest

Close to a third of our native bees nest in wood, including hollow or pithy-stemmed plants. Milk carton bee nests are fun to make and use materials that are easy to find. Visit www.pollinationguelph.ca for additional methods of making bee nests.



Items Needed:

- 2L or 4L milk carton (rinsed)
- 4 sheets of 8 ½" x 11" white paper
- 4 newspaper pages
- Pair of scissors
- Pencils or dowels of varying sizes
- Tape (Scotch or masking tape is best)
- String
- Post/stake
- Paint/markers

**NOTE: hollow or pithy-stemmed twigs can also be used in place of the newspaper tubes. Natural plants stems are recommended as the newspaper can become soggy and moldy.*

Instructions:

1. Following the fold lines at the top of the carton, cut half-way around the carton (e.g. where the "spout" is). This leaves an overhang on the box to help keep out the elements.
2. Paint the outside of the carton using weather-resistant paints. Decorate as desired using paints or permanent markers. (this step is optional).
3. Layer sheets of newspaper and plain paper together, with the long edges together. The white paper keeps the bees away from the newspaper ink and the newspaper increases the strength of the tube and decreases the light.
4. Cut the newspaper-white paper layers along the edge of the white paper (i.e. 8 ½" wide segments).
5. Fold this segment in half along the longest length and then in half again. Cut the folds so that you have similarly-sized newspaper-white paper sets, approximately 7cm x 20cm (2 ¾" x 8 ½").

6. Using a pencil or a dowel, roll the pieces into cylinders or tubes. Different sized dowels are recommended as different bees prefer stems of different diameters and lengths (see also #8 below).
7. Tape the edges shut and slide the tube from the dowel. Fold the last 1 to 2.5cm (1/2" x 1") of the tube upwards and tape it to the body of the tube. This closes the end of the tube and prevents light from entering. The female will plug the front entrance with mud after she finishes nesting.
8. Repeat until you have 15 or more tubes. Place the tubes in the carton, packing additional newspaper around the tubes so that the tubes remain horizontal and will not fall out if moved.

Directions Using Twigs/Stems (continue after steps 1 & 2 above)

Any type of dead stems with a hollow or pithy stem can be used for nesting tubes. Example species include goldenrod, Queen Anne's Lace, sumac, teasel, cattails/reeds, elderberry, parsnip, rose and raspberry stems/twigs. One end of the twigs should be closed (e.g. by a knot or stem node) so that the tube has only one opening; the female bee will plug the front entrance with mud after she finishes nesting. Pack the tubes in the box tightly so that the tubes remain horizontal and will not fall out if moved. Tubes should end just before the edge of the box overhang, to protect the bees from the elements.

9. The completed nest can be placed on a building, post or in a tree. The nest should be kept level, with the entrance facing east or south-east. Direct sunshine in the morning helps warm the bees up in preparation of flight. Ensure that the nest is stable and not going to move in the wind or the bees will nest elsewhere. The actual height does not matter, although 0.6 to 1.8 metres (2 to 6 feet) from the ground is good.

Maintenance:

It is best to put out nests in early spring although it is never too late to put a new one out as females of some species will lay eggs throughout the year. If a female finds a tube suitable, she will lay a series of eggs on a pollen and nectar ball, separated by partitions. As the eggs hatch, the larvae will feed on the provisions and then create cocoons in which they will mature into adults later in the summer or the next spring. It is important to note these bees will only sting if handled roughly (e.g. squeezed) and in the rare cases where this happens, their sting is similar to a mosquito bite.

Activity Source: Pollination Guelph