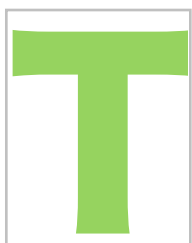


Enhance your garden by attracting the right kind of bees

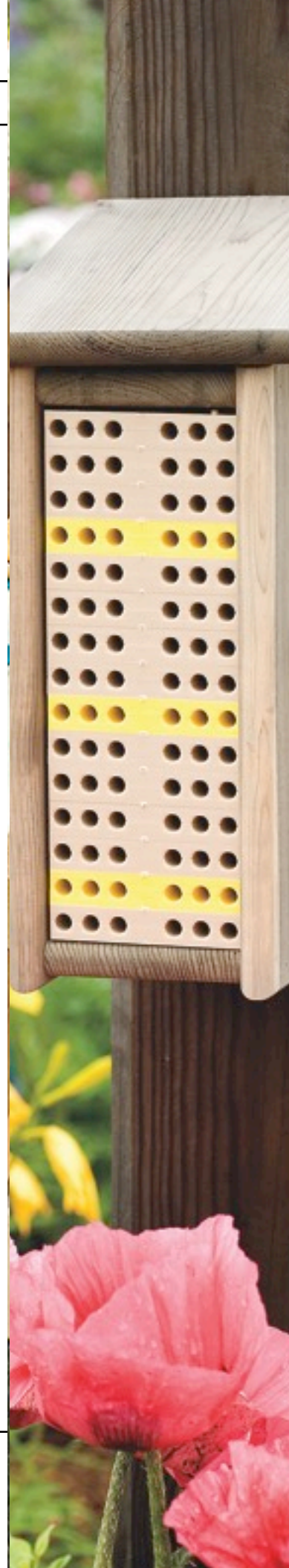


WENTY YEARS AGO, my wife, Mary, and I cut through a rusty, tumbledown wire fence surrounding an old hay field and began turning the land into the home of our dreams. Gardens and orchards were part of that vision, but with them have come an unexpected benefit. As perennial flowers, hedges and trees have grown and matured, new birds and animals have moved in, along with plenty of beneficial insects. The bees are my favourite.

The more the better. That's why I've built special accommodations for a little-known pollinating superstar called the mason bee. As populations of other pollinating insects decline across Canada, mason bees hold the greatest promise for maintaining and enhancing the health of gardens and orchards. With just a little help, they thrive.



You'll need plastic nesting trays to make these bee boxes, and it's best to get them before you begin work. This way you'll be able to test the size and shape of your wooden parts as you make them. I used 5/8"-thick eastern white cedar for my boxes, roughly the standard thickness of fence boards these days. If your material is a little thicker or thinner, no matter. The design works the same without need for modification.



“The sloped roof is removable, and includes an added compartment underneath to put mason bee cocoons for supplemental springtime hatching”



WORKSHOP BUZZ PART 1

WHAT YOU NEED

PART	SIZE	QTY.
Sides	5/8" x 6 3/8" x 12 3/4"	2
Back	5/8" x 5 3/8" x 13"	1
Bottom/inner top	5/8" x 3 9/16" x 6 1/8"	2
Top	5/8" x 6" x 7 7/8"	1

Start by cutting the sides, back and bottom slightly larger than finished size. You could trim these parts now and put them together with square edges, but I opted to rout a little-used rounded profile that creates an effect I find quite attractive. Instead of using a regular roundover bit, I milled all exposed edges with a 1"-diameter bullnose bit in a table-

mounted router. This puts a part-circle profile on the wood that's classier than more conventional full-round shapes. This works out most efficiently if you rout all the edges you can, trim parts to final size (except the sides and back; leave them long for now), then rout any remaining edges. As you work, test fit box parts around your nesting trays. Make sure there's enough clearance around the trays so you can pull them out freely. And don't forget, your wood will swell when it gets wet outdoors, so build in a little extra room.



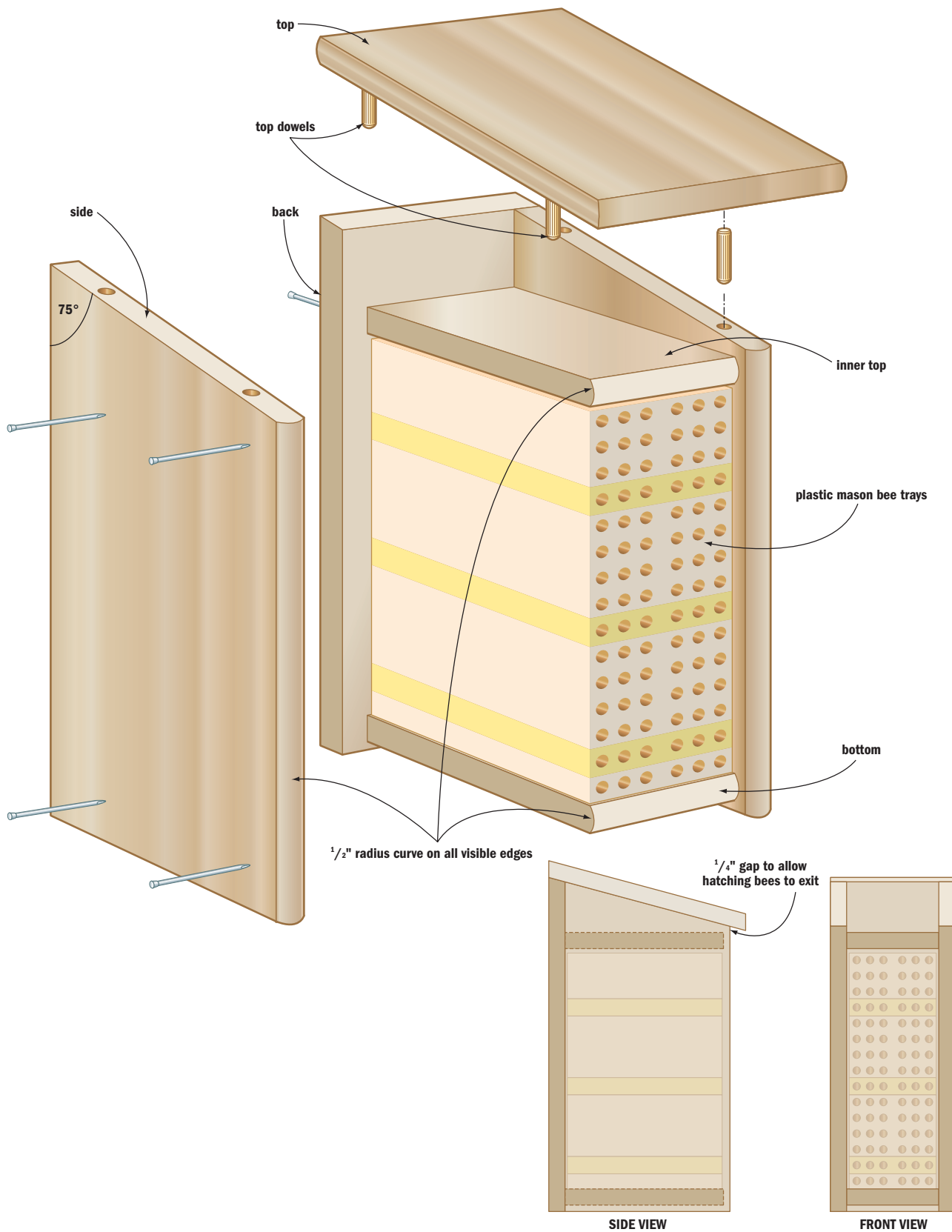
A cedar box holds the trays that are key to attracting pollinating mason bees. Build it, then mount it near your garden

Use weatherproof glue (I went with polyurethane) and stainless steel nails to join one side piece to the back. Next, add the bottom and inner top followed by the second side. At this stage you should have completed the main body of the bee box, except that it's too long on top. It's not sloped yet, either.

I angled the top of my bee box to shed water by sawing it 15° from square on my sliding compound mitre saw as an assembled unit. The 12"-diameter blade almost cut through the entire assembly, but not quite; I sawed the last remaining bit of wood by hand. If you have a smaller mitre saw (or none at all), angle the top ends of the sides and back before assembly.

“Mason bees hold great promise for maintaining and enhancing the health of gardens. With just a little help, they thrive”

PLANS FOR THE BEE BOX



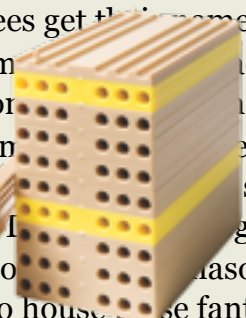
WORKSHOP BUZZ PART 2

Regardless of how you do the work, be sure that the front edge of the sides rise 1/4" higher than the top surface of the inner top. This extension creates a gap under the front of the roof that allows newly hatched mason bees to emerge after hatching from the top chamber, if you decide to use it.

Cut the bee box top to length and width, glue 1/4" dowels into holes on its bottom surface, then create matching, unglued holes in the top edges of the sides. These protruding dowels hold the lid in place, yet allow the top to come off easily when you need to get into the brood chamber.

Leave the wood bare or finish it with a non-toxic outdoor finish, then mount the bee box on a post or tree using a couple of deck screws driven through the back. An east-facing location warms the bees quickest in the morning, encouraging them to get an early start pollinating your fruits and vegetables while filling your garden with a pleasant humming sound.

BEE BONUS



Mason bees get their name from a mortar-like mud compound they use to seal tube-shaped holes where female bees lay eggs. A lack of suitable nesting holes can be a limiting factor in mason bee population. Where a good bee box comes in. Although mason bees happily lay eggs in 5/16" diameter holes drilled into wood, this arrangement isn't ideal. The problem is pollen feeding mites. They can survive several years use, eating the pollen meant for growing larva. To solve this problem, I contacted Dr. J. Gertom (www.beediverse.com), a professor at Simon Fraser University, who has developed a mason bee brood trays that can be taken apart for annual cleaning. Build this bee box to house these fantastic trays.

My bee box design includes a few key details. The nesting trays slide in and out easily for annual cleaning, while also being protected from the weather. The sloped roof is also removable, and includes a compartment underneath to put mason bee cocoons for supplemental springtime hatching.

BEEING HELPFUL

You carefully plan where each seed and plant will go. Then you water, weed and prune to make sure your garden thrives. But have you ever thought of attracting insects for the betterment of your flowers?

Bees are one of the most efficient pollinating insects around. Attracting them to your garden can help your flowers flourish and your plants prosper.

Having a place for them to breed, such as this bee box project, is a great start. Another good idea is to use plants that will attract and promote pollination. Some plants that bees love are:

- * dogwood
- * black-eyed susan
- * sunflower
- * hyssop
- * wild geranium

Once you have a place for bees to breed and flowers they are attracted to, be sure to avoid pesticides to keep your garden ecosystem healthy.

~JODI AVERY MACLEAN

Bees love dogwood and black-eyed susan

