

Julie Craves tells how you can keep wasps from nesting in bluebird boxes

How can I keep wasps from building nests in bluebird boxes? I've heard that rubbing a bar of soap on the inner roof may deter wasps. — Philip Hardy, Americus, Georgia

I have recommended the soap tactic as well. I've also suggested stapling a piece of smooth plastic to the ceiling of the box, and I've seen many other tips on what to put on nest-box ceilings, including wax, petroleum jelly, rabbit fur, and others.

Your question prompted me to consult with [Mark O'Brien](#), insect collections manager at the University of Michigan Museum of Zoology. Based on the ecology of paper wasps, we surmised that soap is probably the most effective option. Here's why:

Paper-wasp nests are made of wood pulp and saliva. The first cells are attached to a substrate by a slim stalk, or pedicel. Wasps may be deterred by the chemical composition of the soap itself, but it's more likely that the initial wetness of the pedicel interacts with the soap, preventing the stalk from adhering.

Materials other than soap seem to have their own liabilities: wax can attract bees, petroleum jelly can melt or soil feathers, rabbit fur may be hard to come by (or attach). The ability of wasps to scrape (the method by which they acquire wood fibers to make pulp), making surfaces rough enough to attach their nests, may diminish the usefulness of attaching smooth materials.

A layer of soap on the ceiling seems most likely to do the trick, as paper wasps prefer attaching their nests to horizontal surfaces. The introduced European paper wasp (*Polistes dominula*), however, is more likely than our 22 native species to attach the pedicel to a vertical surface.

In one study, nearly 20 percent of nests had a vertical attachment. Half of those nests grew to include pedicels attached to the adjacent roof. Thus, extending the soap layer just a short distance down the inside walls of the box should greatly increase the effectiveness of this method. Using an unscented bar soap with minimal ingredients is the most benign choice. — Julie Craves