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NORTH CENTRAL FOREST EXPERIMENT STATION, FOREST SERVICE — U.S. DEPARTMENT OF AGRICULTURE

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A BIRD AND BEE PROBLEM IN HOUSE SIDING

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ABSTRACT.--Plywood house siding made to simulate reverse board-and-batten design is sometimes attacked by woodpeckers because leaf-cutting bees, their prey, make nests in holes in the plywood core. The problem can be prevented by plugging the holes before nesting occurs. If nesting does occur, the nest should be destroyed and then the holes plugged.

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Homeowners in wooded areas of southern Michigan have been experiencing damage to the rustic plywood wood siding on their houses. Woodpeckers had excavated at various places on their houses in search of prey, a megachilid bee, *Megachile relativa* Cresson,[1] that had taken up residence inside the siding (fig. 1).

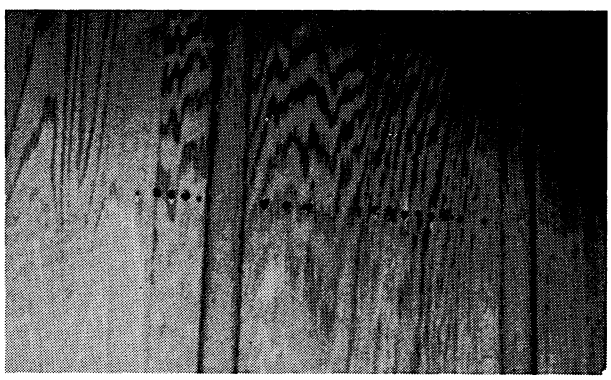

Figure 1.--*Holes in plywood siding caused by woodpeckers seeking megachilid bee larvae.*

All houses attacked were sided with cedar or redwood exterior plywood constructed to simulate a reverse board-and-batten design. The design resembles 8 to 10 inch vertical rough-sawn boards, separated by spaces backed behind with batten boards. These spaces are actually grooves cut about half-way through the plywood, which may be 3/8 to 3/4 inch thick, depending upon the siding.

The woodpecker-bee problem arises because of factory plywood construction

[1] *Specimens identified by R. L. Fischer, Department of Entomology Michigan State University, East Lansing, Michigan 48824.*

procedures used in making the reverse board-and-batten design. The core veneer, or inner layers, used for plywood construction are assembled from lower quality veneer pieces of various widths. During assembly of the plywood sheets, gaps or small voids inevitably occur from place to place between the core layers. The face and back veneer ordinarily cover these voids, but they are sometimes visible on the edges. The voids do not affect the strength or appearance of the plywood. However, when the grooves are cut for the reverse board-and-batten effect, the voids are exposed. Megachilid bees seek out such small cavities to build their nests and enlarge them, if necessary, for cell contruction. These cells, provided for the young bees, are lined and separated by circular pieces of leaf tissue. Six or more containing one larva each may be constructed in the cavity depending on its length. Thus, a nest may be 5 or 6 inches long.

Woodpeckers locate these nests and peck holes in the plywood to remove the larvae. The holes, up to 1/2 inch in diameter and 5 or 6 in a row at each attack, are jagged and contrast readily against the dark-stained wood.

This problem is probably rather common. Reverse board-and-batten plywood siding is popular and extensively used in wooded areas to provide a rustic look. *Megachile relativa* and woodpeckers both live in wooded areas and take advantage of this situation.

The problem can be prevented by sealing or plugging the exposed voids that appear in each of the grooves cut in veneer cores. This will eliminate the nesting sites. Sealing the voids at the factory could greatly increase the cost of the material, so the best method is for the on-site contractor or owner to check the plywood and plug or fill any holes present. These entrance holes must be filled before the bees build their nest. If the holes are plugged after the nest is made, the bees will chew their way out or the woodpeckers will seek out the larvae. The only recourse then is to destroy the nest with a long thin instrument, such as a stiff wire, before woodpeckers discover it. Holes already made by woodpeckers can be patched with an exterior patching compound stained to match the plywood finish. This is time consuming, however, and will show, so the preventive treatment is recommended.