

## **Stand-Level Distribution and Movement of *Platypus quercivorus* Adults and Spatial Patterns of Attacks**

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**Abstract** Flying populations of an ambrosia beetle, *Platypus quercivorus* (Murayama), a vector of the ambrosia fungus *Raffaelea quercivora*, which causes Japanese oak wilt in Japan, were sampled using sticky screen traps. *Platypus quercivorus* beetles tend to move upwards along slopes. The highest concentrations of flying beetles usually occur at the upper forest margins. During the period when numbers of flying beetles were increasing, the incidence of newly infested trees spread from the epicenter into the forest. During the period when number of flying beetles is decreased, the epicenter shrank into the upper forest edge. Newly infested trees did not occur in this period because most trees had already been infested. Near the upper forest edge, where many beetles were highly concentrated throughout the season, the number of new entry holes decreased considerably after the initial attack, early in the season, though many adults were present throughout the entire period.