In 2000 foresters in the Mountain Pine Ridge of Cayo, Belize found the initial signs of infestation of wood-boring beetles. Within only 2 years more than 25,000 hectares of pine forest were infected with a high percentage of trees killed.

There are a variety of wood-boring beetles that affect pine trees. Many species such as those from the genus Ambrosia, rarely prove fatal to trees. In Belize the usual culprits come from two genera, *Dendroctonus* and *Ips*. Although five species of *Ips* are listed for Belize and occur in the Mountain Pine Ridge, they usually occur with *Dendroctonus* species and it is the latter group that is blamed for the high mortality of trees. One species in particular, *D. frontalis* (the southern pine beetle) has caused large-scale pine loss in stands of Central American and American pine. However, in the case of the Mountain Pine Ridge catastrophe there is some debate as it whether it was a species of *Dendroctonus* that is new to science. The unidentified beetle is commonly known as the Caribbean pine beetle.

Caribbean pine beetle attacks begin with one female boring through bark of a pine tree. She then releases pheromones which attracts large numbers of beetles to join her. These also bore into the tree carving out nursery cells where they lay their eggs. The newly hatched larvae eat the innerbark and sapwood then pupate within the bark. When emerge as adults, at just under 4 mm, they gnaw through the bark, fly to another tree and begin the process anew. The pine is able to defend itself by releasing resin, but the tiny beetles are able to overcome a tree due to the massive amounts of beetles in an infestation.

To prevent the spread of beetles infected trees and tracts of healthy trees between infected and healthy forests are felled. Though the Caribbean pine beetle can fly only for a short distance, the southern pine beetles are able to travel 700m in search of a new tree. This means that swathes need to be at least this wide to be effective. Another control is the use of beetle traps using artificial pheromones to keep beetles from healthy trees.
References:

