

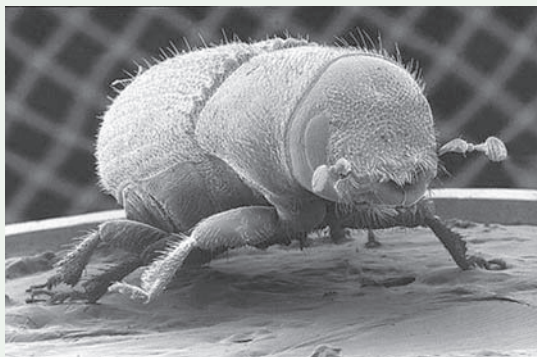
Chapter 10

POPULATION REGULATION AND THE BALANCE OF NATURE

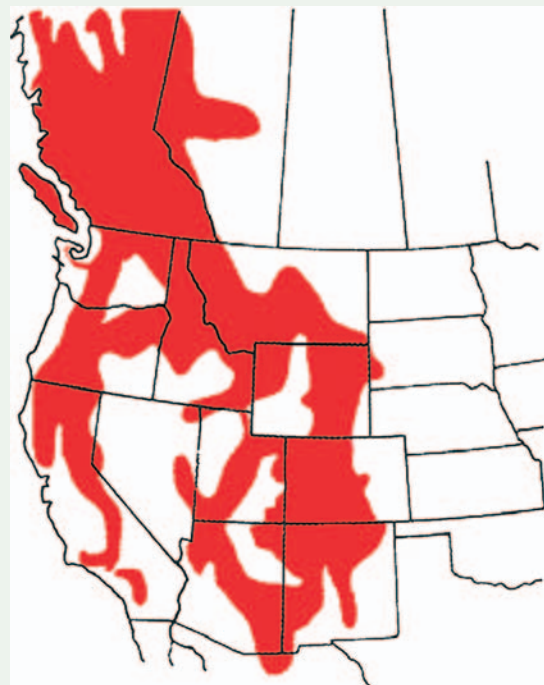
IN THE NEWS

The mountain pine beetle—an insect the size of a rice grain—is one of the most important insect pests of pine forests in western North America. From 1996 to 2001 mountain pine beetles killed more than half a million ponderosa pine trees in the Black Hills of South Dakota. From 1997 to 2004 these beetles have infested about 300,000 hectares (about 1200 square miles) in central British Columbia, killing about 80 million lodgepole pine trees worth US\$4 billion.

The mountain pine beetle is native to North America and occurs from Mexico to northern Canada. Female beetles bore into large pine trees and excavate galleries under the bark in which they lay their eggs. The larvae spend about 10 months under the bark, feeding on the phloem of the tree. Adults emerge the following year and within a day or two of leaving one tree they attack other trees. Trees are killed by the



Mountain pine beetle (Dendroctonus ponderosae)



Geographical distribution of mountain pine beetle