The bark beetle epidemic continued to kill trees across Arizona in 2003. An estimated 40 million ponderosa and piñon pine have died during this outbreak. Several native bark beetle species are responding to the weakened condition of over-crowded, moisture-stressed forests. While bark beetle outbreaks have occurred in the past, the unprecedented density of today’s forests is leading to extraordinary tree losses. Pine mortality will continue until the drought cycle is over or until host material is no longer available.

These native bark beetles typically affect small pockets of trees, but under these conditions, large expanses of forest are being impacted. The area affected in 2002 & 2003 is a seven-fold & fifteen-fold increase respectively from 2001.

The affected area has increased dramatically as seen in the maps above that show aerial survey results from 2001, 2002 and 2003. Supplemental aerial surveys were conducted in 2003 in the piñon forests, which accounts for some of the increases in pine mortality compared to previous years. Although large-scale control measures are not possible, projects involving protection of individual high value trees with insecticide have been effective. Sanitation removal of infested trees and thinnings are also being implemented.
Bark Beetle Activity in Ponderosa Pine and Pinyon Pine (2003 Aerial Detection Survey)