## **Protect Your Pinyon Trees**

## By: Shelly Van Landingham, Forester Colorado State Forest Service, La Junta District

Pinyon trees have been under attack for the past several years by a bark beetle called ips (*Ips confuses*). Normally, ips beetles limit their attacks to trees that are in decline due to root injuries, wounding, under watering, or over watering. However, with the continuing drought, ips beetles are a considerable threat to healthy trees.

Ips kill pinyon by attacking a tree in mass, where they tunnel beneath the bark. There they lay their eggs and the larvae soon hatch and tunnel in the cambium and phloem layers between the bark and wood. The cambium and phloem layers of the tree provide the entire tree with water and nutrients. The larvae girdle these two layers, cutting off the tree's food and water supply. Following a successful attack, the needles of the infested tree quickly fade from green to straw-colored, later turning red and eventually brown. By the time the tree appears to be dying, a new generation of beetles is already maturing beneath the bark that will eventually emerge to fly and infest new trees. Ips beetles are prolific breeders, producing 3 to 5 generations in one season. They become active in spring when temperatures reach a consistent 60 degrees, and can remain active into late October.



*Ips galleries underneath bark* 

Due to their long active period and multiple generations, it is important to preventative spray healthy pinyons at least 2 to 3 times from early spring to late fall. We recommend spraying around the first of April, July, and September. The chemicals to use are carbaryl (brand name Sevin), or permethrin (brand name Astro). There are many products currently on the market that contain these active ingredients. The insecticide must be used as a drenching spray on the entire trunk and larger branches. Follow the manufacturer's recommendation for the proper rate for bark beetle treatment. Bark beetle applications at the labeled rate should provide at least three months control of ips beetles.

Dead trees should be promptly removed (burned or hauled away), as they serve as a breeding ground for the beetle.

For more information contact the Colorado State Forest Service at 384.9087.