



Burning Questions:

November, 2025

PIÑON IPS



Piñon Ips Bark Beetle Biology and Management Strategies

Perhaps you've noticed significant dead or dying piñon trees across the state this year -- visible by their brown, yellow, or fading foliage. From Quemado to Deming, piñon trees are experiencing a widespread mortality event.

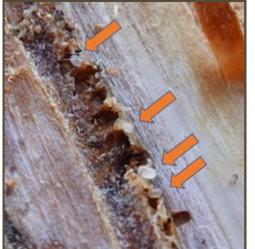
Following years of chronic drought and a 2024/25 winter that was one of the warmest and driest in memory, drought stress has allowed native bark beetles to successfully attack undefended piñon trees, then reproduce, overwhelm, and kill their hosts.

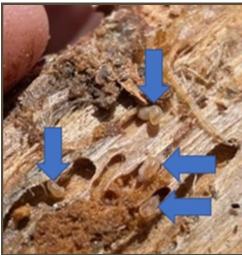
Piñon Ips – *Ips confusus* – is a native bark beetle that attacks piñon pine trees that have a weakened condition due to drought, wounding, root disease or fire. Drought conditions often predispose large areas of piñon woodlands, resulting in a rapid population buildup in a matter of a few weeks. There may be up to four generations of piñon ips in a single season, resulting in high numbers of beetles on the landscape. When beetle populations are high, even healthy trees can be attacked and killed by piñon ips as adults and larvae feed on the phloem of the tree.

Piñon ips has four life stages – egg, larva, pupa and adult. All stages of life are spent under the outer bark of the tree, except when adults emerge from infested trees and seek out new trees to attack. Piñon ips leave a characteristic gallery that can be "I", "Y", or "H" shaped under the bark and sap wood as



Signs of trees affected by piñon ips in the Southern Gila area. Photo by Tom Zegler





Piñon Ips eggs (orange arrows) and larvae (blue arrows)

they mine and feed under the bark. Eggs are laid on either side of the gallery and hatch within a few days. The developing larvae begin to feed on the phloem of the trees vascular tissue. The larvae feed for a few weeks, pupate and emerge as adults.

Shortly after trees are attacked, they begin to fade from green to yellow and then brown. These faded trees are often the first sign that a tree has been attacked by piñon ips. Turn this page over for ips management and affected tree disposal options --->



Management Options for Piñon Ips

Thinning

Thinning piñon stands to reduce competition for soil moisture, sunlight and nutrients allows residual trees to become more resilient to stress during drought. It is strongly recommended that thinning piñon stands occur when bark beetles are inactive or when the mean daily temperatures are below 45 degrees F.

Irrigation

Irrigating high value trees during periods of drought can keep trees in a healthy condition, however this is not practical on a large scale.

Insecticides

Insecticide applications to high value trees in the spring (before bark beetles become active or when the mean daily temperatures are about 45-50 degrees F) can prevent bark beetle attacks. Once a tree has been infested, insecticide treatments are ineffective.

Funding Options

Landowners with over 10 acres and completed forest stewardship plans have options for cost-share funding for treatment through the **Forest Health Initiative (FHI)** program.

Learn more at:

emnrd.emnrd.nm.gov/sfd/forest-health/

Or scan the QR code at the bottom of this page -->

Proper Disposal of Slash

Thinning activities produce **slash** – branches and stems of cut trees.

Slash must be treated by several means to prevent bark beetles from continuing to colonize and reproduce in the cuttings:

- 1. Lop and scatter: Cutting slash into 3–4-foot pieces and scattered on the ground no deeper than 18 inches on sunny sites to dry out will help prevent beetles from colonizing on slash. If possible, debark stems or split bolts to hasten desiccation of the material.
- 2. Chipping: Chipping slash and spreading the material to a depth no greater than 2 inches allows for the material to dry out and return to the nutrient cycle.
- **3. Pile burning:** Piling slash and burning during ideal conditions eliminates the potential for bark beetles to develop and overwinter in slash piles.
- **4. Removal:** Remove slash off site to a green waste facility or a site at least 2 miles away from other piñon stands.



Piñon ips signs in tree highlighted in blue ink. Photo by Tom Zegler



A merged gallery of piñon ips on a pine.
Photo by Victor Lucero

Burning Questions is a product of the New Mexico Forestry Division

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