

Management Guide for Flatheaded Fir Borers

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<p><i>Melanophila drummondi</i> (Kirby) Family Buprestidae</p> <p>Found extensively throughout the western United States and Canada.</p>	<p>Hosts:</p> <ul style="list-style-type: none"> • Douglas-fir • True firs • Spruce • Western hemlock • Western larch
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Key Points

- Mostly attack weakened, damaged or recently felled trees.
- Symptoms similar to bark beetle –killed trees.
- Sanitation during logging operations prevents buildup of populations.

Damage

The flatheaded fir borer usually attacks trees in poor vigor resulting from mechanical injury, mistletoe infection, fire damage, or drought stress. They are also readily attracted to recently felled trees.

especially on dry sites or during unusually droughty conditions.

However, they also attack and kill apparently healthy trees,

Most economic damage occurs when it kills apparently healthy Douglas-fir and western larch, which often occurs during extremely dry conditions.

Life History

A one-year life cycle is typical, but may be extended in some circumstances. Overwintering usually occurs as larvae in galleries, beneath host bark. Pupation takes place in spring. Adults emerge and lay eggs in bark cracks or crevices

during the summer. Larvae mine and feed in the phloem, barely scoring the sapwood. When attacks are unusually heavy, trees may be killed in one season. If healthier trees are attacked, and do not die, larvae seldom survive.

Identifying the flatheaded fir borer

Foliage on dying trees will fade from yellowish to red, typical of a beetle-killed tree.

Typical flatheaded wood borer galleries (tightly packed with boring dust and frass in concentric rings) and larvae will be found beneath the bark. Adults are bronzy black and usually have three small yellow spots on each wing cover. They are a little less than one-half

inch long. Woodpecker feeding will cause recognizable holes in the bark of flatheaded fir borer attacked Douglas-fir.

Management

Sanitation and salvage of infested and severely weakened trees is the best defense against damage. During harvest operations, cull logs and other large materials, suitable for colonization, should be removed or burned.

Other Reading

Furniss, R. L.; Carolin, V.M. 1977. Western Forest Insects. Misc. Publication Number 1339. Washington, D.C.: USDA Forest Service. 654 p.

Forest Health Protection and State Forestry Organizations

Assistance on State And Private Lands

Montana: (406) 542-4300

Idaho: (208) 769-1525

Utah: (801) 538-5211

Nevada: (775) 684-2513

Wyoming: (307) 777-5659

Assistance on Federal Lands

US Forest Service
Region One

Missoula: (406) 329-3605
Coeur d'Alene: (208) 765-7342

US Forest Service
Region Four
Ogden: (801) 476-9720
Boise: (208) 373-4227

