

Section I
Invasive & Emerging Pests

RANGE EXPANSION OF THE CALIFORNIA FIVESPINED IPS, *IPS PARACONFUSUS* (COLEOPTERA: SCOLYTIDAE) INTO WASHINGTON STATE

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The California Fivespined Ips (CFI) (*Ips paraconfusus*) is a native pine engraver and a known pest of both young and mature pine trees. Historically, CFI's most northern range has been the Willamette Valley, OR in the Western Cascade Mountains. In 1999, CFI was first reported causing significant damage to newly established ponderosa pine orchards (*Pinus ponderosa*) in the Willamette Valley. In subsequent years, additional outbreaks have occurred in Western Oregon (Flowers & Willhite 2010).

In 2010 a landowner in the Columbia River Gorge reported multiple trees with top dieback within neighborhood landscapes. Specimens collected from damaged ponderosa pines were identified as CFI. After referencing regional insect collections in Washington State, Idaho and Oregon, this collection was the first recorded specimens of CFI in Washington State. Subsequent landowners reported tree mortality consistent with CFI damage throughout 2010 and 2011.

Using CFI pheromone baited lindgren funnel traps, multiple locations were trapped to determine the presence and flight pattern of CFI during the season of 2010 and 2011. As of 2011, CFI has been collected in Washington as far west as Vancouver, east to Lyle, and north to Toledo (Figure 1). Recent fires and other climatic factors have compromised ponderosa pine health in Klickitat and Yakima counties. Authors will expand the survey area in 2012 to record the range of CFI.

The significance of range expansion of CFI is not realized. During the 2010 areal surveys, approximately 100 acres in the Columbia River Gorge showed symptoms of CFI infestations. CFI has been identified as a bark beetle species that has the capacity to cause landscape-wide damage and has the potential to be affected by changing climates (Bentz et al. 2010).

Bentz, B.J., J. Regniere, C.J. Fettig, E.M. Hansen, J.L. Hayes, J.A. Hick, R.G. Kelsey, J.F. Negrón and S.J. Seybold. 2010. Climate Change and Bark Beetles of the Western United States and Canada: Direct and Indirect Effects. *BioScience* 60(10) pp. 602-613.

Flowers, R.W., and E.A. Willhite. 2010. Distribution & Flight Periods of the California Fivespined Ips (*Ips paraconfusus*) in the Willamette Valley of Western Oregon. 2010 Forest Health Monitoring Working Group Meeting.

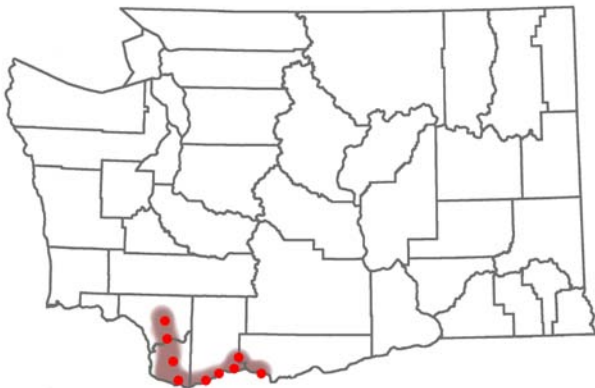


Figure 1. Newly recorded range of California fivespined Ips (*Ips paraconfusus*) in Washington State.