Region 5 Forest Health Protection / Oregon State University

Swiss Needle Cast Special Survey

Background: Annual aerial detection surveys for Swiss needle cast (SNC) have been conducted in Oregon since the 1990's and have been conducted in Washington as well. This is the first attempt to survey for SNC from the air in California. The disease has been reported in private timberlands around Arcata in the last few years. Funding for this survey came from the Swiss Needle Cast Cooperative at OSU.

Objective: Detect and map areas with visible SNC on the Humboldt/Del Norte Coast of California. Mapped areas will be passed on to cooperators for verification of the disease.

Surveyors: Z. Heath, J. Moore, B. Noyes.

Dates: May 14th, 2013.

Methodology: Areas of discolored Douglas-fir were mapped visually by surveyors using digital aerial sketch-mapping systems flying in a light fixed-wing aircraft approximately 1,000 feet above ground level. Photos of symptomatic trees were taken as well.

Details:

- 232 miles were flown, covering about 600,000 acres in Humboldt and Del Norte Counties. See Figure 1.
- Very few areas of Douglas-fir discoloration was mapped. About nine discrete areas totaling 363 acres were mapped between Eureka and
 Crescent City. These areas appeared a pale yellow color and may be the signature of poor site conditions rather than SNC. See Figures 2 & 3.

Figure 1. Flown area and mapped tree discoloration

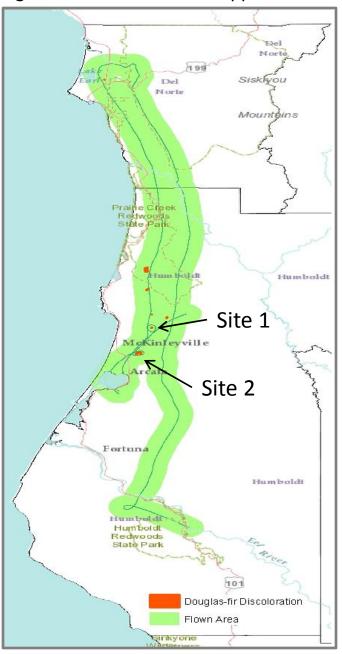




Figure 2. Site 1 on the map.



Figure 3. Site 2 on the map.

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