

Losses and Costs Imposed on California Ranchers by Yellow Starthistle

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ABSTRACT

The substantial ecological damages caused by invasive weeds have been well documented. By comparison, the economic consequences of specific invasive weed species tend to be poorly understood to date. Yellow starthistle (*Centaurea solstitialis* L.) is the most widespread non-crop weed in California, yielding damage to forage on natural range and improved pasture. A survey was administered to California cattle ranchers to investigate infestation rates, loss of forage quantity and value, and control or eradication efforts related to this weed. The results were used to estimate county-wide losses and costs for three focus counties, as well as statewide losses/costs, due to yellow starthistle in California. Total losses of livestock forage value due to this weed on private land in the state of California are estimated at \$7.65 million per year, with ranchers' out-of-pocket expenditures on control amounting to \$9.45 million per year. Together, these amount to the equivalent of 6-7% of the total annual harvested pasture value for the state. Therefore, while the impacts are relatively small within the statewide total agricultural production system, losses and costs due to yellow starthistle infestation do represent a constraint on California's livestock grazing sector.