

A Management Decision Tool for Perennial Pepperweed

Facilitator: Shea O'Keefe (USDAA NRCS)

Topic Leaders: Christine Whitcraft (CSU Long Beach- cwhitcra@csulb.edu) and Bill Winans (San Diego Co. Dept. of Agriculture)

Note Taker: Michelle Murphy- UC Riverside

Discussion Notes:

1. Christine Whitcraft introduced and explained a Draft Decision Key for the management of pepperweed. Key is divided into terrestrial and aquatic environments and lessons learned in those environments regarding treatments, treatment restrictions, etc. Christine requested feedback on the key (cwhitcra@csulb.edu).
2. Discussion of attendees' experiences with pepperweed and control methods ensued:
 - a) Christine Whitcraft: created a weed management area after discovering pepperweed in San Diego Co. in 2000
 - 400 acres in a river park that is of major concern
 - 50 total sites, one large infestation
 - Using Telar herbicide but not getting good control in saturated area
 - Endangered species in the area- helped get funding
 - b) Pepperweed is very resilient, hand pulling not a good option, very deep roots
 - Herbicide is considered the best treatment method
 - Mowing and disking are options.
 - Grazing was used to get biomass out of the way and then herbicide was applied- \$50,000 / 50 acres. Opinion was that the treatment method was expensive but yielded the best results.
 - Difficult to apply herbicide to the stand without grazing pretreatment however grazing is limited to upland areas, too hard in wetland areas
 - c) Radio isotope analysis in mowed versus non-mowed pepperweed showed that herbicide moved into the roots more on a mowed plant that has regrown (dissertation research)
 - d) Dale Schmidt (LA Dept of Water, Bishop, CA)
 - 1600 acres of pepperweed scattered across 500,000 acres of land
 - Tillage= 200-300% inc. without herbicide
 - Hand pulling= 150% inc. without herbicide
 - After 2 years of Telar use applied more than once per year = apparent resistance to the herbicide in pepperweed plants! Plants were increasing even though herbicide was applied three times per year
 - Imazapyr now being used
 - e) Habitat used on Pepperweed in an area that also had Tamarisk and it worked well on both species
 - f) Giselle Block and Renee Spent- good references for control in brackish marsh habitat
 - g) Best time to spray appears to be between budding and flowering
 - h) Imazapyr good for use in tidal areas but not recommended in upland areas as it doesn't seem to wash out and no other plants will germinate afterwards
 - i) Appears pepperweed is not tolerant of salt on its leaves- suggestion of aerial salt spray as a treatment method?

- j) Bill: Example of a fire in Fallbrook area in October/November. By April pepperweed was the only plant growing providing a great opportunity to treat the weed.