## PERENNIAL PEPPERWEED IN IDAHO

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## INTRODUCTION

Perennial pepperweed (*Lepidium latifolium*) was probably first introduced in Idaho in the 1950's. The heaviest infestations are in southwest Idaho, near rivers, canals, and in other areas with high water tables. There are also small infestations in southern and eastern Idaho (Figure 1). Perennial pepperweed is often found along canals and ditches, but is not considered a problem in cropland, due to intense weed control activities there, and the effectiveness of select herbicides in controlling it. The greatest concentrations are in waste areas of low economic value, where weed control activities are not common. It can also be a pest in pastures if not controlled.

A survey of county weed control superintendents indicates that perennial pepperweed is, for the most part, not spreading rapidly. One superintendent mentioned, however, that it does appear to be getting more dense. Table 1 is a summary of acreage estimates reported by county weed superintendents from 1991 to 1995. In many counties, an aggressive control program could eradicate or severely restrict the weed within one to five years. Some of these counties are in fact undertaking such a program.

Although treatments vary among the counties, the most common herbicide used to control perennial pepperweed in Idaho is metsulfuron methyl (*Escort*). The rate varies from .75 to 1.5 ounces per acre, and is reported to be quite effective. An adjuvant is commonly added to the mixture. One weed superintendent reports that, while 2,4-D or dicamba alone will not effectively control perennial pepperweed, a mixture of the two (such as *Weedmaster*) appears to do the job. During the latter part of May 1996, this individual used a mixture of .5 ounces of *Escort* and 1 quart *Weedmaster*, formulated specifically to spray an area heavily infested with pepperweed. About a month later, there appeared to be near 100 percent control. In another county, *Escort* was applied to perennial pepperweed at the county fairgrounds two years ago. Only one plant is growing there this year.

In one county, imazapyr (*Arsenal*) has been used quite successfully in limited situations. One area sprayed with *Arsenal* four years ago had virtually no regrowth of perennial pepperweed. There were similar results in another area that was sprayed three years ago. However, because of its non-selectivity, it should only be used in areas where rapid establishment of desirable vegetation is possible.

Other herbicides that have been tried with varying success are chlorsulfuron (*Telar*), picloram (*Tordon*), 2,4-D LV, and dicamba (*Vanquish*). Telar has proven to be very effective in Idaho, but has a more restrictive labeling than does *Escort*.

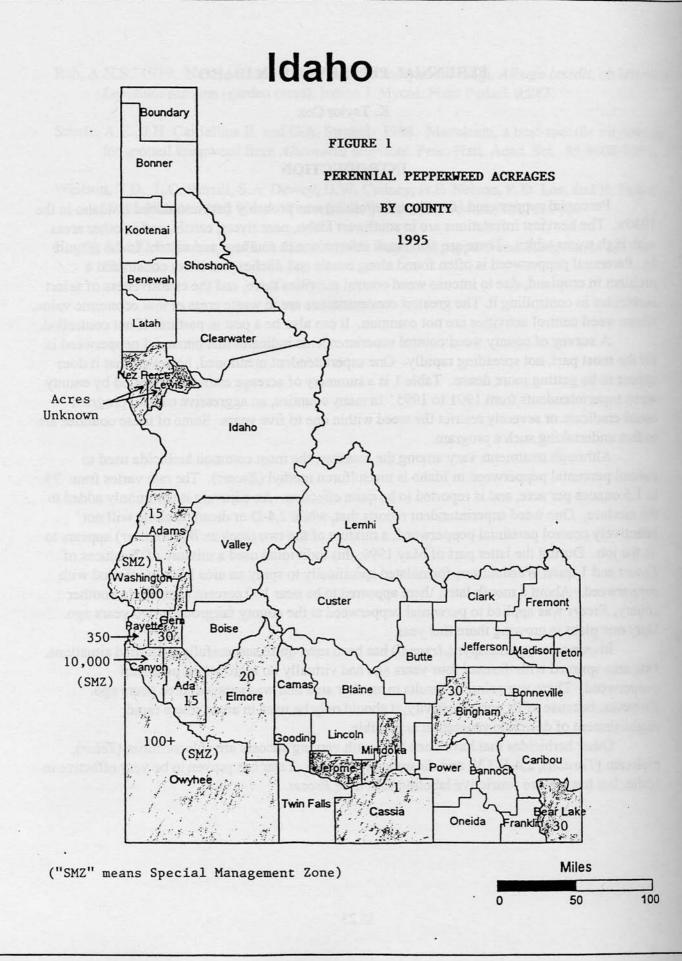


TABLE 1. PERENNIAL PEPPERWEED ACREAGES (ANNUAL REPORTS, 1991-95)

	Ada	Adams	Bear Lake	Bingham
1991	15	.5	5	200
1992	25		5	200
1993	60	1	5	200
1994	10	5	4	100
1995	15	15	30	50
	ngbarathista (ilia sy	an well-arresent to b	he will restrict that ensure	
	Canyon	Cassia	Elmore	Gem
1991	.5		2	3
1992	10,000	.3	2	??
1993	30,000		1+	40
1994	10,000	2	15	40
1995	10,000	1	20	30
	Jefferson	Jerome	Minidoka	Owyhee
1991	100	5,000	to emblessingen finnin Litter welt and a loca	400+
1992		5,000	inian luud san esak	100+
1993	hiparidiga ni sesami	4,000	file 1857 to made graps	100+
1994	??	Targett and the second	.5	100+
1995	elisti?? of the l	scrim ny was military w	.5	100+
	Payette	Washington	NOTE:	
1991	100	300		dis ilosto kantsid
1992	110	500	There are also reported to be infestations in Nez Perce and Lewis Counties, but there are currently no acreage estimates.	
1993	350	1,000		
1994	350	1,000		
1995	350	1,000		