HIMALAYA BLACKBERRY RECOMMENDED REMOVAL TECHNIQUES FROM THE COASTAL OREGON RIPARIAN SILVICULTURE GUIDE DECEMBER 2003

Himalaya Blackberry Removal

 Site Preparation: Site preparation takes time and effort, but it's crucial for the success of riparian plantings. Clearing, competing vegetation, thatch, canes, and boles-is the first step, followed by a means of killing or removing rootstock. The control of re-sprouts and new seedlings is an ongoing process that can take years. Clearing top growth often involves mechanical or manual means with a mower, trimmer, chainsaws, machetes etc. These methods are often most successful when combined with other techniques, such as cutting/pulling shrubs and treating resprouts with herbicide. Chemical methods are effective for clearing pasture grasses and some shrubs, but still require that case, boles and heavy thatch be removed by other means.

With any chemical, it is vitally important to carefully read the label and have all the training necessary to apply the chemical. Such training and subsequent licensing is available from your local Agricultural Department.

- 2. Initial control (July-August): mechanical removal of top growth should be done when plants have the most resources tied up in foliage and fruit. When regrowth reveals locations of roots when winter rains begin, then pull or dig rootstock out.
- 3. Plant species (December –January): replace blackberry by planting desirable species.
- 4. Follow-up control-maintenance: repeat herbicide spot treatments or root grubbing as necessary until planted stock is free to grow. Eliminating week rootstock is critical to regaining control of the site, since planted stock is rarely able to out grow re sprouts from intact rootstock. Manually pulling roots, grubbing and prying roots, or wiping/spraying with herbicide are all effective means of rootstock removal. Roots of pasture grasses and herbaceous species can be fierce competitors for water and must not be overlooked. Mulching, tilling, and soil solarization (placing a cover over the soil surface) have been effective in killing existing rootstock and preventing germination. Seedlings of weeds must also be controlled by preventing soil disturbance that give weeds an opportunity and by spraying, wiping, or pulling those that do grow. Encouraging thick and vigorous herbaceous species between planted stocks will greatly enhance weed prevention by shading out weed seeds and seedlings. Take care to protect planted stock from the same competition that inhabits weeds. There does not appear to be an edge over mechanical vs. chemical site preparation.

Controlling root stock after top growth is removed:

• Some species with strong vegetative reproduction like blackberry, can sprout from fragments left on the surface of the soil or in the stream channel.

- Avoid providing additional seeding sites for weeds.
- Avoid moving weeds from on site to another via equipment, boots, etc.
- Grazing is best used for controlling re-growth. Care must be taken to not spread weed seeds to new sites on fur and in manure and to avoid damage to desirable planted stock.
- The best time for manual control for most plants is in summer when they have the highest level of resources allocated to top growth and fruit production and before they translocate resources to roots in fall. 'Planting short lived or native greases can be effective at preventing some germination on highly disturbed sites such as those altered by channel relocation or pulled back banks.
- Integrated management approaches show greatest success. Herbicide treatment early in the growing season, plus disking and manual removal for several years.

5. Reproductive tactics must be addressed. Different approaches may be required to adequately control seed germination, rooting ant cane apices, suckering from lateral roots, and sprouting from pieces of roots and canes. Burning slash an removing canes before seed set are suggestions for controlling seed germinations: minimizing soil disturbance will also greatly discourage seed germination. Seedling, rooting at cane apices, and sprouts from roots can acnes can be effectively controlled by grazing, provided the animals are not damaging desirable plants or creating seed microsites. Goats, sheep, and cattle have been effectively used to inhibit spread of blackberry. Digging and pulling roots or herbicides may be the only way to remove root systems and prevent root sprouting. If only a single cut for the year can be made, the best time is when plants begin to flower, as root serves as low an and seeds are not yet set. Canes may resprout from root crowns in greater density if not treated wit herbicide.