



A first cut for finding appropriate weed control methods in non-crop environments

Jutta Burger

California Invasive Plant Council

jburger@cal-ipc.org

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Weed CUT

WEED CONTROL USER TOOL

New
Edition!

METHODS FOR MANAGING WEEDS IN WILDLANDS

Weed Control User Tool (WeedCUT)

WeedCUT provides guidance on a range of methods for managing invasive plants in wildlands and helps practitioners select those that are most effective for different situations. Explore the tool below to find the management practices that suit your specific weed problems.

[Use Decision Support Tool →](#)



<https://weedcut-new.ipm.ucanr.edu/>

Decision Support

- Efficacy ratings based on single-season reduction in cover and propagule production for each technique and site condition *under optimal conditions*
- Efficacy categories are:
 - Excellent ($\geq 95\%$)
 - Good ($>80-95\%$)
 - Fair (50-80%)
 - Poor (5-50%)
 - Ineffective (0-5%)
 - N/A
- Rule: The lowest efficacy ranking for any combination of plant and site information dictates efficacy of the technique

“You are only as strong as your weakest link”



Types of Management Practices

<https://weedcut-new.ipm.ucanr.edu/>


NOTE: You are currently using WeedCUT version 2 beta.

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Browse Management Practices


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Solarization



Cutting: Chainsaw



Mechanized Tillage



Biological Control

[View all non-chemical practices →](#)

























Non-Chemical Management Practices

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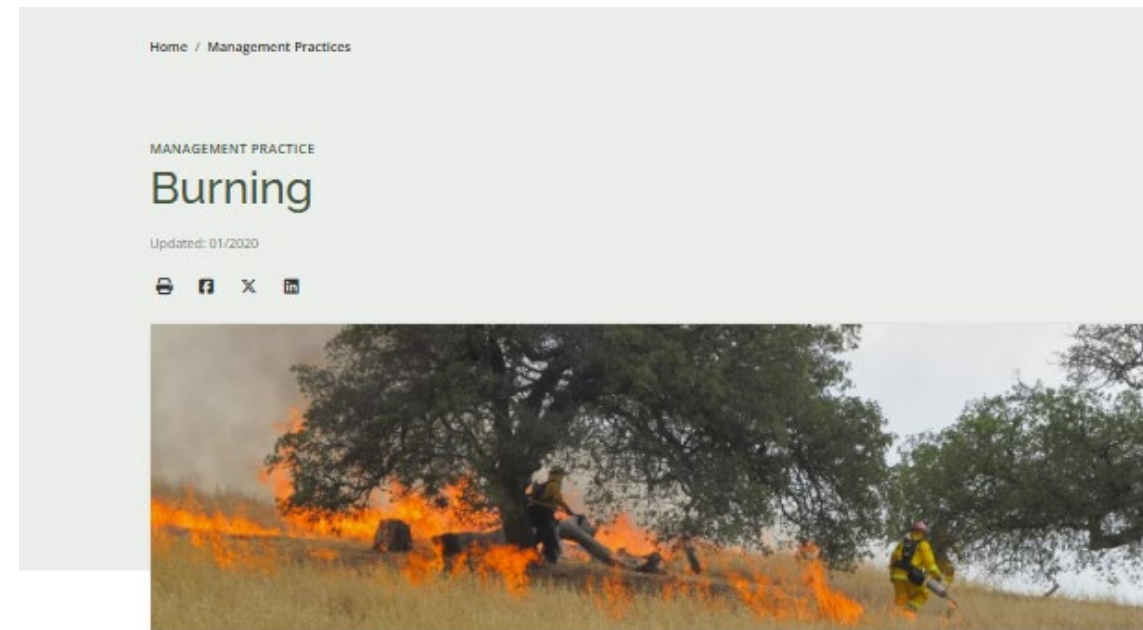
Management Practices

Non-chemical management practices

 Biological Control	 Burning	 Competitive Planting	 Cutting: Bladed Hand Tools
 Cutting: Chainsaw	 Cutting: Pruners, Loppers, Shears, and Hand Saws	 Cutting: Stringtrimmer / Brushcutter	 Flaming
 Girdling	 Grazing	 Grubbing: Grub Hoe	 Mechanized Tillage
 Mowing / Cutting with Larger Equipment	 Mulching	 Scraping: Scuffle Hoe	 Severing Roots
 Solarization	 Steaming	 Stump Grinding	 Tarping
 Whole-Plant Removal: Hand / Hand Tool	 Whole-Plant Removal: Large Equipment		

Non-Chemical BMP Content

- *Overview*
- *How to Use*
- *Special Tips*
- *Optimal Conditions*
- *Caveats*
- *Potential Hazards*
- *Other non-chemical methods to use in combination with technique*
- *When not to use*



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[How to Use](#)

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[Optimal Conditions for Use](#)

[Caveats](#)

[Potential Hazards to Humans, Environment, and Cultural Resources](#)

[Consider Combining with the Following Non-chemical Methods](#)

[Don't Use this Technique When/For](#)

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Works best on: Annual grasses	Selectivity: Low	Cost: Variable
Cultural resources: Low-moderate risk	Fire: High risk	Environmental hazard: Erosion, wildlife, habitat
	Safety: Moderate-high risk	

Overview





Fire has been used by many cultures over millennia to clear land of woody vegetation or to stimulate growth of preferred plant species. Today, prescribed fire is one tool used for treating invasive plants, reducing fuel load, and maintaining habitats in fire adapted landscapes. In California, it has been used most successfully as a tool to control non-native annual grasses in grassland habitat. Eradication of any weed population is unlikely using this technique alone, but it can be a valuable part of an integrated approach when used properly.

Fire removes thatch and aboveground vegetation. Depending on timing and intensity, it also kills grass seeds and exposes bare soil. Its effect on habitat is dependent on plant community, timing, intensity, and burn frequency. In general, prescribed fire works best on annual grass species with fire-sensitive seeds that are short-lived and held on the plant until at least late spring. In California, prescribed fire has been used most effectively on barbed goatgrass (*Aegilops triuncialis*). Under optimal conditions, it has also proven to be moderately effective on medusahead (*Elymus caput-medusae*), ripgut brome (*Bromus diandrus*) and yellow starthistle (*Centaurea solstitialis*).

Along with reducing target plants, using fire in grasslands can lead to an increase in non-native broadleaf forbs. When used in shrubland or riparian habitat, fire can lead to a loss of beneficial perennials and an increase in problematic fire-tolerant weeds, especially where they are already established at low densities. Though fire is not very selective, land managers can often avoid damage to desirable trees, shrubs and other perennials with a well-managed, lower intensity burn. Fire should not be used in habitats that are not adapted to fire, such as desert





















Biological Control

Non-chemical **Biological Control** Herbicides

			
Rush skeleton weed <i>Chondrilla juncea</i>	Dalmatian toadflax <i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Milk thistle <i>Silybum marianum</i>	Russian knapweed <i>Acroptilon repens</i>

[View all biological control practices](#)

Biological Control

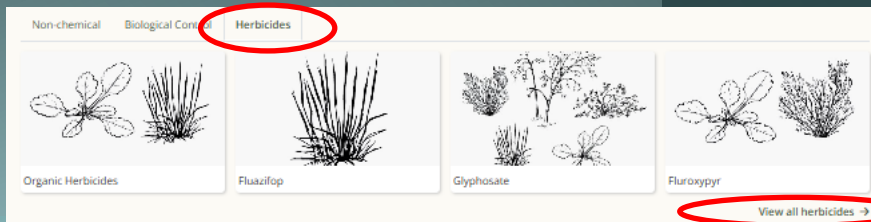
			
Russian knapweed <i>Acroptilon repens</i>	Giant reed <i>Arundo donax</i>	Musk thistle <i>Carduus nutans</i>	Italian thistle <i>Carduus pycnocephalus</i>
			
Yellow starthistle <i>Centaurea solstitialis</i>	Knapweeds <i>Centaurea</i> ssp.	Rush skeleton weed <i>Chondrilla juncea</i>	Canada thistle <i>Cirsium arvense</i>
			
Bull thistle <i>Cirsium vulgare</i>	Scotch broom <i>Cytisus scoparius</i>	Cape ivy <i>Delairea odorata</i>	St. Johnswort <i>Hypericum perforatum</i>
			
Dalmatian toadflax <i>Linaria dalmatica</i> ssp. <i>dalmatica</i>	Purple loosestrife <i>Lythrum salicaria</i>	Mediterranean sage <i>Salvia aethiops</i>	Tansy ragwort <i>Senecio jacobaea</i>
			
Milk thistle <i>Silybum marianum</i>	Saltcedar <i>Tamarix ramosissima</i>	Puncture vine <i>Tribulus terrestris</i>	Gorse <i>Ulex europaeus</i>

Herbicides

forbs

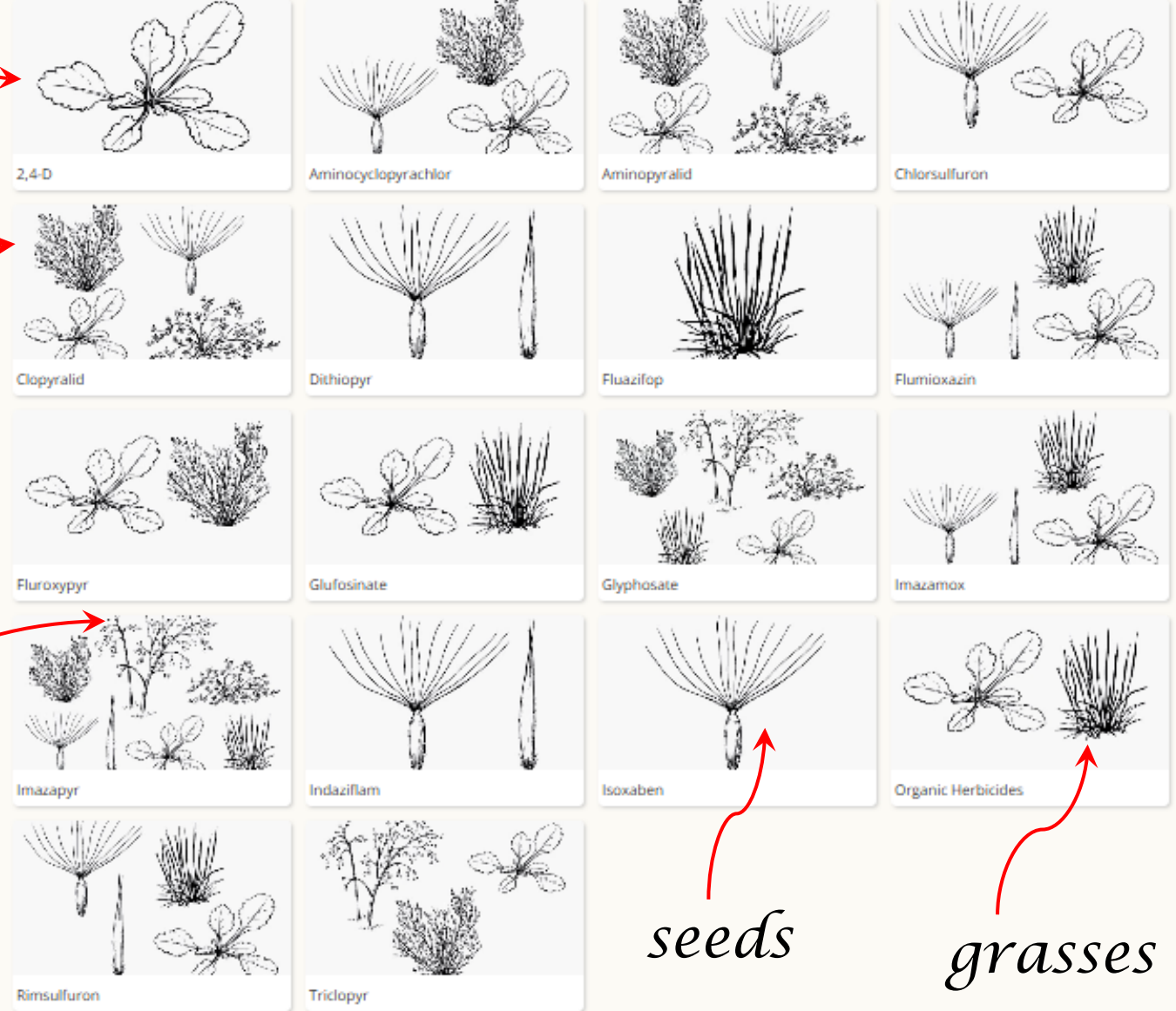
shrubs

trees



Herbicide management practices

Read about different application techniques and their calibration. (Calibration is the process of measuring and adjusting the amount of pesticide your equipment will apply over a target area to ensure that it is applying uniformly and at the correct rate.)



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Application Technique



Basal Bark



Broadcast / Boom Sprayer



Cut Stump



Drill-and-Fill



Drizzle



Hack-and-Squirt



How to Clean Herbicide Application Equipment After Use



Spot Spraying



Wicking



WeedCUT suggests alternative methods to treat weeds based on best available information

Very useful for EDRR species that you may have little experience with.

