

Management Guide for *Sanguisorba minor* (salad burnet)

Species Name	<i>Sanguisorba minor</i> (SAMI3) ^{1,6}	Common Name	salad burnet
Family: Rosaceae	Synonyms:	Common name ^{2,5} - small burnet, burnet, fodder burnet, garden burnet, little burnet, sheep's burnet	
Form: Herbaceous perennial forb		Former species name ^{1,5,8} - <i>Poterium sanguisorba</i> , <i>Poterium polygamum</i> , <i>Sanguisorba muricata</i>	
Habitat: ^{2,3} grassland, shrublands, alluvial meadows, and oak shrublands, often disturbed sites, typically in moist calcareous soils			
Occurrence: ^{1,3,5} Ranges across most of US and Canada, excepting some central and very southeastern states and central Canada, as well as South America, Australia & New Zealand		Native range: ^{2,3,4} Britain and Europe, from Sweden to eastern France and east to Armenia, Siberia and Iran, and northern Africa.	
Flowering time ^{2,6,7} - May to August		Weed class: OR- N/A, WA- N/A, BC- N/A	
Weed ID: ^{3,4,6,7} Most North American salad burnet invasive populations are <i>S. minor</i> subsp. <i>muricata</i> . Sometimes evergreen, a rosette-forming perennial 0.6 m x 0.3 m (2' x 1') with erect pilose hairy stems. Pinnately compound basal leaves, fragrant, with 12-17 paired leaflets 1-3 cm (0.5-1") long & leaves 4-20 cm (2-8") long, ovate and sharply crenately toothed, cauline (stem) leaves become fewer and smaller up the stem. Terminal dense spike inflorescence with dense, mostly imperfect and sessile flowers white to red or purple (color mostly from styles)- lower often staminate and upper pistillate or perfect, flowers have four wide petal-like sepals (lacking true petals). Achene fruits paired in a winged/ridged persistent 3-5 mm long head, ripening in late summer. Long stout taproot below a usually branched caudex stem at rosette base. Roots have been noted as 40 cm (16") to 1 m (3') in depth.			
Look-a-likes: see photos below <i>Sanguisorba annua</i> ² [syn: <i>S. occidentalis</i>] (prairie burnet)- native, <i>Acaena</i> spp.- native			
Weed distinction <i>Sanguisorba annua</i> - starts blooming in April, green to white perfect flowers, fruits 2-3 mm long ¹² , possibly deeper toothed leaflets. <i>Acaena</i> spp.- look like burnet when not in flower- flowers are globose often with long stamen like puff balls, and <i>Sanguisorba</i> spp have terminal styles and spicate flowers rather than globose. ¹³			
Ecological Impacts: A long lived perennial, salad burnet plants may have a lifespan from 7-12 or as much as 20 years. ³ They are prolific seeders in dry habitats. ³ Species is still under investigation for weediness and widely considered minimally invasive despite its wide naturalization. ^{3,6,7} *Salad burnet is still commonly seeded for livestock forage, and erosion control post-wildfires and can quickly decline on sites where it was seeded in. ^{3,7}			

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Control Methods

Large Scale:

Chemical

- **Aminopyralid** had high control of salad burnet.^{10, 11}
Timing
 - Fall application has shown up to 79% control.^{10, 11}
- **Diuron** has shown good control (>85%) of salad burnet.⁹
- **Metsulfuron methyl, dicamba and 2, 4-D with a surfactant-** can be used to control burnet.⁷

Grazing/Mowing - considered very palatable to ungulates and small mammals which may control or reduce seed production which can take two years to occur.^{3, 7, 8}

Competition – Dense grass or other native cover could impair burnet’s seed set to a degree.⁸

Small Scale Control Method:

No information found on small scale removal methods

Unsuccessful control methods:

Prescribed burns- burnet is native to fire-adapted areas and its thick lower stem & large taproot likely protect it from fire as well as long-lived seed kept safe from fire below soil surface.^{3, 8}

Herbicides clethodim, metribuzin, quinclorac, clopyralid, dimethenamid-P, bromoxynil, and pendimethalin were found to cause little to no injury to burnet.¹¹

Last Updated By: Lauren Clark

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References:

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10. Nelson, Ryan L., Peel, Michael D., Ransom, Corey V. “Small Burnet Response to Spring and Fall Postemergence Herbicide Applications.” *Weed Technology*. 28(1):168-175. (2014). <https://bioone.org/journals/weed-technology/volume-28/issue-1/WT-D-13-00045.1/Small-Burnet-Response-to-Spring-and-Fall-Postemergence-Herbicide-Applications/10.1614/WT-D-13-00045.1.pdf>
11. Nelson, Ryan Lee. “Small Burnet (*Sanguisorba minor* Scop.) Response to Herbicides Applied Postemergence.” *All Graduate Theses and Dissertations*. 1479. (2013). <https://digitalcommons.usu.edu/etd/1479>
12. <http://fieldguide.mt.gov/speciesDetail.aspx?elcode=PDROS1L010>
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Photos:



habit



flower head



leaf



inflorescence



older flower head

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Look-a-likes:

Sanguisorba annua— native



Acaena spp.

