

Preface

Western snowberry is a serious pasture weed, and its encroachment into North American grazinglands has been an increasing problem for over one hundred years. Traditional grazing management practices are antagonistic to the biological requirements of grass plants and to the biogeochemical processes in grassland ecosystems; the result of such antagonistic management is less than healthy grass plants. Because they have diminishing competitive abilities, these grass plants relinquish greater quantities of ecosystem natural resources that then become available for western snowberry colony expansion.

The aerial stems of western snowberry can be killed relatively easily with single burning, mowing, or herbicide application treatments. The belowground plant parts, however, are more persistent and not easily damaged. Western snowberry has biological mechanisms and processes that provide the shrub with capabilities to survive aerial stem removal treatments and to completely replace the aerial stem density and biomass by the third growing season following treatment.

Implementation of biologically effective grazing management like the twice-over rotation system improves the health and competitive abilities of the native grass plants but does not remove the aerial stems and reduce the size of preexisting western snowberry colonies. Additional management that uses burning, mechanical, or chemical treatments is needed to reduce western snowberry colonies.

This project summarizes available information about western snowberry with the intent to improve understanding of the shrub's strengths and weaknesses so that management strategies to effectively reduce western snowberry colonies on grazinglands can be developed.