July 27, 2026

DESERT CONSERVATION PROGRAM PROJECT COMPLETION SUMMARY
Brome Reduction Study
2019-USU-1995A

The work for the above referenced project has been completed. Below is a summary of project related information.

The purpose of the above referenced project was:

Red brome (Bromus rubens), an invasive species of grass has afflicted the Trout Canyon and Stump Springs area. The grass is a fire hazard and has been associated with poorer juvenile tortoise growth and survival at Trout Canyon compared to other translocation sites. Pre-emergent herbicides have been effective at reducing the abundance of brome, however certain herbicides are more effective than others and have different environmental effectiveness. The project seeks to conduct research into herbicides and application techniques that result in the greatest amount of brome reduction.

The major accomplishments or findings of this project include:

The trial consisted of 20 treatments arranged in a randomized complete block design with four replications. Treatment used Rejuvra (indaziflam) and Plateau (imazapic) as herbicides, alone or in combinations and at varying rates. Results showed that Plateau was more active in controlling red brome and Mediterranean grass compared to Rejuvra. A potential reason for that is due to the low precipitation at the site, affecting the solubility of the herbicides and their movement. However, the combination of Rejuvra + Plateau maintained higher control of the annual grasses than these products alone. The project demonstrated that desert trumpet was sensitive to the Plateau herbicide, but it there were no obvious negative effects on perennial/woody plant species. The primary researcher recommends that in areas targeted for fire prevention, a combination of Rejuvra + Plateau will likely provide the most consistent control of invasive annual grasses and other annual species. Specific plant species of critical importance to desert tortoise should be considered for additional research to determine potential herbicide treatment effects.

For more information about this project and/or for other Project Reports or Symposium Reports, please visit our website.

If you have any questions about this project, please contact Stefanie Ferrazzano, at (702) 455-6386.