

Improving grassland habitat by prioritizing mesquite management

In January 2016, Arizona Game and Fish, Arizona State Forestry and the Buenos Aires refuge came together to form a partnership for a brush management project on the refuge. The goal was to improve pronghorn habitat by removing predictor cover in the pronghorn movement corridor on the refuge. The plan was to bring a Department of Corrections (DOC) supervised AZSF Crew together to remove mesquite trees in a large scale project spanning two habitat management units (HSMUs) using sawyers and swampers to implement the cut stump method of tree cutting.

The actual work on this project began a year later, in January 2017 and took approximately 8 weeks and about 48 crew members with crew leads to complete. At the project's conclusion in early March of 2017, a total of 1,000 acres had been cleared of mesquite.

At the project's completion nearly 600 gallons of Garlon 4 Ultra was needed to treat all the cut stumps in both units to prevent regrowth the following year and to date, little regrowth has been documented. Crews were initially using a substantial amount of herbicide which significantly increased the original estimated cost to implement the project. This was quickly recognized as a source of the cost increase so a review of the techniques being used by the crews was immediately evaluated by working closely with crews and crew leads to monitor their herbicide application techniques and further training was determined to be the best solution to reduce the high use of herbicide. Once additional training was conducted, crews became more familiar with the proper herbicide application techniques and this greatly reduced the overall cost of the project.