

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Development of an Integrated Weed Management Plan for the Northern District of Bighorn Canyon NRA.
Type of Project: Technical Assistance
Funding Agency: National Park Service, RM-CESU
Effective Dates: May 2002 - December 30, 2003
Funding Amount: \$7012
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Project Abstract: The North District of Bighorn Canyon National Recreation Area (NRA) consists of 540 acres of land around the Fort Smith Headquarters. This area includes an airstrip, two camping areas, park headquarters, three river access points and a picnic area, all of which are connected with surfaced roads. The National Park Service (NPS) is also responsible for weed control in areas managed by the Bureau of Reclamation including the Yellowtail Dam Visitor Center, a dump, three miles of highway east of Ft. Smith, the Ft. Smith government camp and the 11 mile road to Ok-A-Beh. The land now owned by the NPS has a history of disturbance, mainly due to dam construction, and agriculture, as well as ongoing disturbance from heavy visitor use. Due to the distance between the North and South Districts, weed management has been fragmented. Infestations of spotted knapweed and Canada thistle have been known of for at least 16 years but not digitally mapped until 2000. Diffuse knapweed and houndstongue were also recorded throughout the area during the 2000 survey and the first known infestations of Russian knapweed were recorded at the airstrip. The 11 mile road to Ok-A-Beh has not been mapped but multiple spotted knapweed infestations are known to be along this road. Thus, the mapping of noxious and other target weeds is not complete, nor has rate of spread been quantified. An integrated weed management plan would help the park to stratify resources to those infestations that can be controlled and introduce practices that will reduce the chance of further infestations MSU will develop a noxious weed database of the 540 acres around Fort Smith. The database will include information on the area, density, percentage cover and spatial arrangement of the target weeds. Information on dominant native vegetation, aspect, topography and any disturbance features other than those mapped by BICA will be collected. A number of patches will be mapped in such a way that if funding becomes available the patches can be monitored in future years and the rate of spread quantified. These infestations will be chosen to provide contrasting metapopulations due to different proximity to disturbance and infestations sources.
Outcomes with completion dates: MSU will write up the noxious weed management plan and provide BICA with a noxious weed database and maps of weed distribution.
Keywords: Bighorn Canyon National Recreation Area, weed management
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