

Project Summary

Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Non-native Plants Survey of the Greater Yellowstone Inventory and Monitoring Network
Type of Project: Research/natural resources
Funding Agency: National Park Service
Other Partners/Cooperators: Yellowstone NP; Grand Teton NP; Northern Rockies Exotic Plant Management Team
Effective Dates: September 1, 2003 to September 30, 2005
Funding Amount: \$41,108
Investigators and Agency Representative (include name, address, phone, email): NPS KEY OFFICIAL: Cathie Jean, Program Manager, National Park Service, Greater Yellowstone Network, Forestry Sciences Lab, 1648 S. 7 th Ave, Bozeman, MT 59717-2780 406.994.7530, Cathie_jean@nps.gov UNIVERSITY CONTACT: Dr. Bruce Maxwell, Department of Land, Natural Resources, and Environmental Sciences, PO Box 3120, Montana State University, Bozeman, MT 59717-3120. 406-994-5717 bmax@montana.edu INVESTIGATOR: Dr. Lisa Rew, Department of Land, Natural Resources, and Environmental Sciences, PO Box 3120, Montana State University, Bozeman, MT 59717-3120. 406-994-7966 lrew@montana.edu
Project Abstract: Objectives: <ul style="list-style-type: none"> • Increase baseline knowledge on the locations of exotic, invasive, noxious weed populations in Yellowstone NP. • Survey targeted areas to acquire baseline distribution and abundance information on selected non-native plant species. Survey crews from MSU will map exotic plants from selected areas of the Northern Range of Yellowstone NP and will collaborate on weed mapping surveys of the valley floor of Grand Teton NP. • Identify environmental characteristics that correlate with exotic plant distribution. • Identify high priority areas for weed management action. • Gain an increased knowledge of resource threats related to noxious weed establishments (e.g. degradation to native habitats, loss of wildlife forage, threats to T&E species, loss of cultural landscape, accelerated erosion). • Produce GIS-based maps/database for each weed species' distribution that can be queried for weed management planning. • Increase individual parks ability to establish effective weed monitoring programs/ activities. • Further refine the MSU sampling methodology by applying it to a broader geographic region of the GRYE, a methodology that will lead to a predictive model for identifying areas and habitats of high risk for exotic plant infestation. • Complete the last year of a multi-year program of exotic plant mapping that will provide information on invasive plants within YELL NR and GRTE VF, and to adequately capture information on environmental factors that contribute to the distribution and abundance of these plants.
Outcomes with completion dates (reports, publications, workshops, videos, etc.): Final Products will include all data and meta-data in digital form, maps of sampling areas, and a final report with recommendations for future sampling.
Keywords: non-native plants, Greater Yellowstone I&M Network, invasives, Yellowstone NP, Grand Teton NP
<u>For Administrative use only:</u> Date Annual Report Received:

Date Final Report Received:
Publications, etc. on file: