

Project Summary
Rocky Mountains Cooperative Ecosystem Studies Unit

Project Title: Non-native Plants Survey of the Greater Yellowstone Inventory and Monitoring Network (GRYN): Study Plan
Type of Project: Research/biological science
Funding Agency: National Park Service
Effective Dates: May 1, 2003 - March 30, 2004
Funding Amount: \$41,000
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<p>Project Abstract: The cooperator will: Increase baseline knowledge on the locations of exotic, invasive, noxious weed populations within network parks. Survey targeted areas (habitats and areas at risk for invasion by priority non-native plant species and areas that have not been adequately surveyed in previous efforts) 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 third year of a three-year program of exotic plant mapping that will provide information on invasive plants within YELL and GRTE, and to adequately capture information on environmental factors that contribute to the distribution and abundance of these plants.</p>
Outcomes with completion dates: This will lead to a predictive model for identifying areas and habitats of high risk for exotic plant infestation.
Keywords: Greater Yellowstone Network, non-native plants, Yellowstone NP, Grand Teton NP, noxious weeds
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