

**Project Summary**  
**Rocky Mountains Cooperative Ecosystem Studies Unit**

<b>Project Title:</b> How Selective are Biological Controls?: Testing non-target herbivory by biological control agents for Yellow toadflax ( <i>Linaria vulgaris</i> ) and Dalmatian toadflax ( <i>Linaria genistifolia</i> spp. <i>Dalmatica</i> .)
<b>Type of Project:</b> Research/biological sciences
<b>Funding Agency:</b> National Park Service
<b>Effective Dates:</b> May 15, 2003 - May 31, 2005
<b>Funding Amount:</b> \$6,458.00
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<b>Project Abstract:</b> Research would be focused on testing possible herbivory by biological control insects on native plants in the same family, Scrophulariaceae. - Both a control group of native plants and a test group will be established and comparisons made. - The test group of RMNP native plants from the Scrophulariaceae family will be relocated to established toadflax/biocontrol sites and monitored for predation and other signs of poor growth and reproductive performance. - Populations of biocontrols at sites will be confirmed. - Monitoring of the effects of biocontrol herbivory on toadflaxes to answer question of whether effective means of control. Plants for use in this research will be salvaged from the Bear Lake Road Reconstruction corridor in Rocky Mountain National Park. Testing of plants will occur at University of Colorado - Boulder. Data will be statistically analyzed for significance.
<b>Outcomes with completion dates:</b> The Final Report will describe whether native Scrophulariaceae of Rocky Mountain National Park are susceptible to negative impacts by biological control agents and describing the insects' efficacy in controlling exotic toadflaxes. Annual reports are due at the end of each calendar year. Researchers will also make a presentation to ROMO staff on the results of the project and recommendations for the advisability of using biological controls for toadflax. If appropriate, a peer reviewed journal article would be produced.
<b>Keywords:</b> Rocky Mountain National Park, Yellow toadflax ( <i>Linaria vulgaris</i> ), Dalmatian toadflax ( <i>Linaria genistifolia</i> spp. <i>Dalmatica</i> ), biocontrols
<b><u>For Administrative use only:</u></b> Date Annual Report Received:  Date Final Report Received:  Publications, etc. on file: