

Final Report to the Center for Invasive Plant Management

March 31, 2005

The Role of Fire as a Tool to Manage Invasive Plants and Rehabilitate Natural Resources
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Project Accomplishments:

The goals of this project were to evaluate the current state of knowledge on prescribed burning as an invasive weed management tool, to identify knowledge gaps prohibited its effective use, and to describe potential solutions to these limitations.

The first step was developing a thorough literature review on all aspects of the subject. From this review, we designed a workshop including both researchers and practitioners throughout the western states to discuss topics related to prescribed burning as a tool for invasive plant management. The expert workshop was held at USGS offices in Henderson, NV, March 29-30, 2004. Twenty-four invited experts attended, representing university and agency researchers and land managers from ten western states. The topics covered were (1) risks and challenges, (2) control of invasives using prescribed burning, (3) using prescribed burning in an integrated approach, (4) impacts on plant communities, (5) impacts on soil characteristics and other organisms and (6) information gaps. (Workshop attendees are listed in Appendix 1, and the workshop agenda is presented in Appendix 2.)

Workshop attendees conferred to refine an outline of the topic, and to identify the most important findings, through both published research and experience in the field. This material laid the groundwork for a report of the proceedings that captured the material discussed at the workshop. Working with lead individuals for each topic, we brought together the information from both researchers and practitioners on each topic discussed at the workshop and produced a 50-page report. The proceedings have been distributed, and posted on the Cal-IPC website. After professional design, the report will be printed in larger quantities for broader distribution. (See Appendix 3 for the Table of Contents from the report.)

Financial Reporting

Funds spent for Salaries and Domestic travel vary from the original amounts budgeted. We had fewer workshop attendees than originally planned, since several invitees were not available. Additional staff time was needed to coordinate and edit contributions from attendees and to prepare the report.

	Budgeted	Spent
Salaries	15,800	20,465
Domestic travel	17,200	12,495
Supplies	600	640
Services	200	200
Indirect (10%)	3,380	3,380
	37,180	37,180

Appendix 1: Workshop Attendees

1. Edith Allen, College of Natural & Agricultural Sciences, Botany & Plant Sciences (Riverside, CA)
2. Jim Bartolome, College of Natural Resources, Ecosystem Sciences, UC Berkeley (Berkeley, CA)
3. David Boyd, California Dept. of Parks and Recreation (Novato, CA)
4. Matt Brooks, Western Ecological Research Center, Las Vegas Field Station, US Geological Survey (Henderson, NV)
5. Mike Connor, Sierra Foothill Research & Extension Center (Browns Valley, CA)
6. Joe DiTomaso, Weed Science Program, University of California, Davis (Davis, CA)
7. Steve Enloe, Dept. of Plant Sciences, University of Wyoming (Laramie, WY)
8. James Grace, National Wetlands Research Center, US Geological Survey (Lafayette, LA)
9. Marla Hastings, California Dept. of Parks and Recreation (Petaluma, CA)
10. Diana Kimberling, Dept. of Natural Resources and Environmental Science, University of Nevada, Reno (Salem, OR.)
11. Guy Kyser, Weed Science Program, University of California, Davis (Davis, CA)
12. Eric Lane, Colorado Dept. of Agriculture (Lakewood, CO)
13. Robert Masters, Dow AgroSciences (Lincoln, NE)
14. Kurt McDaniel, New Mexico State University (Las Cruces, NM)
15. Ralph Minnich, California Dept. of Forestry and Fire Protection (Redding, CA)
16. Laura Moser, Coconino National Forest, USDA Forest Service (Flagstaff, AZ)
17. Mike Pellant, Idaho State Office, Bureau of Land Management (Boise, ID)
18. Tim Prather, University of Idaho (Moscow, ID)
19. Steve Radosevich, Dept. of Forest Science, Oregon State University (Corvallis, OR)
20. Lisa Rew, Dept. of Land Resources and Environmental Sciences, Montana State University (Bozeman, MT)
21. Peter Rice, Biological Sciences, University of Montana (Missoula, MT)
22. Rob Wilson, University of California Cooperative Extension, Lassen County (Susanville, CA)
23. Jim Young, USDA (Reno, NV)
24. Kris Zouhar, Rocky Mountain Research Station, USDA Forest Service (Missoula, MT)

Appendix 2: Workshop Agenda

Monday, March 29

Noon-1 pm	Lunch (provided)
1:00	Introduction: The goals of the workshop Joe DiTomaso, University of California, Davis
1:10	Knowledge synthesis of the role of fire as a management tool to contain invasive plants Peter Rice, University of Montana
1:25	Database summarizing the benefits and risks of using prescribed burns to contain invasive plant species Diana Kimberling, Oregon State University
1:40	Fire and invasive plants, a general overview Matt Brooks, USGS
2:00	Intro to Topic 1: Risks and challenges of prescribed burning Ralph Minnich, California Dept. Forestry & Fire Protection
2:20	Intro to Topic 2: Overview on the control of invasive plants using prescribed burning <i>Joe DiTomaso, University of California, Davis</i>
2:40	Break
3:00	Break-out sessions covering: Topic 1: Risks and challenges of prescribed burning Topic 2: Overview on the control of invasive plants using prescribed burning
4:00	Group discussion on Topics 1 and 2
5:00	Adjourn for day

Tuesday, March 30

8 am	Coffee and refreshments
8:30	Intro to Topic 3: Using prescribed burning in IPM strategies Dave Boyd, California State Parks
8:50	Intro to Topic 4: Impact of prescribed burning on plant communities Matt Brooks, USGS
9:10	Break-out sessions covering: Topic 3: Using prescribed burning in IPM strategies Topic 4: Impact of prescribed burning on plant communities
10:10	Break
10:30	Group discussion on Topics 3 and 4

Noon	Lunch (provided)
1 pm	Intro to Topic 5: Impacts on soil characteristics and other organisms Edith Allen, University of California, Riverside
1:20	Group discussion covering Topic 5: Impacts on soil characteristics and other organisms
2:20	Effects of fire on invasive plant potential Lisa Rew, Montana State University
2:40	Break
3:00	Group discussion of <u>Topic 6: Information gaps—where do we need to go from here?</u>
4:00	Summary, deliverables and tasks
5:00	Adjourn workshop

Appendix 3: Table of Contents from Report

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