

Lost Trail National Wildlife Refuge

Benton Lake & Lee Metcalf ISST

Accomplishments

Target Species	Total Survey Acres ¹	New individuals ³
Spalding's catchfly	608.3	45
Project Site Totals	608.3	45
¹ Area covered during the course of weed management activities regardless of presence or absence of target weed species as measured by perimeter in GIS. ² Area occupied by weed species within the survey area that does not contain the space between individuals or populations (i.e. net infestation size) as measured by GPS feature for monitoring and treatment combined, but areas in common not additive. ³ The area or subset of infested area that has received some form of treatment as measured by GPS feature.		

Highlights

Schedule

Dates	Project Type	Target Species	Size of Crew	Project Notes
30-July-2014 to 6-August-2014	Rare Plant Survey	Spalding's catchfly	10	Conducted targeted transect surveys based on predictive model.

Coordination and Cooperation

- Regional Invasive Species Biologist Bill Sparklin coordinated with Brendan Moynahan, Kevin Shinn, and Beverly Skinner about the survey goals, design, and logistics.
- The Regional Invasives Program has been coordinating with Botanist Peter Lesica, who is a consultant for the Spalding's catchfly recovery effort.
- On Monday, April 21, 2014 we had a coordination meeting between National Bison Range Staff and the ISST regarding Spalding's catchfly management and invasive species management on Lost Trail NWR and the WPAs. Lindy Garner, Amy Lisk, Brendan Moynahan, Kevin Shinn, Beverly Skinner, Bill Sparklin, and Jessica Zarate attended.
- On Tuesday, April 22, 2014, the Regional Invasive Program hosted a Spalding's catchfly partnership meeting at the Flathead National Forest office in Kalispell, MT. Invitees represented the following groups, the Forest Service, The Nature Conservancy, U.S. Fish and Wildlife Service, Plum Creek Timber Company, MT Department of Natural Resources and Conservation, MT Fish, Wildlife and Parks, MT Natural Heritage Program, and Confederated Salish and Kootenai Tribes. The agenda is attached as Appendix A.
- The Regional Invasives Program also funded \$8,000 towards a Cooperative Weed Management Agreement with Flathead County that runs through FY2019. The purpose of this agreement is to foster cooperative weed management across jurisdictional boundaries within Flathead County of western Montana that controls, reduces the spread of, and prevents the further invasion and establishment of noxious weeds with integrative techniques.
- Regional Biologist Bill Sparklin is preparing a manuscript for journal submission based on the modeling project and subsequent surveys. The current draft 2/23/2015 of this manuscript is attached as Appendix B.

Prevention and Education

- Knowing the locations of Spalding's catchfly occurrences on lands managed by Lost Trail NWR enables them to prioritize them for management while avoiding accidental disturbance or take.
- Having better estimates of the number of individuals within the Spalding's catchfly populations managed by the refuge allows for meeting recovery criteria within the recovery plan.

Inventory and Monitoring

- The Regional Invasives Program took the 2013 Spalding's catchfly locations and created an updated species distribution model (SDM) for Spalding's catchfly at Lost Trail NWR. We then used that model to create transects based on an optimal allocation method.
- The ISST spent one 8-day extended work trip at Lost Trail NWR to survey transects for Spalding's catchfly. The crew was comprised of both strike teams and Regional Invasives Biologist Bill Sparklin.
- The strike team had several new members who had not previously seen Spalding's catchfly, so the first morning of the surveys was spent surveying in the known populations to make sure all crew members could find and identify the plants.
- Several new individual occurrences were found in the 2014 survey, and the high probability areas predicted by the model have now been surveyed.

Management

No management was conducted on Lost Trail NWR by the ISST in 2014.

Proposed 2015 Schedule

- With all of the high probability areas from the models having been surveyed for Spalding's catchfly, ISST efforts should be focused on managing invasive plants encroaching on Spalding's catchfly locations.
- Before scheduling 2015 ISST activities for Lost Trail NWR, we'll need to discuss management objectives for the refuge and WPAs as we did in 2014.

Appendix A.

Spalding's Catchfly Partnership Meeting
April 22, 2014 Agenda
 Flathead National Forest Three Forks Conference Room
 650 Wolfpack Way, Kalispell, MT

Tuesday April 1st	TOPICS	LEAD	OUTCOMES/ACTION ITEMS
9:00-9:15	Introduction and Logistics	Lindy Garner	
9:15-10:15	Montana Partners <ul style="list-style-type: none"> ● FWS ● CSKT ● TNC ● DNRC ● Plum Creek ● Mt Natural Heritage ● MFWP ● FS 	All Yes/No or very short, quick response	Name and Division/Location <ul style="list-style-type: none"> ● Populations or Potential ● GIS Information on Locations ● Past efforts <ul style="list-style-type: none"> ○ Inventory ○ Monitoring ○ Invasive Plant Mgmt ○ Grazing ○ Burning
10:15-10:30	BREAK		
10:30-11:00	Spalding's Catchfly Demography	Peter Lesica	<ul style="list-style-type: none"> ● General Traits of the Plant ● Important Characteristics relative to management
11:00-11:45	Land Management and Spalding's Catchfly	Peter Lesica	Tools and Impacts <ul style="list-style-type: none"> ● Grazing ● Burning ● Herbicide Use
11:45-1:00	LUNCH (order in) Webex of Recovery Plan Overview	Karen Colson	
1:00-1:30	Known Locations in Montana <ul style="list-style-type: none"> ● Dancing Prairie ● Crosson Valley ● Lost Trail NWR ● DNRC 	Lindy Garner and all	Map Overview and Review
1:30-2:15	Modeling Tool to Assist Inventories	Bill Sparklin	Case Study on Lost Trail NWR

2:15-2:30	BREAK		
2:30-3:15	Invasive Plant Management <ul style="list-style-type: none"> • Lost Trail NWR • Dancing Prairie • Crosson Valley 	Jessica Zarate Dave Hannah Doug Dupuis and all	Current Protocol <ul style="list-style-type: none"> • Issues • Ideas for Modification • Develop Guidelines?
3:15-3:45	Partnership Opportunities	All	Inventory Monitoring <ul style="list-style-type: none"> • Spatial locations/Heritage Prog • Distribution/Abund Trends • Herbicide Use effectiveness Management <ul style="list-style-type: none"> • Crews or funding • Weed Treatment • Burning
3:45-4:00	Next Steps/Close-out	Lindy Garner	Workgroup and Leader? Invasive Plant Mgmt Guidelines? Annual update discussions? Assistance or Partnerships? Mapping information updates? ??

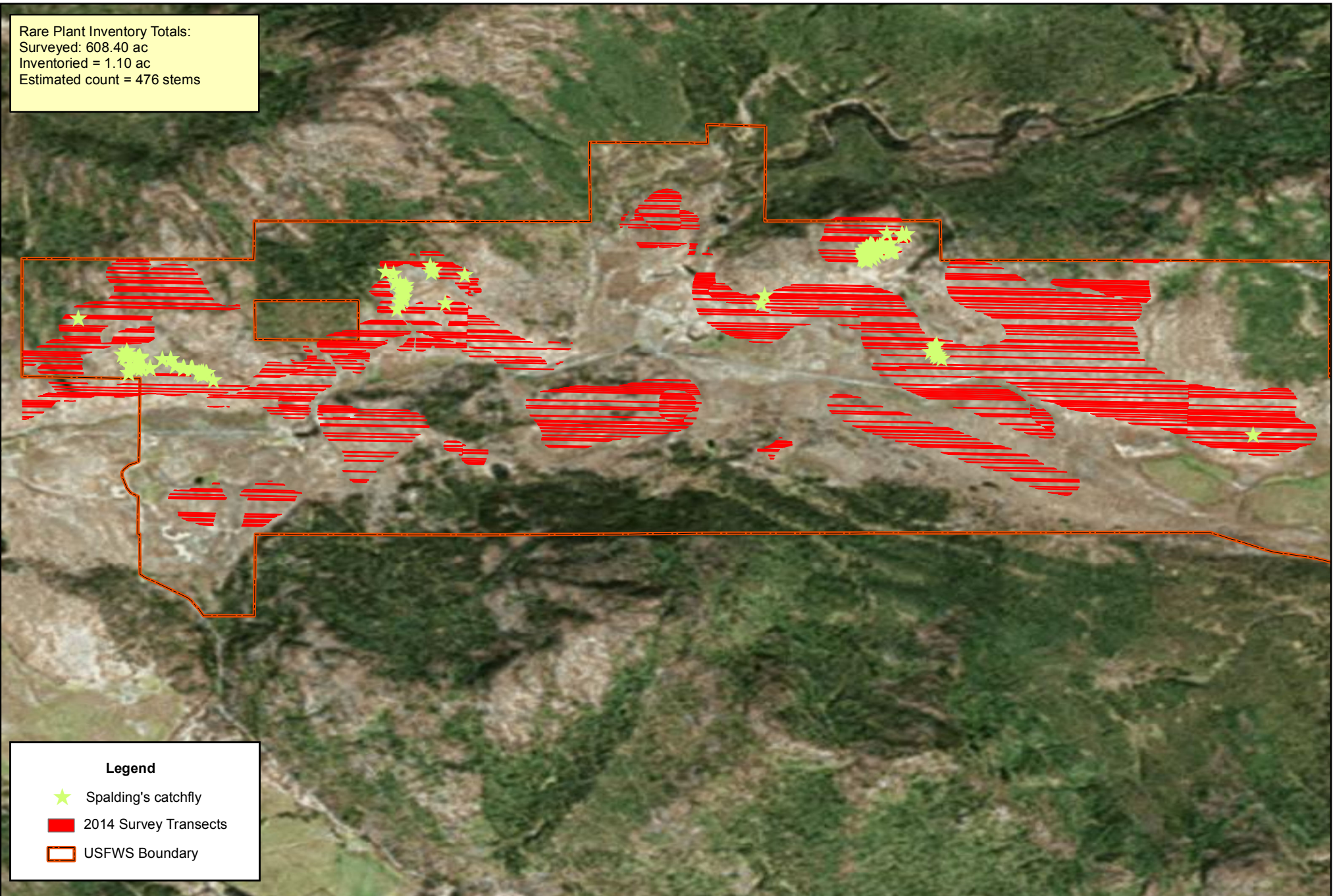


U.S. Fish & Wildlife Service

MOYOCO Invasive Species Strike Team

Lost Trail NWR - 2014 Rare Plant Inventory

Rare Plant Inventory Totals:
Surveyed: 608.40 ac
Inventoried = 1.10 ac
Estimated count = 476 stems



Legend

- ★ Spalding's catchfly
- 2014 Survey Transects
- USFWS Boundary



0 1 2 4 Miles

Reference image from ESRI ArcMap Basemap Imagery

Spalding's catchfly (Silene spaldingii) - 1 of 1 Maps