

# Rare Plant Conservation Planning Workshop Results

## MIDDLE PARK



Penland penstemon  
© B.Jennings, CNHP. 1999.



Kremmling milkvetch  
© S.Spackman, CNHP. 1999.

### Plants of Focus

Kremmling milkvetch (*Astragalus osterhoutii*)  
Penland penstemon (*Penstemon penlandii*)

Sponsored by the  
Colorado Rare Plant Conservation Initiative

June 26, 2008

## Table of Contents

<b>I. Summary</b> .....	1
<b>II. Map</b> .....	4
<b>III. Middle Park Priority Action Area and Associated Rare Plants</b> .....	4
<b>IV. About the Workshop</b> .....	5
<b>V. Workshop Results</b> .....	6
<i>A. Conservation Targets</i> .....	6
<i>B. Viability</i> .....	7
<i>C. Threats</i> .....	9
<i>D. Strategies</i> .....	9
<b>VI. Next Steps</b> .....	9
<b>Attachment 1. Additional key species and plant communities in the Middle Park area</b> ....	11
<b>Attachment 2. Full list of strategies for Kremmling milkvetch and Penland penstemon</b> ...	12

Kram, M., B. Neely and S. Panjabi. 2008. Rare Plant Conservation Planning Workshop: Middle Park Priority Action Area. Prepared by The Nature Conservancy and the Colorado Natural Heritage Program. Unpublished report prepared for the National Fish and Wildlife Foundation.

## I. Summary

This document identifies conservation strategies for Penland penstemon and Kremmling milkvetch, based on an assessment of the plants' viability and threats by participants of a June 2008 workshop. The primary audience is intended to be the workshop participants and other stakeholders interested in helping to implement the strategies.

The Kremmling milkvetch and Penland penstemon are rare plants endemic to the Middle Park Priority Action Area as identified by the Colorado Rare Plant Conservation Initiative (RPCI). A Priority Action Area is an area needing immediate conservation action to prevent the need for listing, extinction, or further losses of imperiled plant species. Selection was based on the level of imperilment of rare plant species, quality of the occurrences, urgency of the management and protection actions, and other opportunities such as funding and land ownership patterns. These areas are based on the Potential Conservation Areas identified by the Colorado Natural Heritage Program, at Colorado State University, with input by the RPCI and the Rare Plant Technical Committee (RPTC).

Located in Grand County, the Middle Park Action Area includes all known occurrences of Penland penstemon (*Penstemon penlandii*; G1, listed endangered; known from only two locations in the world) and Kremmling milkvetch (*Astragalus osterhoutii*; G1, listed endangered; known from only five locations in the world).

Penland penstemon is a stunning plant with blue-purple flowers in the snapdragon family (Schrophulareacea). The species is particularly interesting because it is only known from two locations in the world, despite extensive searches by area botanists over the past 25 years. It is a very distinct species, disjunct from its nearest relatives by nearly 150 miles.

The Kremmling milkvetch is similarly limited in its distribution and rarity, known from a total of five locations in the world. The Kremmling milkvetch is a member of the pea family (Fabaceae) and has numerous whitish flowers. Both of these species are found in fine textured soils in sparsely vegetated sagebrush badlands within an approximately 65 square mile area in Grand County, Colorado.

Although the known occurrences appear to be in good to excellent condition, the habitat of these two imperiled species is threatened by motorized recreation, future residential development, mining, excessive grazing, herbivory (blister beetle), and road construction and maintenance.

To abate these and other threats, participants of a June 2008 workshop identified and prioritized a variety of strategies; the high priority strategies are listed in the following pages. See Attachment 2 for a full list of strategies. Workshop participants plan to meet every 6-12 months to assess progress toward the implementation of these strategies.

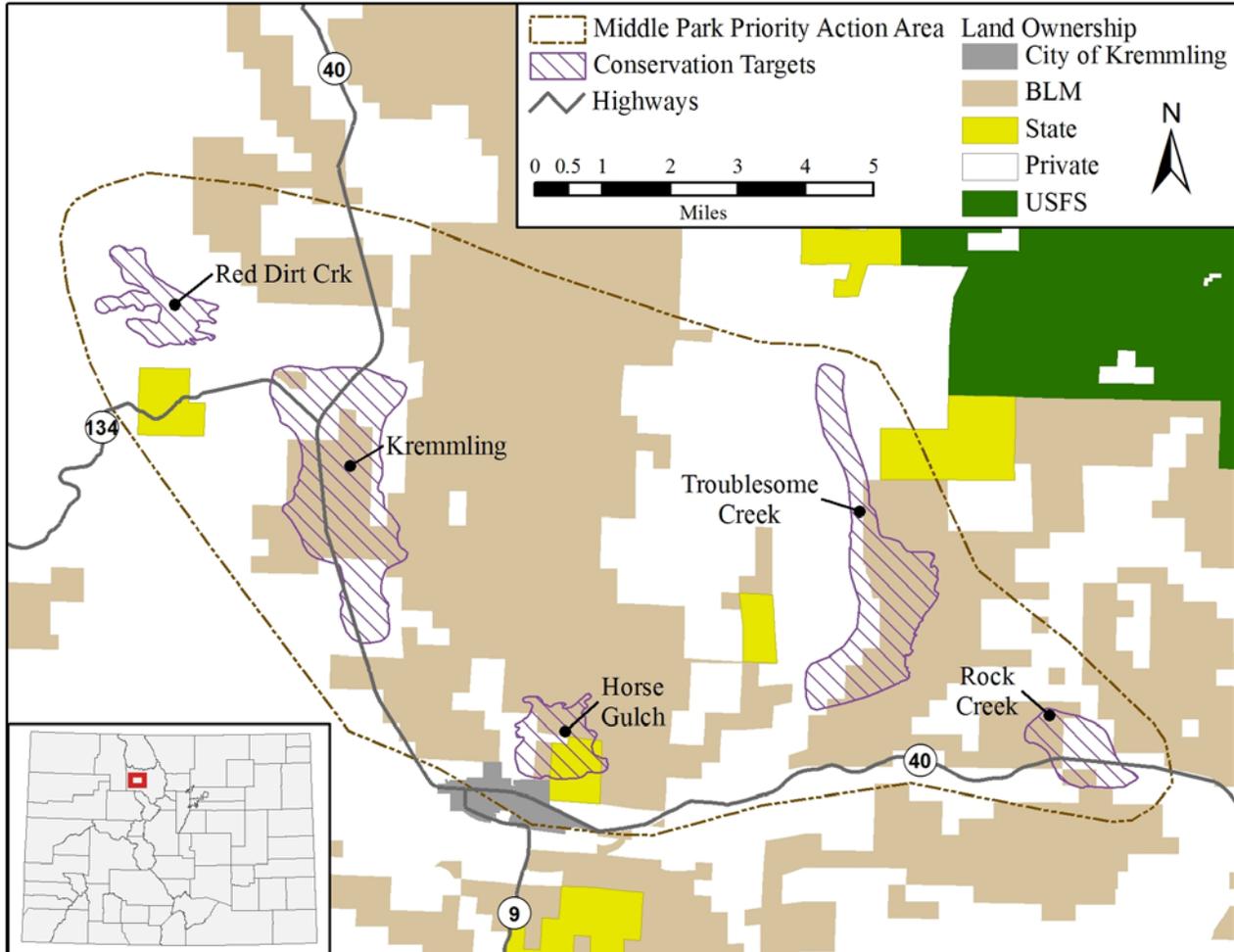
## High priority strategies for conserving Middle Park rare plants

Target					
Site	Owner/ manager	Strategy	Priority	Lead	Notes
<b>Strategies across all target occurrences</b>					
Statewide	All	Improve rare plant education and awareness.	High	RPCI and CNHP	
All	All	Identify lead for Middle Park Priority Action Area.	High	B.Neely	Submit article to newspaper
All	All	Inform county master planning effort to protect rare plants. Include language re spraying and road widening. For private lands, - aim for maintenance of 35+ acre parcels within Potential Conservation Areas as identified by CNHP.	High	CNHP w/RPCI	CNHP needs funding to do follow-ups on surveys w/cty planners. Local contact = K.Manguso, Planning Dept.
All	All	Present to County and Town about rare plants, importance, etc.	High	D.Culver	D.Culver from CNHP presented in 2006. Funding is needed.
All	All	Work with O&G companies to avoid rare plants.	High	RPCI and CNHP	Biggest challenges may be on private lands.
All	All	Monitor plant status.	High	CNHP, BLM	Ongoing
<b>Strategies for specific target occurrences</b>					
All	County roads	Inform road maintenance plan to ensure spraying avoids rare plants. Establish placards for no-spray zones.	High	A.Sidener	
All	Private	Conduct targeted outreach to private landowners to inform them about the rare plants, what they can do to protect them (e.g., conservation easements, surface use agreement for O&G), pursue conservation easements with willing landowners, etc.	High	A.Cwiklin	Will work with B. May. S. Panjabi from CNHP to assist.
All (esp. for Troublesome)	Private	Investigate possibility of State Land Board (SLB) or BLM exchanges.	Medium*	TNC	Talk with L.Osborn from SLB
Horse Gulch	BLM	Continue to maintain fences.	High	BLM	

Target					
Site	Owner/ manager	Strategy	Priority	Lead	Notes
Kremmling	Roads - CDOT	Identify BMPs and share with CDOT and mark maintenance areas.	High	RPCI and CNHP	
Troublesome	BLM	Establish an ACEC w/restrictions on O&G, mining, water disposal, etc. thru the BLM RMP process.	High	BLM	
Troublesome	BLM	Monitor progress of RMP in support of ACEC in all alternatives.	High	A.Sidener	

\* Regarding the strategy of "Investigate possibility of State Land Board or BLM exchanges" – post workshop RPCI reviewers felt that the priority of this strategy may be High rather than Medium.

## II. Map



## III. Middle Park Priority Action Area and Associated Rare Plants

This document focuses on rare plants within the Middle Park Priority Action Area as identified by the Colorado Rare Plant Conservation Initiative (RPCI). To date, RPCI has identified seven such areas across Colorado. A Priority Action Area is an area needing immediate conservation action to prevent the need for listing, extinction, or further losses of imperiled plant species. Selection was based on the level of imperilment of rare plant species, quality of the occurrences, urgency of the management and protection actions, and other opportunities such as funding and land ownership patterns. These areas are based on the Potential Conservation Areas identified by the Colorado Natural Heritage Program, at Colorado State University, with input by the RPCI and the Rare Plant Technical Committee (RPTC).

Located in Grand County, the Middle Park Action Area includes all known occurrences of Penland penstemon (*Penstemon penlandii*; G1, listed endangered) and Kremmling milkvetch (*Astragalus osterhoutii*; G1, listed endangered) (Table 1). This Area occurs within the vicinity

of the Upper Colorado River Corridor Priority Landscape identified by the Colorado Conservation Partnership.

**Table 1.** Plants of focus in the Middle Park Priority Action Area

Common name	Scientific name	Known occurrences	Global rank*	Status	CNHP Rare Plant Field Guide Link
Kremmling milkvetch (or Osterhout's milkvetch)	<i>Astragalus osterhoutii</i>	Five occurrences in the world, all of which are in the Middle Park area.	G1	Listed Endangered	<a href="http://www.cnhp.colostate.edu/rareplants/PDF/AB0F6E0.html">http://www.cnhp.colostate.edu/rareplants/PDF/AB0F6E0.html</a>
Penland penstemon (Penland beardtongue)	<i>Penstemon penlandii</i>	Two occurrences in the world, both of which are in the Middle Park area.	G1	Listed Endangered	<a href="http://www.cnhp.colostate.edu/rareplants/PDS/CR1L780.html">http://www.cnhp.colostate.edu/rareplants/PDS/CR1L780.html</a>

\*G1 = critically imperiled. G2 = imperiled. For more detail on global ranks please visit the Colorado Natural Heritage Program's website at <http://www.cnhp.colostate.edu/heritage.html>.

Penland penstemon is a stunning plant with blue-purple flowers in the snapdragon family (Schrophulareacea). The species is particularly interesting because it is only known from two locations in the world, despite extensive searches by area botanists over the past 25 years. It is a very distinct species, disjunct from its nearest relatives by nearly 150 miles.

The Kremmling milkvetch is similarly limited in its distribution and rarity, known from a total of five locations in the world. The Kremmling milkvetch is a member of the pea family (Fabaceae) and has numerous whitish flowers. Both of these species are found in fine textured soils in sparsely vegetated sagebrush badlands within an approximately 65 square mile area in Grand County, Colorado.

The habitat of these two imperiled species is threatened by motorized recreation, future residential development, mining, excessive grazing, herbivory (blister beetle), and road construction and maintenance.

Although the focus of the workshop was on the globally imperiled plants, Attachment 1 describes other significant species and plant communities in this area. A full suite of biodiversity values should be considered during more expansive conservation planning efforts for this area.

## IV. About the Workshop

**Purpose:** To identify strategies for conserving the Kremmling milkvetch and Penland penstemon, based on an assessment of the viability and threats to their occurrences.

**Origin:** The Rare Plant Conservation Initiative (RCPI) is a diverse partnership of public and private organizations dedicated to conserving Colorado's natural heritage by improving the protection and stewardship of the state's most important plants. RPCI is developing a strategy for the conservation of Colorado's most imperiled plant species. As part of this effort, the group is working with partners to identify statewide and site-specific strategies in areas with (a) the most imperiled species, and (b) a reasonable likelihood of conservation success. For site-specific strategies, RCPI partners identified five priority action areas around the state: Arkansas Valley

Barrens, Middle Park, North Park, Pagosa Springs, and the Piceance Basin. For each of these areas, RCPI led a workshop during the summer of 2008 with local partners to identify priority conservation strategies.

**Workshop date:** June 26, 2008

**Participants:**

Name	Affiliation
<b>Attended</b>	
Megan McGuire	BLM Kremmling Field Office
Molly Mikan	BLM State Office
Peter Gordon	BLM State Office
Jeff Peterson	Colorado Department of Transportation
Denise Culver	Colorado Natural Heritage Program
Susan Panjabi (co-facilitator)	Colorado Natural Heritage Program
Amy Sidener	Grand County
Adam Cwiklin	Middle Park Land Trust
Betsy Neely	The Nature Conservancy
Megan Kram (co-facilitator)	The Nature Conservancy
Paige Lewis	The Nature Conservancy
<b>Unable to attend</b>	
Carol Dawson	BLM State Office
Ellen Mayo	USFWS State Office
Brian Kurzel	Colorado Natural Areas Program
<b>Other contacts</b>	
Audrey Volt	Consultant
Bonnie Kablitz	Middle Park Soil Conservation District
Chuck Cesar	Retired BLM
Lane Osborn	State Land Board

## V. Workshop Results

### A. Conservation Targets

Using the The Nature Conservancy’s (TNC) site conservation planning workshop methodology, “conservation targets” are a limited suite of species, communities, and/or ecological systems, or specific locations of these elements of biodiversity (e.g., occurrences, sub-occurrences, or other areas) that are the basis for setting goals, identifying conservation strategies, and measuring conservation effectiveness. At the Middle Park Action area our targets are specific locations of the endangered plants, identified more specifically based on land ownership.

At the Middle Park workshop, we organized the occurrences of Kremmling milkvetch and Penland penstemon into fourteen targets based on landownership within five “Potential Conservation Areas” (PCA) as identified by the Natural Heritage Program (Table 2). A PCA represents CNHP biologists’ best estimate of the primary area required to support the long-term survival of species or communities of interest or concern. Distinguishing between different

landowners enabled us to effectively evaluate threats and identify meaningful strategies later in the workshop.

**Table 2.** Total of fourteen targets based on landownership and presence of Kremmling milkvetch and Penland penstemon. For example, there are four targets identified for the Kremmling milkvetch at the Horse gulch site: Horse Gulch BLM, Horse Gulch private, Horse Gulch roadside, and Horse Gulch State land Board (SLB).

<b>Target area</b> (each area is a “Potential Conservation Area” as identified by CNHP)	<b>Associated landownership</b> – occurrences of Kremmling milkvetch (and Penland penstemon where noted) that lie entirely or partially within the following:
Horse Gulch	<ul style="list-style-type: none"> <li>▪ BLM</li> <li>▪ Private</li> <li>▪ Roadside - county</li> <li>▪ State Land Board</li> </ul>
Kremmling	<ul style="list-style-type: none"> <li>▪ BLM</li> <li>▪ Private</li> <li>▪ Roadside - CDOT</li> </ul>
Red Dirt Creek	<ul style="list-style-type: none"> <li>▪ Private</li> <li>▪ Roadside – county</li> </ul>
Rock Creek	<ul style="list-style-type: none"> <li>▪ BLM</li> <li>▪ State Wildlife Area</li> </ul>
Troublesome Creek - contains Kremmling milkvetch and the only known occurrences of the Penland penstemon	<ul style="list-style-type: none"> <li>▪ BLM</li> <li>▪ Private</li> <li>▪ Roadside - County</li> </ul>

## ***B. Viability***

“Viability” per TNC terminology is the “health” or “functionality” of the conservation targets. During the Workshop we attempted to answer two key questions through the viability assessment: *How do we define ‘health’ (viability) for each of our targets?* and *What is the current status of each of our targets?*

Table 3 shows the viability for each occurrence as previously identified by the Colorado Natural Heritage Program (CNHP). We do not show viability by target (i.e., by ownership or management) because we identified targets according to *land ownership* and CNHP identifies viability by *occurrence*. Any one occurrence can occur on multiple land ownerships.

**Table 3.** Viability of all of the known occurrences of the two endangered plant species, organized by area

<b>Target Area</b>	<b>Viability Rank*</b>	<b>Occurrence Acres</b>	<b>Occurrence ID # (CNHP)</b>	<b>Conservation Targets (Ownership or Mgmt)</b>
<b>Penland penstemon</b>				
Troublesome	A	798	1	BLM, very small amt. on private
Troublesome	B	37	2	Private
<b>Kremmling milkvetch</b>				
Horse Gulch	A	56	7	BLM, Private, Roadside - county, State Land Board

Target Area	Viability Rank*	Occurrence Acres	Occurrence ID # (CNHP)	Conservation Targets (Ownership or Mgmt)
Kremmling	AB	270	1	BLM, private, roadside
Red Dirt Creek	B	244	5	Private
Rock Creek	A	32	11	BLM, Private
Troublesome	A	192	10	BLM

\* CNHP assigns a rank to each occurrence using the following codes: A = Very good; B = good; C = fair; D = poor; H = possibly extirpated/ possibly extinct; X presumed extirpated/presumed extinct

The overall viability rankings of A-B for each occurrence were based on a systematic assessment of the components of viability, or indicators and associated indicator ratings as shown in the table below. These components of viability are “rolled up” into the overall viability rank.

**Table 4.** Basis for viability ratings.

		Indicator rating criteria			
Key Attribute	Indicator	D - Poor	C - Fair	B - Good	A - Very Good
Intactness of occurrence and surrounding area	% fragmentation	Highly fragmented	Moderately fragmented	Limited fragmentation	Unfragmented
Population structure & recruitment	Evidence of reproduction	Little or no evidence of successful repro. (few seedlings and/or no flowering or fruiting)	Less productive, but still viable with evidence of flowering and/or fruiting and mixed age classes	Good likelihood of long-term viability as evidenced by flowering, fruiting, and mixed age classes.	Excellent viability as evidenced by high % flowering and fruiting, and mixed age classes
Species composition / dominance	Evidence of reproduction	>50% cover	11-50% cover	1-10% cover	<1% cover
Population size & dynamics for <b>KREMMLING MILKVETCH</b>	# individuals	<20	20-100	100-1000	>1000
Population size & dynamics for <b>PENLAND PENSTEMON</b>	# individuals	<100 individuals observed within a 5-year period	100-1000 within a 5-year period	1000-2500 within a five-year period	>2500 within a five-year period

### ***C. Threats***

With the viability analysis complete, participants then identified the primary threats to each site. They identified and ranked threats based on their expertise, local knowledge, and sense of the key issues facing each target (Table 5). Identifying and ranking threats is an important input, along with understanding viability, to ultimately identifying efficient and effective strategies.

Although the known occurrences appear to be in good to excellent condition, the habitat of these two imperiled species is threatened by motorized recreation, future residential development, mining, excessive grazing, herbivory (blister beetle), and road construction and maintenance.

### ***D. Strategies***

Based on an understanding of viability and threats, participants identified strategies (a) across all targets for Kremmling milkvetch and Penland penstemon and (b) for specific target occurrences. Regarding the latter, participants identified at least one strategy for all occurrences and generally focused on strategies needed to mitigate key threats. After brainstorming strategies, participants prioritized them as high, medium, or low based on their anticipated effectiveness. See p. 2 for a list of high priority strategies and Attachment 2 (p.11) for a list of all strategies. Specific to private land protection efforts, the RPCI is also evaluating opportunities to work with willing private landowners and local land trusts to conserve these species and their habitats using voluntary tools such as conservation easements.

## **VI. Next Steps**

Ongoing - The leads for all high- and medium-ranked strategies (Attachment 1) are responsible for ensuring their implementation.

Ongoing - The group proposed to meet annually to gauge progress toward implementing strategies. Ideally this meeting would be coordinated by the RPCI lead for Middle Park. Until such a lead is established, Betsy Neely from TNC/RPCI will coordinate. Preferably this meeting would occur in the summer so a field visit to the plants is also possible.

Winter 2009 - TNC/RPCI will organize a conference call in the winter as a check in.

**Table 5.** Primary threats to each target. Red = high threat, orange = medium threat; yellow = low threat.

Area	Ownership or Mgmt	Excessive grazing	Herbivory - Blister beetle	Housing construction	Invasives	Mining (gravel, uranium)	O&G	Recreation (OHVs)	Road constr.	Road widening	Road maint.	Trail or ditch maint.	Utility construction	Notes
<b>Horse Gulch</b>	BLM	L	M					H						Recreation – Off-highway vehicles (OHVs) may or may not be an issue as plants are fenced. But erosion is problematic. Grazing - not an issue, steep terrain.
	County Rd.										M			
	Private			M										Housing construction -threat within the 3-mile growth boundary.
	SLB	L	H					H						Recreation - OHVs, motorcycles. Negative impacts of the blister beetle are questionable.
<b>Kremmling</b>	BLM		L											Negative impacts of the blister beetle are questionable. Area is closed to OHVs.
	Private			L										
	Roadside - CDOT										M			Widening - no plans to widen now. Road maint. - weed spraying is an issue.
<b>Red Dirt</b>	County Road										L			
	Private	L		M	L				M				M	Invasives - Canada thistle.
<b>Rock Creek</b>	BLM						L							No major threats. Unfavorable terrain for OHVs. Little potential for O&G
	SWA				L							M		
<b>Troublesome</b>	BLM	L	L				M	M	L				L	Beardtongue only may be affected by O&G and recreation. Milkvetch only may be affected by the other colored cells.
	County road								L	L	M	L		Road maint. - magnesium chloride is an issue.
	Private	L		L	M		M							

## Attachment 1. Additional key species and plant communities in the Middle Park area

Although the focus of the workshop was on the globally imperiled plants, other key species and plant communities are known from the Middle Park area as shown in the table below (Colorado Natural Heritage Program 2008, <http://www.cnhp.colostate.edu/>). Specifically, the table identifies rare species and rare and/or high quality examples of plant communities in the Middle Park area. These and other biodiversity values should be considered with more detailed planning efforts for this area.

Common name	Scientific name	Major Group	GRank
Roundtail chub	<i>Gila robusta</i> *	Fish	G3
Dog parsley	<i>Aletes nuttallii</i>	Vascular Plants	G3
Many-stem stickleaf	<i>Nuttallia multicaulis</i>	Vascular Plants	G3
Montane Riparian Forest	<i>Populus angustifolia</i> / <i>Alnus incana</i> Woodland	Natural Communities	G3
Montane Riparian Shrubland	<i>Alnus incana</i> - <i>Salix drummondiana</i> Shrubland	Natural Communities	G3
Montane Wet Meadows	<i>Carex pellita</i> Herbaceous Vegetation	Natural Communities	G3
Montane Willow Carr	<i>Salix ligulifolia</i> Shrubland	Natural Communities	G2G3
Thinleaf Alder-Mixed Willow Species	<i>Alnus incana</i> - <i>Salix (monticola, lucida, ligulifolia)</i> Shrubland	Natural Communities	G3
Bulrush	<i>Schoenoplectus pungens</i> Herbaceous Vegetation	Natural Communities	G3G4
Cottonwood Riparian Forest	<i>Populus angustifolia</i> / <i>Cornus sericea</i> Woodland	Natural Communities	G4
Montane Riparian Meadow	<i>Carex foenea</i> Herbaceous Vegetation	Natural Communities	GU

\*Last observed in the Middle park area in 1983. This is the only element on this list with federal or state level recognition. The roundtail chub is a Colorado Species of Concern, and is included on the BLM and USFS sensitive species lists.

For more information about these and other biodiversity values, see reports including but not limited to the following:

- Colorado Wildlife Action Plan  
<http://wildlife.state.co.us/WildlifeSpecies/ColoradoWildlifeActionPlan/>
- The Nature Conservancy Ecoregional Assessments.  
<http://conserveonline.org/workspaces/cbdgateway/era/reports/index.html> The Southern Rocky Mountains Ecoregional Assessment pertains to the Middle Park Priority Action Area.
- Southern Rockies Ecosystem Project: <http://www.restoretherockies.org/reports.html>

## Attachment 2. Full list of strategies for Kremmling milkvetch and Penland penstemon

The strategies below are organized in priority order of area → target owner/manager → priority, with priority 1 being highest, 2 being secondary, and 3 being a lower priority.

Target					
Site	Owner/ manager	Strategy	Priority	Lead	Notes
<b>Strategies across all target occurrences</b>					
Statewide	All	Improve rare plant education and awareness.	High	RPCI and CNHP	
All	All	Identify lead for Middle Park Priority Action Area	High	B.Neely	Submit article to newspaper?
All	All	Inform county master planning effort to protect rare plants. Include language re spraying and road widening. For private lands, - aim for maintenance of 35+ acre parcels within Potential Conservation Areas as identified by CNHP.	High	CNHP w/RPCI	CNHP needs funding to do follow-ups on surveys w/cty planners. Local contact = K.Manguso, Planning Dept.
All	All	Presentation to County and Town about rare plants, importance, etc.	High	D.Culver	D.Culver from CNHP presented in 2006. Funding is needed.
All	All	Work with O&G companies to avoid rare plants.	High	RPCI and CNHP	Biggest challenges may be on private lands.
All	All	Monitor plant status.	High	CNHP, BLM	
All	All	Designate Rock Creek (SWA) and other sites, possibly, as State Natural Areas.	Medium	S.Panjabi talk with B.Kurzel	
All	All	Rename milkvetch e.g., Middle Park or Kremmling Milk-vetch.	Low	S.Panjabi	Low-hanging fruit
All	All	Gain a better understanding of potential impacts of oil and gas development to rare plants – see TNC O&G layer.	n/a		
All	All	Education: Create informational packet or brochure and share with wide variety of stakeholders.		RPCI	
All	All	Education: Establish educational, e.g. at local museums and community gardens.		RPCI	C.Morales
All	All	Education: Info at public places (e.g., restaurants) about important values of the area.		RPCI	

Target					
Site	Owner/ manager	Strategy	Priority	Lead	Notes
<b>Strategies for specific target occurrences</b>					
All	County road	Inform road maintenance plan to ensure spraying avoids rare plants. Establish placards for no-spray zones.	High	A.Sidener	
All	Private	Conduct targeted outreach to private landowners to inform them about the rare plants, what they can do to protect them (e.g., conservation easements, surface use agreement for O&G), pursue conservation easements with willing landowners, etc.	High	A.Cwiklin	Will work with B.May pass the buck. S. Panjabi to assist.
All	Private	Investigate conservation options (permanent and incentives): Compensation for management agreement; access easement model; possibility of purchasing an easement on a portion of a parcel; sale by willing landowner/purchase by county or land trust; awards; interest group destination; funding for fencing.	Medium	RPCI (maybe S.Dorsey)	Discuss at Colorado land trust rally? Have D.Froeb from TNC help?
All (esp. for Troublesome)	Private	Investigate possibility of State Land Board or BLM exchanges.	Medium*	TNC	Talk with L.Osborn from SLB
Horse Gulch	BLM	Continue to maintain fences.	High	BLM	
Horse Gulch	BLM	Rehabilitate and reseed to reduce or eliminate erosion along trail (trail now closed-off).	Low	BLM	
Horse Gulch	Private	Check on status of town's master plan (e.g., 3-mile comprehensive plan) and inform.	Medium	A.Sidener	
Horse Gulch	SLB	BLM and SLB establish agreement to control ATV use on State Lands, involving local OHV club(s).	n/a	BLM	Sign-off on MOU this summer? Fencing next year, depending on budget
Kremmling	BLM	Check whether plants were transplanted, and if so check status.	Low	BLM	
Kremmling	BLM	Continue to monitor the plants, examining impacts of blister beetle on fruit production. Check for spreading of beetle too.	n/a	BLM	
Kremmling	BoR and/or N.CO water conservation districts	Check potential for dam expansion	Low		
Kremmling	Roads - CDOT	Identify BMPs and share with CDOT and mark maintenance areas.	High	RPCI and CNHP	

<b>Target</b>					
<b>Site</b>	<b>Owner/ manager</b>	<b>Strategy</b>	<b>Priority</b>	<b>Lead</b>	<b>Notes</b>
Rock Creek	BLM	Ensure that trail and ditch maintenance and improvement avoid the rare plants (e.g., snow fencing).	Low	BLM	
Rock Creek	SWA	Ensure that trail and ditch maintenance and improvement avoids the rare plants. Explore possibility w/CDOW of moving the trail.	Low		
Troublesome	All	Stay apprised of potential for uranium mining.	Medium	A.Sidener	
Troublesome	BLM	Establish an ACEC w/restrictions on O&G, mining, water disposal?, etc. thru the BLM RMP process.	High	BLM	
Troublesome	BLM	Monitor progress of RMP in support of ACEC in all alternatives.	High	A.Sidener	
Troublesome	BLM	Establish interpretive signs, e.g., stay on existing trails.	Low	BLM	
Troublesome & Kremmling	BLM	Monitor impacts of O&G adjacent to the potential ACEC on the plants.	Medium	BLM	

\* Regarding the strategy of “Investigate possibility of State Land Board or BLM exchanges” – RPCI reviewers felt that the priority of this strategy may be High rather than Medium.