Summit County Cooperative Weed Management Area (CWMA) Noxious Weed Grant

Funded by:

National Forest Foundation and Cooperating Partners:

* Park City Municipal
* Summit County
* Utah Department of Natural Resources
  Division of Wildlife Management
* Utah Sportsmen for Fish and Wildlife
* Park City Mountain Resort
* The Canyons
* Deer Valley
* United Park City Mines
* Sun Peak Home Owners Association
* Swaner Nature Preserve
* Uinta Headwaters RC&D (NRCS)
National Forest Foundation Priorities

- Concentrate on lands within or close to National Forests
- Preservation of wildlife habitat
- Preservation of National Forests
- Strong coalition of partners
Dear [Name],

Hopefully, you have received a phone call from me to discuss our noxious weed issue here in Summit County. This letter discusses the issue in more detail and gives strong reasons why your participation in attaining a weed mapping and control grant is critical. The grant offers a dollar for dollar match and it would be a crime if we miss out on this great opportunity.

By participating, assuming we receive the grant, you will receive noxious weed mapping services and low cost herbicides. We will work directly with your appointed personnel to complement what you have done already to comply with county regulations. In some cases, your desire to develop new areas may be held up as a result of lack of compliance within the county (see county Code: Title IV, Chapter IV, Ordinance 484).

I just returned from a work trip to the Aspen area and the ski company over there has just spent $15,000 on weed control efforts and plans to quadruple that amount in the coming years (contact Auden Schendler). The weeds they are trying to control over there are the same ones that are creeping into the ski areas and open spaces in our county. Unfortunately, Aspen Ski Company now realizes they waited too long to become proactive on their weed issues. Summit County is at a critical point in noxious weed control. Some of these new noxious weed infestations can be controlled and possibly even eradicated with a combination of a comprehensive mapping of weeds followed by focused action by key large land owners... if we act now.

The rate of spread of noxious weeds has been estimated at more than 4,600 acres per day on federal lands alone. That's about 7 square miles!! That is not happening in the Wasatch... yet. However, many of the noxious weeds that are appearing in Summit County (yellow toadflax, tall pepperweed, yellow starthistle, spotted knapweed, leafy spurge, etc), are among the most aggressive that can spread at these alarming rates. Controlling noxious weeds has been compared to controlling a wild fire. In a wild fire, the outlying “hot spots” need to be found and extinguished early and quickly before they have a chance to expand and spread and become uncontrollable. The same is true for noxious weeds. Once the noxious weeds reach a critical mass, the infestations can become difficult and eventually physically and financially prohibitive to control. There have been far too many beautiful vegetation communities in the American West that have been buried under aggressive noxious weeds. These areas are now suffering from serious decreases in land value (http://www.tcweeds.org/realtors.htm), biodiversity, wildlife habitat, and increases in soil erosion, such as those symptoms we are seeing right now with the Dycr’s woad infestations in Snyderville Basin.
Real Estate Impacts

In Montana and beginning in Jackson Hole:

As part of the continuing education that real estate licensees must undergo, the *Land Values, Land Management, and Invasive Weeds* course fulfills 4 elective credits. The four-hour course is structured to provide real estate personnel with knowledge of the top five invasive weeds in your area, their impacts, how noxious weed presence and control influences property values, and liability issues that are crucial to upholding the law, creating better informed buying and selling transactions, and reducing risk. This course also helps licensees know when and how to contact a local weed expert.

This course specifically designed by REALTORS to meet needs of real estate licensees is a cooperative effort between the Montana Board of Realty Regulation, Montana Association of REALTORS, and the Campaign Task Force to help reduce risk during land transactions.
Get good baseline data on some private lands to help us find priorities and a more comprehensive weed management plan for property owners as well as the county as a whole.
National Forest Foundation
1:1 cash match for cooperating partners

1. Noxious Weed Mapping
   Methods – Standard mapping protocol:
   * Weed species
   * Extent of patch
   * Density of patch
   * Growth stage (date also entered)
   * Other species present

2. Herbicide cost share for partners

3. Education
## Data Gathered

<table>
<thead>
<tr>
<th>Species</th>
<th>Cover</th>
<th>Phenology</th>
<th>Dominant_N</th>
<th>Dominant_2</th>
<th>Disturbance</th>
<th>Notes</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>woad, dyer's</td>
<td>Trace: &lt; 1 %</td>
<td>flower</td>
<td>QUEGAM</td>
<td>CERLED</td>
<td>Low-Mod</td>
<td>ABOVE ROAD CUT</td>
<td>6/8/2006</td>
<td>09:28:35am</td>
</tr>
<tr>
<td>woad, dyer's</td>
<td>Low: 1 to 5 %</td>
<td>flower</td>
<td>QUEGAM</td>
<td>ARTTRIVAS</td>
<td>Low-Mod</td>
<td></td>
<td>6/8/2006</td>
<td>09:31:33am</td>
</tr>
<tr>
<td>woad, dyer's</td>
<td>Trace: &lt; 1 %</td>
<td>flower</td>
<td>QUEGAM</td>
<td>CERLED</td>
<td>Low-Mod</td>
<td></td>
<td>6/8/2006</td>
<td>09:35:56am</td>
</tr>
<tr>
<td>woad, dyer's</td>
<td>Low: 1 to 5 %</td>
<td>flower</td>
<td>QUEGAM</td>
<td>ARTTRIVAS</td>
<td>High</td>
<td>POP TRE</td>
<td>6/8/2006</td>
<td>09:39:45am</td>
</tr>
<tr>
<td>woad, dyer's</td>
<td>Low: 1 to 5 %</td>
<td>flower</td>
<td>QUEGAM</td>
<td>ARTTRIVAS</td>
<td>High</td>
<td></td>
<td>6/8/2006</td>
<td>09:59:14am</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dims_N_S_f</th>
<th>Dims_E_W_f</th>
<th>Priority</th>
<th>GPS_Date</th>
<th>GPS_Time</th>
<th>Understory</th>
<th>Acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>250</td>
<td>5</td>
<td>6/8/2006 03:26:34pm</td>
<td>0.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>100</td>
<td>5</td>
<td>6/8/2006 03:31:32pm</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>30</td>
<td>4</td>
<td>6/8/2006 03:35:55pm</td>
<td>0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>200</td>
<td>5</td>
<td>6/8/2006 03:39:43pm</td>
<td>0.14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>200</td>
<td>5</td>
<td>6/8/2006 03:51:49pm</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>40</td>
<td>5</td>
<td>6/8/2006 03:55:47pm</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>100</td>
<td>160</td>
<td>5</td>
<td>6/8/2006 03:59:13pm</td>
<td>0.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Priority areas for survey
Areas of County that are close Forest Service Property
Concentrate in areas where weeds are introduced and dispersed
  Trails
  Roads
  Facility areas
  Drainages
  Open fields
  Shrubland areas
  Forested areas
Results
Surprises/ Concerns

Extent and locations of perennial pepperweed infestations
Extent and locations of spotted knapweed infestations
New infestations of diffuse knapweed
Extent of yellow toadflax infestations
Scentless chamomile infestations
Yellow starthistle infestations
NOW WHAT?!!?
PREVENTION!!

Ounce of prevention worth a pound of cure

Determine management practices that cause or contribute to the problem and cease or change those practices

  Clean equipment coming from other areas before bringing them into your property

  Limit soil disturbance and revegetate after disturbance

  Know the origin of your fill

  Maintain healthy native plant communities

  Ask for weed free hay or straw
Integrated weed management

Line items in weed management budget for:

Chemical

Cultural- Variable revegetation strategies/ seed mixes

Mechanical

Biological
Chemical
Mechanical
## Cultural

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>Variety</th>
<th>% of mix -PLS</th>
<th>PLS lbs/ acre</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Elymus trachycaulus</em></td>
<td>Slender wheatgrass</td>
<td>Pryor</td>
<td>31%</td>
<td>4</td>
</tr>
<tr>
<td><em>Triticum aestivum</em> X <em>Elytrigia elongata</em></td>
<td>Regreen</td>
<td></td>
<td>32%</td>
<td>50</td>
</tr>
<tr>
<td><em>Hordeum vulgare</em></td>
<td>Annual barley</td>
<td></td>
<td>37%</td>
<td>50</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>
Prioritization

**High priority**
- Weeds near high quality natural resource areas.
- Weeds that are new or relatively rare to the region.
- Small infestations of species known to be highly invasive.
- Infestations likely to spread such as road sides, trail sides, and drainages
- Edges of large infestations.

**Lower priority**
- Large established infestations that would be difficult to eradicate.
- Less invasive species that only infest highly disturbed areas.
Assistance available from:

Summit County Weed Department
Summit County Cooperative Extension
Utah State Department of Agriculture
Utah Weed Control Association
Colorado Weed Management Association
http://tncweeds.ucdavis.edu/