

**CalIPC 2004 Symposium**  
**Forbs Working Group NOTES October 7, 2004**  
*Topic Leader and Moderator: Carri Pirosko*

*Some of the discussion captured by note taker, Steve Schoenig and typed-up by Carri Pirosko*

**Goals of the working group:**

1. To exchange information through varying expertise
2. To share resources
3. To make group email addresses available for post symposium questions and discussion

***The first ten minutes of the session were spent brainstorming species specific questions and other issues for discussion. Our working group topic list included:***

- ✓ yellow starthistle (without herbicides)
- ✓ tocolate
- ✓ Italian thistle
- ✓ bull thistle
- ✓ artichoke thistle
- ✓ dalmatian toadflax
- ✓ Sahara (Moroccan) mustard
- ✓ *chrysanthemum coronarium*
- ✓ spotted knapweed (without herbicides)
- ✓ Prioritizing sites (*discussed in general discussion of species specific control*)
- ✓ Education for Early Detection (*discussed in general discussion of species specific control*)
- ✓ Coordinating with private landowners
- ✓ Resources

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- edible fig
- *Asparagus asparagoides*

**Yellow starthistle (control without herbicides)**

-Grazing (cattle, sheep, goats) can work if timed correctly; timing is also key with mowing. The first viable seed develop within 10-14 days of initial flowering (when you first see yellow). It is this narrow window that mowing can be successful. Site conditions and previous management practices must be taken into account as well.

-Mechanical methods like digging and pulling can be very successful with smaller infestations.

-Yellow starthistle is an annual with a relatively short-lived seed bank as compared to perennial weed species- All methods of weed control are available for yellow starthistle. Herbicides, mechanical methods (digging, etc.), mowing, grazing, controlled burning, tillage, biocontrol.

See a write-up by Extension Specialist, Joe DiTomaso at the Weed RIC website:

<http://wric.ucdavis.edu/yst/manage/management.html> for a COMPREHENSIVE write-up on the management of yellow starthistle.

-You must determine what your management goals are before implementing control measures. Is your goal: eradication, suppression, or containment?

-Early detection is key.

-Prevention is key. Keep spread from expanding into uninfected areas. Clean equipment. Work with adjacent landowners to prevent spread.

-How do you prioritize for a single species, yellow starthistle as an example. Map, stop movement into new areas, focus on sensitive sites first.

### **Tocate**

- Tocate was discussed in context with yellow starthistle control.

-The importance of knowing what species (weeds and natives) exist at your site, before implementing control measures was emphasized. Certain control measures can actually alter your site to a less desirable site and/or leave you with a more difficult to control species. You must know what you will be “taking out” and what will be “filling-in” those bare spaces created (will in be a secondary invasion of a different or worse weed? Will natives or desirable species naturally fill-in? Or will assistance through revegetation measures be necessary?).

### **Italian, Bull, and Artichoke thistles**

- There were questions about Transline; namely what non-target impacts are there on composite species? Transline is a very selective, broadleaf herbicide- the label has a complete list of impacts on non-targets. Transline works well on many composite species; Transline does have impacts on some legume species as well.

- Bull thistle:

One strategy provided was mowing down the thicket and then treating the following year, this allows better access.

Hand removal by the Park Service has been effective, with repeated visits throughout the season. John Randall (as part of his PhD research, now with The Nature Conservancy) found that the less soil disturbance the better. Often grazing or other mechanical methods can create soil disturbance, resulting in a huge flush of seedlings from the seed bank. Preferably, cut the flowers off and bag to minimize the soil disturbance, while eliminating further additions of seed.

There was the question: Can you cut bull thistle plants and leave them (and get no seed production)? Many folks in the group have seen bull thistle plants that were cut have enough energy to go ahead and make viable seed. To be extra cautious, it was advised to cut even young, undeveloped buds/flower heads to avoid any chances of seed development from cut plants.

- Tarping with these thistles was also discussed. The question of clear versus black plastic was posed. Many have cut thistles, piled them in a central location and then tarped with black plastic, as a means to focus the population into islands that would then be targeted heavily for early treatment the following season.

- Another idea for helping battle non-native thistle seed load (or any undesirable thistle with small, FLUFFY seeds that collect at the base of the plant when released)--- USE an outdoor vacuum to clean them up. One can REALLY reduce seed load for the following year.

### **Dalmatian toadflax**

- The question of available and effective herbicides for dalmatian toadflax was posed. Many group participants testified to limited success on dalmatian toadflax with herbicides. Some success has been noted in some areas with Telar.

- Mechanical methods were discussed. Dalmatian toadflax has an extensive root system that results in massive resprouting if any roots are left in the ground. Limited hand pulling will not be successful. Rather, REPEATED digging, in an attempt to remove as much of the extensive root system as possible was recommended. Some smaller infestations have been completely eradicated with frequent digging throughout the duration of the season, year after year- being careful to not allow seed set.

### **Spotted Knapweed**

- The question of available non-chemical methods for spotted knapweed was posed. Many from the group reported used digging as a control measure for spotted knapweed. Spotted knapweed has a huge tap root/root ball that is prone to resprouting, if all of the root is not removed. Special digging bars have been used by the Salmon River Restoration Council in Siskiyou County- and have helped them tackle this resprouting problem (see next comment for their webpage).

- The Salmon River Restoration Council was recommended as a resource, as they have successfully reduced huge spotted knapweed infestations in their watershed and are working toward total eradication- with non-chemical methods. This group has tried all non-chemical methods, including: hand-pulling, digging, tarping, mowing, etc. The Salmon River group can be reached via their comprehensive webpage: [www.srrc.org](http://www.srrc.org)

### **Saharan Mustard**

- This plant is simply taking over the Mojave Desert.

-Remedy (Triclopyr) has been effective. A cautionary statement was made that this weed is prone to herbicide resistance (resistance to Banvel in Australia is well documented).

- Hand pulling can also work; millions of plants have been pulled from Lake Meade

-Matt Brooks with the USGS was mentioned as a further contact for those interested in more on the control of Saharan mustard, including impacts from fire/burning.

### **Chrysanthemum coronarium**

-This plant is a REAL problem in Rancho Palos Verdes, spreading like crazy.

-Originally thought to have been introduced by Japanese immigrants, as this plant is a food source.

-There was limited expertise on available control measures within the group. The group member asking about this species was redirected to resources (listed below).

### **Private Landowner Participation**

-This question was posed: How does one get private land owners on board, especially if you are working as a governmental employee?

-The following contacts/leads were suggested:

\*Getting involved with your local county Weed Management Area group. Often, other members of the group (including the County Agricultural Commissioner's Office) will know the private land owner(s) in question AND/OR if they do not can help you find out and make contact.

\*Cattlemen's Association. Another group that is heavily tied-in with private land owners.

\*Resource Conservation District (RCD) and Natural Resource Conservation Service (NRCS). Two groups that focus on working with private landowners; RCDs and NRCS are charged with creating a bridge between government types and private landowners.

### **Resources to Learn More**

-It was important to brainstorm ways in which group participants could get answers to their specific questions that we did not have time to cover and/or questions that arise beyond the CalIPC Symposium.

The following resources were discussed:

- The CalIPC website: [www.cal-ipc.org](http://www.cal-ipc.org)
- The CalIPC List Serve CalWeed Talk (to sign-on, contact Doug at the CalIPC headquarters office in Berkeley)
- The recently released CalIPC, Weed Worker Handbook (copies available from CalIPC headquarters Office in Berkeley)
- Weed RIC (Research and Information Center) out of UC Davis <http://wric.ucdavis.edu/>
- The Encyclopedica from the California Department of Food and Agriculture [www.cdffa.ca.gov/weedinfo](http://www.cdffa.ca.gov/weedinfo)
- The Nature Conservancy (TNC) Webpage, WEALTH OF INFORMATION <http://tncweeds.ucdavis.edu/handbook.html> AND Other web resources!
- The Center for Invasive Plant Management website [www.weedcenter.org](http://www.weedcenter.org)
- PMIS (Plant Management Information System) through the Army Corps of Engineers, a CD and their resource web page: <http://www.newfs.org/invasive/invasive.htm>
- Your Local Weed Management Area Group, [www.cdffa.ca.gov/wma](http://www.cdffa.ca.gov/wma)