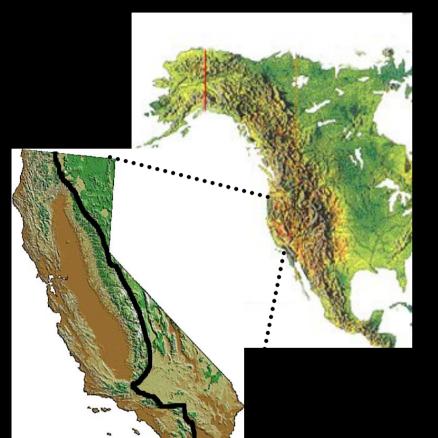
Weeds and Wildlife



Steve Schoenig
California Dept. of Food & Agriculture

California Weed Environment in a Nutshell



- 20,000 30,000 (?) exotics
- •1200-1400 Naturalized Plants
- 200-300 Truly Invasive **
- 15-20 Top Priority for Eradication
- Most from Europe/Asia
- Grasslands highly Invaded
- 32,000,000 people live here
- 7000 Native Plant Species
- 2000 +/- spp. rare, endangered, sensitive, special

** CDFA Noxious Weed List (A,B,&C)

** CA Invasive Plant Council List of Wildland Weeds

Where did these weeds come from?

- Escapes from Ornamental Horticulture
- Crop seed Contaminants
- Range Improvement
- Soil Stabilization
- Animals, Ballast





Statewide and Regional Eradication and Prevention

California's Historic Pest Prevention System

- Pest Exclusion -- to keep pests out
- Pest Detection -- to quickly find new infestations
- Pest Eradication -- to eliminate new pest infestations
- Pest Control -- to reduce the impacts of established pests
- Public Outreach -- to educate the public and obtain their cooperation

- CDFA
- County Ag Commissioners
- County Cooperative extension
- Farmers and Ranchers

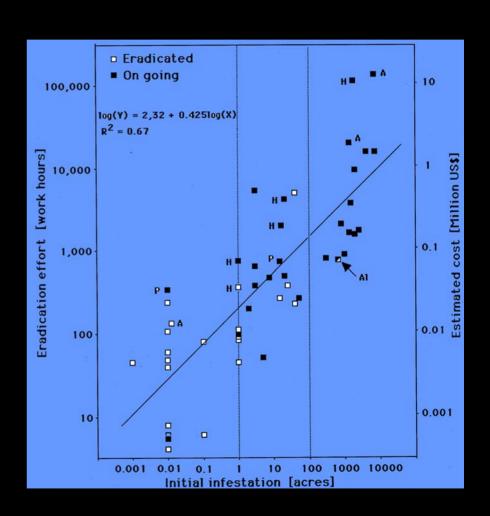


Prevention of new Invasions History and Future

- PPS done to protect agriculture
- 1900 1970
- CNPS and Nature Conservancy
- Prop 13 Jarvis Gann
- Series of State Fiscal Crises 1/3, 1/3/ 1/3 dropped
- NEPA and Anti-Herbicide groups back feds into a corner
- 2000 CDFA Plant Eradication Program and Detection biologists cut 50%
- 1992 Cal EPPC formed WMAs soon to come
- We Need A <u>Formal</u> System to train para-Detection Biologists WE NEED YOU!!

Eradicated Species

- 1) Whitestem distaff thistle –*Carthamnus leucocaulos*.
- 2) Dudaim melon Cucumis melo var. dudaim
- 3) Giant dodder Cuscuta reflexa
- 4) Serrate spurge *Euphorbia serrata*
- 5) Russian salttree *Halimodendron halodendron*
- 6) Blueweed *Helianthus ciliaris*
- 7) Tanglehead *Heteropogon contortus*
- 8) Creeping mesquite *Prosopis strombulifera*
- 9) Meadowsage Salvia virgata
- 10) Heartleaf nightshade *Solanum cardiophyllum*
- 11) Austrian peaweed *Sphaerophysa salsula*
- 12) Wild marigold *Tagetes minuta*
- 13) Syrian beancaper *Zygophyllum fabago*
- 14) Perennial sowthistle Sonchus arvensis



Species Under Eradication

A-rated weeds

**Under containment



**Punagrass - Achnatherum brachychaetum Biddy biddy - Acaena spp. Camelthorn - Alhagi pseudalhagi

**Alligatorweed - Alternanthera philoxeroides

Fertile capeweed - Arctotheca calendula

**Plumeless thistle - Carduus acanthoides

**Musk thistle - Carduus nutans

**Diffuse knapweed - Centaurea diffusa

Iberian starthistle - Centaurea iberica

**Spotted knapweed - Centaurea maculosa

**Squarrose knapweed - Centaurea squarrosa

Yellowspine thistle - Cirsium ochrocentrum

Wavyleaf thistle - Cirsium undulatum

**Bearded creeper - Crupina vulgaris

Golden thistle - Scolymus hispanicus

Leafy spurge - Euphorbia esula

Halogeton - *Halogeton glomeratus*

**Dalmatian toadflax - Linaria genistifolia spp. dalmatica

**Scotch thistle - *Onopordum acanthium*

Illyrian thistle - Onopordum illyricum

Taurian thistle - *Onopordum tauricum*

Harmel - Peganum harmala

Wormleaf salsola - Salsola vermiculata





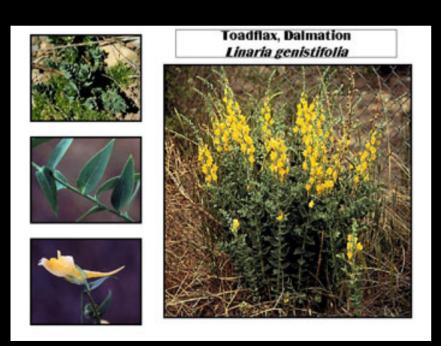
Leafy Spurge

- On the 100 worst Invasive Species of the World list
- Only on Scott River and heading down the Klamath
- \$180 million losses in upper midwest / year
- Need to use herbicide in a river channel

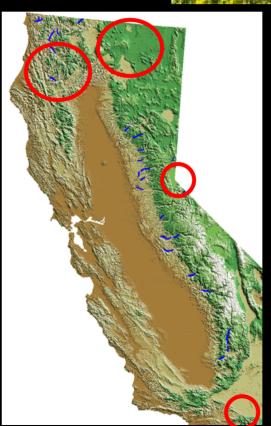


Dalmation Toad Flax

- Forms monocultures
- No mechanical
- Chemical control difficult







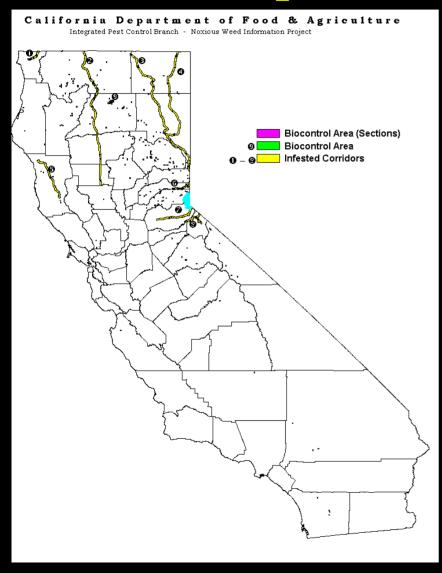
Scotch Thistle

- Can be over 10 feet tall- spiny cornfield
- Very heavy in Modoc county
- Herbicidal control necessary
- 50 year seed bank





Spotted Knapweed



- Many small infestation
- \$40 million per year losses in Montana
- Watershed group pulled > 500,000 plants
- Biocontrol program and local eradication

Prioritization

- Too many weeds too little money
- Need a better system for prioritizing
- What is the 10, 25, 50 year impact of projects
- We have species priorities, but need site priorities
- Population based priority system:
 - Doesn't currently exist
 - Gina Darin, UC Davis & CDFA
 - Combination of species scores combined with site score
- We need an "Un-natural" Diversity Database

California Noxious and Invasive Weed Action Plan

A series of drafts were released to the public and many experts resulting in the final September 2005 plan

California Noxious and Invasive Weed Action Plan

[this will be Seshed out - topics below]

- Delineation of the problem in stark, comprehensive, and gun-impact lang issue for the RAJAX plans is the RAJAX plans. Statement of how the plan was put cogether and who put it together Ratisconting to the Namonal Invasive Species Council, Micropatent Plantisconting to the Rangh Management Advisory Commission in timesgic Ratisconting to the Rangh Management Advisory Commission in timesgic.

- Harmonize regulatory issues and obstacles Increase coordination and harmonization of missing programs
- Our analysis Blue-print for funding enhancements

- Objectives, monitoring, accountability, mea Reports, as verito be determined, \$1000 enriv-

II. Overview of the Naxious Weed List, Categories and Legislatic

A. Navious Ward List and Entires

19 DR 2004, Name 1 Ht IPC WEED Plan Plan Destricted Destriction 21 Across

California Noxious and Invasive Weed Action Plan REVISED DRAFT

Coordinated by

California Department of Food and Agriculture (CDFA) California Invasive Weed Awareness Coalition (CALIWAC) California Invasive Noxious Weed Coordinating Committee (CINW

Editor Stave Schoenig (CDFA)

Weed Action Plan Steering Committee

Diana Brink (Bureau of Land Management);

Dr. Joe DiTomaso (UC Weed Science Program); Sheree Edwards (California Department of Transportation); Susan Ellis (California Department of Fish and Game)

Andrea Fox (California Form Bureau Federation) Dr. Nelroy Jackson (National Invasive Species Council); Doug Johnson (California Invasive Plant Council);

Doug Johnson (California Invasive Plant Council);
Susan LaGrande (California Cattlemen's Association);
Jim Metropulos (Siera Ciub);
Bob Pickard (CALIWAC);
Cheri Roher (United States Department of Agriculture, Forest Service).

Weed Summit Breakout Group Leaders:

Dr. Lars Anderson (US Department of Agriculture) - Research;

Carri Pirosko (CDEA) - Education and Outreach

Steve Schoenig (CDFA) - Mapping and Inventor Ron Unger (EDAW Consulting) Restoration

California Noxious and Invasive Weed Action Plan FINAL DRAFT

California Department of Food and Agriculture (CDFA) California Invasive Weed Awareness Coalition (CALIWAC)
California Invasive Noxious Weed Coordinating Committee (CINWCC)

Editor: Steve Schoenig (CDFA)

Weed Action Plan Steering Committee:

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Nathan Dschopst; (CDFA)
Dr. Joe DITomase (UC Weed Science Program)
Sharee Edwards (California Department of Transports
Suxan Ellis (California Department of Fish and Game)
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narea Fox (California Farm Bureau Federation)

r. Nalpoy, Jackson (Monsanto (retired), National Invasive Species Advisory Committee)

sug Johnson (California Invasive Plant Council)

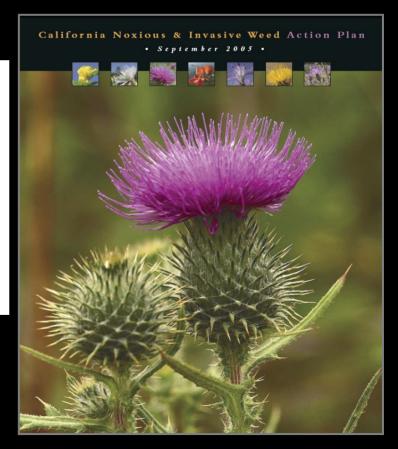
Weed Summit Breakout Group Leaders:

Larry Bezark (CDFA) Breakout Group Coordinate

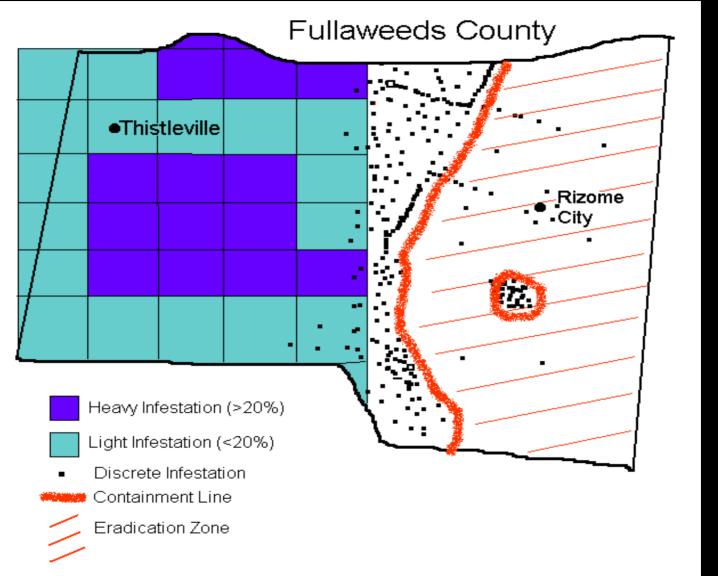
Dr. Lars Anderson (US Department of Agriculture) Research
Stacy Carlson (Marin County Agriculture Department) Leadership and Coordination Joanna Clines (US Forest Service) Prevention

oretz (CDFA) Early Detection Rapid Response

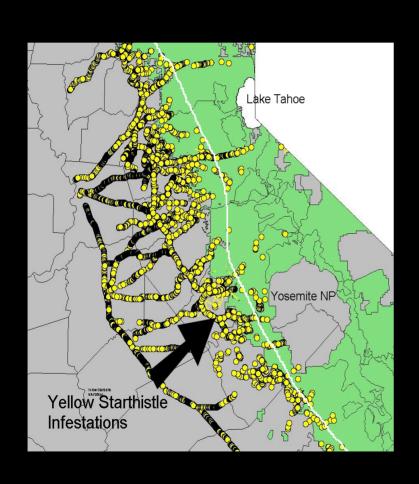
Dr. Joe Di Canasa (UC Davis) Research
Jerry Heward (Calaveras County Agricultuse Department) Enforcement and Compliance
Doug Johnson (California Invasive Plant Council) Funding and Resources
Carri Piropio (CDFA) Education and Outreach



Stopping Weed Spread



Containment of Spread –





What Does the YST Raster Map Mean

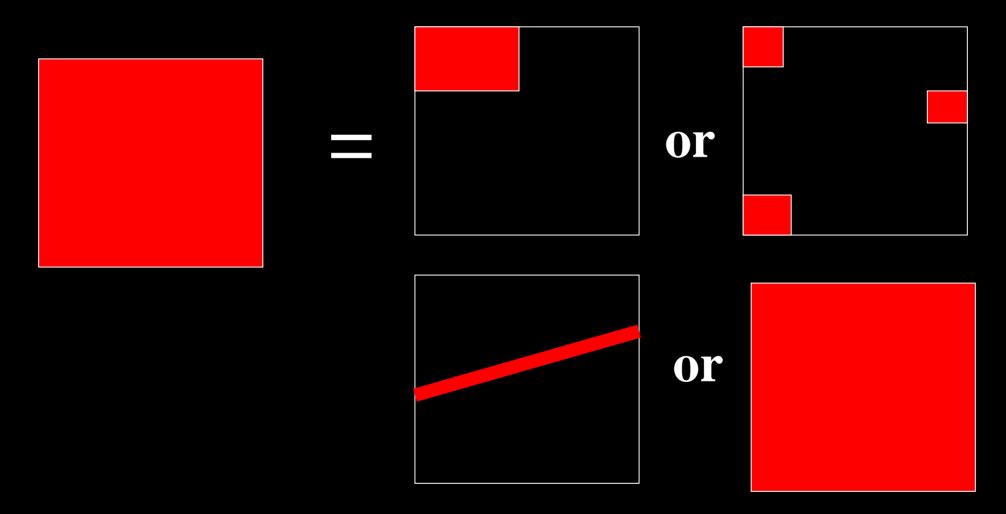


Figure 1: Relationship of Provisional YST Leading Edge Line to
Existing YST Survey Data

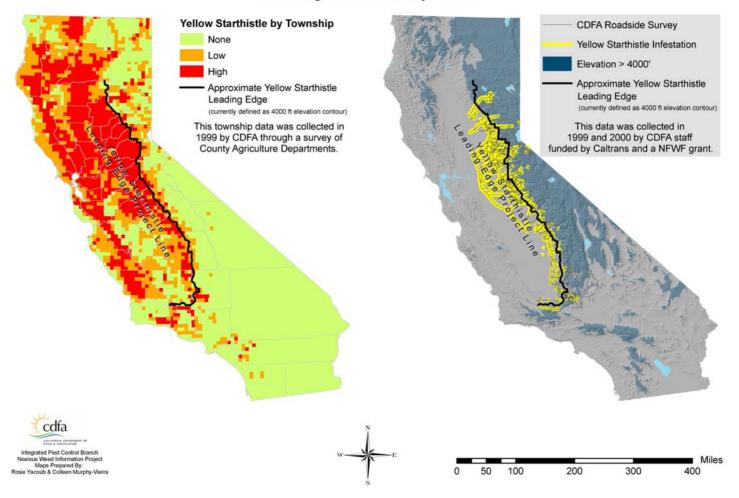
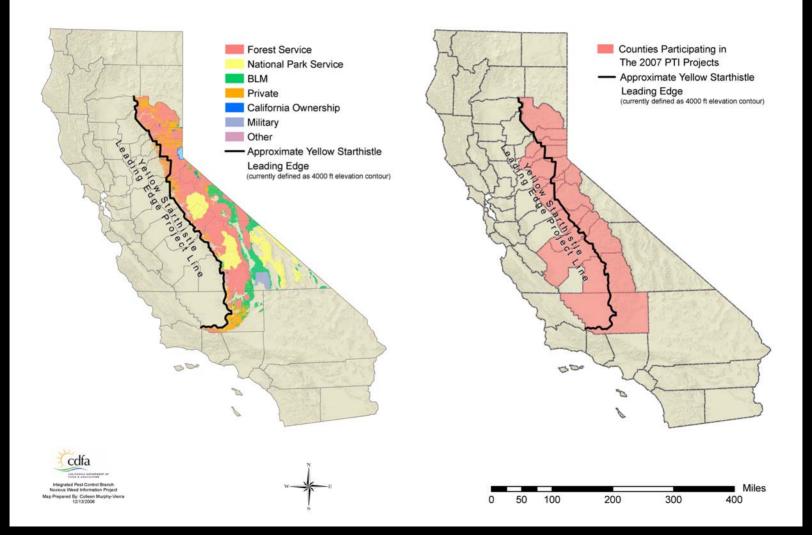
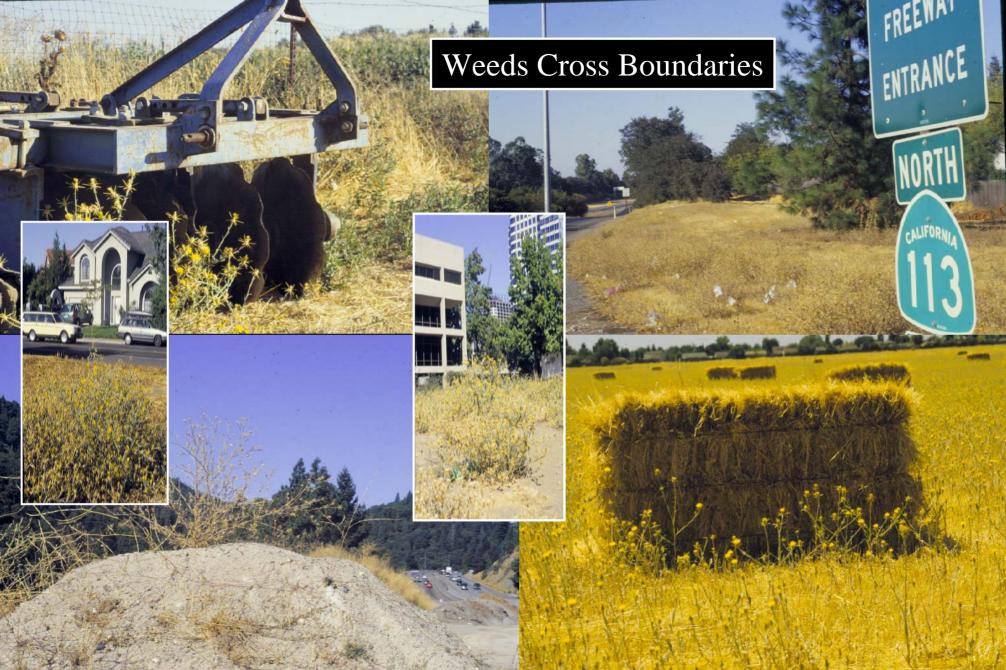
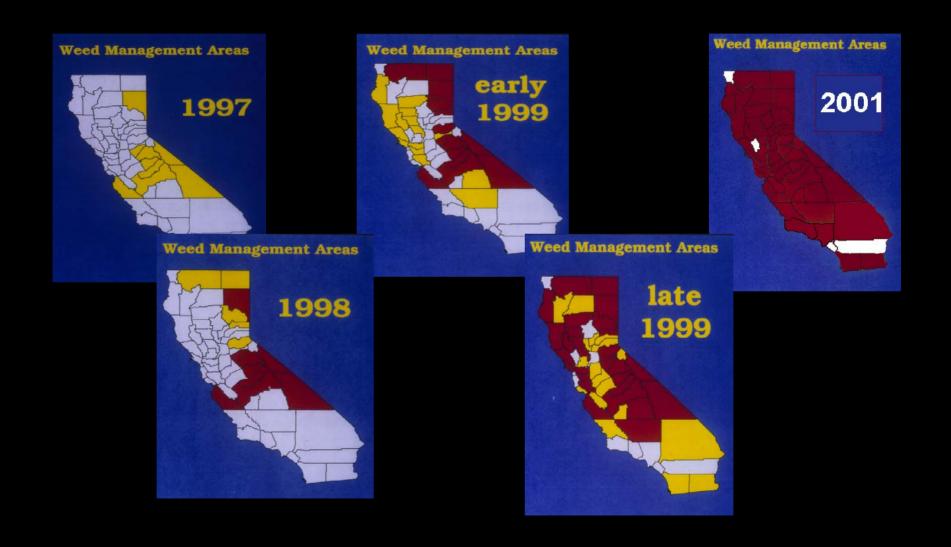


Figure 2: Stakeholders Benefiting from Yellow Starthistle Stop-the-Spread Program





WEED MANAGEMENT AREAS



Who Participates?

- County Ag Department
- State Agencies- CDFA, Parks, Fish & Game, Forestry & Fire, Etc.
- Federal Agencies- BLM, Forest Service, NRCS, NPS
- Growers, Cattlemen, RCDs, Forest Industry, Landowners
- UC Cooperative Extension
- Cities

CACASA

Military Landowners

- Departments of Transportation
- CNPS, Nurserymen
- Railroads, Utilities
- Volunteers, Pest Control Ops
- Open Space, Parks, Water Districts











































































CallWAC





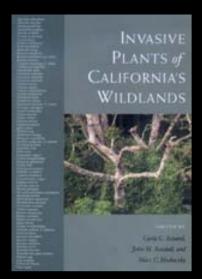
California Invasive Weed Awareness Coalition











Cal-IPC

California Invasive Plant Council

- Quarterly Newsletter
- Annual Symposium
- CaliforniaWeedTalk listserve
- Field School Classes
- Wildland Weed List
- Content-rich website
- Don't Plant a Pest Brochures
- Local, State and Federal Advocacy
- Publications
- Mapping Coordination

www.cal-ipc.org

