

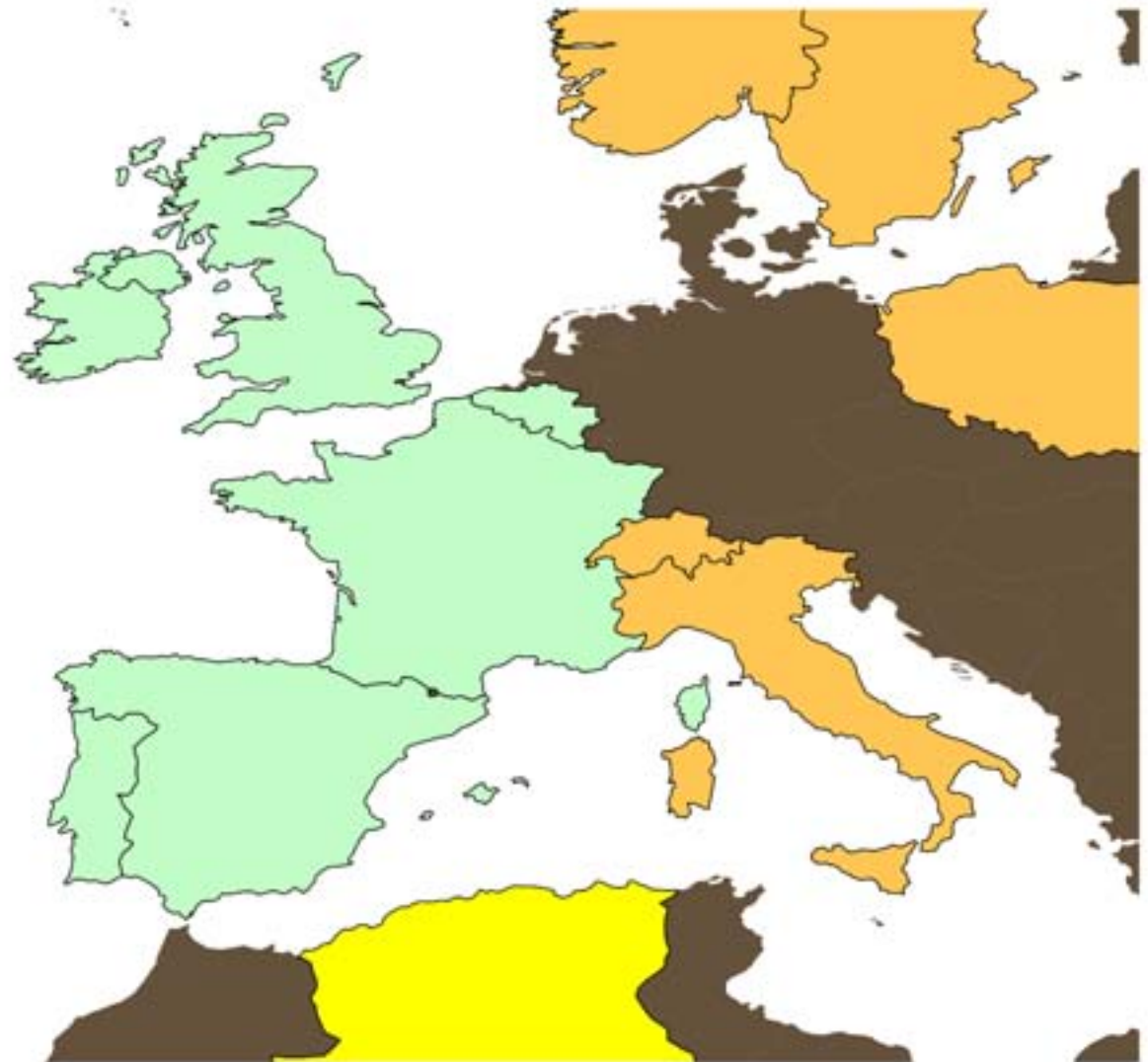
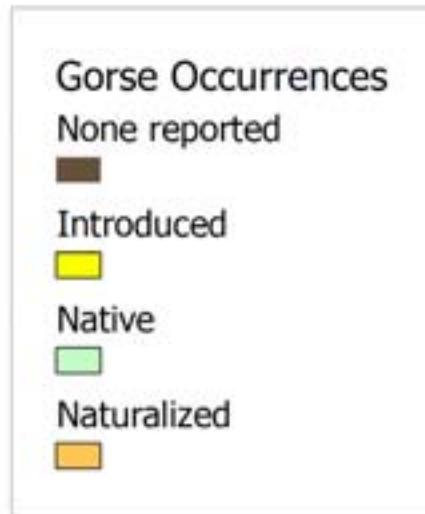
# **Can a Spiny Shrub Prick the Collective Ecological Conscience?**

**Tara Athan**  
Mendocino Coast Cooperative  
Weed Management Area

**Peter Warner**  
Independent botanical consultant and  
educator



# Native Distribution of Gorse (*Ulex europaeus*)



Source: <http://www.issg.org>  
Map Created by Tara Athan, MCWMA,  
for the 2009 Cal-IPC Symposium

















# Sheep Pastures in Britain







2008-01-15









“When gorse is out of bloom,  
kissing is out of season”,

*-old country saying*









2 mm







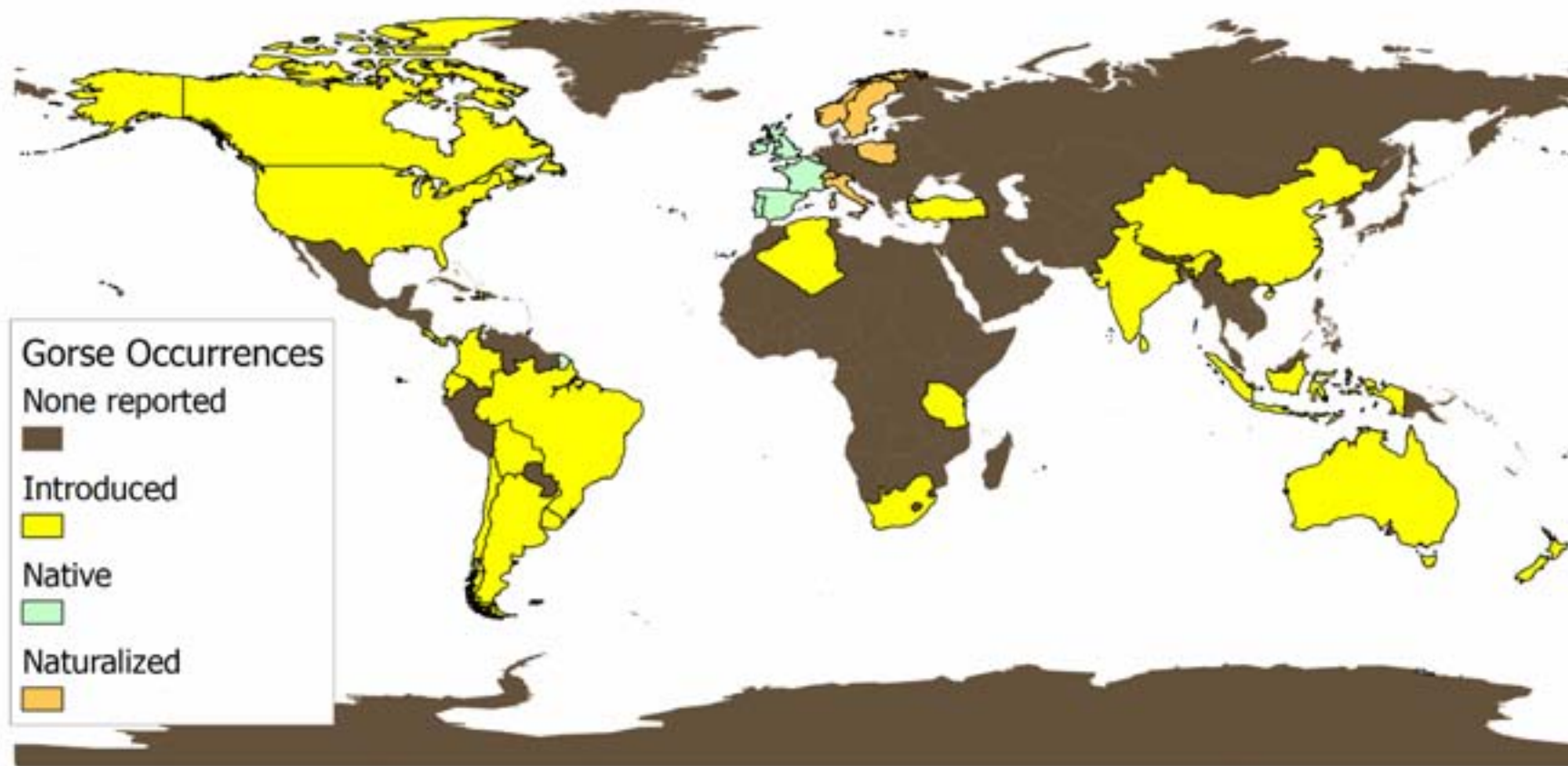
## Gorse Fire: Britain



Source: mozzercork on flickr



## Global Distribution of Gorse (*Ulex europaeus*)

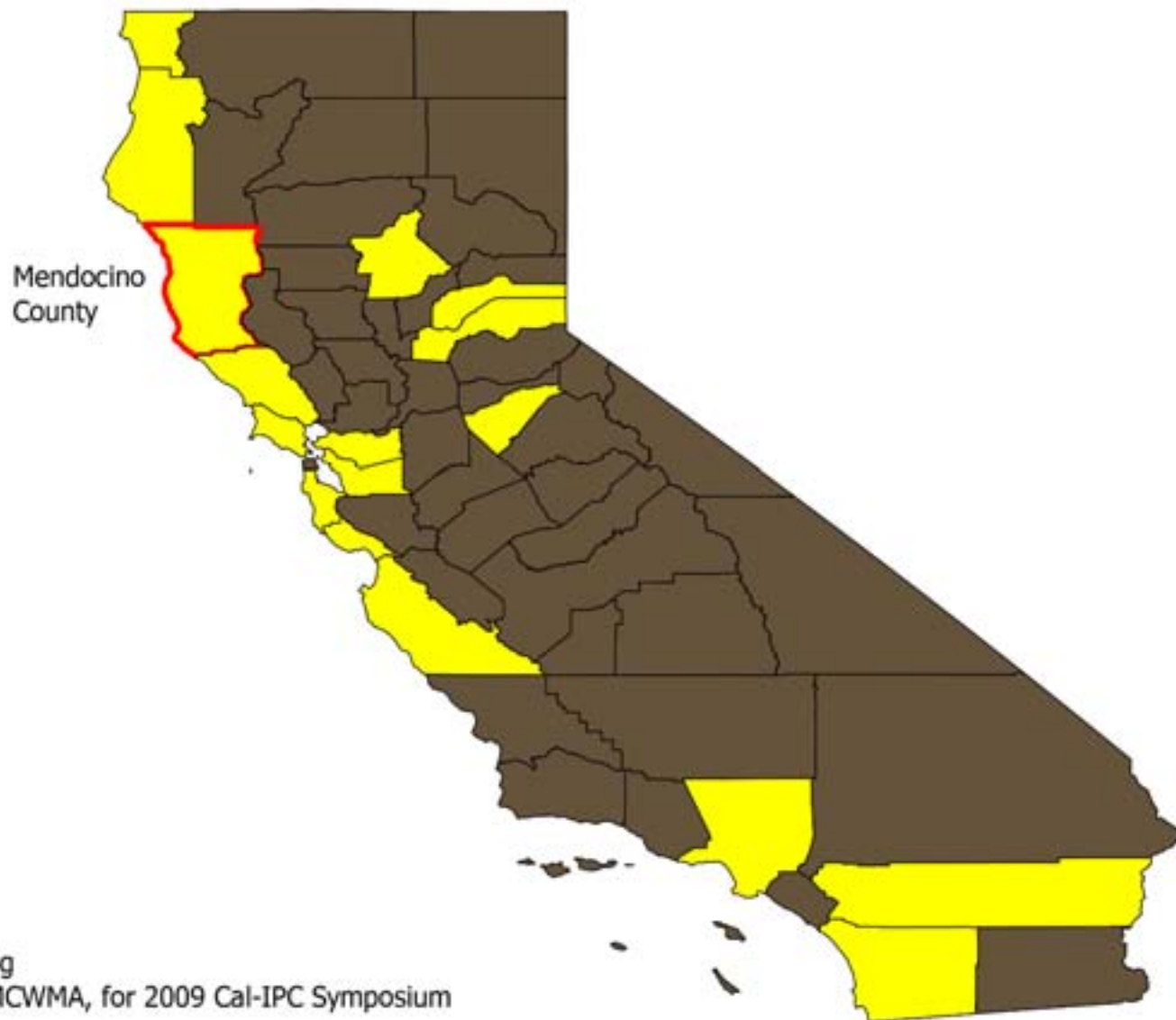
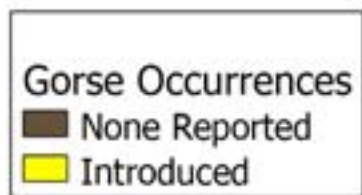


Source: <http://www.issg.org>

Map Created by Tara Athan, MCWMA, for the 2009 Cal-IPC Symposium



# California Distribution of Gorse (*Ulex europaeus*)



Source: <http://www.calflora.org>

Map Created by Tara Athan, MCWMA, for 2009 Cal-IPC Symposium

# Overview of Gorse Containment Project





From:  
Jug Handle Ecological Staircase  
Published 1978



AREA  
OF  
SPECIAL  
BIOLOGICAL  
SIGNIFICANCE

SIGNIFICANCE

SUB-LIT

ABRUPT

SUSPECTED



CASPAR POINT

Coastal Prairie

Ranch Young  
Judd  
State Reserve

Monterey Pine  
Apple  
The Mendocino  
No. 1000  
Farm House

Lowland Pine

Norch

Coastal Prairie

14 Road

OPPE

OLD COAST HIGHWAY

OPPE

Submerged Rock

Coastal Prairie

OPPE

COASTAL

FARMITO

CASPAR ANCHORAGE

CASPAR

Coastal Prairie

Grazing

CASPAR

Scotch Bm

Willow

CASPAR HEADLANDS STATE RESERVE

BRANCH  
COASTAL STATE

SEASONAL SANDS

Old Caspar Mill Site (1888-1988)

Coastal Prairie

Norch Coast C



































964.5503

Mendocino Pacific

REALTY

[www.MendocinoPacificRealty.com](http://www.MendocinoPacificRealty.com)

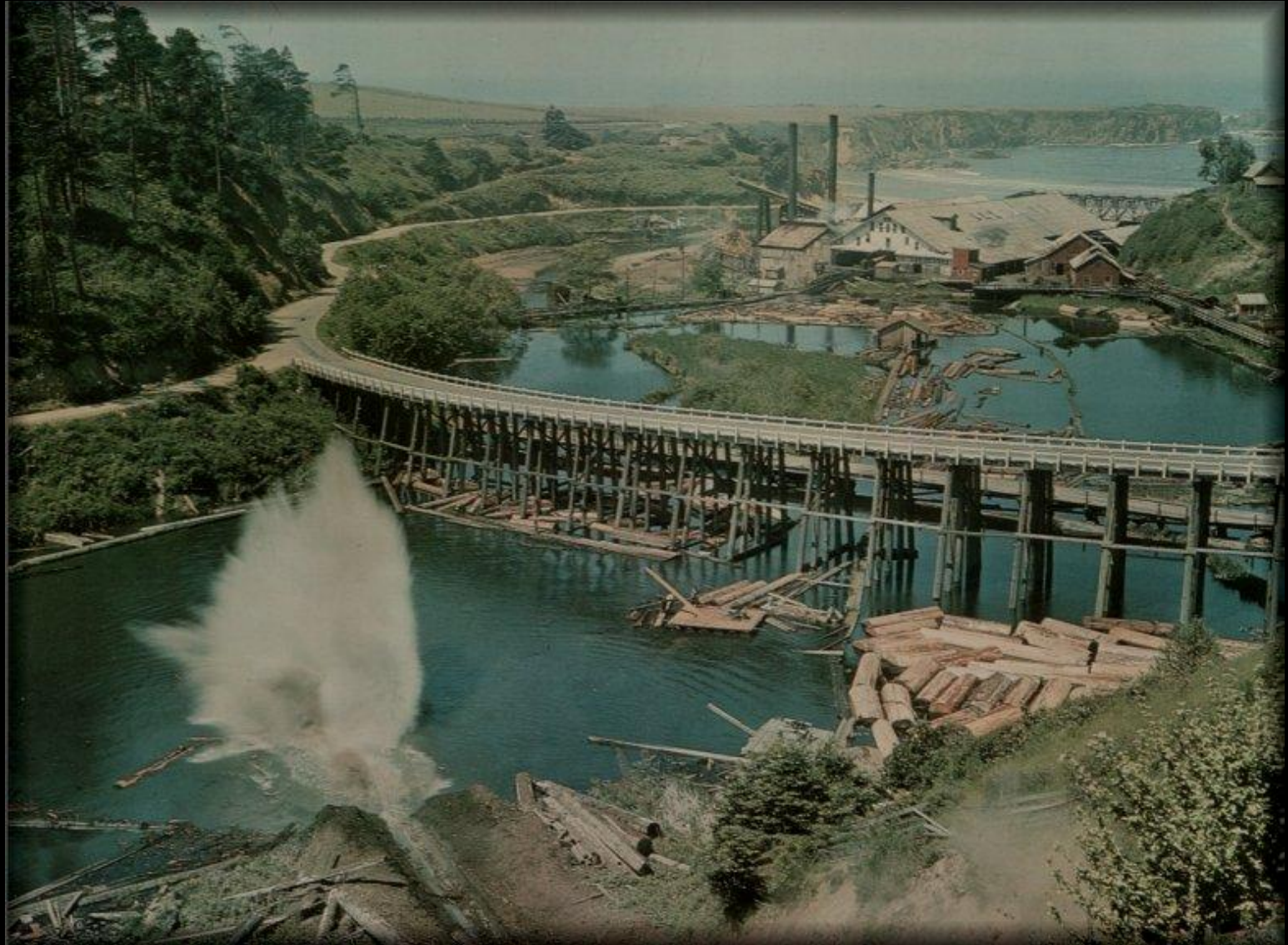
401 North Main • Fort Bragg

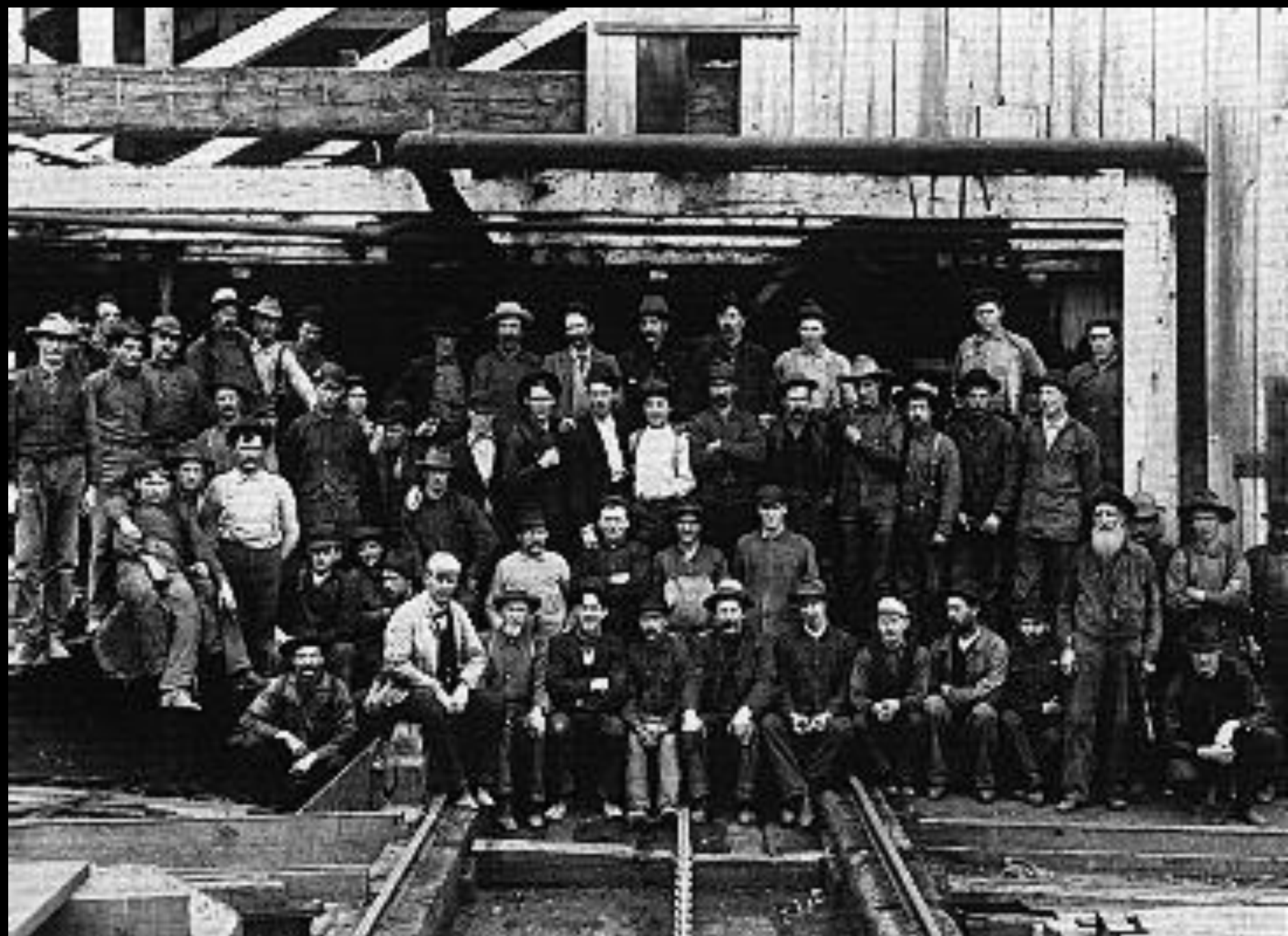






# Historical Perspective on Caspar













Depression Era: Abandoned Lumber Mill in Mendocino County  
(photo by Dorothea Lang)



# Bandon Burn: Cars on the Beach



Source: [http://www.oregon.gov/ODF/FIRE/SB360/wui\\_history.shtml](http://www.oregon.gov/ODF/FIRE/SB360/wui_history.shtml)



# Gorse seed weevil (*Exapion ulicis*)



**JUG HANDLE  
STATE RESERVE**





# Gorse spider mite (*Tetranychus lintearius*)











SPEED  
LIMIT  
55

MAR 1 2006

# Caspar Headlands





# CHAMBERLAIN CREEK CONSERVATION CAMP



CALIFORNIA  
DEPT. OF FORESTRY  
AND  
FIRE PROTECTION



CALIFORNIA  
DEPT.  
OF  
CORRECTIONS





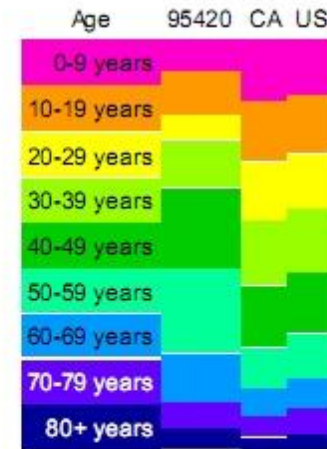
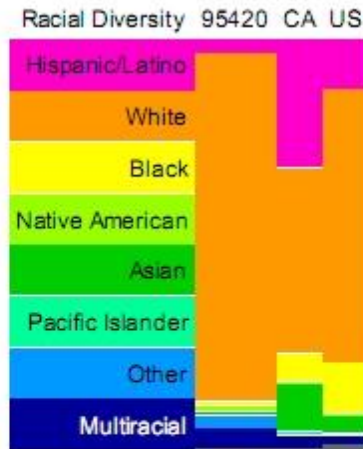
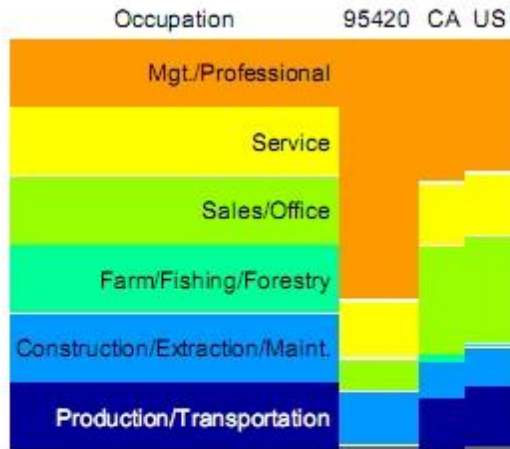
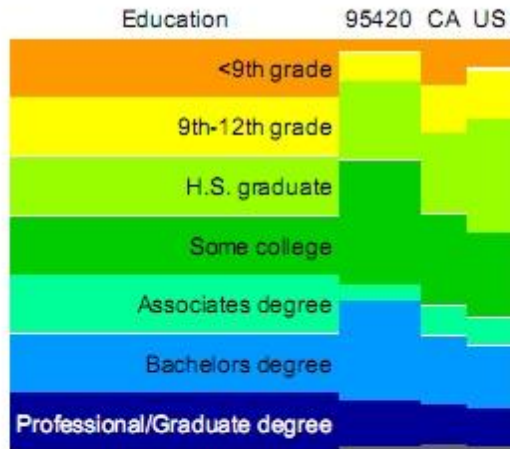


# ZIPskinny

get the skinny on that ZIP

95420  
get it!

## 95420



# Annual Caspar Gorse Festival with Gertie the Gorse Monster





# ISSUES

## GORSE ERADICATION (OR CONTROL)

NEVER GETS ANYWHERE  
BECAUSE THE  
TAXPAYERS LOVE  
FLASHY SHORTTERM  
PROJECTS AND  
GORSE IS NEVER  
TREATED AS A  
LONG TERM PROJECT.

## GORSE

Loss of  
Wildlife  
Habitat-  
Corridors

## ISSUES

- \* SPREADING/EXPANDING RANGE  
OF INVASIVE WEEDS  
IMPACTING NATIVE PLANT  
COMMUNITIES
- \* FIRE-HAZARD
- \* BIRD SPECIES IMPACTS

## MONEY

# SOLUTIONS

Introduction of  
Positive Species  
after weed  
Removal + land  
is bare.

Conservation  
CORPS

# GOATS

WEED CONTROL  
COOPERATION ON  
ADJACENT OWNERSHIPS

## SOLUTIONS

- EDUCATION
- > NEWS PAPER ARTICLES
- + VOLUNTEERISM
- \* SUPPORT BY GOVERNMENT AGENCIES

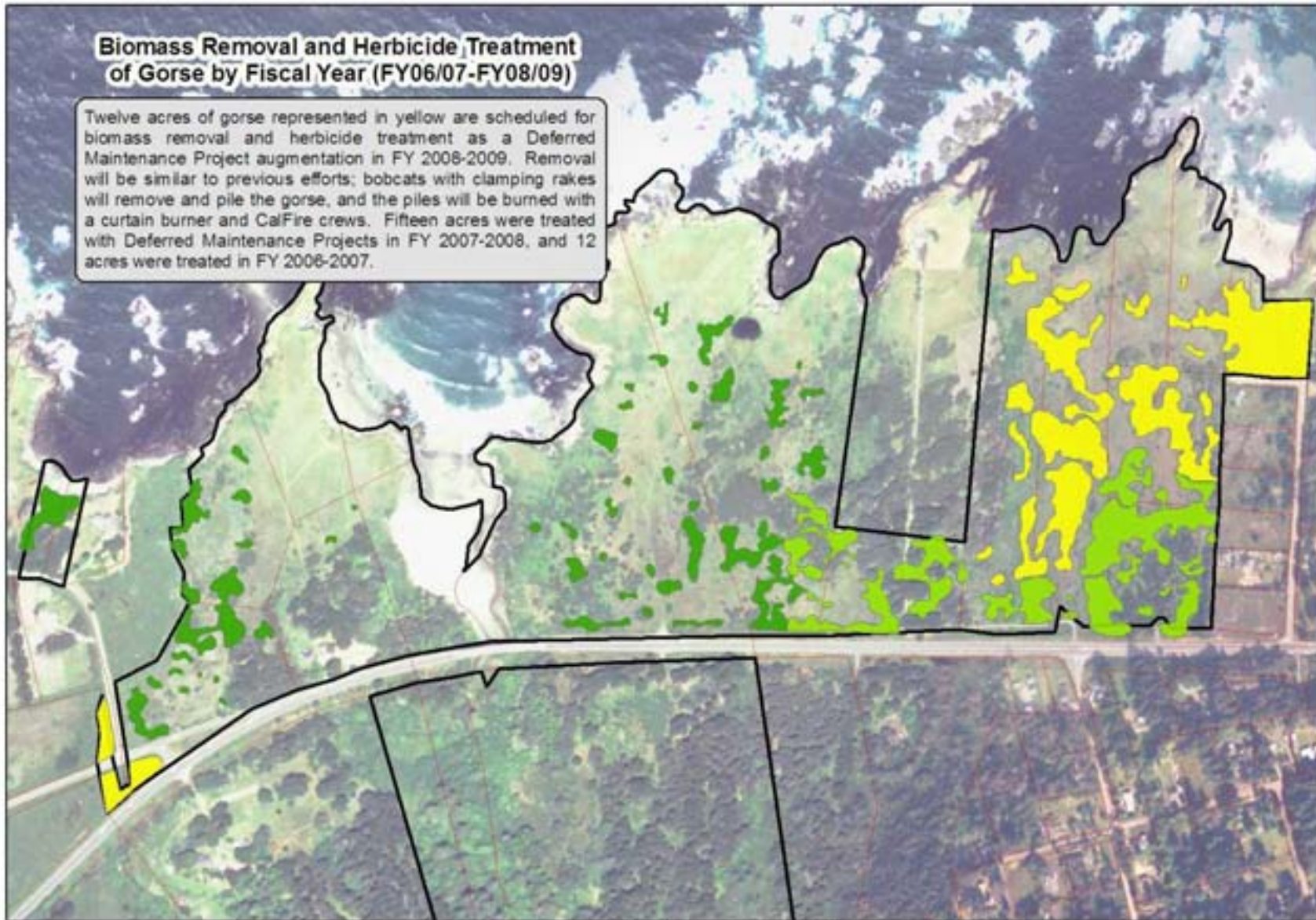
Writing more  
grant  
Proposals  
For help

gorse on private  
land -  
Solution:  
get permission  
to cut.



### Biomass Removal and Herbicide Treatment of Gorse by Fiscal Year (FY06/07-FY08/09)

Twelve acres of gorse represented in yellow are scheduled for biomass removal and herbicide treatment as a Deferred Maintenance Project augmentation in FY 2008-2009. Removal will be similar to previous efforts; bobcats with clamping rakes will remove and pile the gorse, and the piles will be burned with a curtain burner and CalFire crews. Fifteen acres were treated with Deferred Maintenance Projects in FY 2007-2008, and 12 acres were treated in FY 2006-2007.



#### Gorse Treatment by Fiscal Year

-  2006-2007 (12 acres)
-  2007-2008 (15 acres)
-  2008-2009 (12 acres, scheduled)





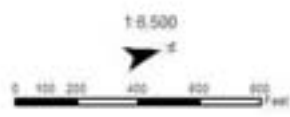
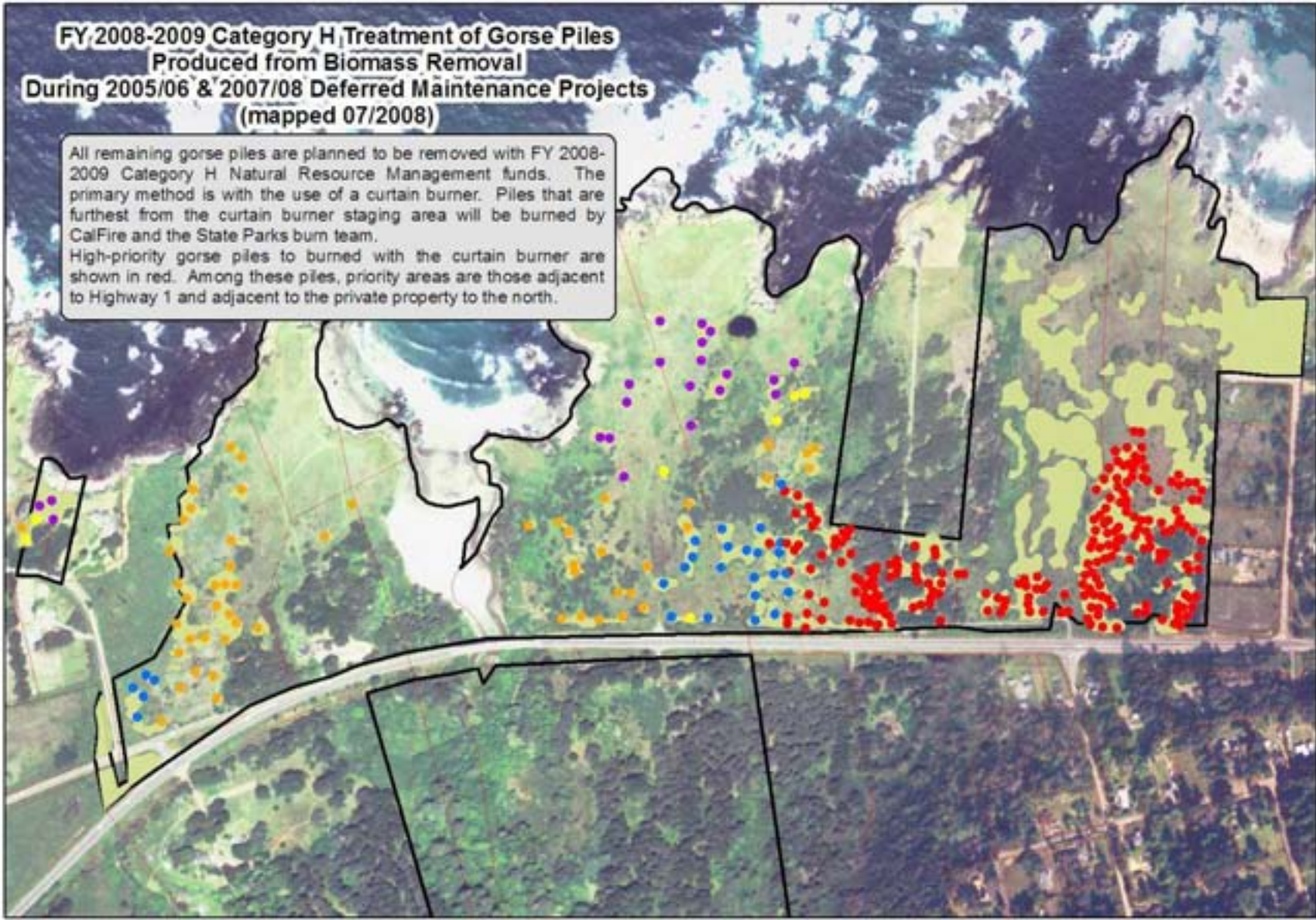






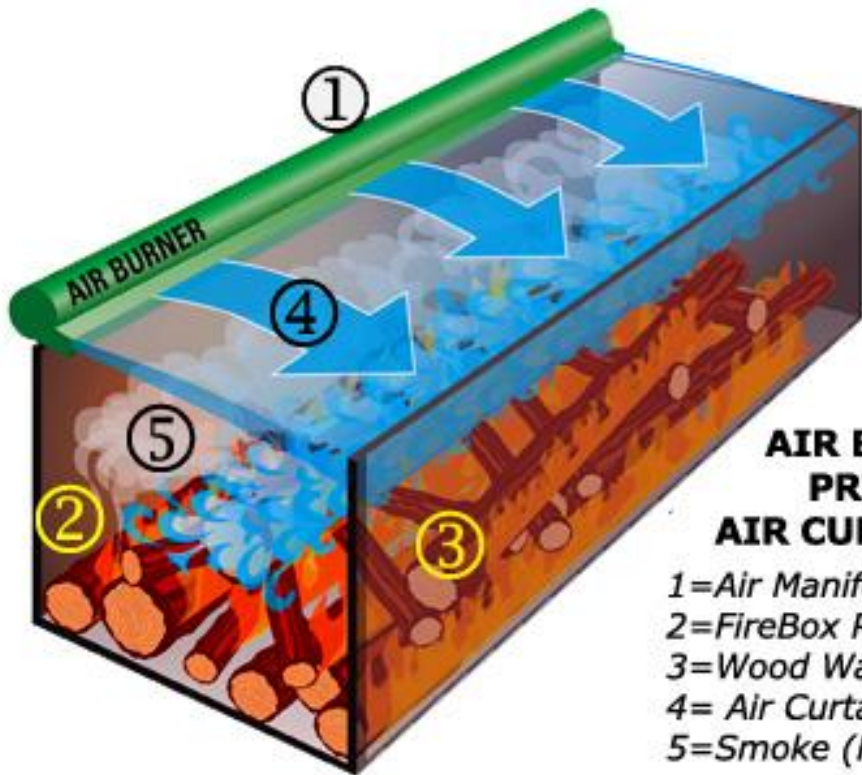
**FY 2008-2009 Category H Treatment of Gorse Piles  
Produced from Biomass Removal  
During 2005/06 & 2007/08 Deferred Maintenance Projects  
(mapped 07/2008)**

All remaining gorse piles are planned to be removed with FY 2008-2009 Category H Natural Resource Management funds. The primary method is with the use of a curtain burner. Piles that are furthest from the curtain burner staging area will be burned by CalFire and the State Parks burn team. High-priority gorse piles to be burned with the curtain burner are shown in red. Among these piles, priority areas are those adjacent to Highway 1 and adjacent to the private property to the north.



- Gorse Piles**
- 2008 Pile - Untreated
  - 2007 Pile - Needs to be burned; currently spread into small piles
  - 2007 Pile - Untreated
  - 2007 Pile - Completed
  - 2007 Pile - Incomplete burn
  - Gorse

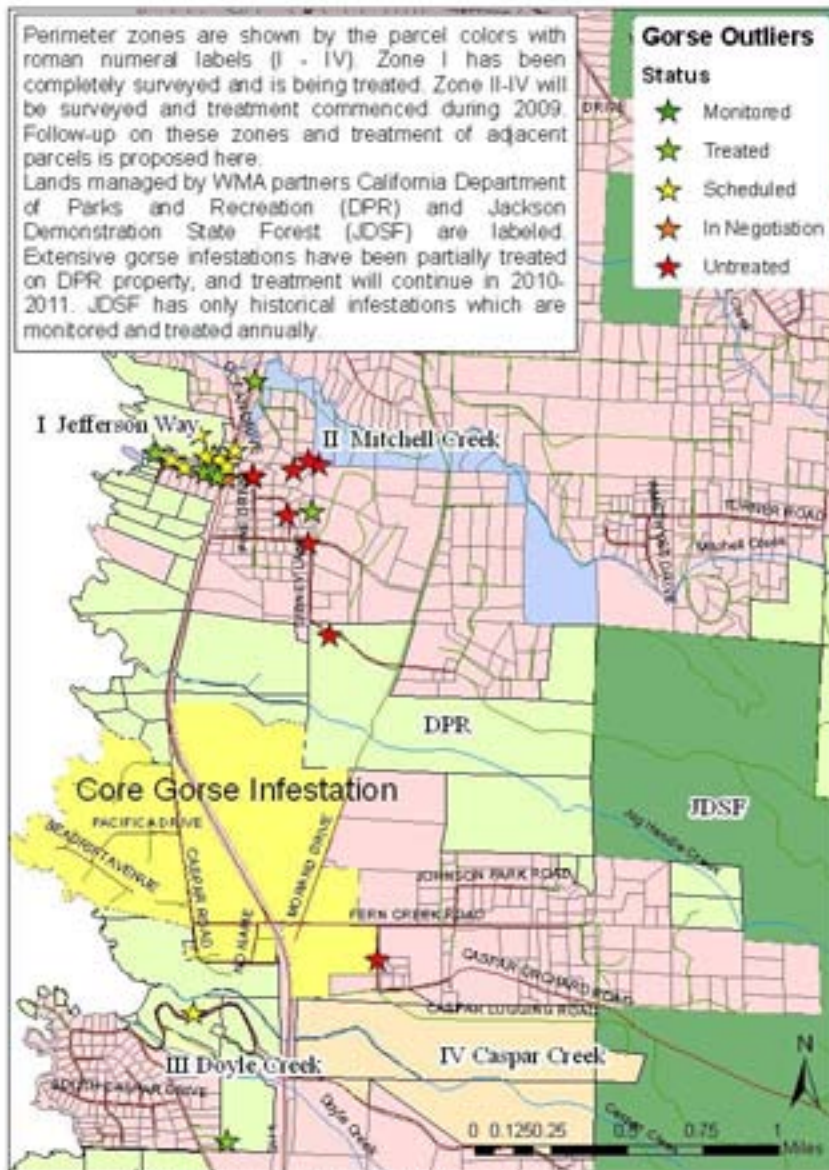




**AIR BURNERS, LLC  
PRINCIPLE OF  
AIR CURTAIN BURNING**

- 1=Air Manifold
- 2=FireBox Refractory Wall
- 3=Wood Waste or Wood Fuel
- 4= Air Curtain (left to right)
- 5=Smoke (PM)

## Gorse Containment Perimeter



Map prepared by Tara Athan, Mendocino Coast Cooperative Weed Management Area











**CASPAR REFUSE  
DISPOSAL SITE**



HOURS:

MON. TUE. WED. 9AM-3PM

SAT. SUN. 9AM-4PM

MENDOCINO  
**409**  
COUNTY

09  
000



## *Some Gorse Facts*

- Native to Western Europe.
- Introduced by Caspar farmers for hedgerows.
- Out-competes native vegetation, creating a vegetation monoculture of poor quality for wildlife.
- Alters soil chemistry, making infestation by other weeds more likely.
- Can increase nitrate levels in water.
- Disrupts soil fungal and microbial function.
- Increases fire hazard due to high oil content and accumulation of dead branches.
- Reduces property value.

For more information

[mcwma.org/pages\\_html/gorse](http://mcwma.org/pages_html/gorse)

485-1198

[coord@mcwma.org](mailto:coord@mcwma.org)

**Ask us about assistance for your  
outlier gorse population.**

## *DO*

1. Remove all young gorse plants!  
Much easier to handle than a 10' bush.
2. Get qualified advice or experienced help.  
Gorse is a tough plant - find out what works!
3. Work the edges of larger patches.  
Roots must be killed to avoid resprouts.
4. Keep gorse away from property lines!  
Your gorse-free neighbor will thank you.
5. Dispose of gorse slash on site!  
Burn (carefully), chip or let decompose.
6. Follow up every year or more often.  
Gorse seeds survive for decades!
7. Report sightings of gorse on public lands!  
If we don't know about it, we can't get rid of it.

## *DON'T*

- Don't tackle the biggest, baddest patch first.  
A small, isolated plant is growing faster.
- Don't rely on mowing at ground level.  
This produces a gorse "lawn" with an underground root mesh that resprouts.
- Don't take gorse to the dump or put into trash, green waste bins or compost piles!  
Gorse seeds are small but cause big problems!
- Don't burn standing gorse!  
Such a fire can quickly escape control.  
Underground roots may burn and spread fire.
- Don't treat it and forget it.  
Eradication requires diligence and years!



# Caspar Waste Transfer Station: October 2008





# Caspar Waste Transfer Station: April 2009





# Caspar Waste Transfer Station: September 2009





# Funding Portfolio

- Short-term

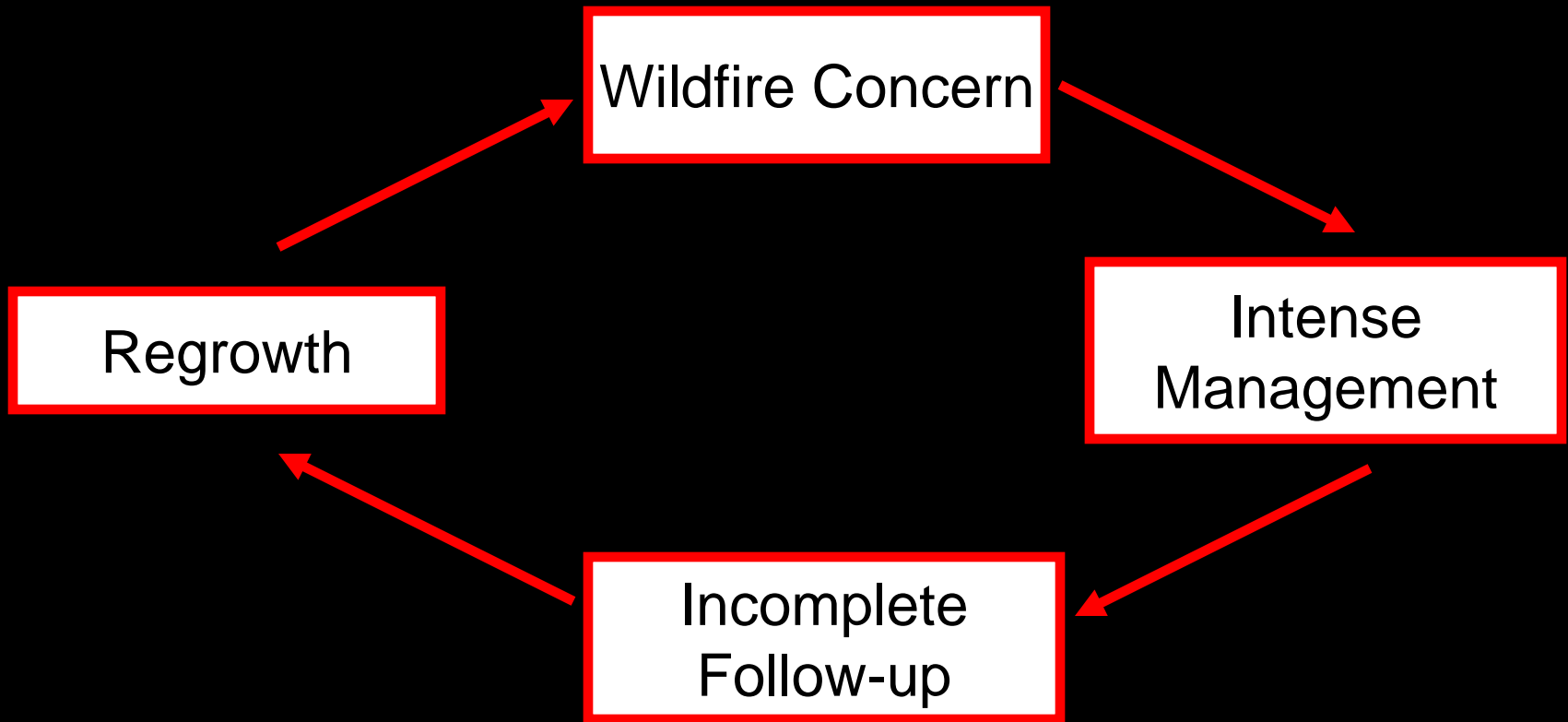
- Pulling Together Initiative (NFWF)
- WMA Supplemental
- Stimulus
- Partner Initiatives
- Donations
- Fire Safe Council

- Long-Term

- WMA Baseline
- Partners: Maintenance
- Residents: \$\$ and Sweat Equity
- Donations



# Conclusions



# Breaking the Cycle

- Communication



# Breaking the Cycle

- Communication
- Identify multiple benefits

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- Accept multiple treatment methods; reject bad methods



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# Breaking the Cycle

- Communication
- Identify multiple benefits
- Accept multiple treatment methods; reject bad methods
- Don't start more than can be finished
- Don't despair

# Acknowledgements

- Caspar residents:
  - Stuart Tregoning
  - Caroline Schooley
  - Guil Dye
  - Michael Potts
  - Judy Tarbell
  - Gertie
- Agency Staff and Volunteers
  - Dave Bengston
  - Ray Harrie
  - Renee Pasquinelli
  - Bill Maslach
  - Bob Melendez
  - Domenic Bongio
  - Lynn Webb
  - Walt Decker
  - Julie Rogers
  - Art Morley
- MCWMA Partners and Friends
  - State Parks
  - Caltrans
  - Mendocino Ag Dept
  - Caltrans
  - Calfire
  - Mendocino Fire Safe Council
  - Caspar Fire Safe Council
  - Point Cabrillo Lighthouse Keepers
  - Mendocino County Historical Society