

Tarping As an Alternative Stump Treatment for *Acacia dealbeata*

Matt Horowitz

Program Director

Natural Resources and Employment
Program

Project Goals

- Test effectiveness of tarping
- Establish specifications for tarping
- Protect habitat for five federally listed species
- Cost/benefit analysis
- Job training for low income workers

Scientific Basis for Tarping

- Eliminates photosynthesis
- Starves root reserves
- Encourages pathogens growth

Site Overview



10/30/03

2001 Test Plot

- Established August 2001.
 - Trench dug around test plot two feet from nearest stump.
 - Trench was dug to a depth of one foot below grade.
 - Acacia stumps cut to within 12” of grade.
 - Acacia stumps tarped with 3 layers of 6 millimeter black plastic.
- Trench was backfilled.

2001 Test Plot



10/30/03

Test Plot September 2002



10/30/03

Test Plot August 2003



10/30/03

Test Plot Stump August 2003



10/30/03

Test Plot Stump August 2003



Acacia Removal 2002

Stump Treatment

1. Tarping
2. Garlon 4®

Removing the Acacias



10/30/03

12

Tarping 2002



Tarping 2002



Tarping 2002



Tarping 2002



10/30/03

16

Garlon 4® 2002



Garlon 4® 2002



Tarping Costs

- Over 95% effective kill rate.
- Tarping cost about \$10.00/stump or about 1 hour per stump installation time.
- Cost to remove plastic at end of project – projected to be \$5.00/stump.

Garlon 4 ®

- Estimated 95% kill rate on stumps.
- Cost about \$9.50/stump to treat including chemical cost, licensed applicator cost, time to paint on.

2002 Tarping Strengths

- No special training required.
- Meets certified organic farming standards.
- Works in riparian zones.
- Good for projects with lots of volunteers but few dollars.

2002 Tarping Weaknesses

- Labor intensive – depending on conditions it may cost more than herbicides.
- Unsightly – tarps can be covered with duff .
- Tarps may not hold on steep hillsides.

Tarp Installed on Steep Hillside



Conclusions

- Tarping is alternative tool for stump control.
- Costs will vary depending on the site.

Team/Resources

- Natural Resources and Employment Program
- San Lorenzo Valley Water District
- U.S. Fish and Wildlife
- Davey Tree Surgery

For More Information

Contact Matt Horowitz
Rudabega@cruzio.com