

Most Wanted: The Brooms



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Scotch broom
(*Cytisus scoparius*)



Stems: 5-sided; star-shaped cross section

Leaves: compound, 3 leaflets, deciduous, sometimes single on new twigs

French broom
(*Genista monspessulana*)



Stems: 8 to 10 ridges; nearly round cross section

Leaves: compound, 3 leaflets, evergreen, usually dense

Spanish broom
(*Spartium junceum*)



Stems: smooth or finely ribbed; round cross section

Leaves: simple, deciduous, sparse

Portuguese broom
(*Cytisus striatus*)



Stems: 8 to 10 ridges; nearly round cross section

Leaves: compound, 3 leaflets, deciduous, sometimes single on new twigs



Flowers: single or paired in leaf axils

Petals: yellow or partially red



Flowers: 4 to 10 in clusters at end of short branches

Petals: yellow



Flowers: several in open racemes at branch tips

Petals: yellow



Flowers: single or paired in leaf axils

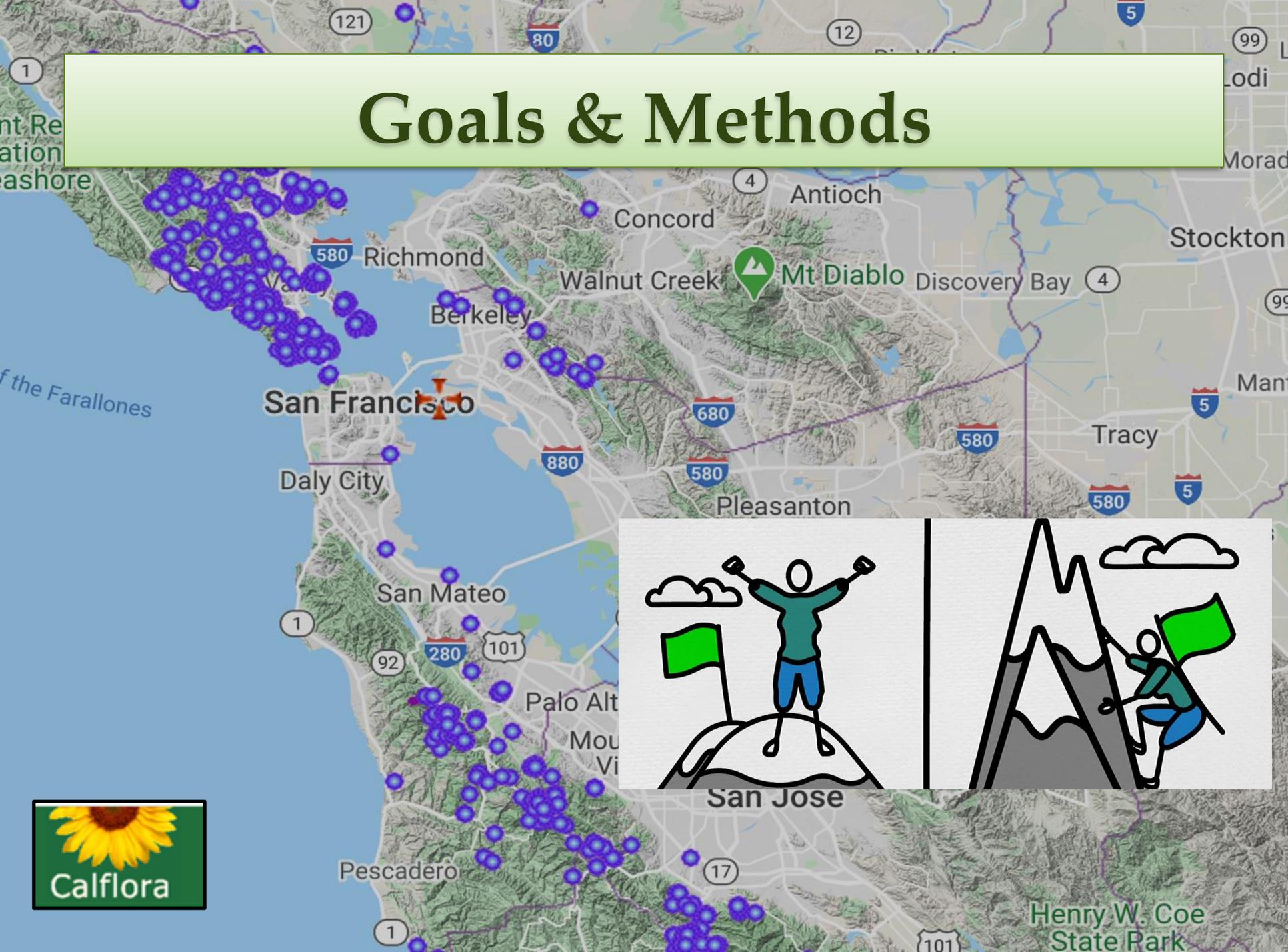
Petals: yellow



The Brooms: Know Your Enemy

- Tall shrubs, live as long as 15 yrs
- Root crown sprouting, not from root fragments
- Leaves in three, legume family
- Stems distinguish between species
- Prolific seed production; exploding pods, late summer
- 30-60% of seeds germinate first year
- Seed bank can persist for a decade/s
- Removal of mature stands stimulate germination
- Reproduction begins 2nd or 3rd year

Goals & Methods



Goal: Biodiversity





Goal: Fuel Reduction

SMART Goals

Specific

- Increase diversity of pollinator opportunities
- Eliminate ladder fuel; maintainable landscape

Measurable

- Quantifiable
- Pictures, simple sampling

Attainable

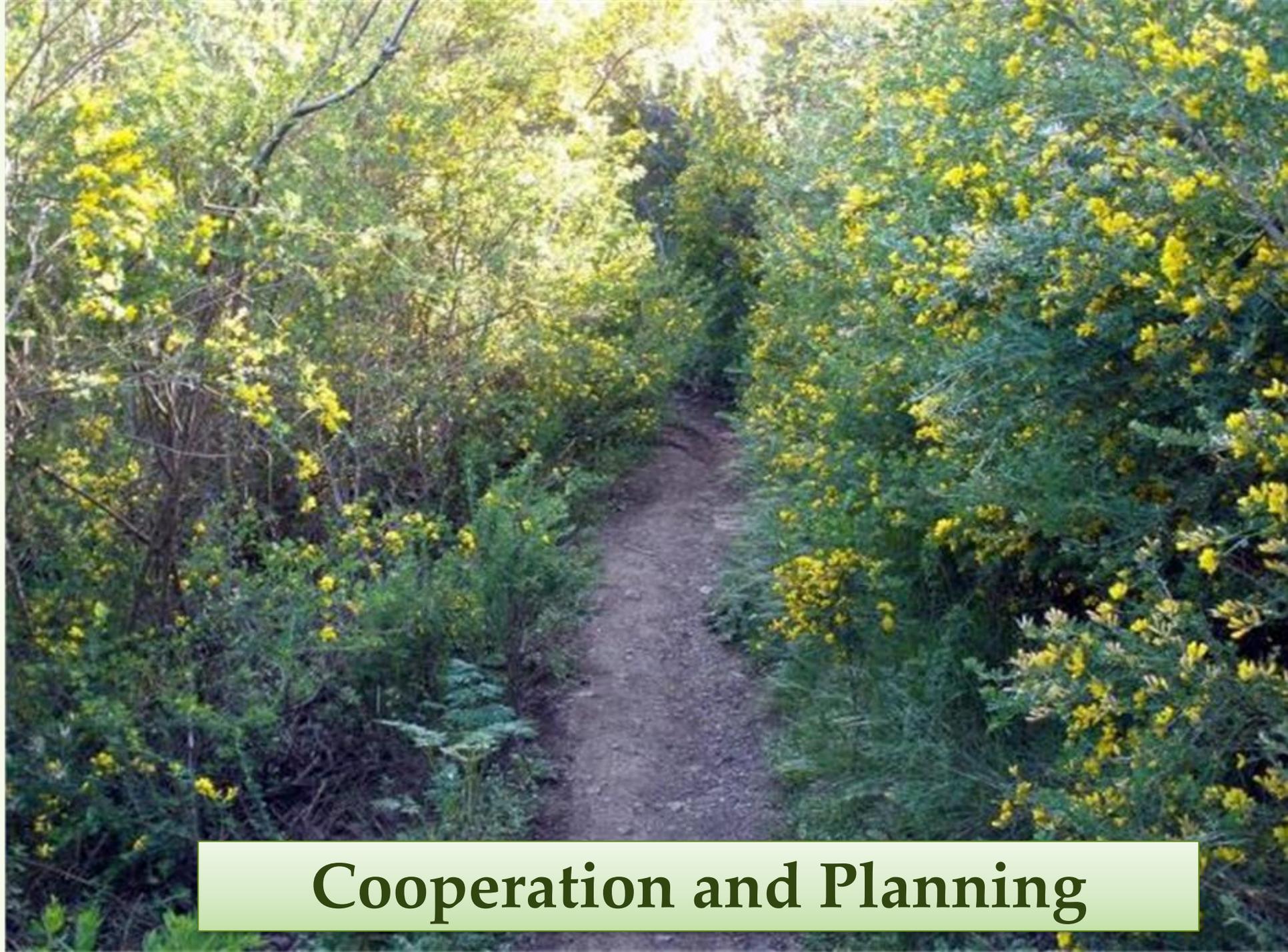
- Be realistic
- Maintain momentum

Relevant

- Do your methods support your goal & organization's goals

Time Bound

- Begin & End
- Allows for Adaption & Sustainability

A dirt path winds through a dense forest of green trees with yellow flowers. The path is narrow and leads into the distance, flanked by lush vegetation. The trees are covered in small, bright yellow flowers, creating a vibrant and colorful scene. The lighting is bright, suggesting a sunny day, and the overall atmosphere is peaceful and natural.

Cooperation and Planning

IPM Philosophy & Practice

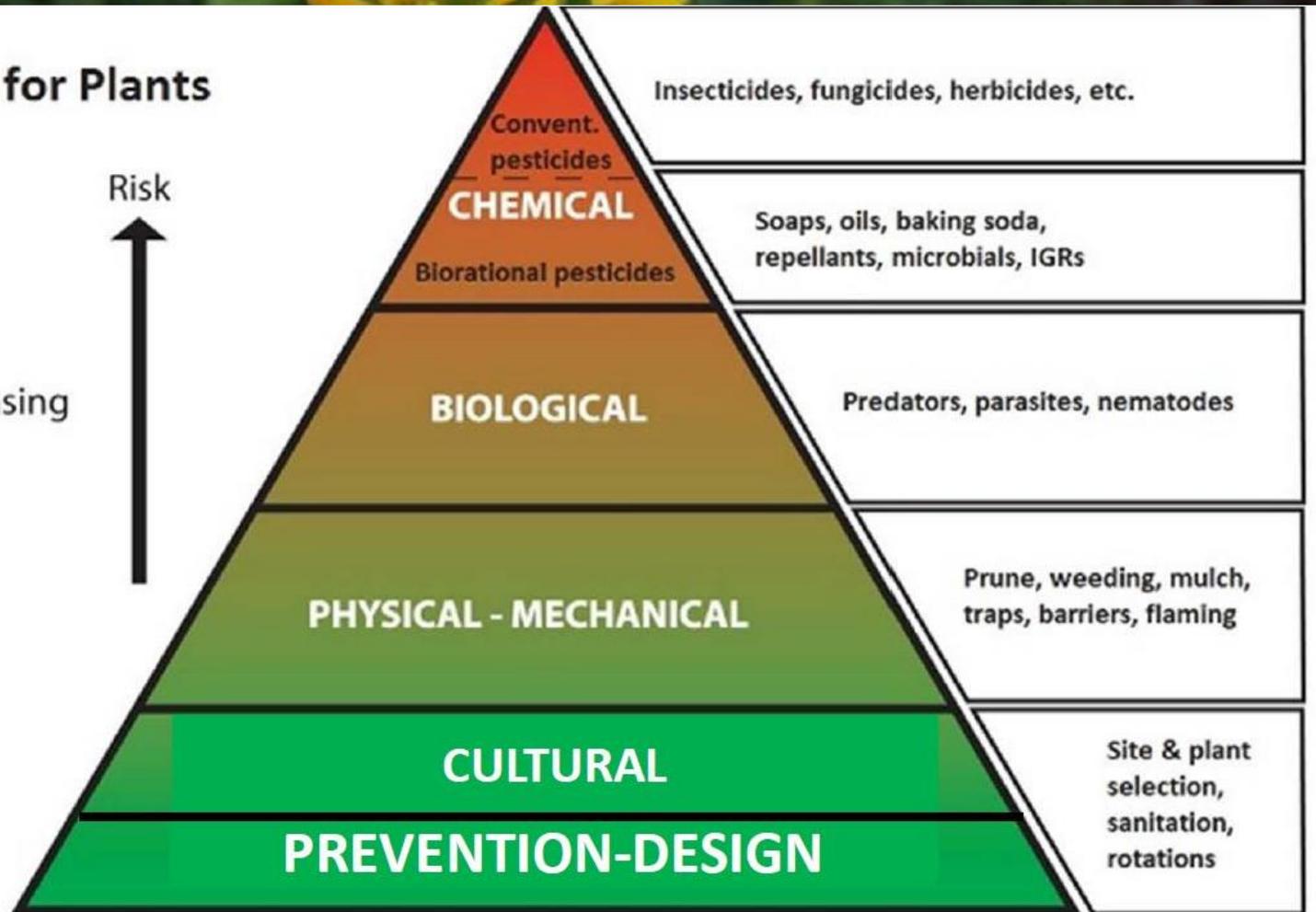
IPM Tactics for Plants

Intervention

Risk

Increasing

Prevention



Prevention

- Education:



- Hygiene: Start Clean, Play Clean, Finish Clean:



- Nursery Plantings: Phytosanitary BMPs

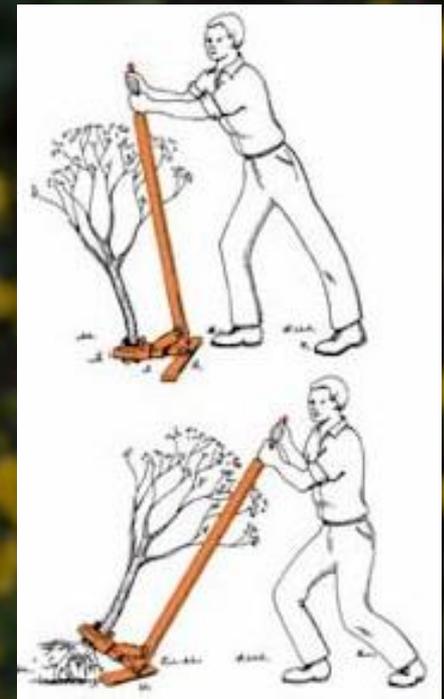


Cultural

- Sheet Mulching
- Burning/Torching
- Grazing
- Competitive Vegetation
 - Passive restoration
 - Assisted passive
 - Active restoration

Mechanical

- **Hand removal**
 - Seedlings
 - Mature
- **Carbohydrate Depletion**
 - Repeated cutting
 - Cutting & Peeling for older plants
- **Mechanized**
 - Mowing
 - Masticating
 - Scraping



Strategies

- **Removal Strategies: No Flower Zone**
- **Recovery Strategies: Deplete Seedbank, Native Competition**
- **Integrate Mechanical & Chemical where feasible**
- **Maintain Momentum; Contingency plans**
- **Follow Up in the same growing season is CRITICAL**

Safety Considerations

- **Poison Oak**
 - Long sleeves, pants socks & wash everything after
 - Ivy block and frequent washing
- **Ticks**
 - Tick checks
 - Wash & dry clothes immediately after
- **Environmental**
 - Sun, dehydration
 - Stinging insects
 - Trail/Road users
- **Ergonomics**
 - Positioning, pull down hill, lunge position, stretches

You are sustainability!



Thank You!

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