

Most Wanted: The Brooms



Pamela Beitz
IPM Specialist
East Bay Regional Park District



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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

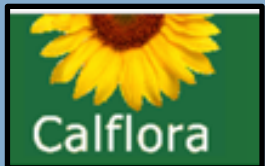
Petals: yellow



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

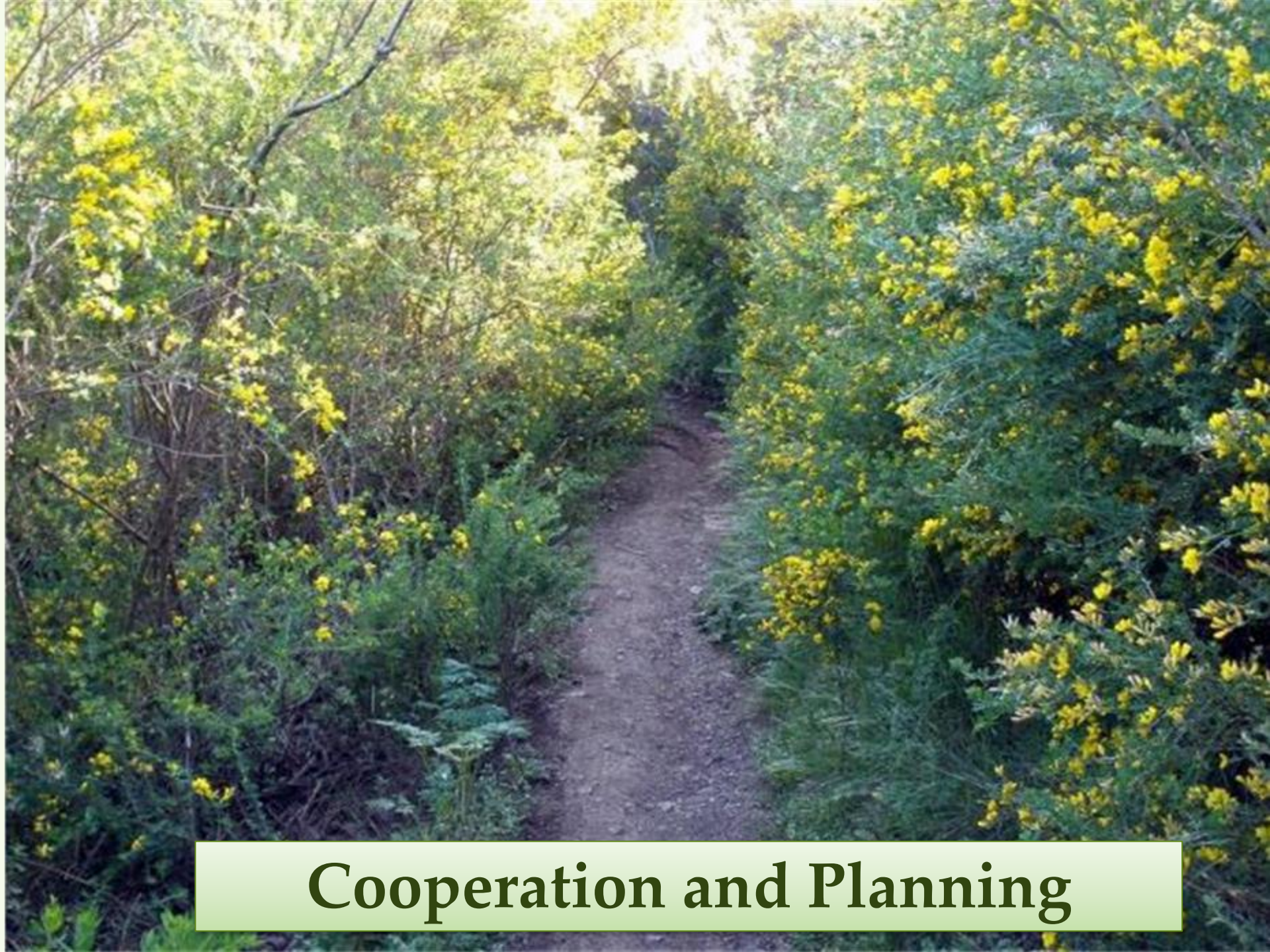
- Be realistic
- Maintain momentum

Relevant

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

Time Bound

- Begin & End
- Allows for Adaption & Sustainability



Cooperation and Planning

IPM Philosophy & Practice

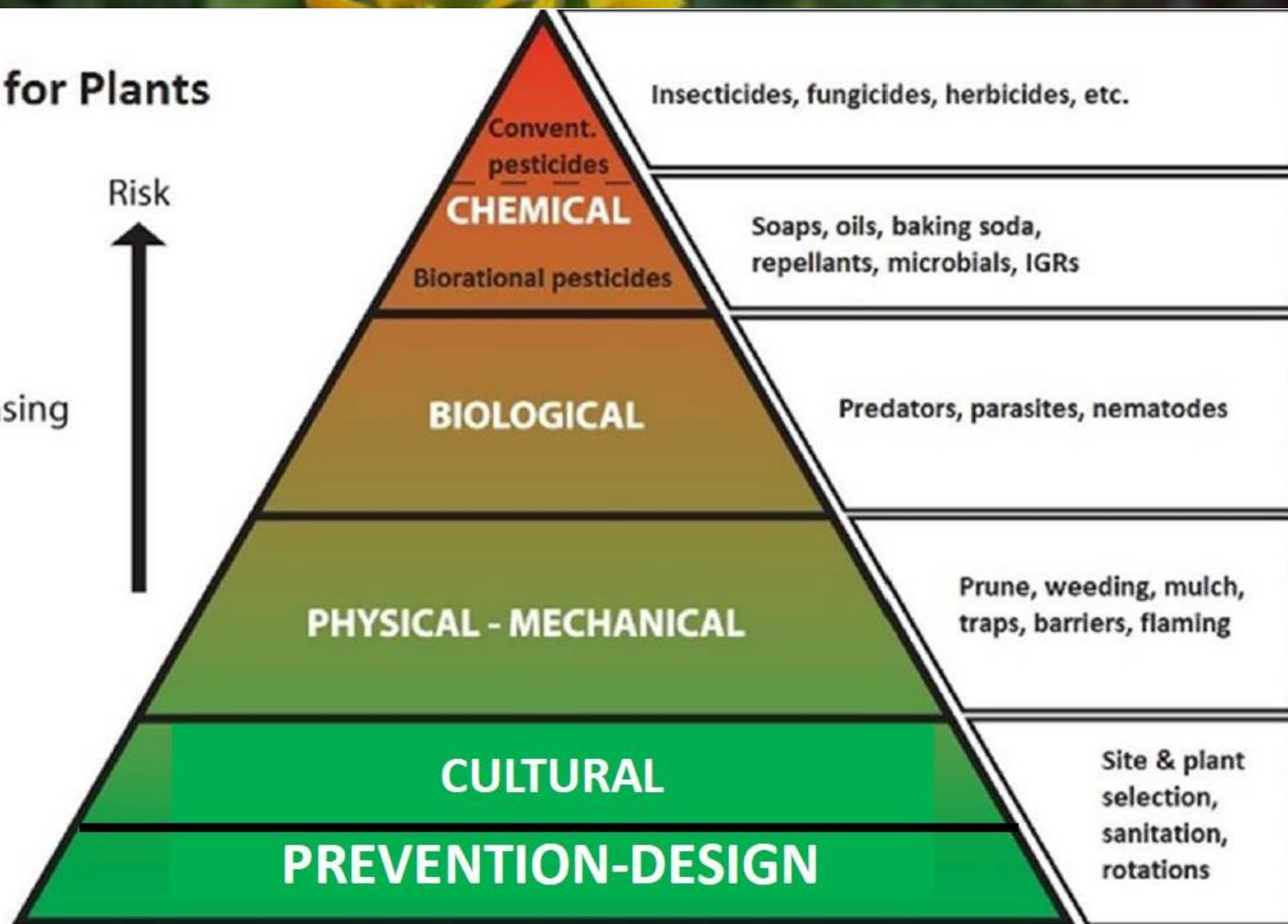
IPM Tactics for Plants

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!
pbeitz@ebparks.org