Ecological Considerations of Vineyard Development

Daniel Rodrigues
Vina Quest LLC
Introduction

- Vineyard Consultant in Central Coast region
- Vina Quest LLC
- 25 years as consultant
- Lecturer Cal Poly (Wine Vit Dept.)
Outline of Discussion

• What are considerations
• Time frame of review
  - New development
  - Ample time to develop vineyard (> 2 years)
• Mitigating factors when developing a vineyard
• Reduce impact of vineyard pests in future
• Purpose of instituting these ecological considerations at the time planting
• Purchase or not?
Field Assessment
Normal Evaluation of a Vineyard site

- Soil type
- Soil depth
- Soil chemistry
- Presence of consolidation
- Impediments
- Standing water
- Soil Pathogens
Assessment of field data

- Preplant soil modifications
- Soil amending
- Rootstocks
- Need of fumigation
- Irrigation needs
- Topography
Extended review of vineyard site

- Assessment of native
- Assessment of vertebrate pressures
- Mounds or trails
- Type, intensity, GPS, pictures
- Plantable areas
- Conduct during due diligence period
- Performed prior to a normal field study
- Untimely understand the ecology and manage toward a sustainable coexistent
Interpretation of additional field data

- Place on base map
- Tentative planting outline / block layout
- Work toward a contiguous planting
- Tracking temperatures in low area
- Set up frost protection
- Plan for owl boxes, bait stations, weed control
Considerations for Vineyard Development
Vertebrate

- Deer
- Squirrels and Gophers
- Pigs
- Predatory species
- Allows for control gophers and squirrels in future
Insects

- Blue Green Sharpshooter
- Glassy wing sharpshooter
- Pierces Disease
- Host Plants
- Sticky traps
Other considerations

• Temperature gathering (High- low gauge)
• Tree removal (unhealthy) or trimming
• Possible sensitive environmental areas
• Noxious weeds
• Economic value of the property
Ecological Survey
Wildlife corridor

- Pathway for migratory animals
- Common in highway construction
- Water
- Bedding
- Food sources
- Can be planned along non planted areas or roadways
Modification of planting plans

- Removal of perennial grasses or noxious weeds
- Type of fencing (Need? Deer vs Pig)
- Wildlife corridors
- Trap (Blue green sharpshooters) or others
- Allowances for environmental concerns
- Blue line streams, Environmental sensitive area
- Plant or not plant ????
Actions

• Fencing options
• Fallow land
• Removal of hosts for Pierces Disease
• Deer pathways
• Road ways
• Water ways
• Contact regulatory agencies if sensitive areas are present
Final Points
Final Points

• Reduce pressures in future
• Reduce environmental impact
• Abide by Regulatory policies
• More sustainable answer to continued control measures
• May increase developmental costs
• May create higher production cost
• May reduce the number of plantable acres