

UAA Research Topics

Right Tree/Right Place

- 1) Species selection

Reliability in utility systems

- 1) Correlation between reliability and Vegetation Management.
- 2) specifications and reliability measurements for utilities
- 3) Reliability - processes for improving reliability; approaches for documenting reliability of systems.

Notification of Utility Vegetation Management

Regulatory/Legal requirements for Utility Vegetation Management

- 2) Environmental policies on maintaining mandated clearances.
- 3) Legal Requirements & Impacts of ROW.
- 4) Vegetation-related utility regulations in the United States.
- 5) Outage measures and standards

Cultural Practices

- 1) Root protection zones in construction.
- 2) directional pruning
- 3) Tree Growth Regulators
- 4) response of vegetation to herbicide, mechanical, fire, biological, and manual treatments
- 5) Recommend optimal pruning standards specific to species, hardiness zone, and pruning method
- 6) construction methods for electric lines such as underground installation; taller poles to minimize pruning requirements; vertical construction; the use of tree wire
- 7) alternative uses and disposal methods for vegetation waste

Management

- 6) Hazard Tree Identification
- 7) Sole sourcing and consolidation on the costs and stability and sustainability of the Utility Vegetation Management industry.
- 8) Arboricultural labor market and availability of skilled workers
- 9) Economic analysis of the cost of turnover and productivity.
- 10) Wage comparisons, both within utility in arboriculture (worker vs. supervisor), and against arboriculture industry in general.
- 1) Assessment of tree contact as it relates to potential ignition of wildfires.
- 2) Cost/benefit of spurless climbing i.e. how does the benefit tree health measure up against the costs of the work method?
- 3) benefits or beneficial uses of right-of-way corridors
- 4) significance of the right-of-way for preserving and connecting habitat for threatened and endangered species, for genetic diversity, and biodiversity
- 5) habits and implications of invasive plants in the right-of-way
- 6) compatible uses for different types of rights-of-way
- 7) Production monitoring - Production improvement; Staff development and possible incentives.

- 8) Ecosystem management - Treatments that protect the electric system, benefit the environment and reduce long term costs.