Secrets towards Success in Live Staking

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Overview

1. Applications
2. Species
3. Harvesting/Sourcing, Storage
4. Preparation & Installation
   - Timing
   - Methods
5. Soils, Slopes & Moisture
6. Monitoring & Maintenance
7. Potential Issues – what could go wrong?
8. Survival Rates
9. Summary
Applications

- Live staking
- Bank stabilization
- Slope stabilization
- Green walls / riverstone
Species
Zone
Ecological community & species selection based on existing site conditions
Species distribution
Survival
Lessons learned
- Nursery supply vs. wild collection
- Risks associated with harvesting
- Timing
- Storage
Preparation & Installation

- Stake preparation – butt cutting/angle cutting
- Site prep. – starter hole, hydraulic method, protective sleeve
- Root stimulator dip
- Orientation & “limbing”
- Overwintering, cold storage
- Timing – spring vs fall, timing between harvest and planting
- watering
Soils, Slopes, and Moisture

- Soil types, organic content, compaction, depositional sediment
- Slopes length, angle
- Moisture requirements
Monitoring, Warranty & Maintenance

- Definitions
- Two year warranty – standard practice
- First season
  - Watering
  - Invasive plant control
  - End of first season assessment of survival rates vs density
  - Analysis of target/goal and
- Second Season
- Replanting/topping up
- Maintenance if required
Potential Issues – what could go wrong?

- Animal browse & beavers
  - Rabbits, mice, moles
  - Protection measures
- Drought/flood
- Length of season winter/spring
- Disease
Survival Rates

- Survival Rates
- Survival Mitigation
- Locally indigenous
- Dormancy planting
- Over-planting
- Replanting
Summary

- Applications
- Live Stake Advantages: economical, aquatic and terrestrial habitat, shading temperature mitigation, forage opportunity, root stabilization
- Understanding of living entity and risks associated
- Pay close attention to site conditions
- Take care on installation
- Closely monitor plant establishment and success
- Adapt to vulnerabilities such as browsers, drought and flooding
- Long-term approach, not instant solution, your project improves every year