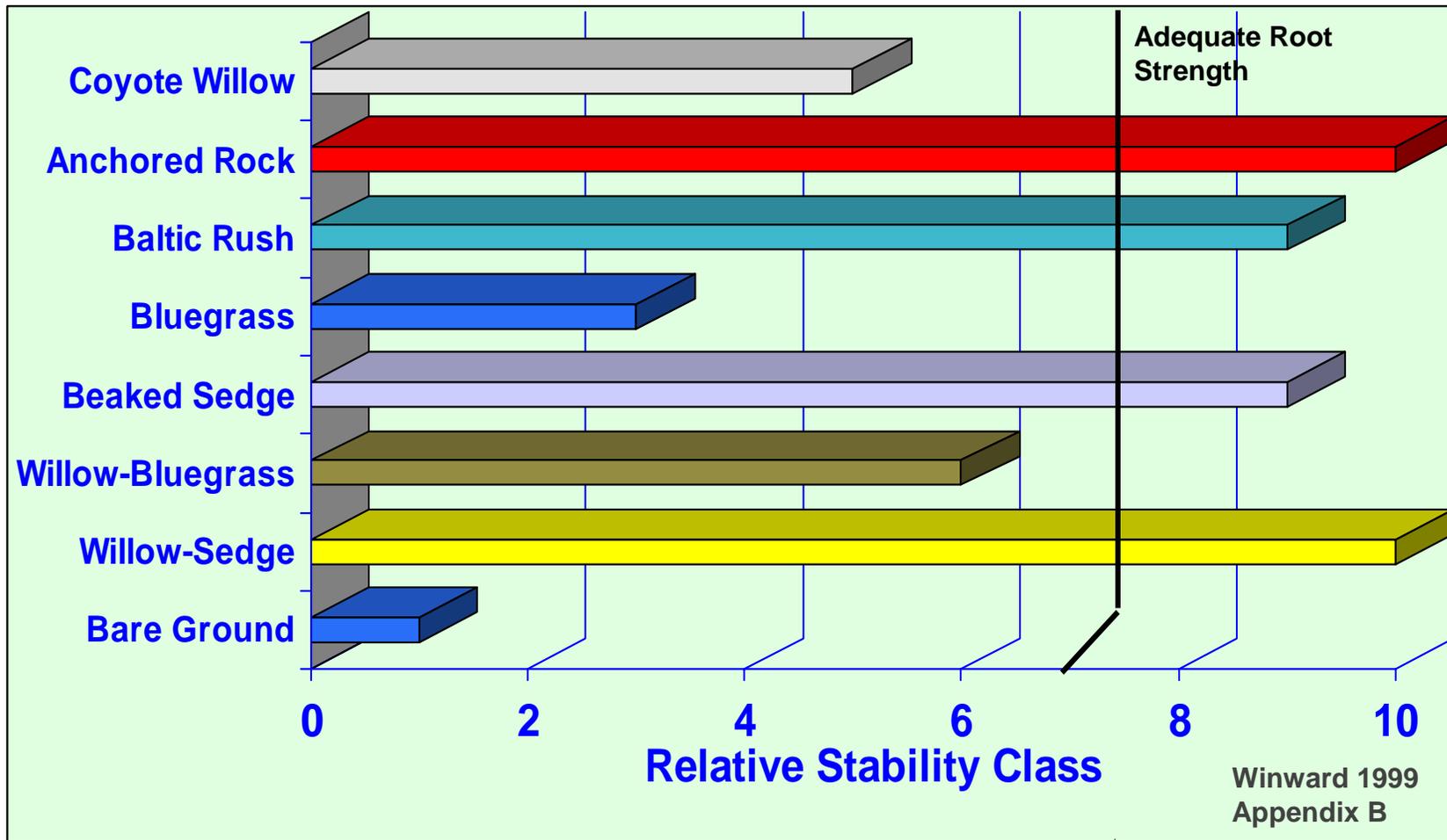
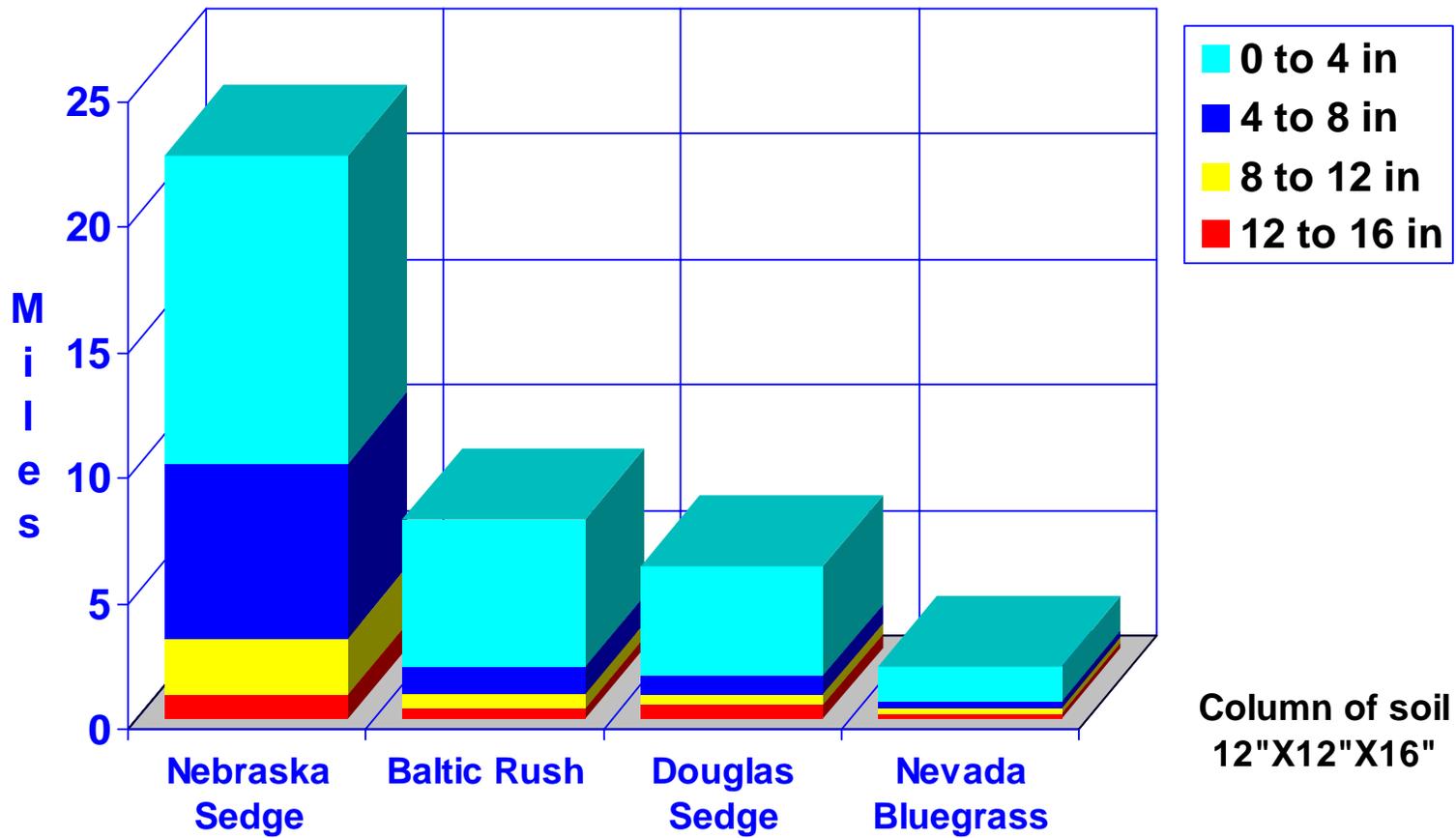


# Channel Stability Rating (Vegetation)



# Root Length



Manning, M.E., et al, 1989

# Wire Grass Roots



# Plant Vigor-Leaves and Roots

**“Caring for the Green Zone, Riparian Areas and Grazing Management  
Alberta Riparian Habitat Management Project, “Cows and Fish Project”**



6) There is diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)



“No” age-class diversity of riparian/wetland species



7) There is diverse composition of riparian-wetland vegetation (for maintenance/recovery)



# **Riparian/Wetland Vegetation Groups**

- **Stabilizers**
- **Colonizers**
- **Increasers/Invaders**

# **Stabilizer group**

- **Establish along streams, rivers, lakes, ponds, springs, & seeps**
- **Strong, fibrous, deep root system**
- **Rhizomatous**
- **Provide protection against water's energy**

# Stabilizer Species

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Nebraska sedge  
Emery Creek



**Wire Grass (baltic rush)**  
Birch Creek



# Wire Grass Roots



# Fowl Manna Grass



# Bluejoint Reed Grass

Little Sand Creek



Reeds Canary Grass  
Little Wood River



# Woody Species (Willow)



# Willow Roots



Woody plant roots hold streambanks



Alder  
Mudd Creek



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# Colonizers

- **Usually first plants to occupy a site**
- **Critical for recovery and maintenance of stream channels**

# Colonizers

- **Establish on**
  - **freshly deposited soil**
  - **shallow open water**
  - **barren areas**
- **Root systems**
  - **stoloniferous or rhizomatous**
  - **shallow and relatively weak**

# Colonizer

Brook Grass



**Spike Rush**  
Little Hardtrigger Creek



# Water Cress



# Coyote (Sand Bar) Willow

Teton River



# Cottonwood

## South Fork Snake River



Sawmill Creek 1987



Sawmill Creek 1996



