FITNESS, NOT DIVERSITY, GUIDES THE RECOVERY PROCESS

Combines Three Favorite Topics:

Fitness Recovery Process Patterns

Fitness Is as Fitness Does

What Proves to Work In the Long Run

Recovery Process

Colonization or a Desired Shift in Vegetational or Structural Composition, as from Introduced Weeds to Desired Perennials

VOLUMES OF DRIVEL WRITTEN ABOUT THE RECOVERY PROCESS

READ ROBERT McINTOSH'S 1980 article: **The relationship between succession and the recovery process** in ecosystems. pp. 11-62 IN: J. Cains, ed. <u>The recovery process in damaged ecosystems</u>. Ann Arbor Sci. Pub.

PATTERNS

SPATIAL PATTERNS
For example, Revegetation Starts
in Draws and Drainages and
Spreads to Sideslopes

TEMPORAL PATTERNS

WEEDS PERENNIALS

or

PERENNIALS NOXIOUS WEEDS

FIRST CASE HISTORY COAL CHEATGRASS WESTERN WHEATGRASS























































HOW?

WHICH TWO WORDS ARE RELATED?

APPLE ENGINEER
CHALET HUBRIS













ROSANA WESTERN WHEATGRASS

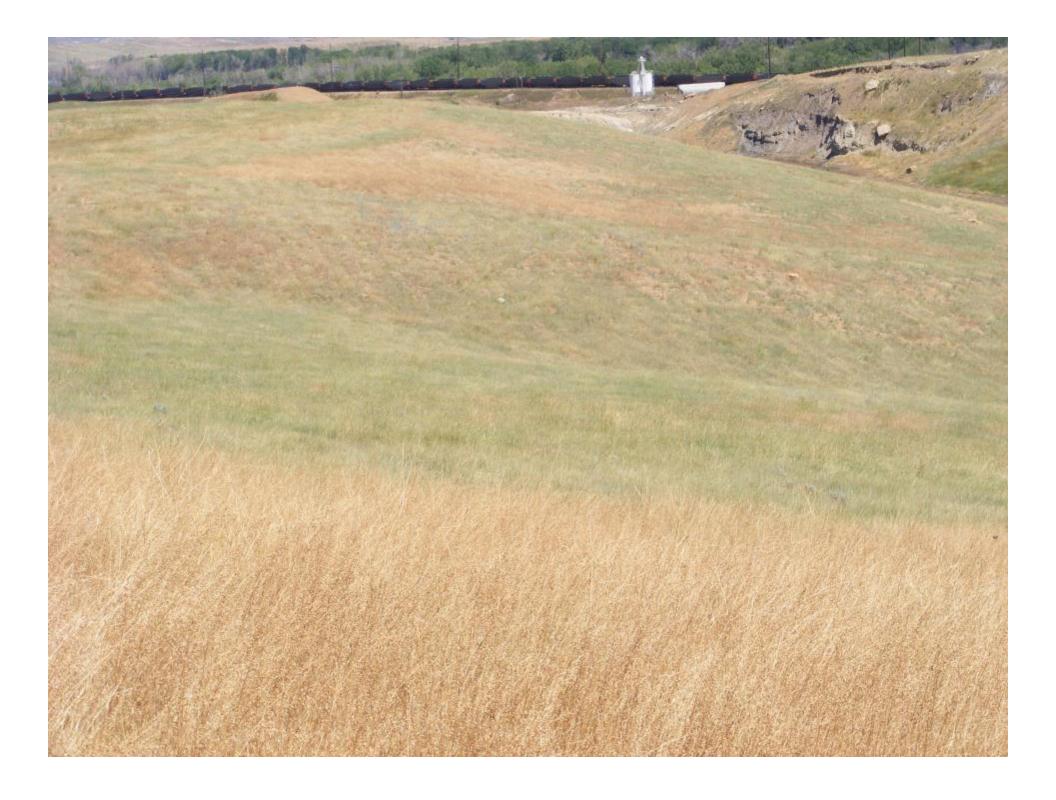
ORIGINATED FORSYTH MT 1959 RELEASED 1972 AS ROSANA AGGRESSIVELY RHIZOMATOUS PRODUCED TIGHTEST SOD





















SECOND CASE HISTORY

CLARK FORK FLOODPLAIN SOUTH OF DEER LODGE

METAL-CONTAMINATED IRRIGATION WATER









LAST CASE STUDY

SMELTER-IMPACTED UPLANDS SOUTHEAST OF FAIRMONT

SO₂ + METALS FUMIGATION MAINLY WINTER INVERSIONS FIRST HALF 20th CENTURY DEFOLIATION DEATH OR SELECTION DIFFERENTIAL EROSION RECOVERY











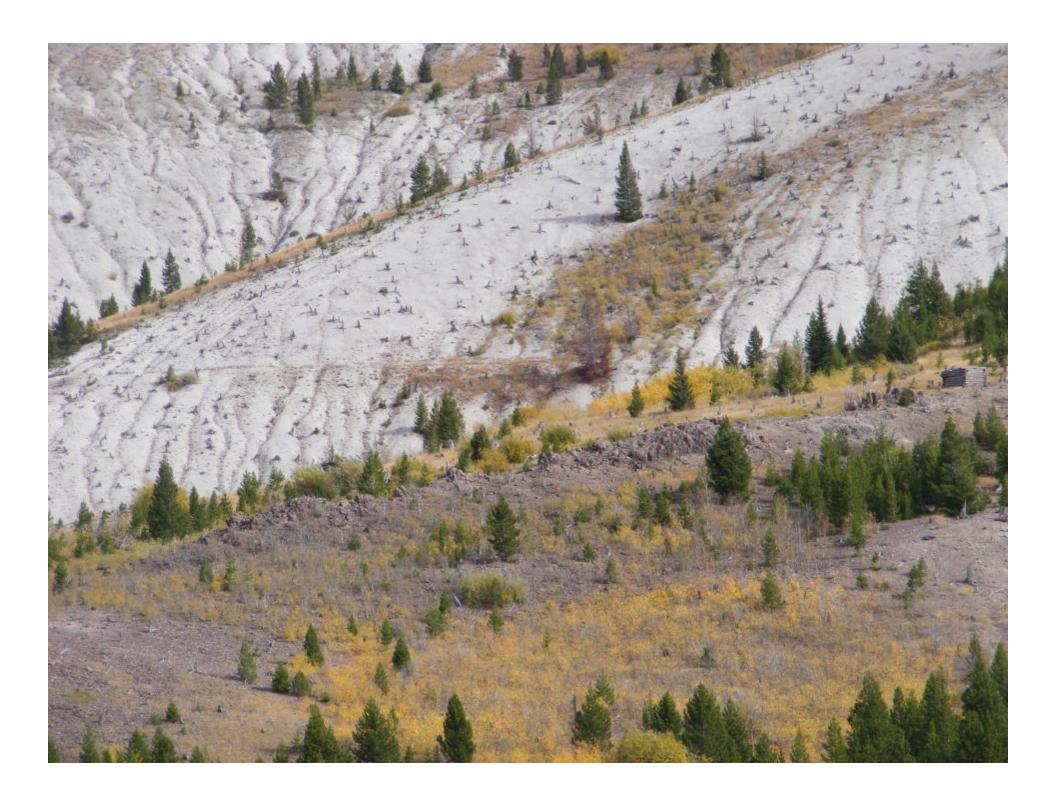


























ASSISTED RECOVERY





















A FEW SPECIES WESTERN WHEATGRASS **QUAKING ASPEN** REDTOP **ACCOUNTED FOR MOST** VEGETATIONAL RECOVERY IN THREE AREAS IN MONTANA

IT'S NOT HOW MANY SPECIES

IT'S HOW FIT THE DRIVERS OF THE RECOVERY PROCESS ARE