GOVERNOR'S SUMMIT ON INVASIVE SPECIES

Montana's History Addressing Invasive Species

Gerald Marks Missoula Extension/Weed District



1895 – Montana's First Noxious Weed Law

Listed noxious weeds

- Canada thistle
- Russian thistle
- Scotchbull thistle

1921 – Legislature Approved The County Noxious Weed Control Act

 Provided for the creation of a paid, seasonal supervisor position by petition of the people. 1921 – Penalty of up to \$300, up to 3 months in jail or combination

Listed Noxious Weeds

- Canada Thistle
- Quackgrass

1935 – Created a Noxious Weed Extermination Fund with proceeds from an assessment not to exceed One Mill.

1937 – Listed Noxious Weeds

- Canada Thistle
- Quackgrass
- Perennial Sowthistle
- Field Bindweed
- Perennial Milkweed
- Russian Knapweed
- Whitetop

1939 – Listed Noxious Weeds

- Canada Thistle
- Field Bindweed
- Russian Knapweed
- Whitetop
- Leafy Spurge

1939 – Allowed for the voluntary establishment of Weed Control Districts by petition of 25% of the Landowner's within the proposed District's area.

Increased Levy from One Mill To Two Mills

1947 – Seed Purity Regulations

Late 1940's Increasing Concern Over Spreading Noxious Weeds

- Spotted Knapweed
- Leafy Spurge

Science brought us new herbicide 2, 4-D

Montana Weed Control Association

Area Councils Formed in the 1970's

1969 – Change Voluntary Status of Weed Districts to Mandatory, Country Wide Weed Control Organizations.

Each county district was to be managed by a 3 or 5 member board.

1969 – Formation of a State Weed Board to serve as Advisory Council to County Weed Boards.

Raised the maximum amount of funding available from Two Mills to Six Mills

1979 – Changed Makeup of County Weed Boards to Include One Person With a Biological Science Background

A 5 Member Board must also include 2 members from municipalities

- 1985 Replaced the Noxious Weed List with a Definition of "Noxious Weed" "Any exotic plant species established or that may be introduced in the state which may render the land unfit for agriculture, forestry, livestock, wildlife or other beneficial uses and which is designated:
- 1. As a statewide noxious weed by rule of the department
- 2. As a district noxious weed by a board, following a public hearing"

1991 – Definition was
Amended to Include Species
that "May Harm Native
Plant Communities"

1985 – Legislation Created the Noxious Weed Trust Fund

To Increase Landowners
Involvement thru the Creation
Cooperative Weed Management
Projects

To Support Research that Would Increase our Ability to Manage Noxious Weeds.

1985 – Created a Noxious Weed Coordinator Position in Montana Department of Agriculture 1993 – Nursery Seed Law It is Illegal for a Nursery to Bring into the State, Sell or Distribute Stock Containing plants or Seed Declared Noxious 1995 – Required State Agencies to Implement an Integrated Noxious Weed Control Program in Coordination with the **County Weed District** Board.

1990's – Summit Committee Statewide Noxious Weed Plan -Approved 2000

- Inventory, Mapping
- Prevention
- Management
- Research
- Education

Aquatic Invasive Species Plan Approved 2002

2007 – Eurasian Water Milfoil Found in Noxon Reservoir

What has been Important & Lessons Learned

The People Partnerships-Partnerships



Individual Land Managers Cooperative Weed Management Groups Cross Jurisdiction Projects Summit Committees Watershed Organizations

- Blackfoot Challenge
- Madison Valley Ranchlands Group
- Rocky Mountain Front Weed Round Table
- Clearwater Resource Council
- Stillwater Valley Watershed Council
- Swan Valley Connections
- Shields Valley Water Shed Group

People's Values – What is Important to Them











"People will Invest in Invasive Species Management up to the Value of the Vegetation on the Land and the Water in our Streams."

Jerry Marks

Frame Work of the Montana Noxious Weed Plan

- Inventory, Mapping
- Prevention
- Management
- Research
- Education

Mapping

 Providing a Picture when Working with Partners
 Documenting Change over Time.

Prevention Check Stations for Invasive Aquatic Species Helps Focus on Small Infestations

- Dyer's Woad
- Yellowflag Iris
- Yellow Starthistle

Management

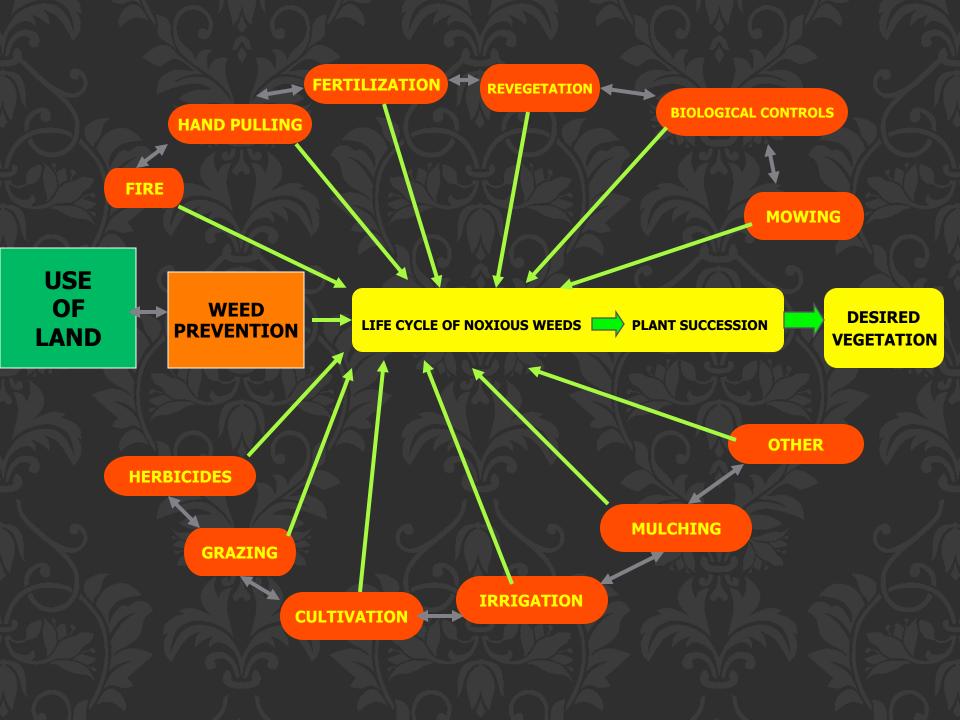
- Spotted Knapweed
- Dalmation Toadflax
- Leafy Spurge

Blackfoot River Leafy Spurge Project

Research

Large Infestations

- Spotted Knapweed
- Dalmation Toadflax
- Leafy Spurge
- eDNA to Improve Early Detection
- Dyers Woad Search Dogs
- Building Bridges Between Land Managers and the Research Community



Education

- Awareness → Using Knowledge to Implement Change
- Statewide Weed Awareness during the 1990's
- Leave No Weeds 5th Grade Students
- Master Invasive Plant Management
- **Noxious Weed Short Course**
- Noxious Weed Management Certification Course

"Landowners, large and small, will implement long term weed management programs when they become empowered to manage weeds in ways they understand."

Jerry Marks

"In the end, we will conserve what we love, we will love what we understand, and we will understand only what we have been taught."

Baba Dioum







Evolution of the Tools We Use for Invasive Plants

Herbicides – Important Tool Since the Late 1940's

Biological Weed Control

Concerns over Economic Return to Weed Control using Herbicides on Range.

Concern on Impact of Herbicides on Forb Plants in Native Range.

Biological Weed Control

- 1974 Graduate Student Projects
- 1979 Research position, Western Montana
- Agriculture Research Center
- 1981 Research/Teaching Position MSU
- 1986 APHIS Research Team at MSU
- 1987 ARS Research Team at MSU
- 1988 Quarantine Facility & Research at MSU
- 1991 Biological Weed Control Coordinating
- Committee
- 1994 U.S. Forest Service Research Position

Late 1980's Grazing with Livestock(Sheep, Goats) to Control Weeds

Explore use of Fire to Control Invasive Plants.

1990's Revegetation
Became Part of the Tool
Box Because of
Undesirable Plants Taking
Over After Weed Control

Tool Based
Decision
Making Model

Ecology Based Decision Making Model

Rangeland Ecologist Position – MSU