

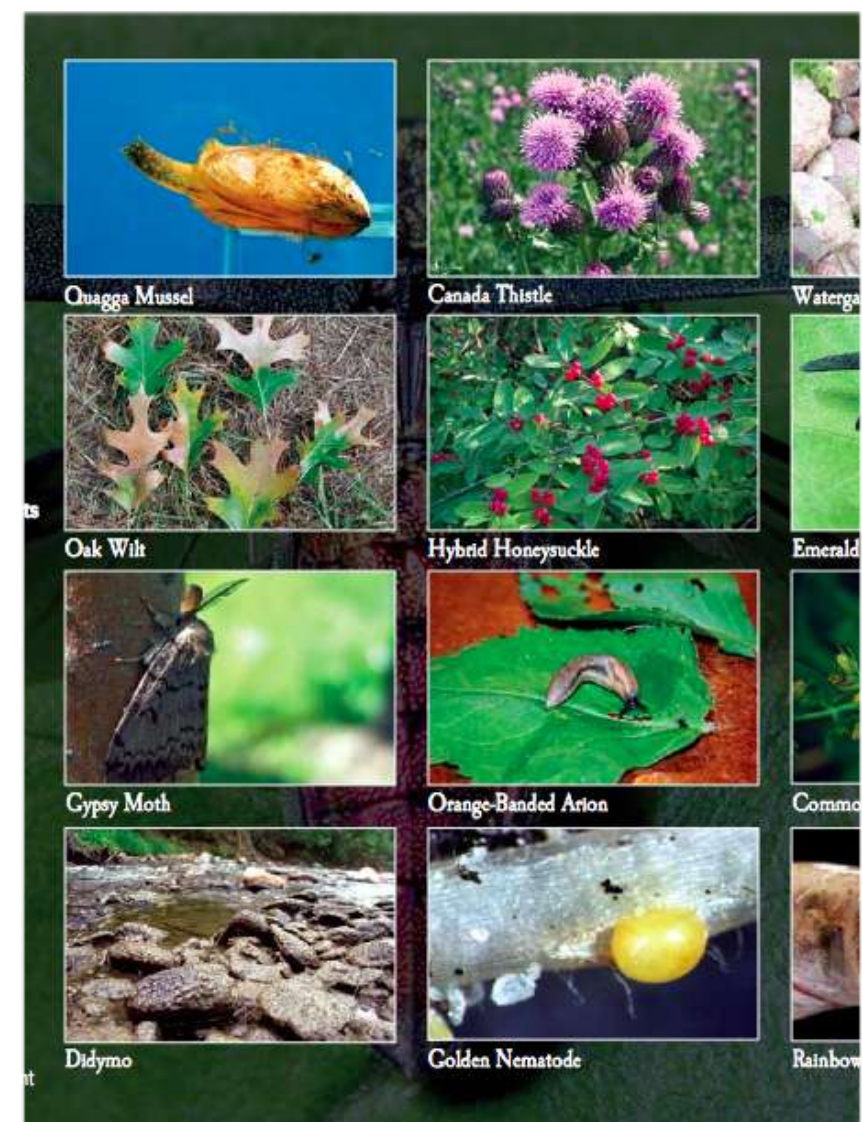
INVASIVE INSIGHTS

bonnie harper-lore

- ☐ **NATIONAL VIEW** - highways & Neighbors
- ☐ **PARTNERSHIP** - MULTILEVEL/ BORDERLeSS
- ☐ **POLICY CHANGE** - ISSUES & NEEDS
- ☐ **FUTURE THREATS & OPTIONS**
- ☐ **ACTION** - A MINNESOTA to-do LIST

Minnesota Partnerships LEAD:

- ☐ Purple loosestrife.
COALITON, 1981
- ☐ Exotic Species TASK
FORCE, 1990
- ☐ 2001 MISAC
PARtNErSHIP
- ☐ 2009 Fond Du Lac MOU



MIDWEST HIT FROM BOTH SIDES

KNAPWEED FROM WEST

PHRAGMITES FROM EAST



PARTNERSHIPS

- ☐ MALHEUR COUNTY
- ☐ ADIRONDACK MOU
- ☐ YELLOWSTONE CWMA
- ☐ CALIFORNIA CWMAs
- ☐ CROSS BORDERS

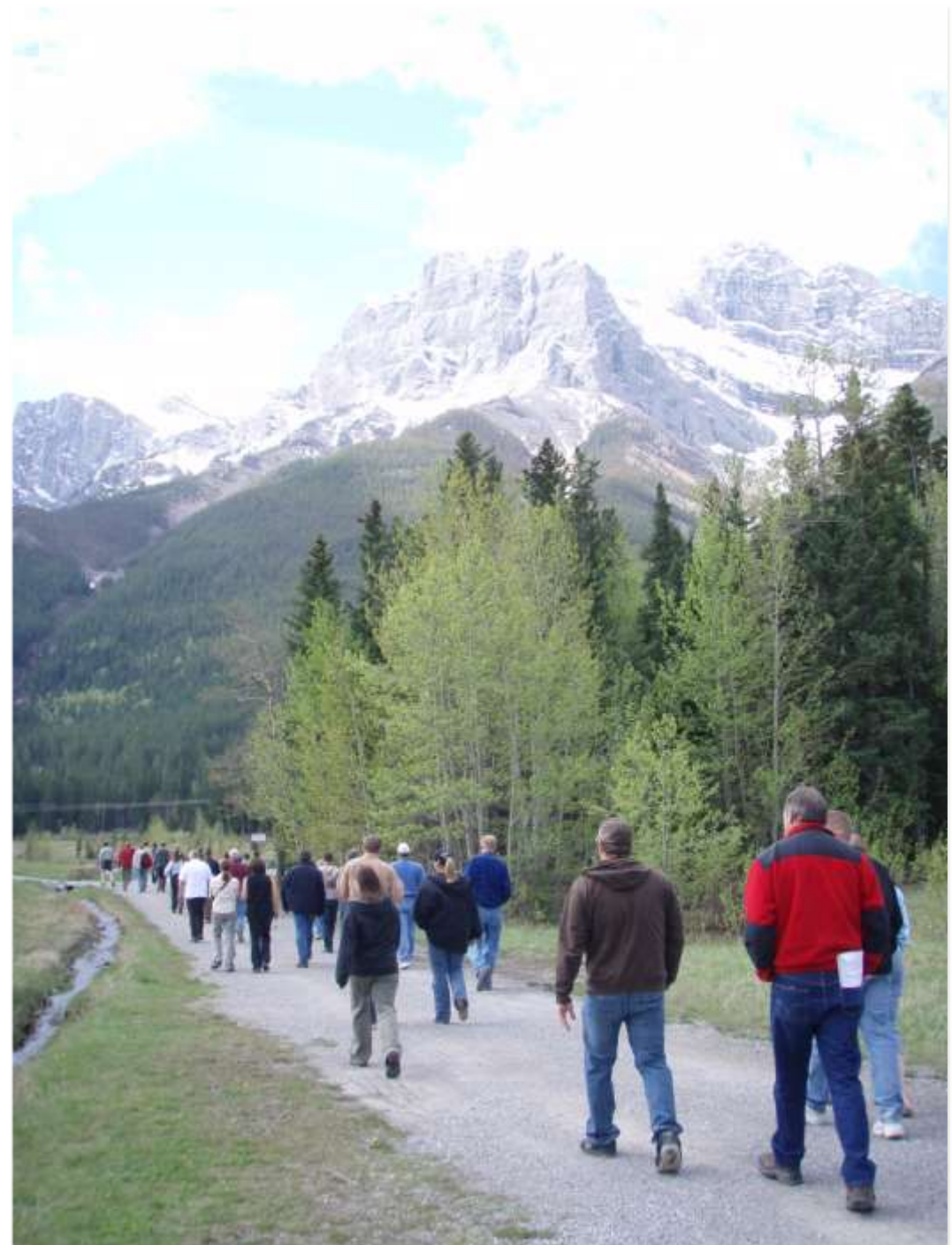




- ☐ **BRING TOGETHER:** natural resource and agriculture agencies from 3 countries
- ☐ **INCLUDE:** applied research scientists, practitioners, and policy makers
- ☐ **ALTERNATE COUNTRIES:** Biennially
- ☐ **ACCOMMODATE ATTENDEES:** with easy, affordable, and comfortable sites for information-sharing

WAB 2002-2010.....

- ☐ Tucson - 2002
- ☐ Minneapolis - 2004
- ☐ Hermosillo - 2006
- ☐ Banff - 2008
- ☐ Shepherdstown -20 10
- ☐ Vera Cruz - 2012



POLICY CONTROVERSIES

- ❑ WEED DEFINITIONS (16)
- ❑ NURSERY INDUSTRY
ST. LOUIS ACCORD
- ❑ USE or PROTECTION of
NATURAL RESOURCES
- ❑ CROWN VETCH

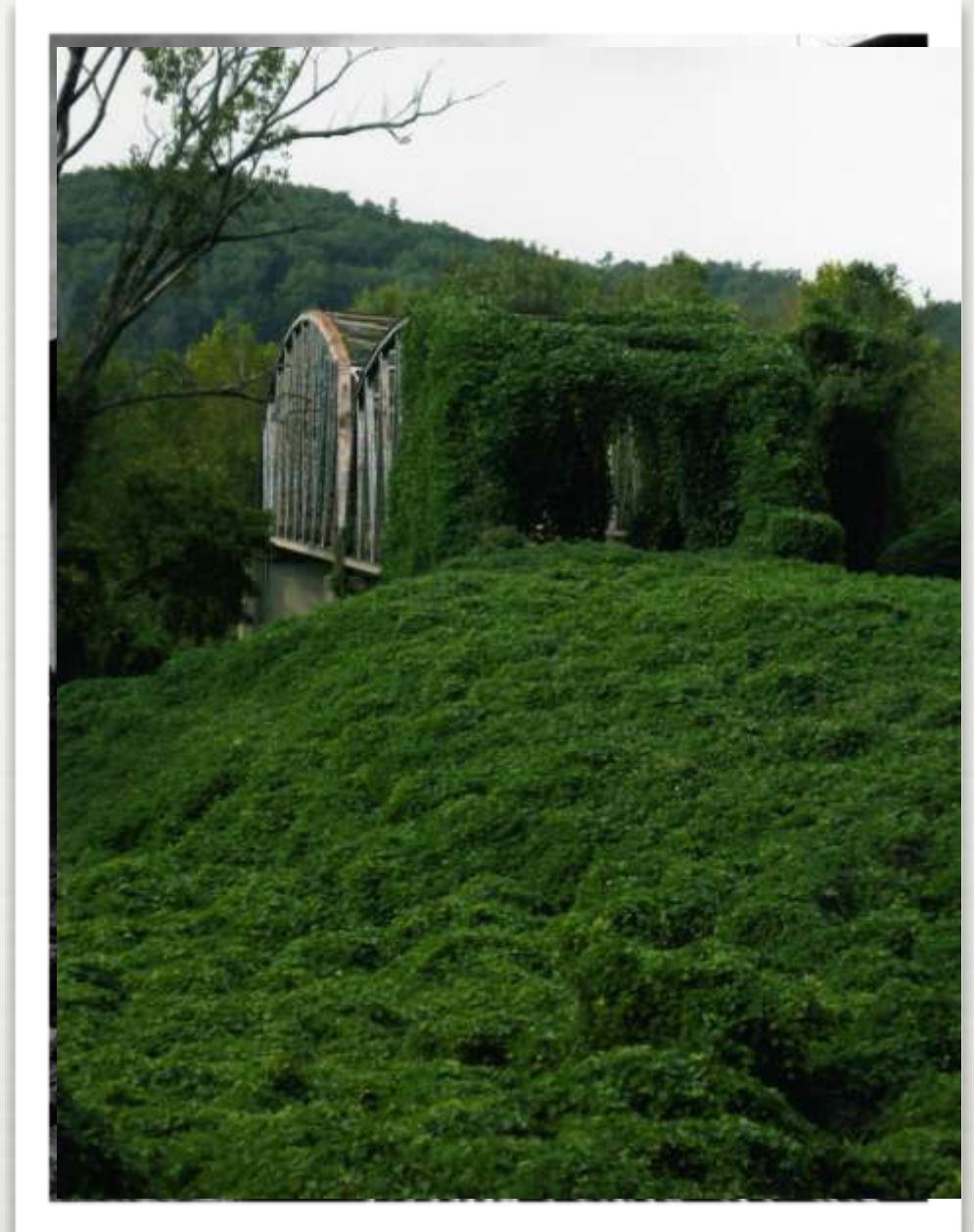


HIGHWAY POLICIES

looking for silver bullets for weeds, front lawn look,
erosion control & economics, one issue at a time.

1930's - Kudzu & Erosion
mowing sickle vs.
horses

- ☐ 1944 - weed control by chemical
- ☐ 1953 - grasses, an economical approach to erosion
- ☐ 1957 - establishment of crownvetch



Reach out to highways



Are We Winning or Losing the War on Weeds?

by Mary Ann Rondinella and
Bonnie L. Harper-Lore

The attack of invasive plants on the Nation's roadsides is still ongoing, but emerging alliances and their successful strategies are on the counterattack.

wildlife habitat, more loss of recreation, loss of flood control, and loss of water in the West.

Typically, weedy grasses and shrubs go unnoticed by the traveling public. Even for vegetation managers, weeds often are difficult

to differentiate from native or other beneficial plants. Without public awareness and increased training for managers, the ecological and economic losses will continue to escalate. In 2004, the impact of invasive species in the United States was estimated at \$142 billion per year.

Moreover, although the overall effects of climate change are uncertain, longer growing seasons and more severe droughts could exacerbate the spread and persistence of some weed infestations. For example, a *Pennsylvania Climate Impact Assessment* published by the Pennsylvania Department of Environmental Protection notes that warmer temperatures may increase the persistence of invasive plants previously killed by cold winters. Kudzu, intentionally planted as an ornamental, formerly was believed unable to survive Pennsylvania winters. But now kudzu stands are in fact persisting, although not expanding. Pennsylvania has begun an eradication program.

In the face of a changing environment and uncertainties associated with that change, the national strategy of early detection and rapid response is still the best overall

approach to combat invasive species. State departments of transportation (DOTs), however, face challenges in waging that battle.

In 2006, the National Cooperative Highway Research Program issued NCHRP Synthesis 363, *Control of Invasive Species*. The synthesis identifies a number of challenges, with lack of funding being the principal one. Not surprisingly, 53 percent of State DOTs responding to the survey conducted for NCHRP Synthesis 363 stated that lack of State funding was an obstacle for invasive species control. Thirty-eight percent cited limited Federal funding as a primary obstacle. Many also mentioned limited staffing and lack of dedicated personnel as obstacles. Overcoming these challenges in a time of limited resources and building on gained experience will be crucial to making progress in the war.

Executive Order 13112, signed in 1999, requires Federal agencies to prevent and control invasions of nonnative plants. According to the executive order, Federal-aid dollars can no longer be used to cause further introductions. In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) expanded eligibility for Federal funding for control of invasive species and environmental restoration. It did not, however, create new funding sources.

The Federal Highway Administration (FHWA) has provided research funding for affordable global positioning system (GPS) units and weed washers, plus technical support via field guides, newsletters, and workshops to inform State DOTs about

On the day you read this article, another 4,600 acres (1,863 hectares) of public lands will be invaded by weeds, according to a Bureau of Land Management and Utah State University estimate. In addition, since the September/October 2002 publication of a *PUBLIC ROADS* article on the "war on weeds," a number of new species have spread along the Nation's roadsides. Among the new invaders are cogongrass, Japanese stiltgrass, wavyleaf basketgrass, and Chinese silvergrass.

Research shows that weedy species along roads are directly correlated to plant invasions of adjacent lands. Invasions of weeds degrade habitat, threaten diversity, replace rare native plants, increase erosion, facilitate wildfires, and usurp water resources. The consequences of a failure to win the war on weeds include fewer songbirds, more ranchers out of business, fewer pollinators, lower food production, less

(Above) Facing constrained budgets, DOTs have reduced mowing and spraying applications, allowing aggressive weed species such as this spotted knapweed to flourish in some areas. Photo: Bonnie L. Harper-Lore.

☐ INSIGHTS

☐ STATE PARTNERSHIPS

☐ REAUTHORIZATION

☐ CHANGE comes VIA

☐ 1. regulation or

☐ 2. public pressure

UNPREDICTABLE future

2007 InterGOVERNMENTAL PANEL FOR CLIMATE CHANGE....."Likely"

- ☐ VIOLENT WEATHER EVENTS
- ☐ LOSS of HABITAT, DIVERSITY, SPS.
- ☐ UNKNOWN TERRITORY IN SCIENCE
- ☐ ADAPTIVE MANAGEMENT & POLICIES
- ☐ PARTNERSHIPS WILL BE MORE IMPORTANT



POTENTIAL THREATS



Minnesota TO DO LIST:



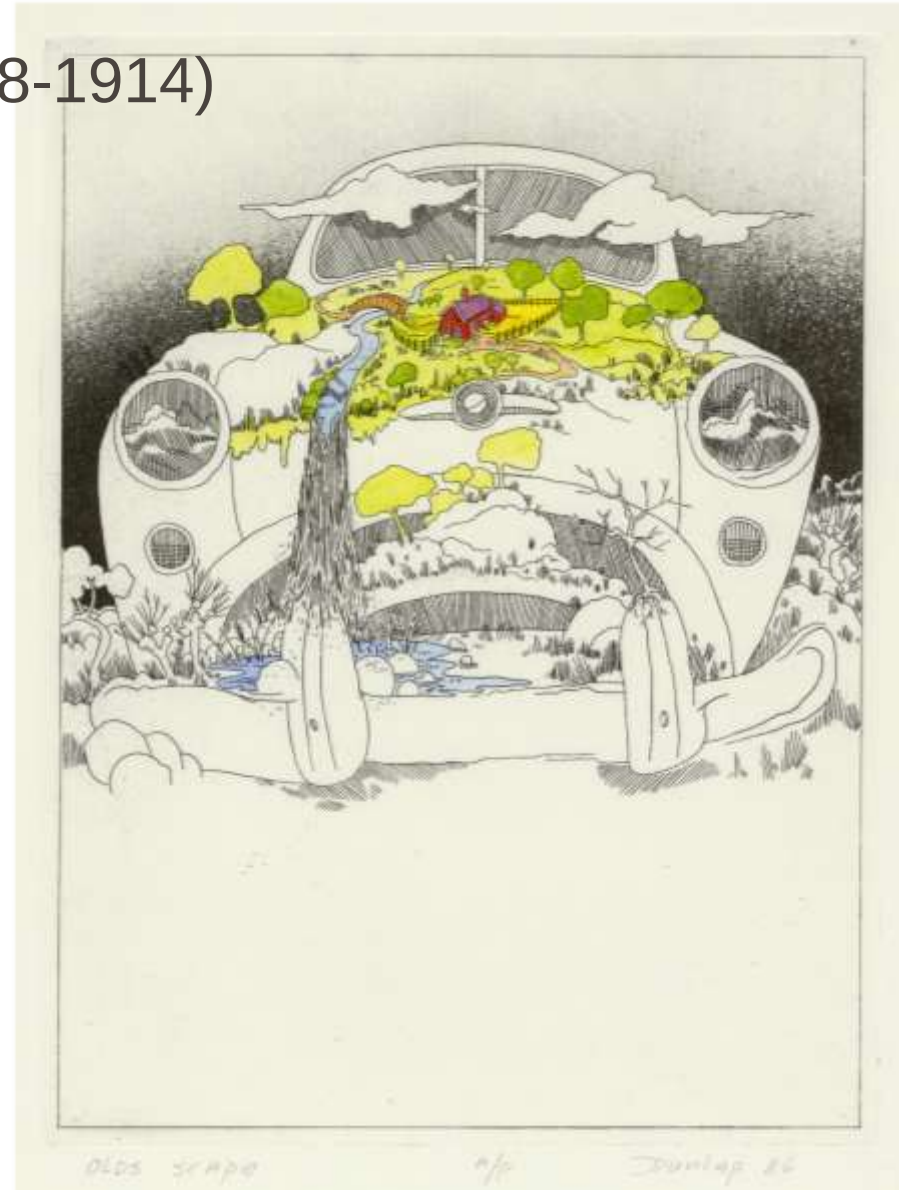
- ☐ AWARENESS....natl. campaign
- ☐ APPROPRIATIONS....federal, state, local
- ☐ AUTHORITY....policy, mous.
- ☐ ALLIANCE....data of existing centers
- ☐ Across borders.... partnerships

*when we try to pick out anything by itself,
we find it hitched to everything else in the universe.*

PLEASE REMEMBER:

muir (1838-1914)

- ☐ Use an ecological approach
- ☐ We are all connected, continentally
- ☐ Continue to pull together to win the war on weeds!



john