

# Roadblocks to implementation and policies that create roadblocks



Photo by Warren Beck, Univ. of Arizona

# Outline

- Statement of issue
- Initial Barriers to implementation of comprehensive control efforts
- Policy issues creating barriers
- Actions taken and lessons learned
- Remaining unmet needs



# Statement of issue

Tony Burgess has watched  
buffelgrass steadily surround  
the UA Desert Laboratory.

## THE GRASS THAT ATE SONORA...

By Greg McNamee

**DESERTS DO NOT** burn. Parched, unwatered, swept by dehydrating winds, the deserts of the world are marked by a scarcity of plant life. Thinly spread across the landscape, desert plants do not grow densely enough to fuel the conflagrations that sweep periodically through forests and prairies. Those fires that do start out among the creosote bush or spinifex, the ghost-gums or baobabs, caused by lightning or the casually tossed cigarette, are small and self-contained. When an unfortunate desert plant does go up in flames, it kindly spares its neighbors--if only because its neighbors are far away.

Tucson Weekly  
April 1996

Buffelgrass (*Pennisetum ciliare*), a fire-prone African bunchgrass, is spreading rapidly across the increasingly urbanized, desert landscapes of southern and central Arizona.



Ongoing are:

Escalating fire risks in what used to be a fireproof and maintenance-free desert landscape

Rapid conversion of Sonoran Desert to African savannah

Threats to prominent national parks, forest land, and conservation properties

Threats to viewsapes and landscapes at popular tourist destinations

**Despite advanced stage of spread, economic impacts still greatly exceed costs of control**

# Initial barriers to implementation

- Lack of scientific community agreement
- Lack of understanding of plant
- Lack of definitive scopes of invasion
- Lack of public and community leader awareness
- Limited funding availability
- Complex jurisdictional boundary issues

# Policy issues creating barriers

- Status of buffelgrass as a noxious weed in Arizona
- Continuing USDA buffelgrass research efforts
- Expanding utilization of buffelgrass in MX
- Control limitations on private lands
- Land disturbance as a primary source of expanding invasion corridors

# Arizona Statute R3-4-244

## Regulated and Restricted Noxious Weeds

Listed 3/05; Approved 12/06/05

State now has authorization to control buffelgrass infestations, but is only required to do so when the Dept of Ag determines that they are a threat to critical resources

No new strains can be imported from other states & territories in US... but they can be imported from other countries and can be transported through AZ

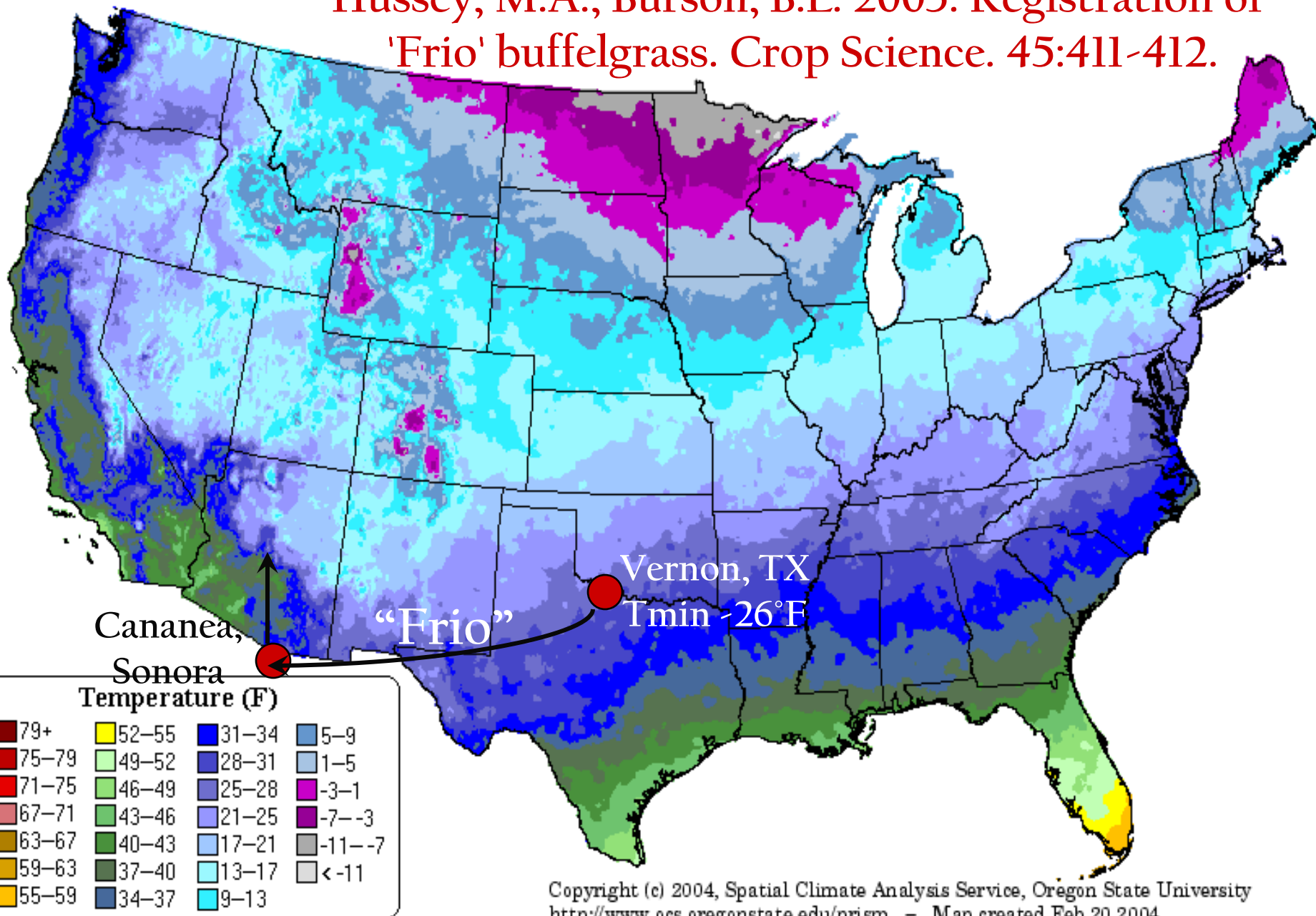
Russo, E. 2004. Cooperation urged on invasives.  
*The Scientist*, March 22, 2004.

“Government agencies are not only failing to cooperate, but....are even working against each other, said Ann Bartuska, deputy chief for research & development at USDA Forest Service....while the National Park Service was attempting to prevent buffelgrass...from spreading to parklands....the USDA was simultaneously developing a hardier, cold-resistant buffelgrass strain.”



# Minimum Temperature: January Climatology (1971–2000)

Hussey, M.A., Burson, B.L. 2005. Registration of 'Frio' buffelgrass. *Crop Science*. 45:411-412.

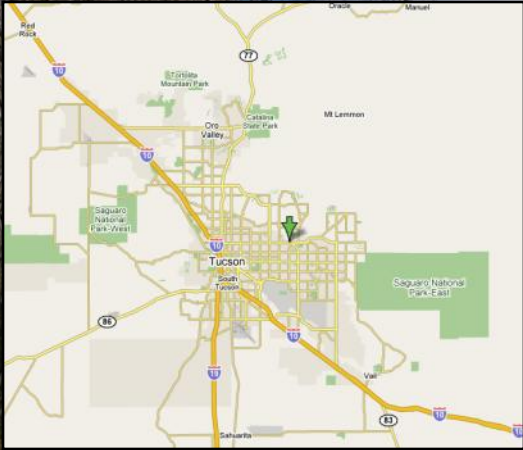


Northern Mexico:  
Buffelgrass actively planted in Sonora, Chihuahua,  
Tamaulipas, and Nueva Leon, millions of acres  
already converted



Photo: Tom Van Devender

# Empty lot in Tucson, AZ (Grant Rd.)



# Wealthy housing subdivision in Pima County



4360

# Roadside dispersal of buffelgrass

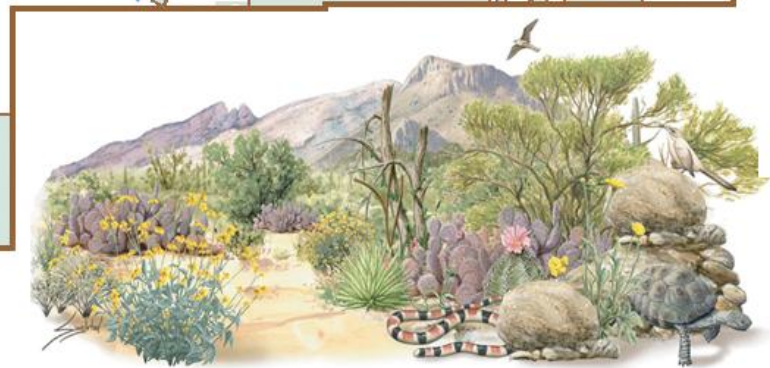
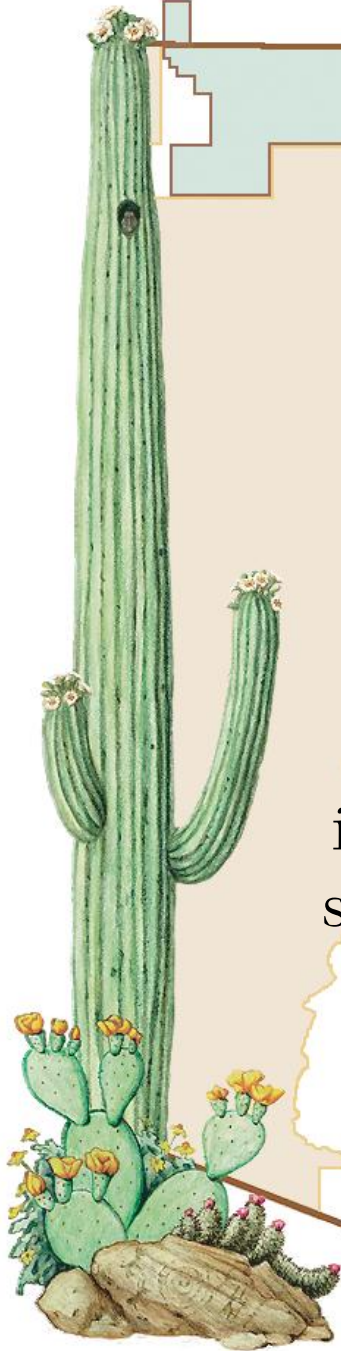


Interstate 10 in  
Eastern Pima County

# Sonoran Desert Conservation Plan

\$174M Open Space Bond  
passed in May 2004

Authorized and wildcat trail building  
increasing buffelgrass connectivity and  
spread into previously un-invaded areas



# Actions taken and lessons learned

- Buffelgrass Summit
- Establish Buffelgrass Working Group
- Buffelgrass Strategic Plan
- Buffelgrass Field Inspection
- Southern Arizona Buffelgrass Coordination Center
- Pima County BOS Resolutions
- Pima County Ordinance Changes

# Buffelgrass Summit, Feb. 9, 2007, Starr Pass Marriott Resort





# Southern Arizona Buffelgrass Strategic Plan



## *A Regional Guide for Control, Mitigation and Restoration*



- Minimize spread in areas where buffelgrass not yet established
- Implement control priorities based on actual & potential impacts
- Restore treated areas in ways that increase resilience against future invasion
- In areas where control is no longer feasible, mitigate fire risks to life & property
- Motivate legislation aimed at sustaining the control effort
- Create a template for invasive sp mgmt in AZ



Pima County Community  
And Economic Development



# Catalina Foothills Buffelgrass Field Conference March 3, 2008

Dana  
Backer  
Saguaro  
Natl Park

Lisa  
Graumlich  
U of AZ

Mayor  
Walkup

Kristin  
Almquist

Jim Kiser  
SALC



The image shows the exterior of a building with light-colored vertical siding. In the center is a set of double doors with multiple glass panes. Above the doors is a white sign with black text that reads "Buffelgrass Coordination Center". To the right of the doors is a smaller white sign that reads "BUILDING #3". Two hanging flower baskets with colorful flowers are suspended on either side of the doors. A small potted plant sits on the ground to the right of the entrance.

**Buffelgrass  
Coordination  
Center**

Purpose & Need:

- To maintain consistent long-term commitment
- To increase control and management proficiency
- To eliminate duplicative efforts

# Coordination of regional buffelgrass management is needed to:

- Enable partners to sustain ecological goods and services essential for tourism, recreation, and quality of life
- Lessen threats to both endangered and iconic species (saguaro, paloverde, ironwood)
- Create firebreaks that keep potential fire size from exceeding 100 acres, and prevent ignition fronts in desert valleys from spreading into our national parks and forests
- Reduce fire suppression costs while also protecting lives, public infrastructure, and private property

## Examples of Performance Metrics 0-2 yrs

- Raise minimum of \$2 million in cash
- Consistent policies (adopted and enforceable)
- Establish routine treatments by all jurisdictions
- Buffelgrass management on 1,000 acres (treated)
- 200 financial contributors
- Hot Spots identified in Strategic Plan fully mapped
- Total volunteer hours increased by 10,000 hours
- Annual updates to Strategic Plan
- 25% of HOA's have complete buffelgrass removal
- 10% of businesses qualify for a 'Certificate of Removal'
- Contingency plan approved by public, non-profit, and corporate stakeholders
- Public awareness survey (baseline)
- Protocols developed and revised
- Host first biennial meeting (Year 2)
- Advise key stakeholders (SAHBA, utilities, conservation, insurance, tourism, etc.)
- Assess risk of fires exceeding 100 acres (mapping)

# Pima County Ordinances

- Dept of Environmental Quality
  - Requirement to remove buffelgrass on private property based on illegal dumping rules
- Development Services
  - New developments and rezonings required to remove and monitor buffelgrass for 5 years

# Remaining unmet needs

- A uniform sense of urgency that action must be taken now
- Meaningful control efforts at the landscape level
- Commitment of stable, multi-year funding from primary jurisdictions and land management agencies
- Key policymaker involvement/commitment to multi-year control efforts
- Definitive mapping data of invasion distribution, infestation levels, control effectiveness



For more information, please feel  
free to contact:

Travis Bean

520.621.8589

[bean@email.arizona.edu](mailto:bean@email.arizona.edu)