

## **Support for the 2007 Buffelgrass Summit: Developing a framework for buffelgrass control in Southern Arizona**

### **Project Leader:**

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### **Project Team:**

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### **Location:**

The Summit will take place at the J.W. Starr Pass Marriott Resort in Tucson, Arizona. Outcomes from the Summit will be applicable across Southern Arizona, including Pima, Maricopa, Pinal, Cochise, and Santa Cruz Counties.

### **Critical Issue:**

Across southern Arizona, buffelgrass (*Pennisetum ciliare*) has introduced a new fire risk and threatens to irrevocably alter the Sonoran Desert. Buffelgrass is a fire-prone and shrubby grass introduced from the African savannah. Listed as a restricted and regulated noxious weed by the Arizona Department of Agriculture in 2005, Buffelgrass grows in dense stands, crowds out native plants, and fuels unprecedented and devastating fires. Competition for water can weaken and kill desert plants, even larger trees and cacti, while dense roots and ground shading prevent germination of native seeds. Buffelgrass can kill or exclude most native plants by these means alone; wildfires will only hasten the process.

In the past two years, the buffelgrass invasion has been the subject of considerable outreach, extensive media coverage, and nearly-unanimous consensus. Despite this increased awareness, the heroic efforts by a few volunteers, and growing public investment, control activities have not kept pace with buffelgrass spread. For example, at Saguaro National Park East, flammable stands of buffelgrass increased in extent from 400 acres in 2002 to 1000 acres in 2005 and 3000 acres in 2006, to a projected 6000-9000 acres in 2007. A mere 200 acres was treated in 2005 and no treatments occurred in 2006. Because this spread is exponential *-populations of this grass and the costs of controlling it may be doubling every year-* time is of the essence and there is a necessity to act collaboratively and decisively.

Without concerted regional action, we face recurring grassland fires, loss of our existing natural desert environment, and damaging economic impacts. Since the late 1950's almost three million acres of desert have been converted to buffelgrass as a way to increase cattle forage in the Mexican state of Sonora. Buffelgrass has expanded from these plantings into surrounding natural and urban areas, and is now driving wildfires throughout most of the year. Fires now

occur almost daily along roadsides and urban areas in Hermosillo. Given similarities in climate and vegetation, Tucson, Phoenix and other southern Arizona municipalities will likewise be challenged by more frequent and devastating fires in the near future. Since February 2004, when stands planted on the tailings of the Duval Mine near Green Valley caught fire, a spate of buffelgrass fires have plagued southern Arizona, including one November 2005 that claimed a Tucson fatality and another that charred a Phoenix city park.

Buffelgrass has already compromised the integrity of several parks and monuments, and other publicly-maintained open spaces devoted to Sonoran Desert conservation and ecological research. Imagine Saguaro National Park without saguaros, Picacho Peak State Park without wildflowers, or charred parklands in Phoenix's mountain preserves (Papago, Peistewa Peaks, North and South Mountain). The Sonoran Desert Conservation Plan acknowledges buffelgrass and other invasive species as important threats to Pima County's rich biodiversity. And clearly, buffelgrass invasion poses serious threats to the 100-yr legacies of ecological research carried out at the Desert Laboratory on Tumamoc Hill and the Santa Rita Experimental Range.

Ecotourism is a cornerstone of the Southern Arizona's economies. Places like the Arizona-Sonora Desert Museum, Saguaro National Park, Sabino Canyon, and Tucson Mountain Park attract tourists from around the world and are also visited repeatedly by local residents. According to the Metropolitan Tucson Convention and Visitors Bureau, and based on studies conducted by the University of Arizona, 3.5 million visitors pump \$2 billion a year into Tucson's economy, including \$20 million of tax revenues for Tucson and Pima County. Tourism accounts for nearly 40,000 jobs, about 12% of total wages in Pima County. In addition to the loss of revenues from tourists visiting our scenic attractions, degradation of viewsapes and the prospect of frequent fires will also discourage businesses and private citizens from choosing southern Arizona as a permanent destination, further slowing economic growth.

### **Outcomes:**

The Buffelgrass Summit will engage the relevant stakeholders and encourage them to identify priority needs for a buffelgrass control program. The list of invitees includes representatives from local, state, and federal land management agencies, as well as local, county, and state government.

These outcomes will specifically address IPM Coordinating Committee priorities by including *the engagement of stakeholders and clientele to identify program priorities and/or demonstrate IPM outcomes to peers to promote broad adoption of IPM, and enhancing noxious or invasive integrated weed management efforts in the state, particularly those that will increase communication and efficiency among partner organizations involved in weed management and increase our ability to respond to new threats.*

### **Plan for Evaluation:**

The success of the Summit will be evaluated by assessing the overall attendance numbers, including how well the various stakeholder groups were represented by attendees. We will also construct a buffelgrass control action plan based on the priority needs identified at the Summit.

### **Inputs**

Contribution of meeting logistics: \$2500