



MAKE THE BEST OF SANTA FE YOURS...FOREVER  
Fractional ownerships from the low \$100's.  
[Discover More](#)



HOME | CALENDAR | BLOG | NEWSLETTER | STORE | SUBSCRIBE | ADVERTISE | CUSTOMER SERVICE | CONTACT US

Search  Search

# THE PREMIER MAGAZINE OF THE WEST COWBOYS & INDIANS

Save 55% and  
Get A Free Gift



[Subscribe](#) | [Renew](#) | [Give A Gift](#)

HOME | WESTERN LIFE & STYLE | ART & ENTERTAINMENT | TRAVEL & ADVENTURE | FOOD & WINE | RESOURCES | REAL ESTATE

COWBOYS & INDIANS / JUNE 2013 / SPECIES INVADERS

[SHARE](#) [EMAIL](#) [PRINT](#)

## Species Invaders

“Keep Out” signs aren’t enough — prevention is key for slowing the progress of invasive species in the West.

BY STEPHANIE STEPHENS



Photography: Russell Graves

Invasive species live among us as unwelcome guests surviving and thriving at the expense of healthy ecosystems. The deadly Africanized honeybee, kudzu, and the zebra mussel are among the better-known violators. However, the insidious troublemakers include a wide variety of organisms: plants, animals, fish, mollusks, insects — even single-cell, disease-causing microbes — that seem to have always been with us.

“It’s nothing new and isn’t a ‘the sky is falling’ issue,” says Liz Galli-Noble, director of the Center for Invasive Species Management at Montana State University in Bozeman. “Invasive species are a long-term, multimillion-dollar management issue that’s not going away in western North America.”

ADVERTISEMENT

Tweets

Follow @CI\_Magazine

**Cowboys & Indians** @CI\_Magazine 1h  
Find out about George Catlin's American Buffalo, the traveling exhibit, and make plans to see it: [ow.ly/kEy13](#)

**GAC** @gactv 3h  
[.OfficialJackson](#) on stage performing "He Stopped Loving Her Today" to close out the service. Amazing, historic event!  
[#RememberingJones](#)  
Retweeted by Cowboys & Indians  
Expand

**GAC** @gactv 4h  
Not a dry eye in the house at the Opry [#RememberingJones](#) - Thank you @VGcom and @theplo for an amazing performance!  
Retweeted by Cowboys & Indians  
Expand

**Cowboys & Indians** 5h  
Tweet to @CI\_Magazine

ADVERTISEMENT

**Plow & Hearth**  
unique items for  
hearth, home, yard  
and garden  
Since 1980  
SHOP

These invasive species have become an even bigger threat to biodiversity than habitat destruction. “Invading alien species in the United States cause major environmental damages and losses adding up to almost \$120 billion per year,” states lead author David Pimentel, an emeritus faculty member at Cornell University, in the 2005 article “Update on the Environmental and Economic Costs Associated with Alien-Invasive Species in the United States.”

He and his coauthors go on to point out that there are approximately 50,000 foreign species in the United States, and their numbers are on the rise. These invasive species are a leading cause of animal population decline and extinction worldwide, putting close to 42 percent of the species on threatened or endangered lists at risk. They can also negatively affect property values, agricultural productivity, public utility operations, native fisheries, tourism, and outdoor recreation.

Despite the magnitude of the problem, invasive species are generally not at the top of the public’s environmental concern agenda. “Invasive species aren’t a sexy issue,” notes Bob Wiltshire, executive director and founder of the nonprofit Invasive Species Action Network. Which is why education has become a top priority.

According to Montana State University’s Galli-Noble, target demographics for educational outreach include private landowners, gardeners, and sportsmen. “I don’t know anybody who doesn’t hunt, fish, or recreate, or has a family member or friend who doesn’t. We know people care about healthy ecosystems. They also want to leave those traditions and landscapes for their children — it’s generational. The key is making the public aware of the problem and getting them engaged in activities that promote prevention — which is also highly cost-effective.”



Photography: (Clockwise from top left) Jan Samanek/State Phytosanitary Administration/Courtesy Bugwood.org, Russell Graves, Randy Westbrook/U.S. Geological Survey/Courtesy Bugwood.org

## Do No Harm

So where do we start? In 1999, President Bill Clinton signed an executive order establishing the **National Invasive Species Council** and defining the terminology needed to begin a nationwide discussion of the problem. The order defined *invasive species* as any non-native species whose introduction harms or is likely to harm the economy, the environment, or human, animal, or plant health.

Although the terms *introduced*, *alien*, *exotic*, *nonindigenous*, and *non-native* are also sometimes used in conjunction with invasive species, not all introduced or non-native species become invasive. In fact, we highly value a number of non-native species: horses, cattle, pigs, sugar cane, and potatoes, to name several. Some don’t become invasive until they escape cultivation or are introduced into favorable environmental conditions that result in a rapid, dangerous proliferation

**Cowboys & Indians - The Premier Magazine of the West**

Like 22,601

---

**Cowboys & Indians - The Premier Magazine of the West**

Find out about George Catlin's American Buffalo, the traveling exhibit, and make plans to see it: <http://ow.ly/kEy13>

**George Catlin's American Buffalo**

ow.ly

Exhibit explores the integration of buffalo in Native American life.

about an hour ago

ADVERTISEMENT

## Living West

ARCHIVE »



### Species Invaders

“Keep Out” signs aren’t enough — prevention is key for slowing the progress of invasive species in the West.



### Snake, Rattle, And Roll

Rattlesnake conservationists work tirelessly to emphasize the often maligned reptile’s importance to the ecosystem.



### Florida’s Last Frontier

Cattle ranchers and conservationists are banding together to protect the northern Everglades.

ADVERTISEMENT

**BACKATTHERANCH.COM**



SANTA FE

888-962-6687

without natural predators, diseases, or competitors. A non-native species subsequently becomes invasive when it disrupts the food chain and alters the delicate balance of nature for fish and wildlife.

“Invasive species don’t respect our state or national borders,” says Galli-Noble. A prime example is that since their discovery in Lake St. Clair, Michigan, in 1988, the voracious zebra mussel, native to Eastern Europe, is now found in 20 U.S. states. The mollusk eats and reproduces at an alarming rate, attaching to piers, pilings, ladders, and boats and their mechanical systems, and blocking water supplies. Its equally reprehensible cousin, the quagga mussel, was found in the Great Lakes several years later.

But western states weren’t so concerned until 2007, when quagga mussels were found in Lake Mead — America’s largest reservoir, near Las Vegas. California, Arizona, Colorado, and Utah have since detected them in critical water supply systems. Because no known method of eradicating quagga mussels exists, states are focusing on minimizing impacts.

Montana, Wyoming, and Idaho conduct mandatory, aggressive watercraft inspections and invasive mussel-prevention programs. Inspectors in Montana have already found dead quagga mussels on two boats.

In Idaho, calcium and water temperature levels have attracted mussel colonies, and so far 90 “critical” and “high-risk” bodies of water have been identified statewide. This infestation comes with a hefty price. It’s thought that introduced mussels could cost Idaho \$100 million annually in damages to infrastructure, facilities, agriculture, and recreation.

But it’s not just about the West’s waterways. With 246 million acres of federal public land in the western United States and Alaska, the Bureau of Land Management (BLM) counts more than 35 million acres infested with invasive plants. Twenty-five million of those are overrun with non-native invasive grasses, says Gina Ramos, BLM senior weeds specialist.

One of the biggest problems on western rangelands is cheatgrass, also known as Downy brome, which thrives across the Great Basin in Nevada, Utah, and parts of Idaho. Another non-native grass, Medusahead, is also on the move.

These quick-spreading grassland invaders reduce rangeland health and soil productivity, says Ramos. “They destroy native habitat for livestock and wildlife — even pollinators like butterflies are forced to move on to other resources.”

The head of Utah’s Department of Natural Resources, Mike Styler, told *The New York Times* in July 2012 that cheatgrass has “changed the entire ecology of the West,” in part because the easy burner may cause four times more fires than other types of ground cover, and it grows back quickly.

Scientists hope that biological control — using other organisms like black finger fungus to control a species — may someday bring cheatgrass to its knees.

## Natives And Non-Natives

Between the cheatgrass on earth and the mussels in the water is the wetland invader. One such example is flowering rush, now living in Montana’s Flathead Lake. “It forms monotypic stands [of a single species versus many species] that restrict shoreline access to the water,” says Virgil Dupuis, extension director of Salish Kootenai College on the Flathead Indian Reservation in western Montana. “The root is considered edible, but we’re not going to eat our way out of this problem.”

Admitting that they haven’t found an effective control for flowering rush, he says tribal people are less willing to embrace chemical controls like herbicides. However, they do use them.

“We try to be as careful as we can,” explains Dupuis. “Nobody likes using those things, and some people are dead set against it.” To do so requires tribal concurrence based upon input from the tribes’ wildlife, fisheries, and plant-restoration professionals.

Dupuis says the tribes worry about potential Eurasian water milfoil infestation, since it’s already established in eastern and western Montana, in spite of aggressive control and prevention programs. “Initially, it creates a good habitat for fish but quickly changes lake ecology, degrading water

## Cowboys & Indians



See On

amazon.com  
and you're done.™

	<a href="#">Vol. 1 Judy Garland Show</a> New \$7.67		<a href="#">The Lone Ranger</a> Clayton Moore, Jay... New \$13.49
	<a href="#">New Adventures of the Lone Ranger</a> -Various, -Vaious New \$5.99		<a href="#">The Lone Ranger, Vol. 3</a> Clayton Moore, Jay... New \$7.11

[Privacy Information](#)

## Latest Blog Post

### Blog

THE PREMIER BLOG OF THE WEST



#### Recipes: Camarena Tequila Cocktails For Cinco De Mayo And Beyond

A festive spirit for any spring and summer occasion.

### Food



#### Recipes: Camarena Tequila Cocktails For Cinco De Mayo And Beyond

A festive spirit for any spring and summer occasion.

### Music



#### Willie Nelson: 80 Years Young, Still On The Road (Again)

Still living the life he loves — and making music with his friends.

### TV & Film

#### Sneak Peek: 'Quick Draw'

Hulu is set to debut a comedy western.

### Fashion

#### Western Storefront: National Cowboy & Western Heritage Museum Store

quality,” he says.

He supports boat inspections and on-site education at boat launches and fishing derbies. “The tribes are a minority on the reservation,” he says. “We educate the majority who are non-Indians. Indian people generally don’t have boats.”

Everyone is basically playing catch-up, he says. “We’re all 100 years late to this battle, especially as borders ‘shrink’ and people become more mobile.”

## Hasta La Vista, Crazy Ants

It’s not all doom and gloom, though. There are success stories. For example, a sprayed herbicide called Habitat proved effective against wetland-invasive phragmites along the Platte River Valley in Nebraska, where they once “choked out” native plants and narrowed the water stream.

Similarly, through state and local efforts, tribes, volunteer groups, and ordinary citizens are writing an “eliminate spartina” success story in the Pacific Northwest’s Puget Sound.

Farther south in Manor, Texas, near Austin, online marketer Bill Leake is attempting to combat “crazy ants,” which move like miniature interstate highways on his 46 acres, or what he calls, “fairly small holdings.” In 2009, Leake was the first landowner in east Travis County to find and report an infestation of the exotic invasive scientifically named *Nylanderia fulva*, found in Houston in 2002.

“They’re a mixed blessing — they rarely bite — but they get all over you, like a zombie, and there’s the ‘ickiness factor,’ ” Leake says. “Still, they’re so prolific they actually exterminate the dreaded fire ants. They can’t be good for species diversity or good for wildlife — they even take down ladybugs.”

At Texas A&M University’s entomology department, assistant research scientist Robert Puckett, Ph.D., explains why Leake’s pesky, proliferating ants don’t bite. They don’t have stingers — unlike the red imported fire ant.

The pragmatic Leake keeps his arthropods in check with a contact poison usually reserved for termites and hopes a giant colony doesn’t invade his car and short out the air conditioning. However, he knows that the ants, like all invasive species, are here to stay. We need to find ways of dealing with the pests, whether it be eliminating the invaders on sight; instituting vigilant inspections, such as those in Rocky Mountain states, to prevent species spread; or implementing preventative measures on private land.

As Leake succinctly sums up the challenge: “We’re just one world sharing everything with each other.”

---

*Education is key when dealing with invasive species. For more information, visit the following organizations online: [Bureau of Land Management](#); [Center for Invasive Species Management](#); [Invasive Species Action Network](#); [National Audubon Society](#); [The Nature Conservancy](#); and the [Federal Interagency Committee for the Management of Noxious and Exotic Weeds](#).*

Filed under: [Western](#), [Living West](#), [Land](#)

---

*This article appears in the [June 2013](#) issue of [Cowboys & Indians](#)  
Did you like what you read here? [Subscribe to Cowboys & Indians](#) »*

---



A gift shop that is a more than a cultural souvenir stand.