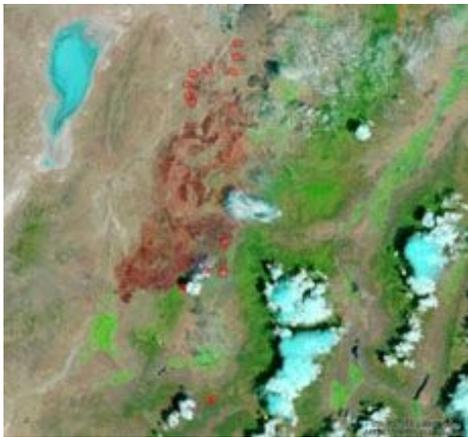


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Many Irons in the Fire



Land managers face tough choices in allocating the resources necessary to restore wildfire-damaged areas. (Even Smokey, at the mouth of Logan Canyon, was yards from an Aug. 1, cheatgrass-fueled wildfire.)



NASA satellite image of the Milford Flat Fire, July 10. The largest blaze in state history devoured roughly 550 square miles. USU's RS-GIS Lab's Virtual Utah interface added spatial data to this image; see <http://earth.gis.usu.edu/milford>.

With a devastating wildfire season still simmering, public and private land managers face tough decisions on securing and allocating the resources necessary to restore thousands of charred acres of Utah land. Yet Utah State University researcher Mark Brunson notes that early collaboration among multiple state, federal, local government and private entities is one bright spot as restoration efforts prepare to kick into high gear.

“The fact that Utah Partners for Conservation and Development is already in place and coordinating relief efforts shows that these diverse entities acknowledge the immense challenge ahead of them,” says Brunson, a professor in USU’s Department of Environment and Society. “The partnership represents multiple agencies with multiple missions, yet they’re collaborating to address the state’s restoration needs.”

UPCD members include federal agencies, such as the U.S. Forest Service, the Bureau of Land Management, the National Park Service and the U.S. Department of Agriculture, along with such state entities as the Utah Department of Natural Resources, Utah Trust Lands Administration and USU Extension.

What will restoring Utah’s scorched wildlands – more than 700,000 acres at last count – entail?

“It comes down to what you think the purpose of these lands is,” says Brunson, a principal investigator for the SageSTEP project, a region-wide study of sageland restoration options. “Is it for grazing, recreation, development, mining, conservation, hunting, carbon sequestration? Not everyone is in agreement about the most appropriate and effective treatments. Each stakeholder group has a different idea about which

practices are acceptable, which plants should be emphasized and whose voice should be heeded when choosing among alternatives.”

Doing nothing, however, is not an option. What most land managers agree on is that the proliferation of invasive weeds – especially cheatgrass – has turned Utah and the rest of the American West into a tinderbox.

In July, Leonard Blackham, Utah commissioner of agriculture and food, announced plans to work with the BLM and other federal agencies to concentrate restoration efforts on battling cheatgrass, a persistent, highly combustible annual that fueled much of the state’s summer blazes.

“Because of cheatgrass, we no longer have the option of letting wildlands ‘go natural,’” says Mike Kuhns, professor in USU’s Department of Wildland Resources. “With each disturbance, the grass comes back in greater abundance than ever, deters regrowth of native grasses and increases the fuel load.”

Tactics for fighting cheatgrass include reseeding large, burned areas with native grasses and “greenstripping,” which involves planting long, narrow bands of fire retardant vegetation. Both solutions, however, are costly, in short supply and offer varied success.

“Securing enough native grass seed to restore these large landscapes will be difficult, if not impossible,” says Doug Ramsey, professor in USU’s Department of Wildland Resources and director of USU’s Remote Sensing/Geographic Information Systems Laboratory. “Most native seed collection is done by hand and it will be in high demand this year throughout the western United States.”

Plus, reseeding an area is a gamble, he says. “It will be a function of how much moisture will be available and the timing of that moisture. We can’t predict the weather and we just can’t irrigate these large landscapes.”

Ramsey notes that time is of the essence. “Cheatgrass grows early in the spring, uses up resources and effectively crowds out its competitors. Native grasses must be established as soon as possible in order to have a competitive chance for survival.”

Cheatgrass will never be eradicated, the USU researchers agree, and it’s not the only culprit fueling Utah wildfires. Using satellite imagery, the scientists observed sizable stands of mature juniper that burned with intensity in the Milford Flats Fire.

Treatments for addressing woody shrub encroachment include prescribed burning and chaining. Brunson’s research shows that the latter is unpopular with the public; the former meets with greater public approval but many citizens lack confidence in land managers’ ability to use it safely.

“Determining and finding the resources to do the best job they know how

is going to be a challenge for land managers,” he says.

With a united front, state and federal agencies can better address the formidable task before them.

“We demand a lot of our public officials and we demand a lot of our rangelands,” Brunson says.

He notes that western rangelands continue to support traditional uses such as livestock grazing and mining, while they’re increasingly supporting development and conservation needs.

“The West is the fastest growing region in the country for non-metropolitan residential housing development,” Brunson says. “As the population grows in wildfire-prone areas, our society will have to shift resources and make decisions based on changing and increasing land use.”

See related story on forage kochia research at USU
[<http://www.usu.edu/ust/index.cfm?article=18531>]

Related links:

- [*“Utah wildfires create chance to curb cheatgrass,”*](#) by Joe Bauman, *Deseret Morning News*, August 6, 2007.
- [*“Dryness, heat turn Utah plants into tinder,”*](#) by Natalie Hale and Stephen Speckman, *Deseret Morning News*, July 21, 2007.
- [*“Property owners expected to protect homes from fire,”*](#) *KSL Eyewitness News*, July 11, 2007
- [USU Restoring the West Conference 2007](#)
- [USU Department of Environment and Society](#)
- [USU Department of Wildland Resources](#)
- [USU RS/GIS Laboratory/Virtual Utah](#)
- [USU College of Natural Resources](#)
- [SageSTEP](#)

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