

PARKScience

Integrating Research and Resource Management in the National Parks

National Park Service
U.S. Department of the Interior

Natural Resource Stewardship and Science
Office of Education and Outreach



WILDERNESS STEWARDSHIP AND SCIENCE

We reflect on the vitality of the Wilderness Act, the utility of recent and classical wilderness research findings, and the application of scientific tools for stewardship of these special landscapes

In This Issue

- Wilderness character
- Interview with Director Jarvis
- Consequences of fire suppression
- Wilderness experience and spirituality
- Compatibility of science
- Trail and impact survey methods
- Contribution of cultural resources
- The future of wilderness stewardship

ON THE COVER

 To capture this image of Cascade Pass in the Stephen Mather Wilderness, North Cascades National Park, Washington, Keith Brumund-Smith scrambled to the top of the highest peak in the area as the sun was setting. The photographer returned to his campsite guided by full moon and headlamp. This photo was a runner-up in the recent *Park Science* wilderness photo contest. For more winning shots of wilderness see pages 7–11, 42–43, and 66.

NPS/KEITH BRUMUND-SMITH

A Wilderness Celebration

The photographs on the cover, in this section, and interspersed in articles throughout this issue are selections from the Park Science wilderness photo contest, held in September 2011. The event garnered 131 entries, with 8 winners and 10 runners-up. We congratulate the winners and thank all participants whose love of wilderness generated such a glorious response.

Contest photos in this issue are distinguished by a camera icon (📷). A slide show of all entries can be viewed online at http://www.nature.nps.gov/ParkScience/graphics/vol_28_3/PhotoContest/index.html. Individual photos are available for downloading from NPS Focus, the digital library and research station, at <http://npsfocus.nps.gov/nps/home.do?searchtype=npshome>. Search for “Park Science 2011 Wilderness Photo Contest.”

📷 Third place (tie)

Biologist and photographer Alicia Burtner notes that relatively few visitors venture below the canyon rim to experience the magnificence of the Grand Canyon, Arizona. Though not designated as a wilderness area, the Grand Canyon is proposed as wilderness and managed under policy to preserve wilderness character.

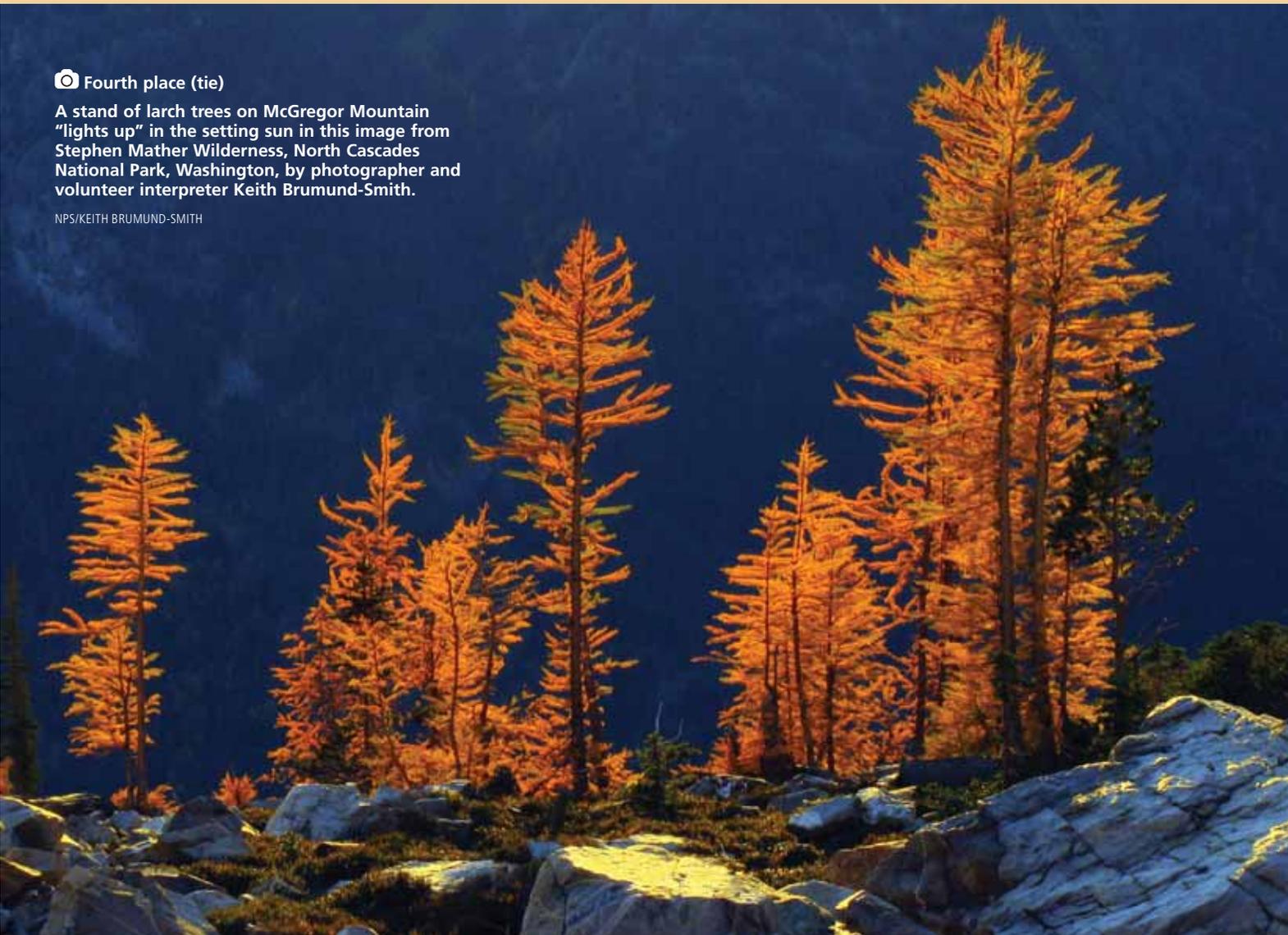
NPS/ALICIA BURTNER



📷 Fourth place (tie)

A stand of larch trees on McGregor Mountain “lights up” in the setting sun in this image from Stephen Mather Wilderness, North Cascades National Park, Washington, by photographer and volunteer interpreter Keith Brumund-Smith.

NPS/KEITH BRUMUND-SMITH





 **First place**

Photographer Jacob W. Frank shares this inspiring view of a hiker looking out onto the Big Creek drainage in the Denali Wilderness, Denali National Park and Preserve, Alaska.

NPS/JACOB W. FRANK



 **Second place (tie)**

Photographer Doug Buehler notes that the combined effects of weather, season, and time of day create a range of moods on El Capitan, the most recognizable feature of the Guadalupe Mountains Wilderness, Guadalupe Mountains National Park, Texas.

NPS/DOUG BUEHLER



📷 (Above, left) Second place (tie)

Botanist Jane Cipra captures dramatic light on Eureka Dunes in Death Valley Wilderness, California. Formerly an off-road vehicle playground, the dunes are habitat for two threatened plant species and five rare beetles.

NPS/JANE CIPRA

📷 (Above, right) Runner-up

Ecologist Chris Sergeant documents a Steller sea lion haul-out near South Marble Island, Glacier Bay Wilderness, Alaska. On a calm day you can hear the din of sea lions from miles away.

NPS/CHRIS SERGEANT

📷 (Right) Fifth place

Photographer Matt Melcher awaits his turn to ascend the Half Dome cables in Yosemite Wilderness, California, about 45 minutes before sunrise.

NPS/MATT MELCHER





📷 Runner-up

A hiker atop Divide Mountain in Denali Wilderness, Alaska, takes in the panorama, which includes the headwaters of the west fork of the Toklat River.

NPS/JACOB W. FRANK



📷 (Above, left) Runner-up

Photographer Molly Hanna depicts the North Fork Flathead River area of Glacier National Park, Montana, one of the least visited areas of the park and one that is recommended as wilderness.

NPS/MOLLY HANNA

📷 (Above, right) Runner-up

Photographer Daniel Silva was impressed by the vastness of this scene, which makes the trees look small amid the colorful landscape of Theodore Roosevelt Wilderness, North Dakota.

NPS/DANIEL SILVA

📷 (Left) Runner-up

Hikers ascend Mount Herard in Sangre de Cristo Wilderness, Great Sand Dunes National Park and Preserve, Colorado, in this image by wilderness coordinator Suzy Stutzman.

NPS/SUZY STUTZMAN

