UC Berkeley

Parks Stewardship Forum

Title

Cover, Masthead, and Table of Contents PSF Vol. 38 No. 3

Permalink https://escholarship.org/uc/item/4pv4t2gv

Journal Parks Stewardship Forum, 38(3)

Author PSF Editorial Team, The

Publication Date

DOI 10.5070/P538358986

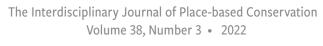
Copyright Information

Copyright 2022 by the author(s). This work is made available under the terms of a Creative Commons Attribution-NonCommercial License, available at https://creativecommons.org/licenses/by-nc/4.0/

PSF

PARKS STEWARDSHIP FORUM

Cultural Resources & Climate Change NAVIGATING A PRECARIOUS FUTURE



ISSN 2688-187X

Berkeley Parks, People, and Biodiversity



Co-published by the Institute for Parks, People, and Biodiversity, University of California, Berkeley and the George Wright Society.

RKS STEWARDSHIP FORUM

Parks Stewardship Forum explores innovative thinking and offers enduring perspectives on critical issues of place-based heritage management and stewardship. Interdisciplinary in nature, the journal gathers insights from all fields related to parks, protected/conserved areas, cultural sites, and other place-based forms of conservation. The scope of the journal is international. It is dedicated to the legacy of George Meléndez Wright, a graduate of UC Berkeley and pioneer in conservation of national parks.

Parks Stewardship Forum is published through eScholarship, an open-access publishing platform subsidized by the University of California and managed by the California Digital Library. Openaccess publishing serves the missions of the Institute for Parks, People, and Biodiversity and the George Wright Society to share, freely and broadly, research and knowledge produced by and for those who manage parks, protected/conserved areas, and cultural sites throughout the world.

The journal continues *The George Wright Forum*, published 1981–2018 by the George Wright Society.

Parks Stewardship Forum is distributed under a Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0) that allows others to copy, distribute, translate, adapt,and build upon original submissions to Parks Stewardship Forum, as long as they provide appropriate credit to the author(s) and do not use the submission for commercial purposes. Anyone who uses or redistributes the submission under this license must indicate any changes that were made, must link to the license, and cannot imply that the author endorses them or their use. More information about this license is available at https://creativecommons.org/ licenses/by-nc/4.0/.

Some photos published in Parks Stewardship Forum are covered by other Creative Commons licenses, which can be found here. From time to time *Parks Stewardship Forum* also reprints, with permission, previously published material. Such material is subject to its original copyright, as indicated.

Parks Stewardship Forum is published at https://escholarship.org/uc/psf.

A version designed for online reading is also available at https://parks.berkeley.edu/psf.

PSF is designed by Laurie Frasier • lauriefrasier.com



On the cover of this issue

Climate change creates conditions conducive to larger, more frequent fires, particularly in the American West. As a result, historic structures and artifacts are at greater risk of fire damage. The Bent's Fort Fire started on the morning of April 12, 2022. Approximately 85% of the national historic site's 800 acres burned. Thanks to the efforts of fire crews, the reconstructed adobe fort was undamaged. | NATIONAL PARK SERVICE

EDITORIAL BOARD

Jonathan B. Jarvis, UC Berkeley Institute for Parks, People, and Biodiversity Dr. Steven R. Beissinger, UC Berkeley Rolf Diamant, George Wright Society Professor Holly Doremus, UC Berkeley Kalani Quiocho, NOAA Nadine Spence, Parks Canada

EDITORIAL STAFF

Dr. Rebecca Conard, Managing Co-editor Dorothy A. Davis, Co-editor, "The Photographer's Frame" Gary E. Davis, Co-editor, "The Photographer's Frame" David Harmon, Managing Co-editor Dr. Gary Machlis, Editor, "Verse in Place"

EDITORIAL AND ADMINISTRATIVE OFFICE

George Wright Society P.O. Box 65 Hancock, MI 49930-0065 USA 1.906.487.9722 psf@georgewright.org

Berkeley Institute for Parks, People, and Biodiversity

The UC Berkeley Institute for Parks, People, and Biodiversity aims to bring an interdisciplinary approach to the research, management, and protection of our national, state and local parks and public lands. Recognizing that parks and public lands play an increasingly important role in climate adaptation, public health, education, jobs, and environmental justice, the Institute will serve as convener, research coordinator, and bridge between field managers and the academic community.

The Institute is devoted to the investigation, dissemination, and application of science to the critical issues facing national, state, and local parks, and equivalent protected areas. The Institute fosters cross-disciplinary research, applied science, policy, and field management, and also strives to help prepare the next generation of conservation leaders in academia and in the field.

https://parks.berkeley.edu



CONTRIBUTING TO PARKS STEWARDSHIP FORUM

We welcome proposals for papers in PSF's two main departments: "New Perspectives," for nonpeer-reviewed articles that will be evaluated solely by the journal's editors; and "Advances in Research and Management," for articles that will undergo formal peer review. We also invite proposals for "The Photographer's Frame," our regular feature in which contributors tell a compelling conservation story in photographs.

More information and manuscript submission guidelines may be found at:

The George Wright Society advances the scientific and cultural resource values of parks, protected and conserved areas, cultural sites, and other forms of place-based conservation. The Society promotes research and resource stewardship across disciplines; brings practitioners together to share their expertise; provides avenues of communication among scholars, researchers, educators, practitioners, and the public; and supports informed conservation decisions and management actions that embrace these values. By uniting people from many different backgrounds around a common passion for protecting Earth's natural and cultural heritage, we create the collaboration needed to meet today's greatest conservation challenges.

https://www.georgewrightsociety.org/psfsubmissions

https://www.georgewrightsociety.org

CONTENTS • VOLUME 38/3



375 Four signs Rolf Diamant



- COLORING OUTSIDE THE LINES
- 381 The power to question: A tribute to Dr. Nina S. Roberts, 1960–2022

THEME ARTICLES

CLIMATE CHANGE AND CULTURAL RESOURCES: NAVIGATING A PRECARIOUS FUTURE

Margaret D. Breuker and Naomi Kroll Hassebroek, guest editors

384 Climate change and cultural resources: Navigating a precarious future

Margaret D. Breuker and Naomi Kroll Hassebroek

- 389 Mapping and the future of caring for the past: Using GIS as a tool to understand the risk of emergencies to cultural heritage collections *Madeline Cooper*
- 399 Plan the work, work the plan: An introduction to the National Park Service Climate, Science, and Disaster Response Program Jeneva P. Wright and Morris Hylton III

412 Strategies for meaningful engagement: A commentary on collaboration in archaeological climate adaptation planning *Courtney Hotchkiss, Erin Seekamp, and Alicia McGill*

- 428 A brief overview of climatization strategies of historic houses in the Netherlands: From "one size fits all" to "a process of deliberation" Bart Ankersmit and Marc Stappers
- 449 Why do we keep doing this? An argument for informed environmental assessments David Bittermann
- 463 Climate change and Martin Van Buren National Historic Site: Building a holistic plan *Megan O'Malley*
- 470 The Witness Tree project: A portfolio *Carolyn Monastra*
- 481 Cultural heritage resources in climate action
 Stephanie Shapiro and Sarah Sutton

(more)

NATIONAL PARK SERVICE

CONTENTS • VOLUME 38/3



A Changing Climate

Idaho was a very different place during the Pliocene Epoch (three to four million years ago). Like much of the planet, this area was warmer and more humid, with annual rain fail of 20 inches. Studies of ancient pollen found in the sund and clay layers suggest that there were trees and grasslands which supported many creatures. Mastodons, camels, and horses existed alongside much smaller animals like shrews, turdles, and fish. Over 200 species of plants and animals have been exeavated from the cliffs. As they died they left their bones and pollen in the sediments.

From studying the fossils, scientists have determined that the climate changed, becoming cold and dry. The first ice age had arrived. Some animals adapted, some migrated, while others simply became extinct. Hagerman has one of the most prolific accumulation of fossils in the world from the Pliocene Epoch, and they tell a story of the consequences of a changing climate.

Proversion of the second

What About Our Impact? Humankind has not woven the web of life. We are but one thread within it. Whatever we do to the web, we do to ourselives. All things are bound together. All things connect.

ATIONAL PARK SERV

NEW PERSPECTIVES

490 The power and potential of citizen science for park bonding, advocacy, and stewardship

Philip Halliwell, Gillian Bowser, Sarah Whipple, Alia B. Smith, Maricela DeMirjyn, and Stefan Moss

- 497 A history of recent US World Heritage nominations *Phyllis Ellin*
- 505 Three landscapes: An excerpt from Olmsted and Yosemite: Civil War, Abolition, and the National Park Idea Rolf Diamant and Ethan Carr
- 516 Using the best available science: An excerpt from National Parks Forever: Fifty Years of Fighting and a Case for Independence Jonathan B. Jarvis and T. Destry Jarvis

ADVANCES IN RESEARCH AND MANAGEMENT

526 Recent protected area–Indigenous Peoples research articles in Canada and the USA: A meta-review Forrest Hisey, Chance Finegan, and Andrea Olive 540 Science and the evolving management of environmental hazards at Yosemite National Park *Jeffrey Jenkins*



THE PHOTOGRAPHER'S FRAME

556 National parks, highways, and climate change Gary E. Davis and Dorothy A. Davis



VERSE IN PLACE

568 Bread and Roses James Oppenheim