

Recreation Management & Human Valuation, the Fusion of Social and Ecological Science

International Urban Wildlife Conference

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Balancing Nature-based Recreation Experiences with Maintenance of Ecological Integrity

- Orange County – 3.2 million residents
- Demand for outdoor recreation is ever-present and increasing
- Equally important – Increasing need and desire for conservation of natural resources and preservation of rich natural heritage



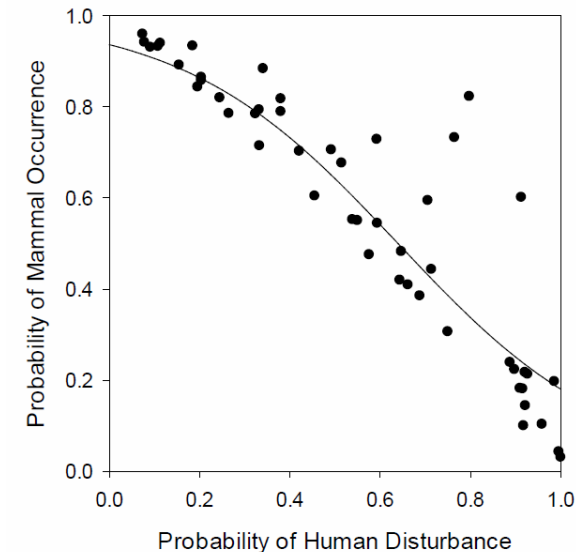
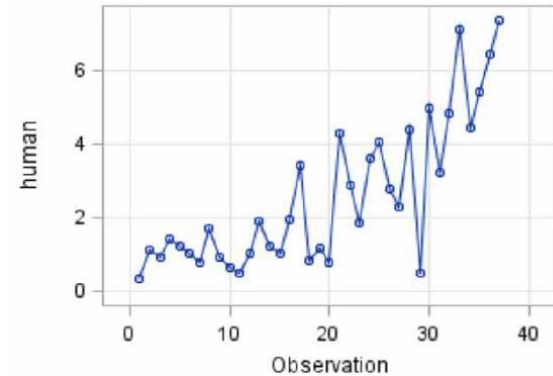
Balancing Nature-based Recreation Experiences with Maintenance of Ecological Integrity

- Once private ranchland is now public open space
- Lands owned and managed by State Parks, Department of Fish & Wildlife, cities, and County of Orange
- Set aside for protection of natural resources, demand for access and need to manage recreation is real



Balancing Nature-based Recreation Experiences with Maintenance of Ecological Integrity

- Marked increase in human-use of wildlands over the last ten years
- Temporal and spatial shifts by wildlife due to human presence
- Popular visitor sites can become locally degraded
- Trails can proliferate
- Conflicts between user groups can emerge



MANAGING OUTDOOR RECREATION

CASE STUDIES IN THE NATIONAL PARKS

Robert E. Manning and Laura E. Anderson



WILDLAND RECREATION

Ecology and Management, Third Edition

William E. Hammitt
David N. Cole
Christopher A. Monz

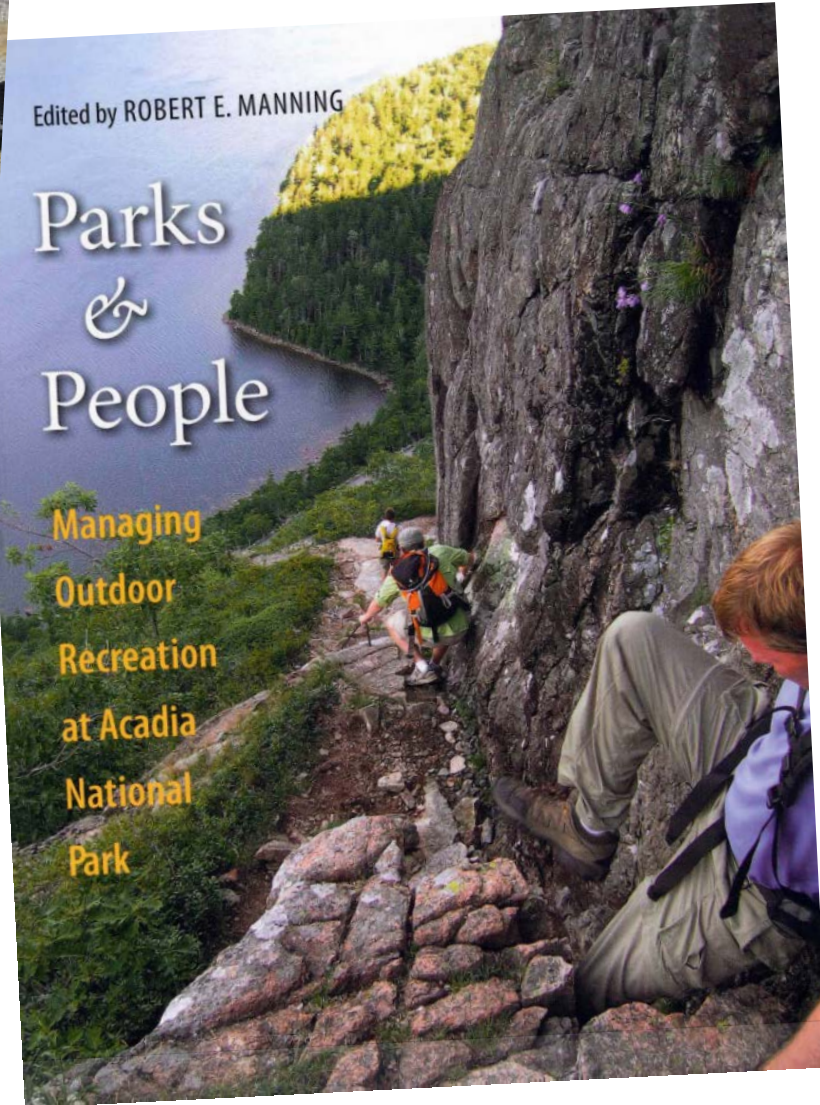


WILEY Blackwell

Edited by ROBERT E. MANNING

Parks & People

Managing
Outdoor
Recreation
at Acadia
National
Park



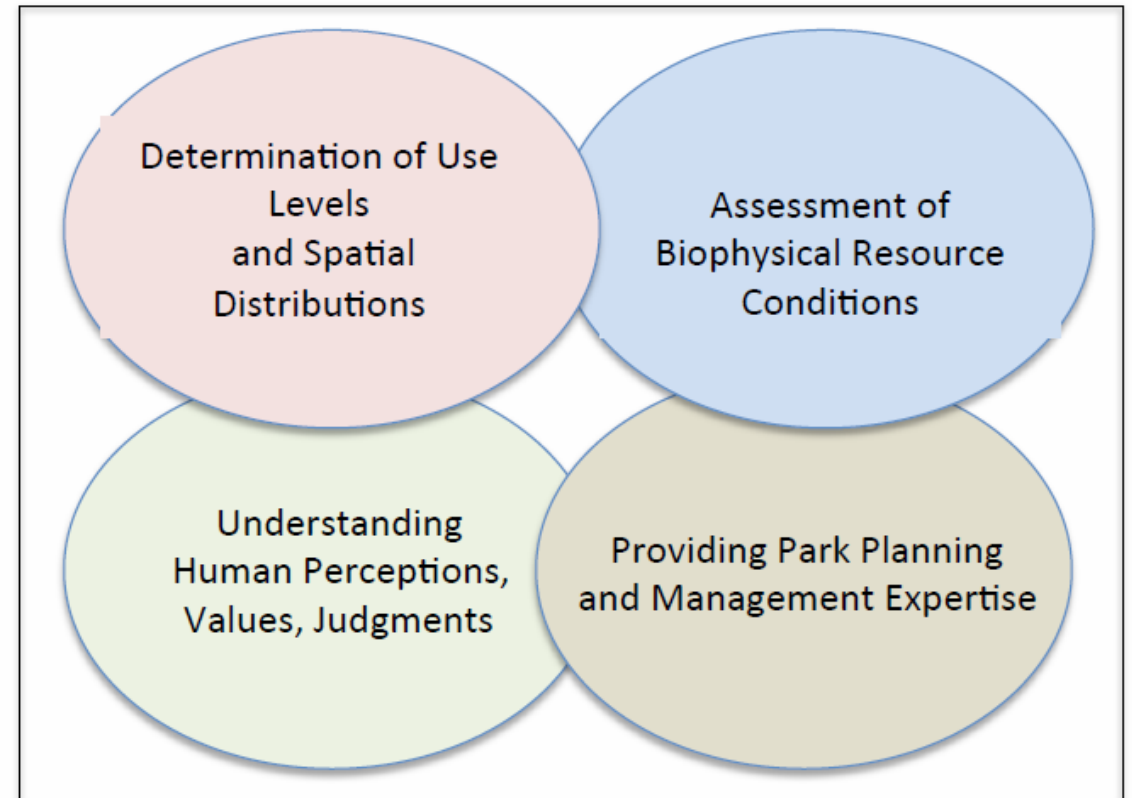
Resource Management Planning & Implementation Strategies

- Science for Parks, Parks for Science: The Next Century – March, 2015 at UC Berkeley
- Utah State University visited Orange County and met with partners in October, 2015
- Conducted phone interviews and reviewed available documents
- Participated in Science Integration Meeting in February, 2016



Resource Management Planning & Implementation Strategies

- Recreation Management Agreement with USU – January, 2017
- Four Focal Dimensions



Human-use Monitoring & Valuation

- Understand recreation use levels, types, intensity, spatial aspects
- Develop methodologies to monitor use levels and patterns over time
- Examine ecological aspects of use
- Understand human dimension of resource management, including human perceptions, characteristics, and motivations



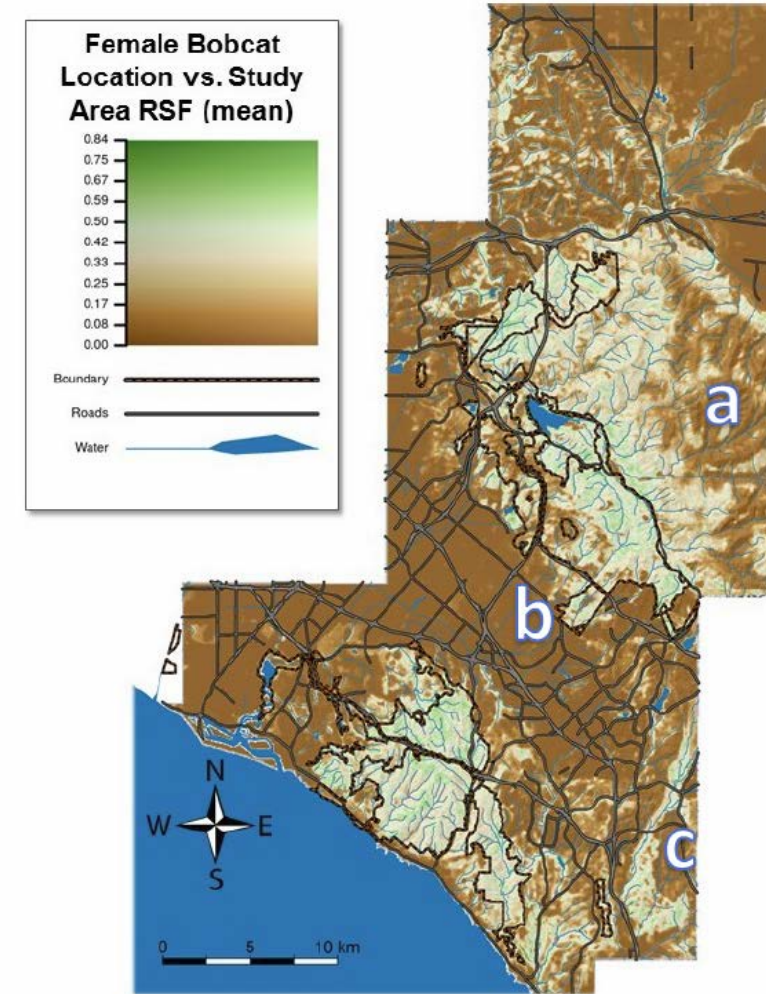
Thresholds Management

- Implement a planning process using base-line information
- Determine thresholds of acceptability of key indicators
- Assist in developing a range of possible management actions once thresholds have been exceeded



Core Area Management

- Define spatial extent of core areas
- Use an interdisciplinary process informed by biophysical assessments, thresholds of acceptability, and desired future conditions
- Expand core area concept to include areas of moderate and low intensities, restricted-use areas, and non-core areas of high intensity use



Trail Design & Use

- Envision a redesign of existing trail system
- Explore spatial and temporal separation of recreational uses
- Determine acceptability of key management strategies (establish block-out periods, limit expansion of use beyond established activity envelopes, enhance functional connectivity)



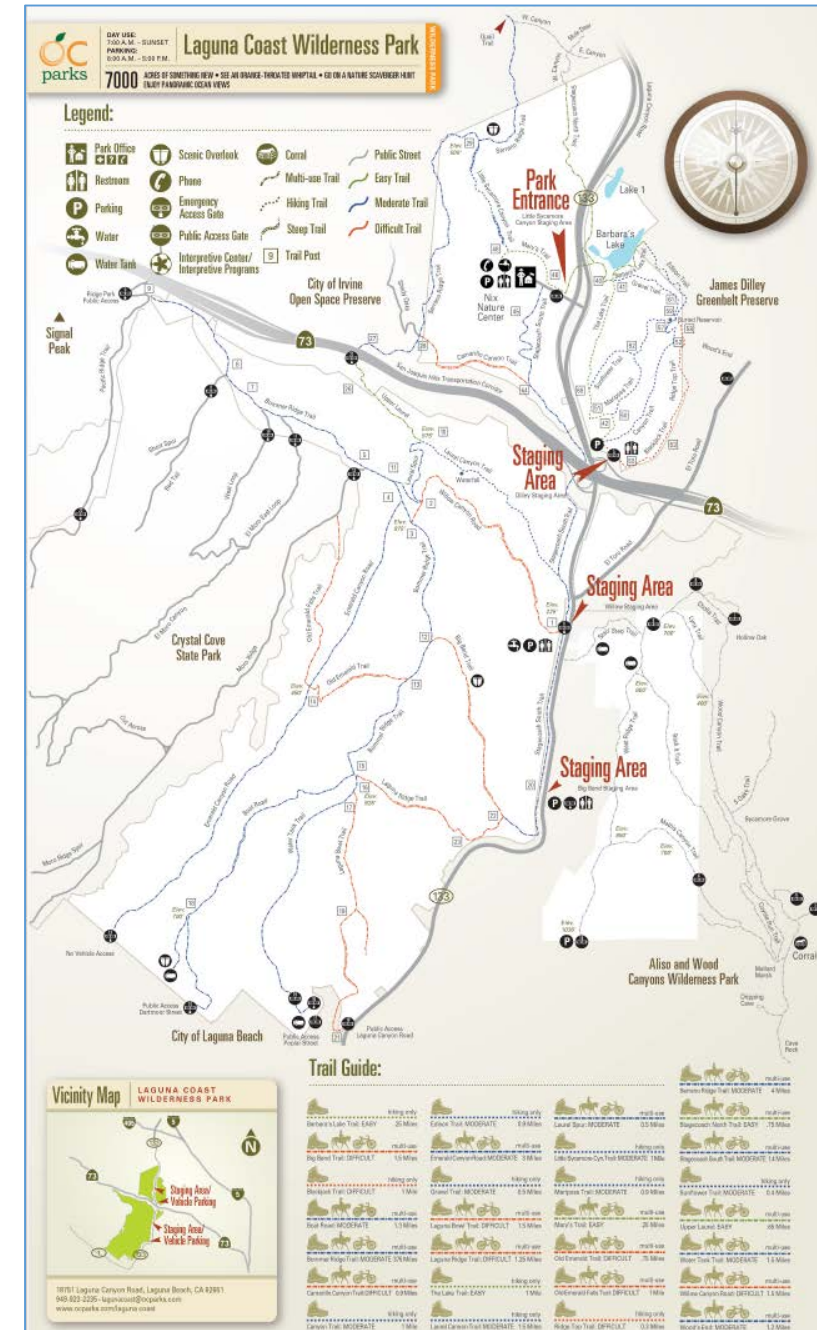
Spring 2017 Fieldwork – First Expression of the Project

- Questionnaire – 29 Questions (12 to 15 minutes)
- Intended destination today
- Parks visited regularly
- Knowledge of Nature Reserve of Orange County
- Compatibility of recreation with conservation
- Frequency (intensity) of participation in listed activities
- Reason for visiting and importance of listed experiences
- Importance of place attachment, dependence, identity
- Experience today
- Personal profile





- Eight high-priority field sites sampled during 24 days of fieldwork in May (2017)
- 673 surveys collected out of 923 solicited (73% response rate)
- 662 GPS collected out of 884 solicited (75% response rate)
- Only the beginning...





Coastal
Greenbelt
Authority



Thank You

