The National Parks: America’s Best Idea

Dr. Donelle Schwalm
Department of Biology
University of Maine-Farmington
Travel Courses at University of Maine-Farmington

- University of Maine-Farmington has a long history of study abroad programs, both short and long term.
- Course focus varies, but sustainability is a common component.
- This model can easily be to an “stateside” travel course.
- Why travel within the US?
  - Similar potential for personal challenge and growth – but less intimidating for first time travelers.
  - Cheaper? Well…sorta.
The National Parks: American’s Best Idea

- The National Park Service: a case study in historic, contemporary, and future sustainability
- Title is from a documentary by Ken Burns
The National Parks: American’s Best Idea

- The National Parks are captivating, ecologically diverse, and have a rich cultural history.
The National Parks: American’s Best Idea

- The National Parks also embody many of the challenges facing conservation today
Course Themes

- **Conserving species and ecosystems**
  - What role does the National Park System (NPS) have in conserving wildlife and their habitats?

- **Federal land use policies**
  - How does NPS policy differ from other public lands policies?
  - What are the conservation outcomes of these differences?

- **Balancing opposing stakeholder opinions**
  - What are some of the conflicting opinions surrounding the NPS and other public lands? How are they resolved?

- **Being a good citizen steward**
  - How can a visitor reduce their impact on public lands?
Course Schedule

- Scheduled immediately before fall semester
  - Allows students immediate access to summer break
  - Allows students to work for most of the summer

- Pre-trip planning and assignments
  - In person during spring semester, online during summer
  - Online delivery of readings and assignments

- Travel
  - Two weeks, 12 site visits

- Post-trip
  - Final assignment TBD – potentially, structured decision making exercise
Road Tripping Through America’s Natural Wonders

Locations

- Oregon Coast “National Park”
- Columbia River Gorge National Scenic Area
- Redwoods National Park
- Crater Lake National Park
- Malheur National Wildlife Refuge
- Steens Mountain Wilderness
- Craters of the Moon National Monument
- Minidoka National Historic Site
- Wallowa-Whitman National Forest
- Craters of the Moon National Park
- Yellowstone National Park
- Grand Teton National Park
- Mount Rainier National Park
- Steens Mountain Wilderness
Oregon Coast National Park: The Almost National Park
Themes and Questions

- **Conserving Species and Ecosystems**
  - What differences in the landscape and ecosystem would you predict seeing if a National Park had been established in this area?

- **Federal Land Policy**
  - Why do you think the proposal to establish Oregon Coast National Park failed?
  - What impact do you think a National Park would have had on the local economy?
Redwoods National Park: Federal and State Land in Tandem
Themes and Questions

- **Conserving species and ecosystems**
  - Review Roosevelt elk (*Cervus canadensis roosevelti*) restoration program
  - Microplastics in coastal areas (lab)

- **Federal land policies**
  - How do the National Park Service and the State of California cooperate to jointly manage this area?

- **Being a good citizen steward**
  - Begin Leave-No-Trace training
Yellowstone National Park: Conservation Yin & Yang
Themes and Questions

- Conserving species and ecosystems
  - Wolf reintroduction and trophic cascades
  - Yellowstone to Yukon initiative
  - Effect of increasing visitation
- Balancing opposing stakeholder opinions
  - Hunting wolves and grizzlies at the park boundaries
  - Culling the bison herd
  - The NPS water bottle ban
Yellowstone National Park: Conservation Yin & Yang

The howl and death of Yellowstone wolf 926F
A researcher's mission to document the wild records the song of a famous Yellowstone canine.

Jacob Job | ESSAY | Dec. 26, 2018 | From the print edition

Groups Challenge Law Allowing Wyoming To Stage Grizzly Bear Hunts
By Kurt Repanshek on February 21st, 2019

The science behind Yellowstone's bison cull
Some wildlife biologists say the cull makes sense — but not because bison can spread brucellosis.
Yellowstone National Park: Conservation Yin & Yang
Visitation at the National Parks: Loving Our Parks to Death?

The popularity of American national parks has increased dramatically; in 2016 alone, there were over 330m visits.

Source: National Park Service
Mount Rainier National Park
Pikas and Climate Change: Intro to Structured Decision Making
Themes and Questions

- **Conserving species and ecosystems**
  - Review of American fisher (*Pekania penanti*) reintroduction project
  - Cascade red fox (*Vulpes vulpes cascadensis*) scat surveys (lab)
  - Pika occupancy survey (lab)
  - White-nose syndrome and bats (lab)
  - Structured Decision Making (Final Project)
Malheur National Wildlife Refuge
The Bundy Takeover

Tyranny is cruel, unreasonable, arbitrary use of Power or Control

BLM Another Intrusive Tyranical Goverment Entity Doing What They Do Best
ABUSING POWER & Oppressing the Backbone of America

GO HOME BUNDYS!!
The Bundy Takeover
The Steens Mountain Wilderness
Public lands livestock grazing displaces native wildlife through forage competition.

www.westernwatersheds.org
Wild horse ecological damage

Wild and Free-Roaming Horses and Burros Act of 1971
Questions

- In a multi-use system, what “uses” are valued over others?
- What are the impacts of a multi-use land conservation approach on wildlife and ecosystems?
- What impact does land conservation have on local economies?
- How do we balance the interests of diverse stakeholders?
- When should we extract natural resources from public lands, if ever? Who should profit from this extraction?
Sustaining Natural Resources For Whom?
Budgeting: A Few Useful Tips

- Apply for an Academic Waiver to eliminate entrance fee costs
- Check with the motor pool of a nearby university for low-cost rental vans
- In most National Forests, you can camp anywhere that is not posted for free; you are not restricted to established campgrounds
- In National Parks, group campsites provide ~50% savings for groups >10
Is It Cheaper? Yes and No.

- Course fee and additional expenses: $2,375
- Cost is on the low end, but not “cheap”
Adaptation: Conservation in New England
Conservation in New England

- Similar focus, similar duration or shorter
- Conservation in student’s “back yard”
  - Maine, New Hampshire, Vermont, Massachusetts, New York
- Potentially – lower cost, due to reduced travel expense
Potential Locations are Endless!

- Acadia National Park, Adirondack National Park
- White Mountains National Forest
- Rachel Carson National Wildlife Refuge
- Cape Cod National Seashore
- Baxter State Park + Khatadin Woods and Waters National Monument
- The Nature Conservancy – Big Reed
- 100 Mile Wilderness
- Land trusts (ex. Kennebec Land Trust)
- Lake Champlain, Lake Winnipesaukee
Exploring Issues Close to Home

- Project Puffin seabird restoration
- American fisher and marten reintroduction
- Climate change, ticks and ‘ghost’ moose
- Climate change, rising sea levels, and salt marsh sparrows or shorebirds
- Forestry and fisheries – conservation, local economy
- Dam removal - Penobscot
- Energy corridor development
  - CMP Corridor, Northern Pass
- Ridgeline and offshore wind development
- Lake recreation, eutrophication
Partnership Outside of UMF

- Ideally, for this course we would bring together students from two (or more!) universities
- Contact me if you are interested in discussing further
  - Email: donelle.schwalm@maine.edu
What Students Should Gain From This Course

- In-situ learning about diverse natural ecosystems
- Engagement with real-world conservation research
- Understanding of conservation success stories and challenges in the National Parks
- Increased knowledge of public lands conservation policy, with emphasis on the National Parks
- Tools that increase their ability to “do no harm” when visiting public lands
Crater Lake National Park: Climate Change and the Cascades
Themes and Questions

- Conserving species and ecosystems
  - Review predicted impact of climate change on American pikas (*Ochotona princeps*)
  - Discuss forestry practices, climate change, and fire
  - Assist with white-nose syndrome monitoring in bats (lab)
  - Ponderosa Pine ecosystem – plant and wildlife ID (lab)
Columbia River Gorge National Scenic Area
Transporting fossil fuels on the Columbia River
Grand Teton National Park: Recreation in the NPS
Themes and Questions

- Conserving species and ecosystems
  - The American pika, round 2
- Balancing opposing stakeholder opinions
  - Hunting elk
  - 4-wheelin’ in the parks
  - Canoeing Jenny Lake
- Being a good citizen steward
  - Leave No Trace, continued
Craters of the Moon National Monument: Is it Getting Hot in Here?
Themes and Questions

- Conserving species and ecosystems
  - American pikas and climate change, round 3
  - Vegetation ID and temperature logging (lab)
- Being a good citizen steward
Minidoka National Historic Site: Lessons for Contemporary Times
Wallowa/Whitman National Forest