The National Parks: America's Best Idea

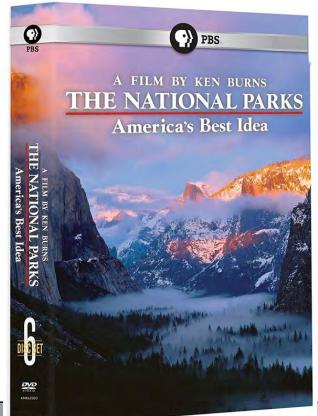
Dr. Donelle Schwalm Department of Biology University of Maine-Farmington

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



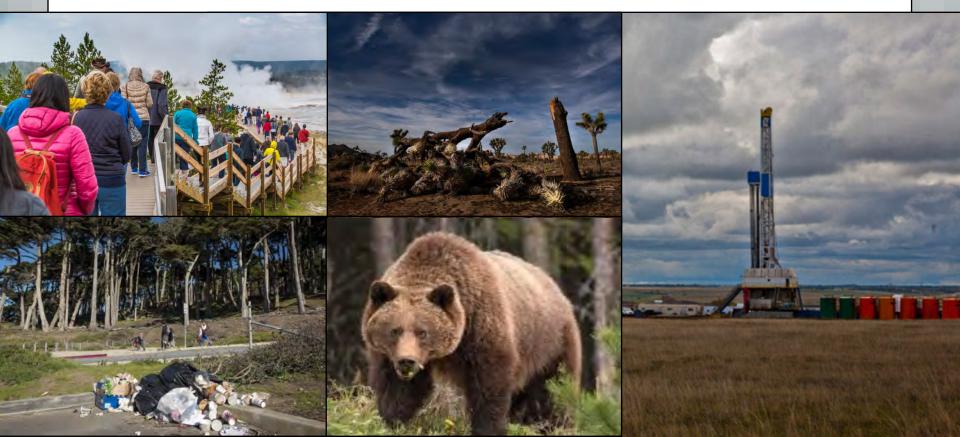
The National Parks: American's Best Idea

• 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

• <u>Conserving species and ecosystems</u>

• 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

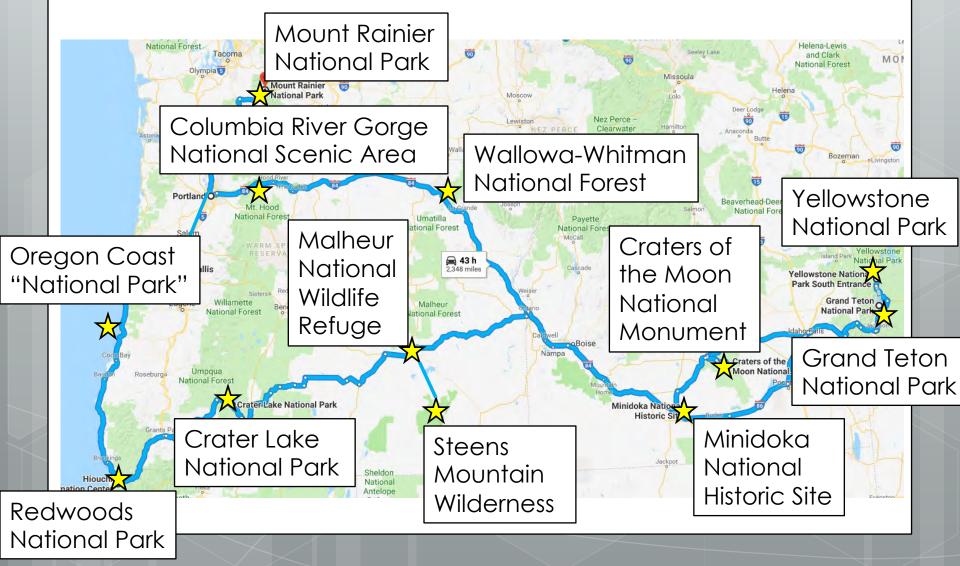
o Travel

• Two weeks, 12 site visits

• Post-trip

• Final assignment TBD – potentially, structured decision making exercise

Locations Road Tripping Through America's Natural Wonders



Oregon Coast

Oregon Coast National Park: The Almost National Park



Themes and Questions

• <u>Conserving Species and Ecosystems</u>

• 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

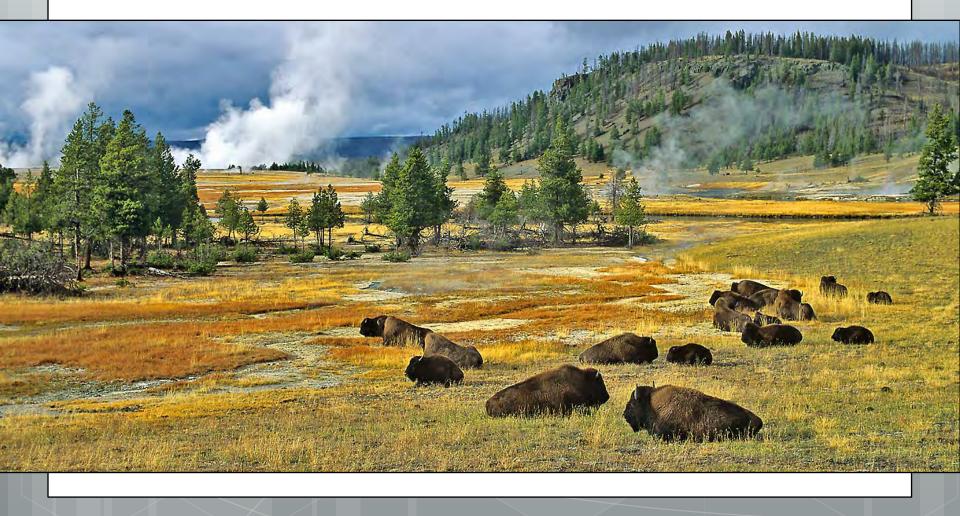


Themes and Questions

<u>Conserving species and ecosystems</u>

- Review Roosevelt elk (Cervus canadensis rooseveltii) 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?
- <u>Being a good citizen steward</u>
 - 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





926F, the alpha female of the Lamar Canyon Pack, stands at edge of the Lamar River during the winter of 2016.

Melissa DiNino

Groups Challenge Law Allowing Wyoming To Stage Grizzly Bear Hunts

By Kurt Repanshek on February 21st, 2019

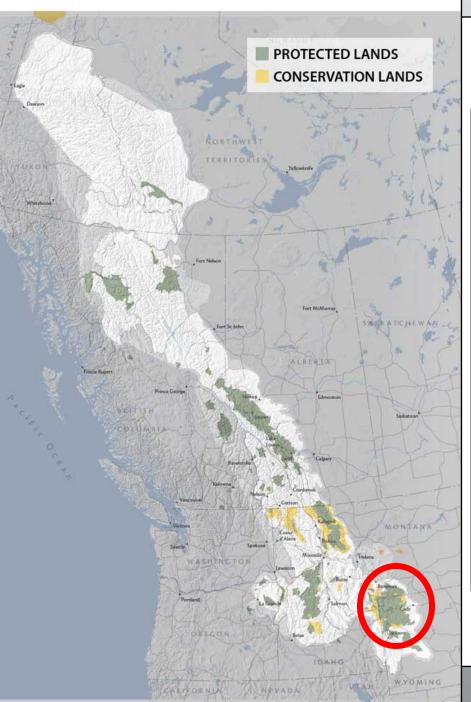
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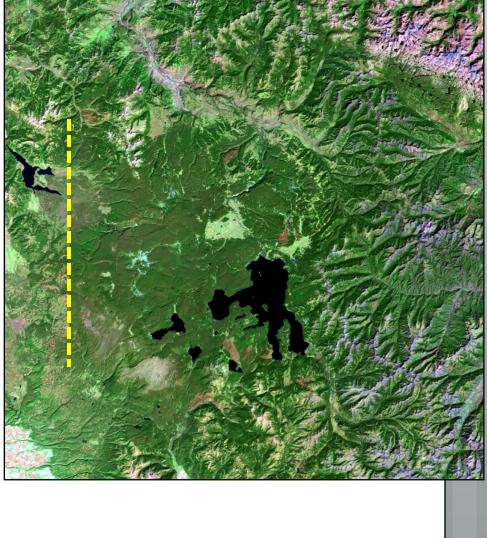


WILDLIFE

The science behind Yellowstone's bison cull

Some wildlife biologists say the cull makes sense — but not because bison can spread brucellosis.

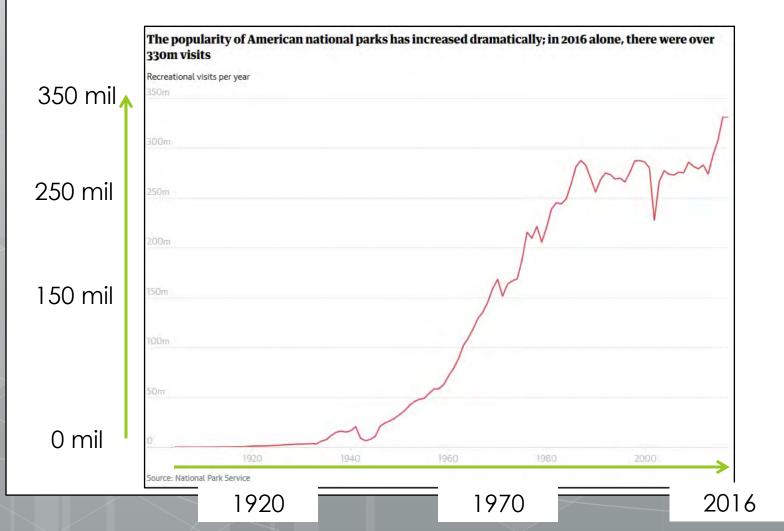




Yellowstone National Park: Conservation Yin & Yang



Visitation at the National Parks: Loving Our Parks to Death?



Mount Rainier National Park





Mount Rainier

Pikas and Climate Change: Intro to Structured Decision Making



Themes and Questions

• <u>Conserving species and ecosystems</u>

- 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)

The Side Trips: Exploring Alternative Models of Federal Land Conservation & The Controversies That Surround Them

Malheur National Wildlife Refuge



The Bundy Takeover



Tyr·an·ny 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

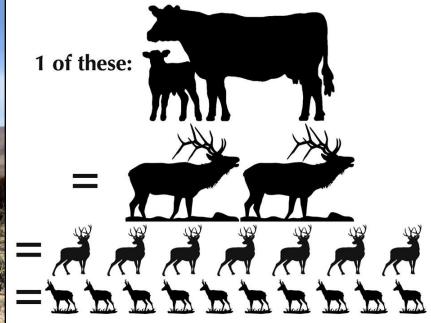
The Bundy Takeover

The Steens Mountain Wilderness









Public lands livestock grazing displaces native wildlife through forage competition.

www.westernwatersheds.org



STOP WILD HORSE ROUNDUS

APES THE BLA

Steens

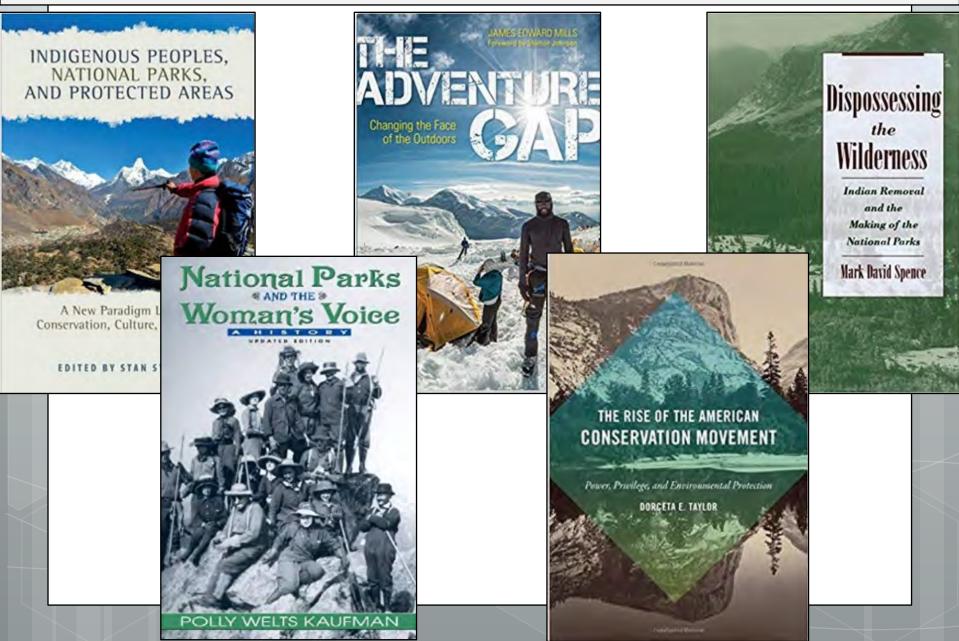
- Wild horse ecological damage
- Wild and Free-Roaming Horses and Burros Act of 1971



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?



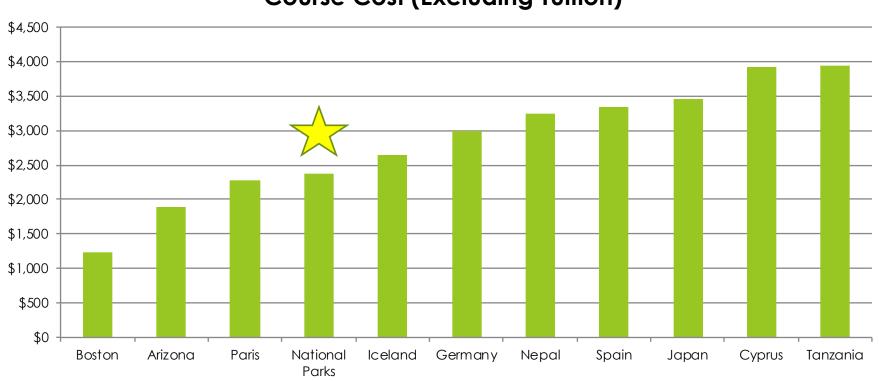
Organizing Details

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"



Course Cost (Excluding Tuition)

New England Course

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

Questions?

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

• <u>Conserving species and ecosystems</u>

- 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

Columbia River Gorge National Scenic Area





Transporting fossil fuels on the Columbia River





Grand Teton

Grand Teton National Park: Recreation in the NPS



Themes and Questions

<u>Conserving species and ecosystems</u>
The American pika, round 2
<u>Balancing opposing stakeholder opinions</u>
Hunting elk
4-wheelin' in the parks
Canoeing Jenny Lake
<u>Being a good citizen steward</u>
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

Minidoka National Historic Site: Lessons for Contemporary Times



Wallowa-Whitman

Wallowa/Whitman National Forest

