

Our National Parks as a Natural Resource

 Views from Canyonlands (left) and Arches (below) National Parks



## How do you define Resource?

- Your textbook defines a resource as the following "In economic terms, anything with potential use in creating wealth or giving satisfaction"
- Murck & Skinner (another intro book) basically define a resource as "useful things that we get from the Earth." pg. 470

- Resources. The total means available for economic and political development, such as mineral wealth,labor force, and armaments.
  - b. The total means available to a company for increasing production or profit, including plant, labor, and raw material; assets.
  - c. Such means considered individually

Limited Source? Potential Profitable?

# How do you define Resource?

- -Non-renewable resource
  - •"A resource that cannot be replenished on the scale of a human lifetime"
- The National Parks represent hundreds of unique geologic and ecological systems which took hundreds to hundreds of thousands of years to create. Once these areas are gone, there will be no replacing them. In 1998 the National Park System had 286,739,115 visitors! Obviously this has a significant impact on each of the parks.

# Birth of the National Park System

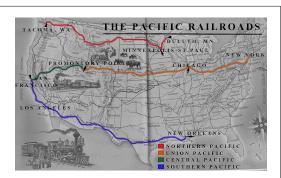


- Created by an Act of Congress on March 1, 1872, Yellowstone is the first and oldest national park in the world.
- What were the motivations behind its creation ?





the Central Pacific, to construct a transcontinental railroad.



The Northern Pacific acquired 47 million acres between Lake Superior and the Puget Sound to construct a railroad - now they needed to attract people to settle in the West



A noon meal in Ferdinand V. Hayden's camp Red Buttes, Wyo. Terr., August 24, 1871. Hayden sits at far end of table in dark jacket; W. H. Jackson stands at far right.

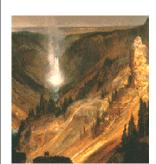


The U.S. Geological and Geophysical Survey of the Territories, conducted by Hayden in 1871, en route with pack train upon the trail between the Yellowstone and East Fork Rivers "showing the manner in which all parties traverse these wilds."



Essentially the only value of Yellowstone was as "public entertainment"

• Hayden's survey confirmed that Yellowstone was "worthless" - with no valuable mineral deposits, its timber erratic and poor quality and the terrain too steep and sparsely vegetated for grazing land.



- Painting of "The Grand Canyon of the Yellowstone" by Thomas Moran - a member of the 1871 Hayden Expedition
- Moran was sponsored by the Northern Pacific.
- His paintings were used to advertise the wonders of Yellowstone

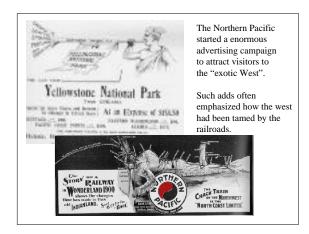


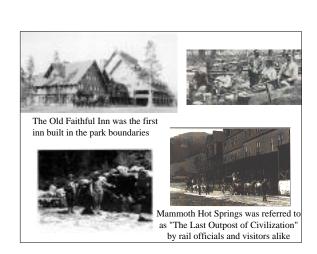
Neither Wyoming nor Montana was a State in 1872, when the Yellowstone bill was introduced to Congress. Congress was unwilling to assign management to either Territory, so it created a National Park and named Nathaniel Langford (brother-in-law to two of Northern Pacific's largest investors) as Park Superintendent.

With Langford in charge the Northern Pacific was allowed to build railroad hotels and visitor centers inside park boundaries.



 Buildings at Yellowstone were meant to rival those in the East for splendor and elegance while visitors experienced the natural beauty of the West







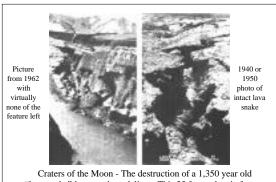


 The birth of the National Park System was also the birth of an ongoing conflict between the desires of tourists and the need to protect fragile ecosystems and rare or unique geologic systems

## The Sheriff's Posse Dash



Craters of the Moon National Monument (est. 1924)



Craters of the Moon - The destruction of a 1,350 year old "lava snake" by casual vandalism. This 35 foot volcanic feature was destroyed by souvenir seeking park visitors

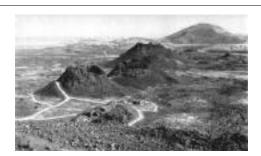
## Craters of the Moon



The Spatter Cones as they appeared in 1924



The Spatter Cones in the 1950 - notice all of the new trails



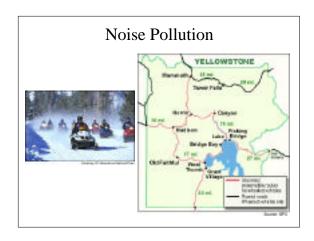
The Spatter Cones in the early 1970s undergoing trail maintenance

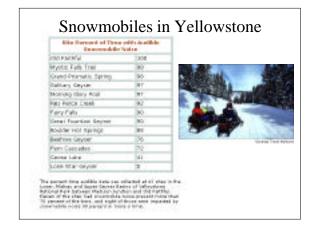


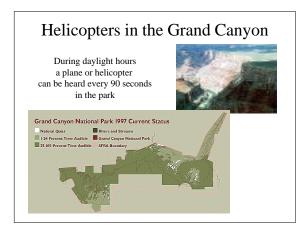
The Spatter Cones in the mid-1980s prior to remediation

# **Intangible Resources**

• There are several "resources" found in National Parks which may not be tangible, but are nevertheless of great importance to preserve









• Economically inappropriate exterior lighting costs the US \$1.5 billion annually using the conservative estimate that 30% of all exterior lights are directed upwards

# Light Pollution ?



 An unobstructed view of the night sky is one of the most common reasons for people to visit a national park - only 10% of Americans now see the night sky in its natural state.

## Effect on Nature ...



 Newly hatched sea turtles that instinctively home in on the starlight reflected off the ocean instead wander onshore to die, confused by the beach lighting.



- In Hawaii, an endangered bird, the dark-rumped petrel is fatally attracted to streetlights
- Bright lights disrupt the circadian rhythms of trees causing them to drop their leaves too late in the year
- As many as 100 million birds may die each year as a result of nighttime collisions with lighted buildings

### Natural Resources vs. Nature



What about all those tangible resources locked in the parks?

### Timber



Many people assume our National Forests are off-limits to logging. They aren't. Not only is commercial logging allowed, it's being subsidized by taxpayers at a huge loss. From 1992 to 1997, the General Accounting Office said taxpayers lost \$2 billion on the Forest Service logging program. More than 440,000 miles of roads now scar our National Forests; the overwhelming majority of those roads were built for the logging industry and paid for by the American taxpayer.

Only 4% of America's old growth forests are still standing, 75 % them are within National Forest borders.



- The General Grant Tree from Redwood National Park in California
- Coast redwood (Sequoia sempervirens) finds a last stronghold in these state and national park enclaves along the northern California coast, from the Monterey vicinity into southern Oregon. Redwoods are an important component of old growth forests. These trees are world renowned for their great height

## Geothermal Energy?



• Tourists at Old Faithful circa. 1886

- Yellowstone's geothermal features are part of a complex hydrothermal network that extends well beyond the parks boundaries
- A major threat to Yellowstone has come from proposals for geothermal lease applications for sites outside the park, some less than 2 miles away





