

MAN AND BIOSPHERE NATURAL RESOURCE ATLAS  
FOR YELLOWSTONE NATIONAL PARK

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Objectives

Baseline information on the status of natural resources, past and present, is a vital ingredient in the decision-making process for natural resource management and in the planning, design and conduct of natural resource research. As a designated Biosphere Reserve in the International Man and Biosphere program (Franklin, 1977), there is a need for baseline information on Yellowstone to be organized into a single, readily available reference source for accurate and rapid assimilation by Park managers and researchers. Consequently, the objectives of this project are:

1. To develop uniform scale overlays of the status of the past and present natural resources of Yellowstone National Park;
2. To develop tabular and/or narrative material where necessary to supplement the map overlays; and
3. To identify weak, incomplete or missing resource data and discuss the potential for upgrading the quality and quantity of that data.

Procedures

Natural resource data were collected from Park files, reports, library and archive documents and personal interviews with Park personnel. Where practical, those data were placed on overlays of a standard base map (scale 1:125000) of Yellowstone National Park. To facilitate handling, the base map was divided into two equal north and south sections. Sources of each data set are identified in a reference supplement. The design of the format and nature of the preparation of the entire data set strives for an easy, fast and reliable integration of natural resource information for park resource managers and researchers. Project research began on June 1, 1978 and will terminate on June 30, 1979.

Results

Table 1 contains a summary of the map overlay data gathered. Tabular and narrative information for many of the items in Table 1 include greater detail, i.e., dates of establishment or changes; kinds of data collected

by stations or projects; dates of data collection; sources of data information; floral and faunal species lists; aerial photographic coverage by type, year and availability; etc.

### Discussion

Production of the foregoing information into a working publication is being planned with the assistance of Neal J. Reid, Chief Scientist, National Park Service, Rocky Mountain Region. Hopefully that task will be completed by mid-summer of 1979. Continued up-dating of the working document will be necessary to maintain its usefulness.

### Acknowledgments

Many Yellowstone National Park personnel contributed information to this project. Their invaluable assistance made this investigation possible. The collection and preparation of the atlas data have been supported and facilitated in various ways by the National Park Service and the University of Wyoming.

### Literature Cited

Franklin, J. F. 1977. The biosphere reserve program in the United States. *Science* 195: 262-267.

Table 1. Yellowstone National Park historical and current natural resource information displayed on map overlays.

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I. Administrative and Service Facilities	
1. Residential areas	9. Dumps
2. Roads	10. Incinerators
3. Ranger Stations	11. Compactor Sites
4. Backcountry Cabins	12. Traffic Counters
5. Fire Lookouts	13. Climate Stations
6. Horse Corrals and Barns	14. Snow Courses
7. Gravel Pits and Crusher Sites	15. C.C.C. Camps
8. Road Camps	16. Plane Wrecks
	17. Snow Stakes
II. Communication and Utility Systems	
1. Repeater Stations	4. Power Substations
2. Telephone Repeaters	5. Power Lines
3. Radio Antennas	6. Telephone Lines
III. Public Facilities	
1. Trails	7. Public Auto Camps (old)
2. Boat Ramps and Marinas	8. Bath Houses
3. Campgrounds	9. Swimming Pools
4. Tent Camps	10. Ski Areas
5. Old Hotels (not in presently developed areas)	11. Horse Corrals
6. Lunch Stations	12. Big Game Shows
	13. Picnic Areas
IV. Flora, Fauna and Substrate	
1. Grizzly Bear - density and sightings	
2. Black Bears - density and sightings	
3. Bison - winter and summer ranges by herd	
4. Elk - winter and summer ranges by herd	
5. Pronghorn	
6. Cougar - tracks and sightings	
7. Wolverine - tracks and sightings	
8. Wolves - tracks and sightings	
9. Bald Eagle and Osprey Nest Sites	
10. Fisheries and Waters	
a. Cutthroat trout	g. Mountain whitefish
b. Grayling	h. Fish egg collection stations
c. Brook trout	i. Fish hatcheries
d. Rainbow trout	j. Rearing ponds
e. Brown trout	k. Gaging stations
f. Lake trout	

Table 1 (Continued)

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11. Vegetation Types
12. Range Plots
13. Vegetation Volume Plots
14. Browse Plots
15. Range Enclosures
16. Vegetation Transects
17. Forested Areas
18. Geologic Formation
19. Soil Types

V. Landscape Alterations

1. Foundations of Homes and Ranches
2. Roads, Bridges and Railroads
3. Relating to Maintenance Work
4. Structures Used by the Public
5. Structures Used by Park Personnel
6. Miscellaneous

VI. Environmental Land Units With Impacts or Potential Impacts

1. Air Quality
  2. Erosion Hazard
  3. Water Pollution Potential
  4. Mass Earth Movement
  5. Susceptability to Noise
  6. Thermal Areas
  7. Earthquake Faults
  8. Natural Pollutants
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