

**THE CHANGING AMERICAN CONCEPTION OF THE WILDERNESS
AS EVIDENCED IN THE DEVELOPMENT OF THE NATIONAL PARK SYSTEM**

by

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Thesis submitted to the Faculty of the
Virginia Polytechnic Institute and State University
in partial fulfillment of the requirements for the degree of
Master of Landscape Architecture
in
Architecture and Urban Studies

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March, 1986

Blacksburg, Virginia

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(ABSTRACT)

Throughout the development of our country attitudes toward wilderness have gradually evolved, reflecting ever changing values and concerns. While colonial man viewed wilderness with fear and distaste and believed the worth of such areas was solely dependent on the economic value of its resources, his modern counterpart has begun to realize that the absolute preservation of wilderness is desirable and necessary in order to protect important inspirational, educational and ecological values generated from these lands.

It follows that the federal agency we consider to be one of the largest holders of wilderness lands - the National Park Service - has not always employed wilderness preservation as a major criterion for national park establishment. The intent of this thesis is, thus, to trace the evolution of national attitudes toward wilderness through an examination of the development of the national park system, focusing on the types of parks created in different periods of time and the rationale used to justify park establishment.

In this investigation the national park system was divided into five peak periods of establishment. Two parks were then selected from each period for examination as representative case studies. It was found that the parks of each period tended to possess similar physical characteristics, featured objects of preservation and rationale for inclusion into the system. As the park system developed a gradual broadening of concerns was apparent. With the introduction of new rationale and featured objects of preservation from peak to peak, rarely were previous

concerns displaced entirely. Thus, the overall development of the park system can be interpreted as an additive process, resulting in the representation of an entire spectrum of environmental concerns by the fifth period of park establishment.

Acknowledgements

It is difficult to adequately express gratitude to all those who contributed to my education throughout the years. But to those who hold my deepest admiration and respect - my family, friends and teachers - your wisdom, support, concern and patience means more to me than you will ever know. Many thanks to all of you.

In particular, I would like to thank my committee members Dean Bork, John Randolph and Mike Bircher for their advice, astute observations and valuable guidance. A special thanks is also due to Whit Watts for his editorial, analytical and graphic recommendations throughout the course of this project. Without his valuable feedback and support, this thesis may have gone on another ten years...

Finally, I would like to express my deepest thanks to my family and friends - you are the ones that made it all worthwhile.

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RESEARCH QUESTION

INTRODUCTION

The United States has set aside approximately two hundred national parks and monuments for public use and enjoyment. The establishment of these parks has been based on a variety of reasons, ranging from scenic to scientific, historical, recreational and ecological sensibilities, which have changed as man's perception of the environment has changed throughout time.

Our first national park, Yellowstone was created in 1872 because, according to Shepard (1967), its scenic character reflected the popular aesthetic of the day - the pastoral English Landscape Garden. The undeveloped wilderness area of Yellowstone reminded its early explorers more of a humanized, domesticated landscape than of a wild untameable area, such as the term wilderness generally implies. Yellowstone was seen as both a natural wonder and a picturesque monument, as Paul Shepard (1967) pointed out.

However, as new values emerged the reasons for the establishment of new national parks shifted. Since 1916, four-fifths of the National Park Service's holdings have been added and a large percentage of these newer parks failed to meet the earlier criteria of appearing domesticated, improved or picturesque. As leisure time and travel capabilities of Americans increased, along with the growing desire for recreational opportunities, more and more national parks were created to meet this recreational demand. In a similar fashion, the environmental movement of the 1950s and 1960s led to the preservation of several wilderness areas within national parks and forests, based on unique ecological or biological conditions. The 1980 addition of seven expansive new Alaskan national parks presents evidence of this changed sentiment.

As new attitudes and values emerged, many national parks lost the original intentions for their creation and began to adopt new management philosophies to satisfy the more current user

demands and desires. It is in this sense that many problems have arisen. As the demand for recreational activities increased, many national parks attempted to enhance the "playground atmosphere" by providing diversions for the masses who flock to the parks through the inclusion of swimming pools, gift shops, golf courses and lodges (Shepard, 1967). These additional facilities were successful in both attracting numerous tourists to the parks and in contributing to the overuse and destruction of the natural resources.

PURPOSE

The national park system gradually evolved over the past 100 years, resulting in a comprehensive system of diverse areas, which appeal to a large segment of the American population. Similarly, attitudes toward the wilderness also evolved, reflecting different values and concerns at different periods of time. The purpose of this thesis is, thus, twofold: firstly to develop a clear understanding of the changes that have developed in America's national attitude toward the wilderness from the 1600s to the present; and secondly to examine the extent to which the role of these national attitudes influenced the selection of lands for national park status.

The hypothesis of the thesis states that the national park system can be divided into peak periods of establishment which reflect the evolving attitudes toward wilderness. In addition, it is hypothesized that the parks created during each period possess similar characteristics, qualities, and reasons for inclusion into the system. Thus, an indication of the attitudes toward wilderness during different time periods can be derived from examining the types of parks created as well as the rationale for establishment.

The national attitudes toward wilderness will be examined over a continuum so that specific periods of change can be identified. In addition, two national parks will be selected from each peak period to study in detail as case studies in the research of the hypothesis. In order to fully understand the role of national attitudes in the development of the national park system, an examination must also be made of the role of other factors, such as political or economic, that influenced national park designation. Through this examination, the influence of the various factors can be compared and the overriding factor or factors in park selection can be identified.

SUBSIDIARY RESEARCH QUESTIONS

Several subsidiary questions were investigated in order to contribute significant information to the central hypothesis. A list and brief discussion of the subsidiary questions follows:

1. How is the national attitude toward wilderness reflected in the everyday language of the time? The way in which people speak about the environment can be very indicative of their attitudes. Therefore, a portion of this thesis will be devoted to an examination of the generative metaphors and phraseology used in the documents, such as the Committee Hearings, legislative reports, and related literature to describe the prevailing perception of wilderness.
2. What common characteristics can be identified among the diverse types of national parks that exist today? Can a common thread or link between all these parks be identified or does a prevalent overriding reason for park creation exist?

3. What time lags or overlaps can be identified in the national attitude toward wilderness and how are these time lags accommodated for in the creation of new national parks, if at all?
4. What specific groups or individuals were instrumental in the establishment of the specific national parks to be examined? How influential are special interest groups in the establishment process and do specific groups tend to dominate the discussions for the majority of potential parklands that are under consideration for national park status?
5. How important are factors other than environmental concerns, i.e. political and economic considerations, in the creation of our national parks?
6. What conclusions can be drawn from this historical investigation that can lend significance and applicability to the research findings?

METHODOLOGY

The type of information utilized in this thesis was accumulated through an historical investigation of the changes that have evolved in American's attitudes toward the wilderness from the 1600s to the present. This investigation was applied to the National Park System through a cursory examination of the entire park system coupled with an in-depth study of ten national parks. Five peak periods in the designation of land for national park status were identified. Two parks were selected from each of the five peak periods. The specific national parks selected for study include:

Peak I: Yellowstone (1872) and Yosemite (1890)

Peak II: Crater Lake (1902) and Mesa Verde (1906)

Peak III: Rocky Mountain (1915) and Acadia (1919)

Peak IV: Great Smoky Mountains (1934) and Everglades (1934)

Peak V: Voyageurs (1975) and Gates of the Arctic (1980).

These parks were selected for study because they were created for different reasons, in different time periods, in different geographic locations, and thus represent a range in the philosophical perspectives of the National Park Service.

Sources of Information

An indication of the evolving national attitude toward wilderness was provided through an extensive literature review of current periodicals and publications, as well as original documents such as the Committee Hearings for park establishment, congressional documents and reports, and popular literature of the times. The Committee Hearings and legislative documents for each of the ten national parks were used to determine the background, arguments for and against establishment, the instrumental actors in the legislation, and the role of factors, other than the prevalent national attitudes, that influenced park establishment.

OUTLINE OF THE THESIS

This first chapter is designed to provide an introduction to the research problem and the methodology to be utilized. A brief outline of subsequent chapters follows.

CHAPTER 2 - BACKGROUND

Historical discussion of the changing concept of wilderness and of the development of the national park system.

1. European background
2. Changing attitudes in America
3. History of the National Park Service
 - Factors that influenced park preservation
 - Natural resource management philosophies toward preservation
 - Origin of the national park idea

CHAPTER 3 - DEVELOPMENT OF THE NATIONAL PARK SYSTEM

Discussion of the research findings, including an explanation of the manner in which the national attitudes toward the wilderness and the types of national parks evolved over time.

1. PEAK I: Discussion of Yellowstone and Yosemite
2. PEAK II: Discussion of Crater Lake and Mesa Verde
3. PEAK III: Discussion of Rocky Mountain and Acadia
4. PEAK IV: Discussion of Great Smoky Mountains and Everglades
5. PEAK V: Discussion of Voyageurs and Gates of the Arctic

CHAPTER 4 - ANALYSIS/CONCLUSION

1. Analysis of the trends that have developed over time in the national attitude toward wilderness and how these trends are reflected in the development of the national park system
2. Development of a time scale along which the trends could be plotted
3. Analysis and comparison of the research findings from the committee hearings and legislative documents of the selected national parks to identify any commonalities or important dissimilarities
4. Identification of important time lags or overlaps in the trends and discussion of how these phenomena influenced the policies of the National Park System, if at all
5. Identification of possible future trends in both the national attitude and the National Park Service

BACKGROUND

INTRODUCTION

It is the intent of this chapter to provide an historical background of both the changing concept of wilderness and the development of the national park system. In order to reveal the progression of attitudes that led to the era of national park establishment, the following discussion was divided into three major sections:

1. European Background
2. Changing Attitudes of Americans (1600 - 1900)
3. History of National Park Development

A discussion of the changing European attitudes toward wilderness was included for several reasons. First of all, European attitudes formed a basis for the appreciation for wild nature that later developed in America, especially in the years of American development from 1600-1900. Secondly, it is often said that history tends to repeat itself. Through the following discussion it will be shown that this cyclical nature is clearly evident, although older concepts were frequently altered or "modernized" to better fit the current times. For example, many of the attitudes predominant during the Greek and Roman empires were later revived in the Renaissance, and were later still incorporated into the aesthetic system of the Romantic Movement in both Europe and the United States. Similarly, several Medieval notions were transformed into 17th Century attitudes of distaste for wild nature. A final purpose of this discussion is to provide an indication of the relatively short amount of time our present attitudes have existed in comparison with the total framework of known civilization. However, one overriding observation can be derived from these centuries of changing thought: As civilization became more advanced and secure in its own setting, wilder aspects of nature were

often viewed as less foreboding, and were instead seen as stimulating, challenging, sublime, beautiful or even inspirational.

EUROPEAN BACKGROUND

In order to trace the origins of the appreciation of wild scenery in America, it is helpful to go back in time and examine the attitudes of our ancestors. While it is commonly held that Rousseau and the leaders of the English Romantic Movement were the first to develop a genuine love of wild nature, feelings of admiration for the beauties of nature have existed since the beginning of civilization. However, for the better part of man's existence truly wild scenery, consisting of mountains, oceans, forest, desert or other areas untouched by man, has been interpreted as being without utility for man. Admiration of such scenery was often described as "unsociable" and "luxurious", since it tended to draw man away from others and from the useful arts of life (Ellis, 1909).

Antiquity

The ancient Greeks and Romans upheld a profound feeling for the beauties of nature, but their appreciation was limited to gentle and orderly landscapes, rather than to the wilder aspects of nature. They had a particular fondness for meadows, shady groves and fountains. Thus, the landscape beauty that most appealed to the classical mind was "easy and luxuriant, pleasant to all senses, and good to rest in". Mountains and deep forests were often described as "being infested by wild beasts and [were] places of horror that had better be avoided" (Ellis, 1909 p 182). Although mountains were not considered beautiful to the Greeks, their highest

mountain, Olympus, possessed religious sacredness as it was the home of their gods. The religion of the Greeks tended to reinforce ties to nature, since the gods they worshipped were embodiments of nature. This taught man to think of himself as part of nature and live in accord with nature's laws (Krutch, 1961).

The later Romans exhibited a stronger appreciation for the wilder aspects of nature. As the civilization advanced and as man began craving new and stronger stimulation, wild nature lost something of its horror and became even agreeable. Nero, emperor of Rome (54-68 AD) chose the semi alpine site of Subiaco, "the wildest spot near Rome" for his summer palace (Ellis, 1909 p 183).

Medieval Period (500-1500 AD)

During the Middle Ages wilderness was believed to be sinful and the home of demons, while the most admired aspects of nature continued to be those which had been tamed by man (Brooks, 1960). Although walled cloister gardens were very common during this period, these gardens were appreciated for their productive capacities, and rarely did an admiration of the environment extend beyond these walls.

The tradition of associating wild mountains with religion continued during this period as well. Many of the churches and monasteries, such as Monte Cassino and Chamonix, were built upon sites that would be considered today as containing very impressive wild mountain scenery. However, beauty was not the criteria for medieval man. Such spots were reserved for the church because they were too remote, inaccessible or unproductive to be of much use for others. Since the demand for this land was very low, the church could purchase the property at a negligible price. Although such remote spots were ideal for the continuous worship of the contemplative orders, the contemporaries of monks were astonished at the

courage of those who "dared to penetrate such horrible wilderness, infested by wild beasts and far from the haunts of men" (Ellis, 1909).

Religion was so ingrained and integral to the lives of medieval men that the Bible was relied upon as the primary source of inspiration and interpretation of the world. The earth was seen as God's creation and, therefore, it must reveal His nature. It was believed that nature was present for man's instruction. Thus, as William Mills points out in "Metaphorical Visions: Changes in Western Attitudes to the Environment" (1976),

it came to be believed that God had bequeathed not one but two books to mankind: the book of scriptures and the book of nature, both of which had to be read in order to come to a true knowledge of Him.

However, to respond to the beauties of nature in a purely sensual fashion was to be condemned. Man could enjoy nature, but never to the degree as to render him oblivious of its true purpose (Mills, 1976).

Renaissance (1300-1600)

The Renaissance brought a shift in the attitude toward nature, although the shift was not revolutionary. This period ushered in a revival of the classical enjoyment of nature. While the primary attraction still focused on "tamed" landscapes, a new and adventurous love of mountains and "wild" scenery was also developing (Brooks, 1960; Ellis, 1909). It has been said that the 14th century Italian scholar Petrarch was the first man who ever confessed to climbing a mountain just for the sake of the view (Krutch, 1961). For the Swiss, the Renaissance brought about an enthusiastic admiration for the Alps, strengthened by their patriotism and familiarity with the area. But for most travellers, the Alps still remained a scene of "unmitigated horror, which no one could approach for the sake of pleasure." (Ellis, 1909)

Man's orientation to the world also shifted during the Renaissance. The metaphorical image evoked by the times utilized humanity as its model. People of the Renaissance possessed a

self-centered view of the world, in which man was believed to be an essential part of the world and, inversely, the world was an essential part of man. Men and women were seen as images of the cosmos. Human structure was mirrored in that of the earth and human changes were echoed in the changes of the earth. The cosmos was seen as one animate body, possessing human characteristics such as: life, a soul, stages of infancy, youth, maturation, skin, a heart, veins, arteries, etc. Much of the language we still use speaks of metaphors that originated during the Renaissance, such as mountains possessing "brows", "shoulders", and "feet", and rivers having "heads", flowing through gorges into "mouths". We also refer to a "neck" of land, an "arm" of the sea, a "vein" of mineral ore and the "bowels" of the earth (Mills, 1976).

Seventeenth Century

In the 1600s, as the colonies were being founded in America, wilderness again became distasteful and was considered a servant or enemy (Brooks, 1960). As the industrial age was being ushered in in Europe, man's thinking became geared to the workings of machines. Man attempted to interpret the complex world in terms of his most advanced inventions. The attitude toward the environment gradually became one of analysis and dissection, asking not only how it works, but also how such mechanisms may be controlled for human ends (Mills, 1976). Through this viewpoint nature was deprived of its divine aura and became an instrument available for use and exploitation. This metaphor reflected the desire for control and manipulation of the environment, as man now sought to be the "lord and possessor" of the world. In the past, mankind had always sought some sense of control over his environment, but to the industrial age man, this concern was brought to the forefront of his thought (Mills, 1976).

The rise and expansion of geometry and mathematical studies during the late 17th century reinforced the appreciation of regimented order, which was reflected in the love of orderly, symmetrical gardens and the distaste for disorderly confused nature (Ellis, 1909). This type

of landscape was particularly evident in the French gardens such as Versailles, but was also incorporated into English estates, Italian villas, and was later an important component of the gardens of 18th century American colonists.

Romantic Period (1700-1850)

The writings of Addison in the early 18th century represent a state of transition in the attitudes toward wilderness. Although wild nature was still commonly viewed as intrinsically ugly and a cultivated environment, consisting of gentle meadows, orchards, lawns and springs, was preferred, Addison managed to arouse some agreeable emotions to wild nature. In his unprecedented *Remarks on Several Parts of Italy, etc.* published in 1705, Addison revealed an admiration for the beauties of **natural disorder** (Ellis, 1909). However, many other writers of the day were more reserved in their admiration for nature. Andrew Marshall, a contemporary of Addison, wrote ecstatically about gardens and shade, but he described mountains as "ill designed excrescences that deform the earth and frighten heaven " (Brooks, 1960).

A more genuine and romantic admiration of wild scenery developed in the mid 1700s, spurred by the writings of Jean Jacques Rousseau (1712-1778). Through his writings the old patterns of thought were finally broken and a new revolution in man's attitudes toward the environment was initiated. Rousseau wrote of nature in ecstatic terms, "rhapsodizing and swooning" at everything outdoors, from sunrises to precipices (Brooks, 1960).

The Romantic Revival Movement followed Rousseau's impetus, and was led by the English poets Byron, Wordsworth and Shelly. These poets proclaimed a new gospel of nature, espousing a passionate and romantic love of wild scenery, sharply differentiated from the feeling for nature of earlier years (Wooley, 1898). Consequently, the old habit of speaking of moun-

tains and wild nature as "hideous" was replaced by the new convention of referring to them as "romantic" (Ellis, 1909).

This difference can be clearly seen in descriptions of the Swiss Alps. In 1621 one Welshman described the Alps as:

high and hideous...uncouth, huge monstrous excrescences of nature [unlike] our mountains in Wales, which bear always something useful to man or beast, some grass at least. (Ellis, 1909)

In contrast, during the late 1700s, the Alps were consistently described as "sublime" and "beautiful". By this time life had become relatively secure and men were increasingly finding the previously terrifying spectacle of nature's grandeur "thrillingly beautiful", "sublime" or "picturesque". Men were beginning to exclaim over thunderstorms, raging seas and icy peaks, or over whatever seemed grander and less comfortable than their own gardens (Krutch, 1961). This new aesthetic was embodied in the romantic English Landscape Gardens, in which picturesque elements such as classical ruins and grottos were essential components. The relationship between man-made ruins and natural features such as caverns, mountains and geological formations was pronounced during this period. These natural features were frequently likened to "natural cathedrals", and all types of ruin, whether natural or man-made were placed in the same aesthetic category (Tuan, 1964). This romantic glorification of nature continued almost unchecked until the mid 1800s, when the scientific objectivity of Charles Darwin rebelled against it (Krutch, 1961).

CHANGING ATTITUDES OF AMERICANS: 1600-1900

The centuries of changing thought in Europe formed the basis of the attitudes toward wild nature that later developed in America. The attitudes of 17th century Europe were clearly apparent in the colonial period in America, as wilderness was feared as an unknown and unpredictable "enemy". However, by the time of the American Revolution of 1776 the fear of the wilder aspects of nature had lessened and these elements were instead described in romantic terms, spurred by the Romantic Movement which developed in Europe over 25 years prior. This movement stimulated a genuine admiration for wilderness and led to the concept of preserving certain areas as national parks.

Colonial Period

The initial American attitude toward the environment paralleled that of the old world from which it sprang. To the colonists, wilderness was alien and hostile and had to be battled as a physical obstacle to comfort and survival. The vast uncivilized wilderness was interpreted as a "moral wasteland, a dark chaos which Christianity would redeem and order" (Nash, 1970). Preserving the wilderness was the last thing that was desired or considered. There was already too much raw land, and consequently, for the next two centuries energies were directed toward "conquering wilderness and destroying savages in the name of progress, religion and survival" (Nash, 1966).

As westward expansion progressed, natural resources were believed to be inexhaustible and the seemingly limitless western frontier was interpreted as an unending resource base for the growth of the American economy and society (Watson, 1976; Marshall, 1930). The pioneers frequently used a militaristic metaphor in describing the advance of civilization. Wild country

was "unpredictable and threatening" and was thus an enemy to be "conquered", "vanquished" and "subdued". The "unbroken and trackless wilderness" was "reclaimed" and was "transformed into fruitful farms and filled with flourishing cities" (Nash, 1966; Culhane, 1981). The broadaxe was considered the most essential tool for the cultivation of the frontier and became the symbol of the early American's attitude toward nature (Huth, 1957).

In 17th century descriptions of the environment, little mention is given to scenic qualities. Instead, accounts tended to merely document the productive capacities of the land, climate, geography as well as the political, economic and religious characteristics. Rarely was wilderness spoken about with sentimentality or admiration (Marx, 1966). An account written in 1663 by John Jesselyn, describing a visit to the White Mountains, provides an indication of the prevalent attitudes:

The country beyond these Hills northward is daunting terrible, being full of rocky Hills, as thick as mole-hills in a meadow and clothed with infinite thick woods. (Wooley, 1898)

Praise of American mountains is, in fact, scarce until after the revolution in 1776. By the time of the revolution, a good deal of the "terrible" wilderness had been subdued with axe and fire and a new sentiment was being cultivated in the American mind, which expressed a romantic enthusiasm for wild scenery as well as a growing scientific and aesthetic interest in flora and fauna (Wooley, 1898; Brooks, 1960). Jefferson's *Notes on Virginia* (1781-1784) describes Natural Bridge as the "most sublime of Nature's works", while new accounts of the White Mountains refer to them as "sublimely picturesque and romantic". By the end of the 18th century, expressions of admiration for the picturesque and romantic seemed unending. The western part of the country in particular was described as abounding in "picturesque situations and beautiful landscapes" (Wooley, 1898).

Nineteenth Century

The 19th century continued to be an extremely romantic period in history and for the first time in America, a genuine appreciation of the wilder aspects of nature developed. Attitudes toward the wilderness during this time were influenced by three predominate ideas: (1) Romanticism - which influenced the aesthetic admiration for the picturesque and sublime as well as the artistic and literary sensibilities; (2) Transcendentalism - which linked religious significance to the wilderness; and (3) Nationalism - which recognized wilderness as an essential part of the American identity. However, with the exception of romanticism, these ideas were not brought to the forefront of American thought until the mid 1800s. During the first half of the century, energies still centered on acquiring and developing land rather than on preservation. In 1803 the heartland of America was acquired through the Louisiana Purchase. As Lewis and Clark explored the far reaches of the acquisition (1804-1806), they were continually reporting:

some truly magnificent and sublimely grand object, which has from the commencement of time been concealed from the view of civilized man. (Marshall, 1930).

John Colter followed Lewis and Clark with four more years of trapping and exploration. On his return in 1810 he told of:

great clefts in the rock, thundering waterfalls, underground explosions, and gigantic spoutings of boiling water from the bowels of the earth. (Newton, 1971)

This was the area later to become Yellowstone National Park. However, his stories seemed so unbelievable that he was laughed at and his region was dubbed "Colter's Hell".

Westward expansion continued with the 1845 annexation of Texas and the 1846-48 acquisitions of the most spectacular portions of the continent. In 1846 Great Britain relinquished claim to the pacific northwest including Washington, Oregon, Idaho and western Montana. With the defeat of Mexico in 1848, the U.S. acquired most of the southwest, including California (Runte, 1979).

Romanticism

The love of romantic picturesque scenery, which originated in America during the late 18th century, continued with full force well into the 19th century. Under this aesthetic system, the wilder aspects of nature became less forbidding and were, instead, praised as being "sublime". The preferred landscape of the Romantic movement was one that was only suggestive of human occupation, containing ruined castles or crumbling fortresses. While these man-made ruins were virtually nonexistent in the United States, the weathered mesas and rock formations of the west provided an ideal substitute.

Advances in geology in the 19th century also strongly influenced the aesthetic theories involving the picturesque and sublime ruin. Prior to the 1870s, it was widely upheld that mountains were formed as a result of either cataclysmic collapse or an upheaval from below. Geologists recognized the importance of deposition but failed to pay much attention to denudation, although the two processes are inseparable. Thus, mountains were generally viewed as protuberances, excrescences or growths and were considered immortal. However, the bare cliffs and weather worn mesas of the American west revealed their erosional origins with great clarity. It follows that as geologic accounts of the American west were being recorded in the last quarter of the 19th century, the theory of the erosional cycle developed into a dominant theme in the new science of land forms. This began the widespread acceptance of mountain peaks, mesas and bluffs as erosional ruins. Poets then began to contemplate the impermanence of things in the world, even mountains. This romantic sentiment was evident in John Wesley Powell's 1875 observations of the west:

The mountains were not thrust up as peaks, but a great block was slowly lifted, and from this the mountains were carved by the clouds - patient artists, who take what time may be necessary for their work. (Tuan, 1964)

The aesthetic value of wild nature received additional support from the romantic writers and painters of the early 1800s, who often found inspiration in nature. Writers such as J.F. Cooper,

W.C. Bryant and H. Greeley and painters, such as Thomas Cole, George Catlin and Thomas Moran related accounts of the western frontier in a highly romantic manner. Based on these accounts, and those of others, growing numbers of people began to take a stronger interest in the outdoors, and by 1850 people finally realized that the frontier was vanishing and conservation measures were becoming necessary (Huth, 1948)

Transcendentalism

The first American wholly committed to the values of wild nature was Henry David Thoreau. In his prophetic appeals in support of wilderness, Thoreau regarded man "as an inhabitant, and a part and parcel of Nature" (Brooks, 1960). The transcendentalists proclaimed that wilderness possessed religious significance since it was a "pure and delicate object of great beauty and morality" and a place for "rest, inspiration and prayers" (Muir, 1898). Men such as Thoreau, Emerson and Muir were instrumental in organizing wilderness preservation efforts. Thoreau's pleas for preservation were first published in *Atlantic Monthly* (1858) and later in *The Maine Woods* (1864), the same year Yosemite Valley was granted to the state of California (Zahniser, 1954). John Muir also spurred the preservation cause through his *Atlantic Monthly* articles, revealing the beauty and grandeur of the national parks and forests with descriptions enticing people to come and experience them. In an 1898 *Atlantic Monthly* article, Muir's reference to the Rocky Mountain reserves revealed his religious associations with wilderness:

Give a month at least to this precious reserve. The time will not be taken from the sum of your life. Instead of shortening, it will indefinitely lengthen it and make you truly immortal... Wander a whole summer here, if you can. Thousands of God's wild blessings will search you and soak you as if you were a sponge. (Muir, 1898).

Supported by words like these, more and more people began following philosophers and poets in embracing nature as an avenue of escape. By 1900, it no longer seemed strange to

Americans to celebrate the beauty and holiness of wilderness. Many returned from wilderness treks with feelings of renewed strength, inspiration and closeness to God (Nash, 1966).

Nationalism

Since the time of independence from Great Britain, America had been attempting to prove its national greatness, yet the country lacked a cultural heritage, especially in art, architecture and literature. Americans of the day sorely missed reminders of past civilizations, including castles, ruins and cathedrals. Therefore, in the Romantic tradition, nationalists looked to the monumental scenery of the west as proof of national greatness. Prior to 1850, America's best claim to scenic superiority over Europe was Niagara Falls. The rest of the eastern landscape was generally described as "monotonous" or "common" (Runte, 1979). Yet, by as early as 1830 the Falls had suffered from severe degradation from developers. Based on the condition of the Falls, The English accused Americans of having no pride in themselves or their past (Runte, 1979).

The discovery of Yosemite Valley and the Sierra Redwoods in 1851 and 1852 provided the first believable evidence since Niagara Falls that the United States had a valid claim to cultural recognition through natural wonders. Americans subsequently began to belittle the most magnificent European scenery in comparison with its own. One admirer of Yosemite stated that:

When we come to the Yosemite Falls proper, we behold an object which has no parallel anywhere in the Alps...I question if the world furnishes a parallel...certainly there is none known. (Runte, 1979)

The Reverend Thomas Starrking's impressions of Yosemite, published in a series of articles in the 1860 *Boston Evening Transcript*, claimed:

Nowhere among the Alps, in no pass in the Andes, and in no canyon of the mighty Oregon Range, is there such stupendous rock scenery...[only] the awful gorges of the Himalaya might challenge the summits and defiles of the Sierra Nevada. (Runte, 1979).

By the 1860s many Americans had embraced the wonderlands of the west as replacements for man-made marks of achievement and often interpreted the escarpments, bluffs and mesas as structures of ghostly architecture or cities in ruin. The names given to rock formations throughout the west, such as Castle, Smokestack, Courthouse, Chimney, Table and Steamboat, provide an indication of this sentiment. In describing the bluffs along the Platte River, John Bidwell wrote in 1841:

The scenery of the surrounding country became beautifully grand and picturesque...[the geologic formations] were worn in such a manner by the storm of unnumbered seasons, that they really counterfeited the lofty spires, towering edifices, spacious domes, and in fine all the beautiful mansions of cities. (Shepard, 1956).

The "grand pillar like" forests of the Sierra redwoods also gave the appearance of an ancient city in ruin, according to a description by the explorer and surveyor Clarence King:

no fragment of human work, broken pillar or sand-worn image half lifted over pathetic desert, -none of these link the past and today with anything like the power of these monuments of living antiquity... (Runte, 1979).

These statements contrasted severely to James Fenimore Cooper's early 1800 comment that Americans must "concede to Europe much of the noblest scenery...in all those effects which depended on time and association" (Runte, 1979).

The national spirit was further strengthened in 1890 when the U.S. Census Bureau issued a report stating that for the first time in nearly 300 years, America no longer possessed a distinct boundary between the settled and unsettled portions of the west, and that most of the remaining uninhabited land was in mountainous or desert provinces of marginal economic importance. This news was disturbing to many. Since the founding of the first settlements, the frontier had symbolized the essence of personal and economic freedom. Thus, the passage of the frontier and frontier way of life represented to many the disappearance of the forces which shaped their national character (Runte, 1979). Anxiety about the nation's future was

now dominated with doubts about strength, patriotism and stamina of urban based Americans, and a growing trend developed which associated wilderness with many desirable national characteristics. Frederick Jackson Turner pointed out in his *Atlantic Monthly* essays between 1896 and 1903 that it was not just the frontier but "the return to primitive conditions that fostered the individualism, independence and confidence in the common man", which comprised the tradition of self government. (Nash, 1966).

As the appeal of wilderness and "primitive conditions" grew during the 1890s, the discontentment with civilization and urban life grew as well. In fact, urban environments were frequently regarded with the hostility once reserved for wild nature. With the rapid spread of cities and factories, people began to question whether the industrial revolution really represented progress. It seemed that too much civilization, not too little was at the root of the nation's difficulties. Progress appeared to have brought confusion, corruption and a debilitating overabundance. Wilderness, thus, became a symbol of what was being sacrificed for material progress and was further invested with religious and ethical attributes.

In response to the new "outdoor movement", several organizations were formed in the late 19th and early 20th centuries. The Appalachian Mountain Club (1876) in the east and the Sierra Club (1892) in the west represent two examples. The members of these clubs were ardent wilderness supporters and became stalwarts in the campaign for preservation. The creation of the Boy Scouts of America in 1910 was another response to the disturbing phenomenon of a civilization tearing itself away from its frontier roots. The scouting movement emphasized frontier skills and values and became a tremendous success. Theodore Roosevelt also did much to bring the wilderness into national prominence by stressing the virtues of wilderness and frontier values. According to Roosevelt, Americans should covet wilderness reserves because:

as our civilization grows older and more complex, we need a greater and not a less development of fundamental frontier virtues. The price of forgetting the frontier past would be degeneracy and the loss of messianic idealism. (Nash, 1966).

The prevalent attitude that wilderness brought relief from artificiality and confinement of urban life can be summed up in the following two statements. The first is an 1898 statement of John Muir:

Thousands of tired, nerve shaken, overcivilized people are beginning to find out that going to the mountains is going home; that wilderness is a necessity; and that mountain parks and reservations are useful not only as fountains of timber and irrigating rivers, but as fountains of life. Awakening from the stupefying effects of the vice of over-industry and the deadly apathy of luxury, they are trying as best they can to mix and enrich their own little ongoings with those of Nature and to get rid of rust and disease. (Muir, 1898).

The second statement is from a 1904 wilderness enthusiast:

Whenever the light of civilization falls upon you with a blinding power,...go to the wilderness...to return to the primitive, the elemental [and escape] the perils of ...cities. [The end result was to] give you good red blood; [and] turn you from a weakling into a man. (Nash, 1966).

HISTORY OF NATIONAL PARK DEVELOPMENT

In presenting the background of national park development, the following discussion will focus on three areas of significance: (1) the factors influencing the preservation of public lands; (2) the changes in natural resource management philosophies; and (3) the origin of the national park idea.

Factors Influencing Preservation of Park Lands

The concept of preserving lands from use oriented systems entailed a slowly evolving process which received impetus from the romantic ideologies of the 19th century as well as from additional historical, political and economic factors. Although the national park idea has now been exported throughout the world, it is a uniquely American tradition, which reflects some of the central values and experiences of the American culture. According to Nash (1966), four factors were instrumental in the formation of the national park system.

1. The nation's unique experience with wilderness - the settlement of the frontier. (historical)
2. The presence of a democratic ideology. (political)
3. The existence of sizable amounts of land when the desire for protection arose. (economic)
4. The nation's affluence. (economic)

America had a proud heritage in its frontier background. As the degree of civilization increased, an appreciation of the disappearing wilderness grew and the idea of preservation emerged. It was the old case of valuing something only when threatened with its deprivation.

However, for organized preservation efforts to occur, more was needed than just a recognition of the value of wild nature. For example, in the Far East a tradition of appreciating wild nature extended back at least two thousand years before America was settled, yet there were no equivalent parks or reserves until after the American example. The difference in America was the presence of a democratic ideology, which had supported public ownership of land since the 17th century. In addition, most of the western lands were already in the hands of the federal government. This strengthened the possibility of retaining some areas for public use.

Both the timing and the pattern of settlement also influenced wilderness preservation. If the country had been settled between the 11th and 15th centuries, for example, the appearance of national parks would have been unlikely since there was no prevailing body of ideas that supported wilderness preservation during that time. In addition, if the country had been settled simultaneously from the west as well as from the east, it is conceivable that civilization could have destroyed wilderness before a counter movement in behalf of preservation developed. It is fortunate that there was sufficient land left to preserve when a change in western opinion of wild nature developed. Older nations such as England found themselves with little wild land left to protect when the national park movement arrived.

The final factor was the nation's affluence. By the late 1800s, America was wealthy enough to afford the luxury of setting aside some land for noninstrumental purposes. It is ironic that the nation's success in exploiting the environment increased the likelihood of its preservation (Nash, 1966).

Changes in Natural Resource Management Philosophies

For nearly 300 years following the establishment of the first colonies, the attitude toward natural resources was one of exploitation and control. The natural resource management philosophy which developed out of these attitudes, Utilitarianism, espoused two different views of nature. Nature was interpreted as being the source of human sustenance, but it was also unpredictable and threatening, and thus, needed to be conquered and subdued (Watson, 1976). As a result of this philosophy, the most productive lands containing timber, mineral ore or fertile soil were the first to be utilized, settled or "subdued". Toward the end of the 19th century, Americans began to realize that the resources were not limitless and that an abused environment could actually turn on men. In response to the destructive plunders of utilitarians, two natural resource management philosophies, Progressive Conservationism and Romantic Preservationism, emerged almost simultaneously. These two philosophies challenged earlier utilitarian beliefs and led to a policy of retaining certain lands for the public (Runte, 1976).

The progressive conservationists believed that resources should be utilized, but utilized efficiently and wisely. They wanted no part of the destructive, short term, profit-maximizing exploitation that was common with utilitarians and were strongly opposed to the domination of economic affairs by narrow "special interest" groups, such as cattle or timber barons (Culhane, 1981). However, scenic preservation was seen as wasteful since it restricted land to only one use - recreation.

The influence of the conservationist philosophy was first evidenced with the passage of the Forest Reserve Act of 1891. This act authorized the president to make withdrawals of millions of acres of public timber lands from private development and exploitation. Several additional conservationist acts followed, including the Pickett Act (1910), the Federal Water Power Act (1920) and the Mineral Leasing Act (1920). The effect of these acts was to set aside a wide

variety of the best federal lands for specific purposes, leaving primarily those lands of minimal or unknown market value available for disposal (Environmental Law Institute, 1974).

Both the Forest Service (1905) and the Bureau of Land Management (1946) developed out of this philosophy, and both agencies embodied the conservationist principles of "multiple use" and "sustained yield" in their policies (Ise, 1979). Theodore Roosevelt and his natural resource advisor Gifford Pinchot strongly endorsed conservationism and had a tremendous impact on expanding the forest reserves. Many of the tenets of conservationism are still practiced today, including land reclamation, forestry and the leasing of the public domain (Runte, 1979).

Although Romantic Preservationism developed about the same time as Conservationism, these two philosophies were quite different. To Preservationists, nature and especially wilderness, were seen as places of transcendental experiences. Wilderness provided a retreat from the artificiality and disharmony of urban life. "Wild things - wilderness, wild rivers, wildlife - were reminders of mankind's roots in and dependence on the natural order, as well as spiritual retreats from the urban world" (Culhane, 1981). Proponents of this philosophy, such as Thoreau, John Muir, Aldo Leopold and Edward Abbey, all claimed that wilderness areas were of value in their own right and should be preserved from exploitation. Thus, this highly emotional movement spurred the creation of numerous national parks and provided the foundation of the National Park Service's policy of preservation rather than utilization of the wilderness.

Both Conservationism and Preservationism remained in prominence until the mid 1900s, when they merged to form a new philosophy - Environmentalism. Environmentalists believe that mankind is interrelated with nature, not apart from or superior to it, and that the environment is an integral part of our existence. In addition, Environmentalists realize the supply of natural resources is finite and, thus, believe that the maintenance and renewal of our natural re-

sources are essential to insure the continuation and stability of environmental as well as human processes (Culhane, 1981).

The differences between the four natural resource management philosophies can be summarized as follows. Utilitarians were concerned solely with the human use of resources, while preservationists attempted to protect selected parts of the biosphere from human consumption, regardless of the benefits other uses might provide. In contrast, conservationists focused on human needs and the usefulness of the biosphere to man. To environmentalists, the biosphere was of primary concern and human use was secondary. In other words, "conservationists worry about the depletion of resources that would affect human consumption; and environmentalists worry about the future of the biosphere, including the human race." (Culhane, 1981).

Origin of the National Park Idea

Although Yellowstone National Park, established in 1872, is considered the first national park, the concept of its preservation slowly evolved over centuries of changing thought. Due to the strong influence of Utilitarian attitudes throughout the early development of our country, attempts to preserve land for noninstrumental purposes prior to the mid 1800s were met with strong opposition, especially if the land possessed any economic value at all. However, as the 19th century progressed with the emergence of romantic and nationalistic ideologies, and with the opening of the west to exploration, many individuals began to voice opinions in support of wilderness preservation. One of the earliest reports of a "national park" concept was that of the explorer and painter George Catlin in 1832. Catlin conceived of creating a large park east of the Rockies, extending from Mexico to Lake Winnipeg, and consisting of wild na-

ture, wildlife and Indians. In a letter published in the *New York Daily Commercial Advertiser* in 1833 Catlin described his idea by stating that this large area might be:

preserved in...pristine beauty and wildness, in a magnificent park, where the world could see for ages to come, the native Indian in his classic attire, galloping his wild horses...amid the fleeting herds of elks and buffaloes. What a beautiful and thrilling specimen for America to preserve and hold up to the view of her refined citizens and the world, in future ages! A nation's Park, containing man and beast, in all the wild and freshness of their nature's beauty. (quoted in Huth, 1948).

After Catlin the number of calls for wilderness preservation gradually increased, with Thoreau, Thomas Cole and Horace Greeley being some of the more influential. Meanwhile in the east, steps were being made in the direction of conservation of land for the public, through the development of the pastoral scenic cemeteries, such as Mount Auburn (1831) and the acceptance of the proposal for Central Park (1851).

Soon after the discovery of Yosemite Valley in 1851, publicity of the spectacular scenery began to circulate. By 1856 Yosemite was well known throughout the nation. A small group of men, including Frederick Law Olmsted, were instrumental in pushing preservation legislation through, largely for idealistic reasons:

to prevent occupation and especially to preserve the trees in the valley from destruction. (Huth, 1948; from a letter to Senator Conness from Israel W. Raymond Feb 20, 1864).

Without much resistance, a bill was passed on June 29, 1864 granting the area to the state of California "upon the express conditions that the premises be held for public use, resort and recreation, shall be inalienable for all time" (Huth, 1948). The unique feature of this bill was that the area was set aside for a strictly non-utilitarian purpose and, thus, a precedent was set for future preservation legislation.

Support for preservation grew in 1870 as reports were published from the Washburn and Langford expedition into Yellowstone. Around a campfire, the men of the expedition decided the area was too important for any one man to own and concluded that it should be preserved for all to enjoy. Lieutenant Doane, an officer assigned to the party, submitted a full report to Congress describing the spectacular scenery and urging preservation, while Langford gave

lectures throughout the east. In 1871, the geologist F.V. Hayden joined the campaign to preserve Yellowstone, following his scientific study of the area. In his 1872 *Scribner's Monthly* article, Hayden exclaimed of scenery "varied beyond description". He added that:

We pass with rapid transition from one remarkable vision to another, each unique of its kind and surpassing all others in the known world. The intelligent American will one day point on the map to this remarkable district with the conscious pride that it has not its parallel on the face of the globe....Why will not Congress at once pass a law setting it apart as a great public park for all time to come, as has been done with that not more remarkable wonder, the Yosemite Valley? (Hayden, 1872).

The reports of Hayden, Doane and Langford were received with widespread interest and a feeling of national pride was instilled as it was revealed that America contained "the most remarkable regions in the world" (Buck, 1921; quoted from *New York Tribune*. Jan. 23, 1871). However, the establishment of Yellowstone National Park was not the result of popular demand but was, rather, brought about through the efforts of a small group of dedicated men including Hayden, Langford and Montana delegate W.H. Clagett. As these men enthusiastically pushed preservation legislation through Congress, they received opposition from a few legislators who typified the prevailing utilitarian attitude (Newton, 1971). Senator Cole (CA) spoke against the bill stating that:

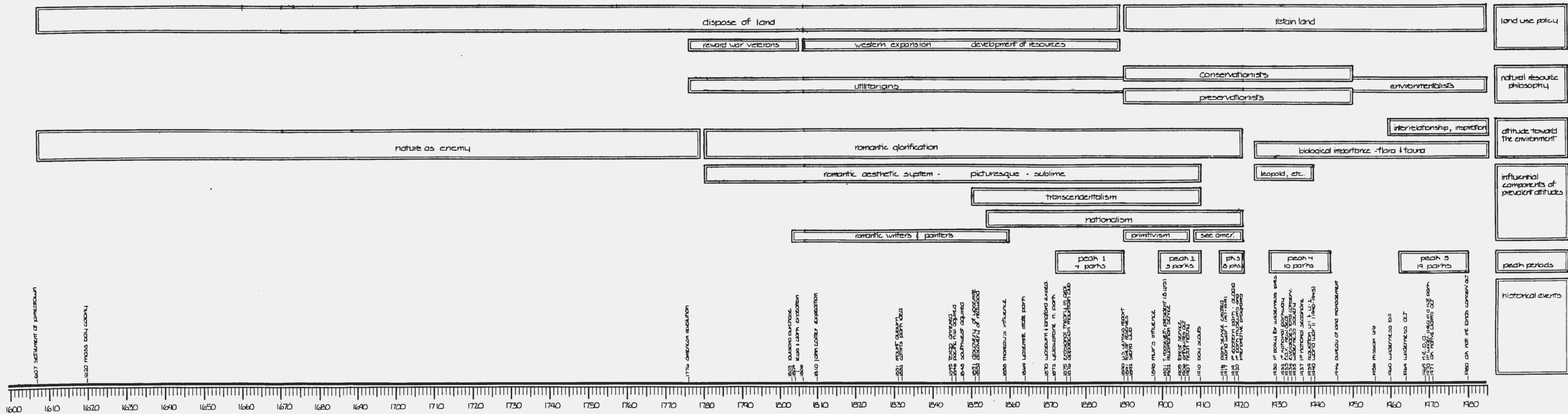
I cannot see how the natural curiosities can be interfered with if the settlers are allowed to approach them....I do not see the reason or propriety of setting apart a large tract of land of that kind...for a public park. There is an abundance of public park ground in the Rocky Mountains that will never be occupied. It is all one great park, and can never be anything else (Buck, 1921; from *Congressional Globe* (42-2) 1872).

When the bill finally passed establishing Yellowstone National Park in 1872, no one had any conception of what measures would be needed to protect and manage such a park. No appropriations for park development were requested at the outset, since it was expected that the area would be self-sustaining on revenues from ten year leases. The federal government's role was only to prevent private occupation and to exert general supervision over park management, and no appropriations were provided for the salary or expenses of the superintendent or for park improvement until 1878 (Buck, 1921). Thus, the early years of Yellowstone were very unstable due to problems of poor administration, vandalism, poorly defined and

controlled boundaries, and attempts by unprincipled legislators to loot the area for private gain (Newton, 1971).

The establishment of Yellowstone National Park was a remarkable achievement because it was the first instance of large scale, federal preservation of scenic land for the public benefit. The fact that legislation was passed in a time when Congress was dominated by utilitarian attitudes made this an even greater achievement. However, in 1872 there was no recognition that wilderness had been preserved. Emphasis was, instead, placed on the scenic qualities and on making the geysers, hot springs and similar "wonders" available as tourist attractions (Nash, 1966). The first proposed boundaries around Yellowstone were laid out to protect only a few acres around the rim of each geyser and along the rim of the canyon and shore of the lake. Even Ferdinand Hayden, the man finally responsible for suggesting the park boundaries, included over 3,000 square miles only because he thought there might be undiscovered hot springs and geysers in the vicinity, not in the interest of protecting wilderness (Nash, 1970). It was not until the 1890s, with the widespread recognition of the value of the frontier, that a few people began to realize that wilderness had, in fact, been protected.

The attached graphic time line (Figure 1) summarizes the major points discussed in this chapter and reveals the relationship of these different factors over time. In addition, the time line includes many of the factors discussed in Chapter III as influencing the subsequent development of the national park system. Thus, this time line serves as a reference for interrelating the major points of both chapters.



Time Line of Changing Attitudes Toward Wilderness

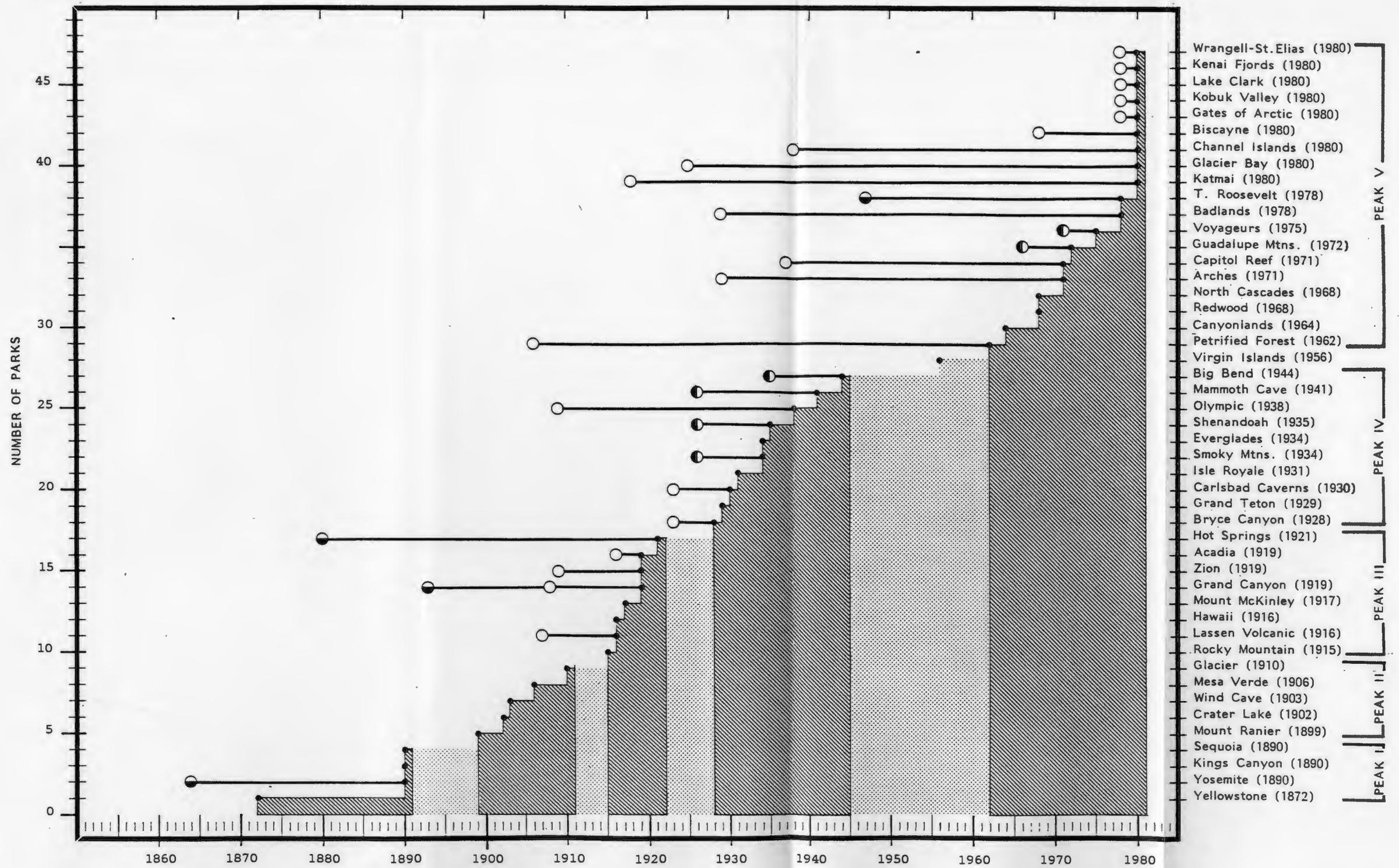
Figure 1.

DEVELOPMENT OF THE NATIONAL PARK SYSTEM

INTRODUCTION

While Chapter II provided insights into the changing attitudes toward wilderness in America from the 1600s to the late 1800s, it is the intent of this chapter to (1) continue the discussion of attitudes toward wilderness up to the 1980s, and (2) relate these changing attitudes to the development of the national park system. Since the establishment of Yellowstone in 1872, 47 parks have been incorporated into the national park system, forming a comprehensive system of diverse natural areas. Over this time span, the types of national parks and reasons for establishment have gradually evolved reflecting a simultaneous evolution in the national attitude toward wilderness.

It was hypothesized that the development of the national park system could be divided into peak periods of establishment, and that the parks created during each period possessed similar characteristics and reasons for establishment, based on changing attitudes toward wilderness. Through a careful examination of the national park system, five peak periods of establishment were identified. These periods are graphically depicted in Figure 2, with the dates of park establishment and prior reservation periods included. As the national parks were plotted along a time line a natural clustering pattern appeared. For the purpose of this thesis, each period was defined as containing parks that were separated by a time span of two years or less. The single exception to this rule occurred in the first period, when Yellowstone was included although an 18 year span separated it from the other parks of the same period. This system effectively included all the national parks within some peak period, with the exception of Virgin Islands National Park (1956).



Peak Periods in National Park Establishment

- Peak Period
- Gaps Between Periods
- National Park
- National Monument
- Land withdrawn as a park or reserve
- Authorization Date

Figure 2.

The five periods are summarized in the following table.

<i>Peak Period</i>	<i>Time Span</i>	<i>Number of Parks</i>
I	1872-1890	four
II	1899-1910	five
III	1915-1921	eight
IV	1928-1944	ten
V	1962-1980	nineteen

A general discussion of each of these peak periods follows, coupled with a more detailed discussion of two selected parks from each period. Although the factors influencing the peak periods inevitably overlap between periods, each peak clearly possesses unique distinguishing characteristics as revealed by the reasons for park establishment, the geographic location of the parks, the general landforms contained within the boundaries and the role environmental attitudes played in park establishment. An important component of the prevailing attitudes toward the environment was the phraseology and connotation of the written language of the day. Thus, to prevent distortion of these statements numerous direct quotes were taken from the legislative documents to lend support to the discussion.



— National Parks of Peak I 1872 - 1890 —

Figure 3.

PEAK I (1872-1890)

As was discussed at the end of Chapter II, the original motives for preservation of land for national park status included scenic quality or the "awesomeness" of monumental landscapes, as well as low economic value of the land and increased national pride concerning America's "wonderlands". All the national parks established during the first period, including Yellowstone, Yosemite, Sequoia and King's Canyon,¹ contained very rugged scenery and unique natural "curiosities" or "wonders", such as thermal areas, enormous canyons, huge waterfalls or giant trees. Due to political pressure from utilitarians, the land also had to be deemed worthless in order to be preserved. Park boundaries included only the minimum area necessary for highlighting the focal wonders. These standards of rugged, monumental scenery and economic worthlessness continued to be the major criteria for national park establishment for many years to come.

Yellowstone National Park (1872)

In addition to scenic and economic motives for park preservation, reasons of public health, conservation of resources and scientific value were also mentioned in the legislation for Yellowstone National Park. House Report 26 (1872) lists the following reasons for establishing the national park:

- Low economic value. The area is "not susceptible of cultivation...[and it is]...not probable that any mines or minerals of value will ever be found there."
- Scenic grandeur. "All these springs are adorned with decorations more beautiful than human art has ever conceived, and which have required thousands of years for the cunning hand of nature to form."

¹ King's Canyon was originally named General Grant National Park.

- Prevention of private exploitation of the scenic wonders...“the sight of which ought to be as free as the air or water.”
- To provide a resort. “As a place of resort for invalids and pleasure seekers it will not be excelled by any portion of the world.”
- Scientific value. “The geysers of Iceland, which have been objects of interest for the scientificman and traveller of the entire world, sink into insignificance in comparison with the hot springs of the Yellowstone and Fire-Hole Basins.” (H rpt 26, 1872).

The report concluded that:

The withdrawal of this tract, therefore, from sale or settlement takes nothing from the value of the public domain, and is no pecuniary loss to the Government, but will be regarded by the entire civilized world as a step of progress and an honor to Congress and the nation. (H rpt 26, 1872).

Of these motives for park establishment, the scenic qualities of the monumental landscapes and the subsequent feeling of national pride instilled by these “wonders” seemed to be the most prevalent in the legislation. Both the Doane Report (1870) and the Barlow/Heap Report (1871) of the reconnaissance into the Yellowstone were filled with descriptions of picturesque and sublime scenery. Doane reported that the Firehole Basin...

contains phenomena of thermal springs unparalleled on the surface of the globe... The beauty of the scene takes one’s breath away. It is overpowering, transcending the visions of the Moslem’s Paradise. The earth affords not an equal. It is the most lovely inanimate object in existence.... Taken as an aggregate the Firehole Basin surpasses all other great wonders of the continent. It produces an effect on the mind of the beholder utterly staggering and overpowering. (S exdoc 51, 1871).

Barlow and Heap added that the great falls of the Yellowstone were “exceedingly picturesque” and “should be classed among the most interesting and beautiful on earth... I should describe the upper fall as the embodiment of beauty, the lower one that of grandeur” (S exdoc 66, 1872). Between the two falls were numerous cascades which “if located on an eastern stream would be celebrated in history and song; here amid objects so grand as to strain conception and stagger belief, they are passed without a halt” (S exdoc 51, 1871).

Several of the descriptions of the area were sublime in nature, reflecting both fear and admiration of the landscape. Of the Middle Canyon of the Yellowstone Doane stated:

Standing on the brink of the chasm the heavy roaring of the imprisoned river comes to ear only in a sort of hollow, hungry growl, scarcely audible from the depths, and strongly suggestive of demons in torment below... It is grand, gloomy, and terrible; a solitude peopled with fantastic ideas; an empire of shadows and turmoil (S exdoc 51, 1871).

Descriptions of the Firehole Basin yielded similar statements:

From the surface of the water a vast cloud of steam was constantly rising, producing an effect on the mind of something terrible and unreal, and at the same time very fascinating (S exdoc 66, 1872).

The earth trembles under the descending deluge from this vast fountain, a thousand hissing sounds are heard in the air; rainbows encircle the summits of the jets with a halo of celestial glory. The falling water plows up and bares away the shelly strata, a seething flood pours down the slope and into the river. It is the grandest, the most majestic, and the most terrible fountain in the world.... The waving to and fro of the gigantic fountain, when its jets are at their highest, and in a bright sunlight, affords a spectacle of wonder of which any description can give but a feeble idea (S exdoc 51, 1871).

In addition to these descriptions of scenic grandeur, Doane added a broader significance to the area concluding that:

As a country for sight-seers it is without parallel; as a field for scientific research, it promises great results;...it is probably the greatest laboratory that nature furnishes on the surface of the globe (S exdoc 51, 1871).

Even after Yellowstone was established as a national park reports continued to flow into Congress describing the scenic beauties and enhancing the importance of the park to the nation. Nathaniel P. Langford, the first superintendent of the park, wrote in 1873 that:

It is impossible in this report, to convey the faintest idea of the grandeur of the mountain and river scenery everywhere present... We venture to say that there is not in the world, within the same limit, so many wonderful freaks of physical geography, so much to amaze and delight the beholder... In the catalogue of earthly wonders it is the greatest, and must ever remain so. It confers a distinct character upon our country, greater than that of Niagara, Yosemite, or Mammoth Cave, though each of these is, in itself, without parallel. But here the grandest, most wonderful, and most unique elements of nature are combined, seemingly to produce upon the most stupendous scale an exhibition unlike any other on the globe (S exdoc 35, 1873).

While these elaborate descriptions were received with interest in Congress, the principle objection to the establishment of a national park was that annual appropriations would be necessary for upkeep and improvement. "Had not Congress been assured that no demands would be made for annual appropriations...it is very doubtful whether the bill would have ever become a law" (H exdoc 75, 1878). The expectation that the Northern Pacific Railroad would be extended into Montana strengthened support of the park, since this rail would bring visitors to within 40 miles of the area. However, the failure of this railroad hampered development and use of the park for several years. It was not until 1883 that a system of road construction began and it was not possible to reach the park by rail until 1884 (Buck, 1921). During this

eleven year span it had become clear that the expectation that the park would be little trouble or expense to the government had proven false. Considerable expense and constant attention would be required if the park was to be made accessible for public use. This led opponents of the park to repeatedly raise the question of whether the government should own a national park, believing that the benefits of the park were far below the cost and trouble. "The best thing the Government could do with Yellowstone National Park is to survey it and sell it" espoused Senator Ingalls of Kansas (Congressional Record, 47-2, 3264). Another senator characterized the area as a "very expensive luxury enjoyed by an exceedingly small portion of the population" and supported federal control of only the small points surrounding the curiosities (Buck, 1921).

Much of the opposition reflected utilitarian attitudes, with the interests of private enterprise weighing heavily. The most persistent of the private enterprise efforts were the recurrent attempts to construct a railroad through the park. While this measure was repeatedly passed in the House, a small group of Yellowstone advocates succeeded in defeating the measure in the Senate each time (Congressional Record 49-2, 94).

The question of continued federal ownership of Yellowstone National Park was heightened by problems of vandalism, poor accessibility and a lack of defined boundaries. If the park was to become a popular resort it had to be accessible from the east, otherwise "the park would remain a trackless wilderness" (Buck, 1921). Reports were repeatedly submitted to Congress requesting appropriations for development and protection of the resources. However, it was not until 1878 that the first appropriations were allotted and no roads of any sort were constructed within the park before 1879. A letter from the 1878 superintendent of Yellowstone P.W. Norris sums up the early condition of the park:

Valuable forests of pine and cedar timber have been prostrated and travel impeded by the careless use of fire. Bison, elk, antelope, big horn sheep, and other beautiful animals have been slaughtered by the thousands merely for their tongues and pelts.

Great masses of ancient timber, fossils, geyser-cones, and beautifully scalloped pool borders, which made the region the "wonderland" for which its preservation was desired, have been broken up to obtain transportable specimens, which have been made articles of fraudulent commerce...

The preservation of these rare animals and matchless wonders, and the construction of roads, bridges and bridle-paths throughout the park, is absolutely necessary for the enjoyment and the benefit of the people (H exdoc 75, 1878).

An earlier statement of Langford presented a similar case...

for extent, beauty, novelty and variety [the park's] physical wonders excel those of any other known region of the world... Unless they are protected by law, it cannot be long before the greatest beauties of the park will be destroyed (H exdoc 147, 1874).

Yosemite National Park (1890)

Although Yosemite National Park was created 18 years after Yellowstone, its enabling legislation and reasons for establishment emulated those of Yellowstone. Once again, scenic beauty, national pride and protection from private exploitation were the overriding criteria for park establishment. Early descriptions of Yosemite Valley, which was granted to the state of California as a state park in 1864, reflected these concerns:

The Yosemite Valley is one of the wonders of the world. It stands unrivaled in its majesty, grandeur and beauty. It is one of those magnificent developments of natural scenery in which all the people of the country feel a pride and an interest, and to which their equal right of access and enjoyment ought to be protected (S rpt 185, 1868).

The marvelous beauty and grandeur of the locality prompted the legislation. Among the great natural wonders of the world it stands unrivaled... the waters of the Merced River... fall into the valley below, forming the most beautiful cascade in the known world. No description could do justice to the dazzling scenes of loveliness and magnificence which feast the eye and gladden the heart in every part of this wonderfully appointed valley. It was felt, and most naturally, that a spot so sacred to beauty and to worship should not be appointed to private ownership and exclusive use, but should be preserved free and open to the world (H rpt 2, 1870).

In 1890 Congress reserved approximately 1500 square miles completely encircling the state park as Yosemite National Park. Descriptions of the national park also stressed the importance of preserving the scenic qualities of the area:

The canyons... within this park are hardly less wonderful in their scenery than the canyons of the Yellowstone and Colorado Rivers. The Hetch Hetchy Valley... is a Yosemite Valley on a reduced scale; and were there no Yosemite Valley this Hetch Hetchy Valley with its marvelous rock and water scenery, would be regarded as one of the wonders of the world.

There are forests... of great beauty and of unusual size and height, comprising as a whole, the most wonderful combination of rock, water, and forest scenery in the known world.... This rare, varied and wonderful scenery found within the limits of this park was a sufficient and proper reason for its establishment by Congress as the Yosemite National Park (S rpt 863, 1896).

The most significant issue affecting Yosemite was the high number of private holdings within the boundaries of both the state and national parks, and the effect these interests would have in exploiting and destroying the unique natural features of the two parks. By 1890 it was commonly asserted that Yosemite Valley State Park had been largely usurped by private interests, thus undermining the original intent of the 1864 act creating the park for public use. Therefore, in September of 1890 Congress passed a resolution to investigate the valley and ascertain whether the act had been fulfilled or violated (S rpt 599, 1892). Reports of the next few years contained evidence that the valley had "been given over to private use in at least a great measure, to the exclusion of the public, and to the destruction of the scenic effects which exist there",² and that the valley was "managed with an eye to profit and speculation and not in the line of preserving the scenic and botanic wonders of the place for the benefit of the nation" (S exdoc 67 53-2). The failure of California to adequately protect the unique resources of the valley spurred the creation of the enveloping national park. Inevitably, friction resulted between state and federal management and petitions were put before Congress to put the entire area under federal control.

However, questions as to the number and extent of private holdings were still unclear. The act establishing Yosemite National Park had been passed on suspension day, without having been previously introduced and considered in committee (H rpt 1485, 1894). Thus, the boundaries of the park had been determined arbitrarily, without previous examination and without giving the persons holding land within the park the opportunity to be heard before Congress. Upon passage of the act, Congress had not realized that contained within the boundaries were 65,000 acres of patented land and approximately 300 mining claims, many of proven value (H rpt 1485, 1894; H exdoc 1, 1891). The large private holdings made efficient

² Senate Report 599, 1892.

administration difficult and placed an inconvenience on the title holders. Efforts were repeatedly addressed to Congress from both private interests and legislators urging a readjustment of the the boundaries to "exclude all the mining claims" and agricultural areas. In addition, the suggested boundaries were to "include the only portion of the country that furnishes a reason for a national park [including] all the natural wonders, excluding none whatever" (H exdoc 1, 1891).

In many of the efforts to adjust the park's boundaries, utilitarian economic rationales were revealed, as the statement of the 1894 Secretary of the Interior Hoke Smith indicated:

a large extent of the territory is now included in the reserve, which is of practically no interest to the sightseer, nor does it appear useful as a conservateur of the water supply... There are also sections which are valuable as agricultural and mineral lands, but are virtually useless for park purposes... We recommend a reduction of the boundaries,... placing them on natural lines as far as possible (H rpt 1485, 1894).

By 1898 private claims were still an issue, but statements to Congress disclosed a growing preservationist's sentiment by stressing that the exclusion of private claims was favored "as long as this could be accomplished without injury to the features worthy of preservation" (Buck, 1921). An example is provided through the following statement, although utilitarian overtones were still present:

The patented tracts embrace the finest timber and lands within the park, and to permit them to be cleared of timber now would be an irretrievable injury and defeat the very object of these acts. In exchanging for these lands other of the public domain the Government admittedly secures the better of the bargain, as it secures tracts of timber land superior to any in the United States (H rpt 1547, 1898).

By act of February 7, 1905 and joint resolution of June 11, 1906, the Yosemite Valley Grant was receded to the federal government as part of Yosemite National Park and boundaries were redrawn to exclude 542 square miles of mining claims and patented land (Buck, 1921). Thus, the policy of extinguishing all private claims within national parks was initiated and the government proceeded to regain possession of those claims desirable for inclusion in the national park.



———— National Parks of Peak II 1899 - 1910 —————

Figure 4.

DEVELOPMENT OF THE NATIONAL PARK SYSTEM

PEAK II (1899-1910)

Although the national parks established at the beginning of the 20th century still largely reflected the original scenic standards, two new motives for preservation were introduced. A **scientific** motive was introduced with the 1902 establishment of Crater Lake, as scientists pointed out that even the most breathtaking, sublime scenery also invariably contained some geological, biological or ecological phenomenon worthy of preservation. An **historical** motive was introduced in 1906 with the establishment of Mesa Verde National Park and the passage of the Antiquities Act, which authorized a president to set aside, as a national monument, any area of historical or scientific importance on land already controlled by the government. This act provided the president with a quick initial step toward establishing a national park by setting aside a nucleus of the area as a national monument (Newton, 1971). Passage of this act was motivated, in part, by the spirit of scenic nationalism prominent at the time. The search for cultural identity led Americans to interpret the dwellings of prehistoric Indians as replacements for monuments of European antiquity (Runte, 1979).

The first half of the 20th century was also characterized by struggle and compromise between the preservationists' restricted use and the conservationists' multiple use policies. The preservationists faced quite a challenge in attempting to preserve land for scenic quality under the strongly conservationist administration of Theodore Roosevelt and Gifford Pinchot, who both supported harvesting of trees, damming of rivers and manipulating of natural cycles to achieve greater industrial and agricultural efficiency. As lands were nominated for national park status, their approval hinged on proof of the land's economic worthlessness, regardless of scenic quality.

Crater Lake National Park (1902)

Evidence of scenic, economic and scientific motives are clearly apparent in the legislation concerning the establishment of Crater Lake National Park. In addition to these, the concern for public health was also evident in statements made to the effect that Crater Lake was "equally inviting to the tourist and others in search of health and pleasure"³ due to "the scenic beauties of the Lake and the healthful and invigorating air of the mountain summit" (H rpt 533, 1900).

Scenic qualifications of Crater Lake were repeatedly mentioned as the area was referred to as "one of the greatest scenic wonders in the United States, if not the known world" or "one of the greatest scenic attractions of our country" (H rpt 533, 1900). To lend further credentials, Crater Lake was compared to other known scenic wonders of our country:

The beauty and majesty of the scenery are indescribable, but in the order of its impressiveness it is like that of the Niagara Falls, the Yosemite Valley, the Grand Canyons of the Colorado and the Yellowstone, and yet it is wholly unlike any of these (S rpt 1318, 1902).

Although the scenic qualities of Crater Lake are exceptional, the proposed park was introduced to Congress as being economically worthless, containing no agricultural lands and "with timber...not of a character suitable for lumber, most of it being what is known as lodge-pole pine and of a very little commercial value" (H rpt 533, 1900). J.S. Diller, geologist of the U.S.G.S. added that:

Making the region a national park, therefore, would in no way conflict with the interests of the farmer, the miner, or the lumberman, but, on the other hand, it would be a public benefaction in calling attention to and preserving one of those great natural features, an increasing appreciation of which does so much for the pleasure and general advancement of our people (H rpt 533, 1900).

The economic argument for park establishment was further justified by the fact that roads were already constructed to the area, making it easily accessible, and that there were no

³ Diller, 1897.

private holdings within the boundaries. Despite the claims of low economic value, Congress would not pass the bill until it had been amended to allow mining within the park (Runte, 1979).

A similar situation occurred with Glacier National Park, which was hailed as the rival of Yellowstone and Yosemite Valley. Yet the congressional debate was opened with Senator J.M. Dixon's statement that the area...

is one of the grandest scenic sections in the United States, absolutely unfit for civilization or habitation, and as far as I know not possessing any mineral resources...[and] no agricultural land whatever. (Runte, 1979).

However, the enabling act provided for mining, settlement, reclamation and sustained yield forestry in the park, if there was a change in the worth of the region.

A final justification for establishing Crater Lake National Park was the area's superb scientific value. While the scientific value of Yellowstone was mentioned by Hayden and others in 1870, the scientific qualities were overshadowed by the outstanding scenic qualities of the area. However, proponents for Crater Lake National Park were much more emphatic in stressing the importance of both the scenic and scientific value of the area. From a scientific investigation of the area in 1897, geologist J.S. Diller stated that:

Aside from its attractive scenic features, Crater Lake affords one of the most interesting and instructive fields for the study of volcanic geology to be found anywhere in the world. Considered in all its aspects it ranks with the Grand Canyon of the Colorado, the Yosemite Valley and the Falls of the Niagara... (Diller, 1897).

Diller later issued the following statement to Congress:

Beautiful and majestic as its scenic features are, the lake and its surroundings have a geologic history that is even more attractive, and if made a national park, and published to the world as furnished with facilities for study and entertainment, it would doubtless attract many scientific tourists and contribute in no small measure to the prosperity of the region, as well as to the general information of the country at large (H rpt 533, 1900).

In addition to geologists, other men of science including biologists, botanists, and ichthyologists, were also interested in preserving the area for its scientific and educational value. Biologist C.H. Merriam stated that "it is a peculiarly favorable area in which to study the successive fauna and flora that characterizes several life zones"; while ichthyologist B.W.

Everman claimed: "the scientific interest of Crate Lake is very great, and it is important that the physical and natural-history features of the region be preserved in tact" (H rpt 533, 1900).

Mesa Verde National Park (1906)

The establishment of Mesa Verde National Park introduced a new component to the national park system since, for the first time, man-made features of the landscape were the focus of preservation. This was an important precedent since the scientific and historical values of the ruins finally outweighed scenic qualities as justification for national park establishment. This is not to say that the ruins of Mesa Verde did not possess aesthetic qualities. On the contrary, their ruinous nature lent a picturesque appearance, which was an important component of the romantic aesthetic system of the day. However, scenic qualities were not stressed in the legislation concerning Mesa Verde; instead scientific, historical and educational values were emphasized, as well as the low economic value of the land and the necessity of protecting the ruins from exploitation (H rpt 4944, 1906).

The scientific and historic justifications for establishing Mesa Verde National Park were supported by numerous statements throughout the legislation. The ruins were said to be "of infinite value to the archeologist and man of science, and preeminently valuable to the historian and to future generations" (S rpt 1428, 1906). The cliff dwellings were also described as:

unique in character and unsurpassed in many ways by any of their kind in the known world, attracting the attention and study of travellers, historians, and ethnologists from every continent (S rpt 1428, 1906).

Therefore, the preservation of the cliff dwellings was urged to "aid in the understanding of the previous inhabitants of this continent", and for "preserving the records of human history and advancing the science of man" (H rpt 4944, 1906). Preservation of the ruins was further justi-

fied by the fact that other nations recognize the importance of preserving their cultural heritage:

Almost every civilized nation in the world has enacted laws for the preservation of the remains of its historic past, and it is believed... that the ruins of the Mesa Verde possess sufficient historic value to be well worthy of preservation (H rpt 4944, 1906).

Although Mesa Verde was espoused to possess "some of the most remarkable ruins in America" of local and national interest, the economic worthlessness of the land also had to be demonstrated in order to satisfy the conservationists in Congress (H rpt 3703, 1905). In keeping with tradition, the land within the boundaries of Mesa Verde National Park was shown to be "absolutely worthless for agriculture, grazing, or other purposes" (H rpt 4944, 1906).

The lands sought to be embraced in a national park by this bill are situated upon a high mesa, and are wholly unfit for any agricultural or mining purposes; nor is the land valuable for grazing owing to the want of water (H rpt 4944, 1906).

The final justification for establishing Mesa Verde National Park was that, due to the area's value to the scientific world, it was necessary to protect the ruins from spoliation and decay. While the cliff dwellings were some of the best preserved prehistoric buildings in the United States, the structures had suffered from neglect and vandalism. Thus, federal protection was desired to prevent further "wanton and malicious damage" to these antiquities.

Additional facets of Peak II

The struggle between the preservationists' ideals and conservationists' policies continued to be a major feature throughout this period. The frustration of compromise was compounded with the petition for a reservoir in Hetch Hetchy Valley, in the heart of Yosemite National Park. Since the establishment of the Reclamation Service in 1902, hydroelectric and water storage projects had become popular across the country. However, the Hetch Hetchy Reservoir was a particularly controversial project since it threatened the survival of the national park idea.

If Yosemite could not be saved from exploitation, no park could be considered safe. The petition was approved in 1907 and construction was permitted in 1908.

Preservationists now faced a dilemma in updating their own tradition. Hetch Hetchy taught them to rely as much on economic rationales for protection as emotional ones (Runte, 1979). However, with all the national parks located in the west and with nine-tenths of the population in the east, revenue from park visitation was minimal. Thus, in the second decade of the 20th century, energies were focused on arousing public enthusiasm for the parks, and making travel easier and accommodations less primitive.

A "See America First" campaign was launched during this time to turn American eyes away from European scenery to native scenery. The premise utilized in this campaign was that the "western United States offered in beauty, variety, and uniqueness of its scenery attractions as strong as those of Europe" (Buck, 1921). This campaign was successful in strengthening the national park idea by channeling cultural nationalism into aesthetic and economic defense of the national parks. The campaign frequently associated human "efficiency" and "productivity" with outdoor recreation and, thus, turned the rhetoric of the conservationists into an asset for preservationists.

In 1916 the National Park Service was formed and the first heads, Mather and Albright, continued the campaign to heighten public awareness of the parks through mass media, promotional literature and an alliance with the railroad companies. The object of this campaign was to spread information about the parks, making them the core of a great potential American tourist system. In 1916, in cooperation with the railroads, the Department of Interior published the first large collection of illustrated booklets on national parks entitled *National Park Portfolio*. These booklets became so popular that the demand exceeded the supply (Buck, 1921). With the formation of the Park Service and the growing popularity of the national parks, Congress now had good reason to add to the park system, rather than dismantle it.

Prior to the establishment of the National Park Service, each of the parks was administered as a separate entity and each was operated under its own specific legislation. The army was in charge of most areas, although the division of authority and administration was chaotic (Newton, 1971). There was also no uniform procedure for the selection of lands for national park status. Proposals for many of the parks arose from local or group interests. The reliance on local sentiment led to the establishment of several national parks, such as Platt (OK) and Sully's Hill (ND), which did not merit national park status. Many believed these parks lacked sufficient national characteristics to warrant their development as national parks, and these areas were later stripped of their national park status (Buck, 1921). Thus, through the formation of the National Park Service, a federal agency was developed which could insure uniform management, proper allocation of funds, and proper selection of lands for inclusion in the national park system.



———— National Parks of Peak III 1915 - 1921 ————

Figure 5.

PEAK III (1915-1921)

During the third peak of park establishment, scenic monumentalism was still a predominate force behind preservation efforts. The parks created during this time, Rocky Mountain, Hawaii Volcanoes, Lassen Volcanic, Mt McKinley, Zion, Grand Canyon and Lafayette all contained rugged monumental scenery. Even though a precedent was set with the first eastern park - Lafayette (later Acadia), this area met traditional scenic standards by containing a rugged coastline, glacial worn mountains and the highest elevation on the eastern seaboard.

The third peak of national park establishment also represented an important period in the development of the national park system, since for the first time, the national parks were actually being utilized as recreation centers or "pleasuring grounds". The increased travel to national parks was a result of several factors including the success of the See America First campaign; the reduction of European travel due to World War I; the advent of the automobile, which allowed previously unthought of travel; and the Panama-Pacific Exposition of 1915 in San Francisco. As a result of the See America First campaign, the national parks had also taken on a patriotic aspect, and they were viewed as "national assets in which every state of the Union has an inalienable right of possession" (Buck, 1921). A greater sense of national unity also developed as Americans began travelling from state to state.

The recreational importance of national parks was stressed heavily as a motive for park establishment during this period, especially with Rocky Mountain and Acadia National Parks, due to their close proximity to population centers. As tourist travel increased, economic criteria for park establishment took on a new significance. While the land within national parks still had to be deemed worthless for agriculture, mining or forestry, Americans now realized that scenery could be marketed as an economic asset. Many commercial organizations and state legislators were eager to acquire new national parks and promote tourist travel to ex-

isting national parks as a means of encouraging investment and inducing settlement in their state. "One of the reasons for creating Mount McKinley National Park was to stimulate travel by sightseers and tourists to Alaska who in turn would become investors, publicity agents, and perhaps settlers" (Buck, 1921 from S rpt 440).

The San Francisco Exposition of 1915 was an additional factor in stimulating travel across the country. The national parks were actively promoted as attractive stopovers on route to California. As a result, 1915 was the first great year enjoyed by the park system, with 335,000 visitors as opposed to 235,000 in 1914 (Buck, 1921). Visitation continued to increase in the following years, with a slight falling off in 1918. However, by 1920 annual visitation to the parks had exceeded one million people. With the revenues generated from this surge in popularity, the new goal of the Park Service was to make the parks entirely self-sustaining "by increasing and perfecting facilities and conditions for caring for the tourist and encouraging a greatly increased tourist travel throughout all the reservations" (H rpt 1275, 1915).

Rocky Mountain National Park (1915)

The bulk of the statements submitted to Congress concerning the establishment of Rocky Mountain National Park were contained in one comprehensive legislative report, # 1275, 1915. Although the petitions contained in this document were numerous and varied in scope, the same basic motives for park establishment were repeatedly emphasized:

- Scenic quality
- Low economic value of the land for agriculture, etc.
- High economic value of the scenery
- Recreation potential
- Health

Of these motives, Senator T.M. Patterson (CO) believed "the strongest and most dominating...arises out of a conviction that the area comprises the grandest scenery, some of the most magnificent mountain peaks, broad valleys and deep gorges to be found in the mountain regions of the North American continent" (H rpt 1275, 1915). It was added that the area was of "local, national and international interest,...known almost as well throughout Europe as it is in the United States as being one of the most marvelously beautiful regions of the earth" (H rpt 1275, 1915).

An interesting facet of the scenic motive for park establishment was that the object of scenic admiration was not a specific natural feature or wonder, but instead, was more comprehensive in scope. A report submitted in 1913 and again in 1915 by Robert Marshall, administrator of the National Park Service, provides evidence of this broader scenic appreciation:

There is no commanding natural feature in Estes Park,⁴ such as is found in the Crater Lake, the Yellowstone or the Yosemite, or along the Grand Canyon of the Colorado, but the region as a whole is as beautiful as any to be found in the United States, or, indeed, the world. There is spread before the eye a gorgeous assemblage of wonderful mountain sculpture, surrounded by fantastic and ever-changing clouds... one beholds the scene with awe and amazement (H rpt 502, 1916).

The influence of the conservationists continued, from earlier years, to be a major factor in the establishment of Rocky Mountain National Park, as the park's preservation was compromised to accommodate economic claims. The principle objection to the establishment of the park was based on the assumption that the proposed boundaries were too large "for economical administration" and that they included valuable private holdings (H rpt 502, 1916). In addition, the area had to be proven to be of little commercial value before the bill would pass in Congress. Robert Marshall reported that "the area is little adapted to either agriculture or grazing"; the timber is "of very little merchantable value,... there are no valuable minerals"; and concluded that "the territory has no other special value excepting for scenery" (Congressional Record, 62-3 1913; H rpt 1275, 1915). Senator Thomas of Colorado added that:

⁴ Estes Park was the original proposed name for the national park. However, due to a desire to attach a name with broader national and descriptive significance, it was changed to Rocky Mountain National Park before the bill was passed in Congress.

Up until this time it has yielded nothing to the quest of the prospector, and considered as a whole it is unfitted for permanent occupation.... the park harmonizes with every practical interest and conflicts with none of them. The prospector, the farmer, and the townsman are mutually interested in the permanent preservation of the forests, the water supply and the growth of this wonderful region... [Thus] the only purpose that can be subserved by this territory is to consecrate it to the public as a national park (H rpt 1275, 1915).

Despite the claims of low economic value, it was recommended that leases be granted for mining, hydroelectric and grazing privileges within the park, and that the private holdings be exchanged for public lands outside the park. In addition, the bill was not allowed to pass in Congress until an amendment had been added allowing the Reclamation Service to enter the park "and utilize for flowage or other purposes any area...which may be necessary for the development and maintenance of a Government reclamation project" (Cong. Rec, 63-2, 1914).

Economic justifications for park establishment took on a new twist with Rocky Mountain as preservationists began buttressing their arguments with positive economic rationale. A statement of the Secretary of Interior Franklin Lane, published in the Washington Evening Post on Dec. 27, 1914 and again in House report 1275 supported the new belief that Americans should capitalize on the scenery and climate of the nation:

American people have been too slow to look upon scenery as an asset which is just as valuable in its way as is coal, timber, water power, or any other natural resource. The scenery of Switzerland is estimated to be worth more than \$250,000,000 a year to the people of that little country (H rpt 1275, 1915).

As Americans realized that scenery could be used as a great natural resource, they saw the potential of developing the national parks as "national playgrounds", with the goal of keeping American tourist dollars from being diverted overseas. Mark Daniels, general superintendent and landscape engineer for the national parks in 1915 supported this strategy with the following statement:

if the national park system was properly developed and placed before the public in all its wonderful phases, there is no doubt that more than \$50,000,000 that are spent annually abroad by scenery lovers could be diverted and spent within the boundaries of the United States (H rpt 1275, 1915).

This economic rationale was relied upon strongly in the support of Rocky Mountain National Park which was often referred to as the "Switzerland of America". The area had already

proven itself to be of national interest, attracting over 50,000 visitors in 1914, without the assistance of the federal government. The park's close proximity to the expansive population centers in the eastern U.S. offered additional incentive for park establishment. If established, Rocky Mountain would be the most accessible of the scenic national parks due to its location and ease of access by rail or auto, thus attracting visitors from all sections of the United States and generating "enormous revenues for the State of Colorado" (H rpt 502, 1916).

1915 was expected to be a particularly important tourist year for Colorado due to the San Francisco Exposition. As a result, many commercial organizations were very active in their support of park establishment. These organizations were eager to "use Rocky Mountain National Park as an attractive announcement for the thousands of tourists who are going to pass through Colorado to the San Francisco Exposition" (H rpt 1275, 1915).

In addition to the tourist travel that would be generated by the establishment of Rocky Mountain National Park, the importance of outdoor recreation to an increasingly urbanized American population was a final justification for the establishment of the park. Many Americans believed that outdoor recreation was important to the physical as well as mental health of the population, as the following statement points out:

We know of the growing need and the growing demand for public recreation places out of doors, and we believe that if localities of natural scenic beauty are preserved and used for public recreation places they will benefit the lives of millions of people, physically, mentally and morally (H rpt 1275, 1915).

The moral value of national parks was pointed out by Horace McFarland in his comparison of national forests to national parks:

The primary function of the national forests is to supply lumber. The primary function of the national parks is to maintain in healthful efficiency the lives of the people who must use that lumber. The parks are the nation's reserve for the maintenance of individual patriotism and Federal solidarity... [and are] known to have great influence upon the development of that best citizenship without which a country is poor indeed (H rpt 1275, 1915).

In addition to moral values, Enos A. Mills supported the physical health benefits of outdoor recreation stating that: "the benefit of the public would come from the health of the citizens,

which is always improved by outdoor vacations" (H rpt 1275, 1915). Outdoor clubs throughout America were in agreement with Mills, claiming that:

The strenuous life which American people are living requires outdoor recreation and relaxation, and our city, state and national parks are one of our greatest health assets (H rpt 1275, 1915).

Acadia National Park (1919)

Acadia National Park represented an important addition to the national park system because it set precedents for being the first eastern park, the first coastal park, and the first park created entirely from the private domain. Several of the motives for establishing Acadia were similar to those for Rocky Mountain National Park, including scenic quality and recreational potential. However, it is interesting to note that the strong emphasis on the economic worthlessness of the lands within Rocky Mountain was largely absent from the discussion of Acadia National Park. This may be due, in part, to the fact that Acadia was merely converted from Sieur de Monts National Monument, which had been established by presidential proclamation on July 8, 1916. Thus, the land was already reserved due to its national importance and the question of its value for other purposes was no longer an issue. The principle question involved in the legislation was, rather, whether the monument lands were worthy of advancement to national park status. The arguments used repeatedly to justify this advancement fall under the following major categories:

- Historic
- Scenic
- Scientific
- Recreational

The historic value of Acadia was based on its rich French and English background. The island was first discovered in 1604 by Champlain, and was the first land named and touched by him

on his explorations of our coastline. In 1613, it was the site of the earliest French missionary settlement on the continent and remained in French hands until the English conquest a century later (H rpt 932, 1919). The original name of the national park, Lafayette, reflected both the historic importance of the French background and the close associations of America and France in the first world war.⁵

The name of Lafayette should be commemorated by these splendid mountains facing on the sea on what was once a corner of Old France, and with its early friendship of the two nations in the present war. Already, this land, as a portion of the old French Acadia, is associated with some of the most famous names of France: Henry of Navarre, De Monts, Champlain, Cadallac, and others (S rpt 576, 1918).

Although Acadia is located on the eastern shore, statements of its scenic qualifications resembled earlier statements praising the rugged mountainous scenery of the western parks. Acadia was said to be the "crowning point of beauty on our eastern shore,⁶ [and was] in the heart of the most beautiful and picturesque scenery on the Atlantic coast, if not the world".⁷ The landscape was further described as "extraordinarily bold in character" containing the loftiest headlands of the Atlantic Coast.

Their high rounded summits, often craggy, and their splendid granite shelves form a background for a rugged shoreline and an island-dotted harbor which is one of the finest that even the Maine coast can present. Back of the shore is a mountain and lake wilderness which is typical in a remarkable degree of the range of Appalachian scenery (S rpt 503, 1918).

The scientific justification for park establishment was based on the outstanding botanical, geological and biological characteristics of the area, and the value of conserving these features in their natural state. The park land was said to be "covered by an extraordinary variety of trees, shrubs and flowers" (Cong rec 65-3, 1919). "There are few spots, if any, which can combine the variety and luxuriance of the eastern forest in such small compass" (S rpt 503, 1918). Geologically, the area contained some of the "most ancient and interesting mountain

⁵ The name Acadia is an Indian word describing the region and was used among early fishermen and traders in accounts brought to Europe before the first recorded explorations of the French and English (S rpt 1425, 1929).

⁶ House report 932, 1919.

⁷ Congressional Record (65-3) 1919.

and rock formations in the world;⁸ they are exhibits of scientific interest as well as beauty".⁹ In addition, wildlife was said to abound in the area, making it an ideal setting for a bird or wildlife sanctuary.

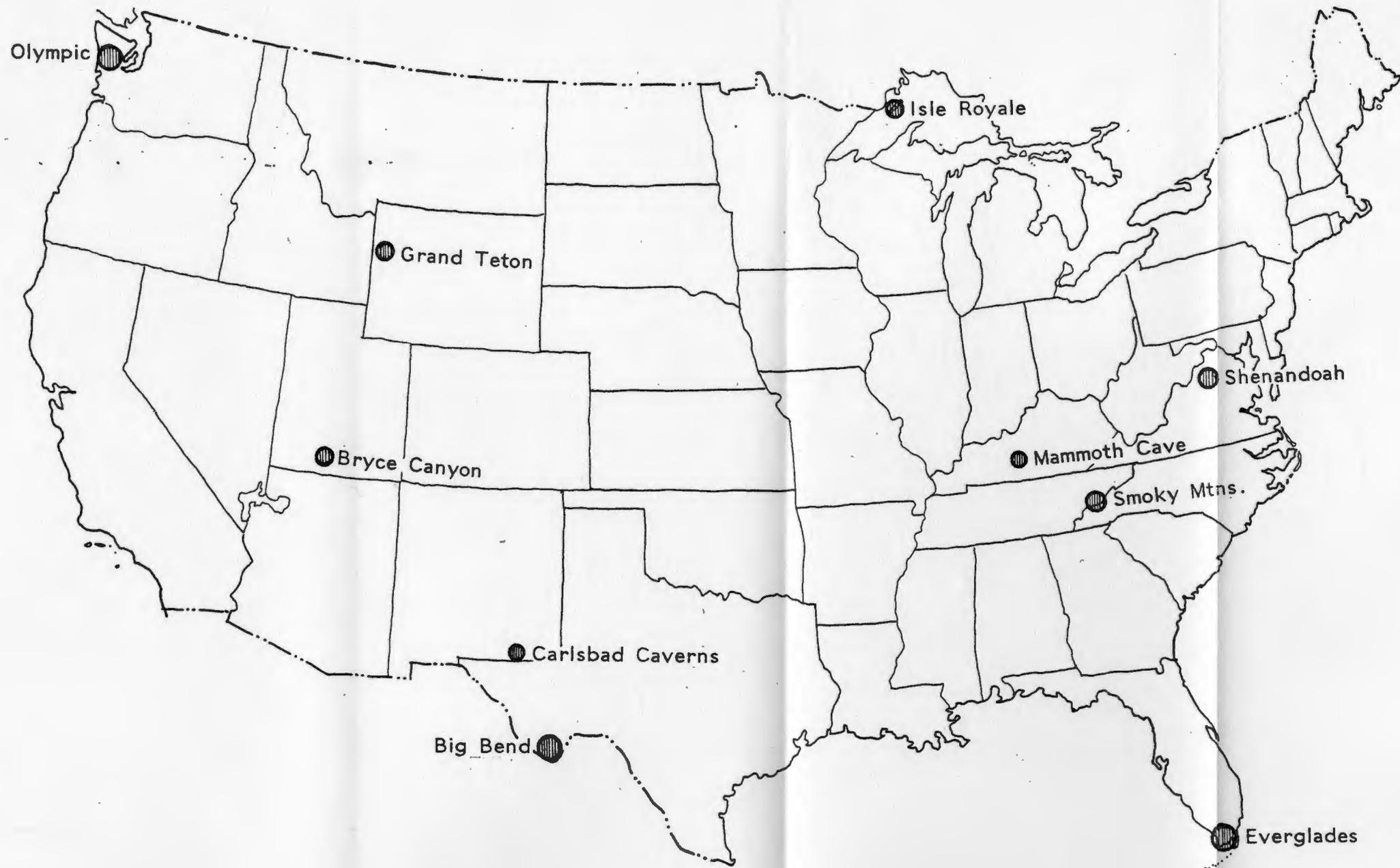
The final justification for national park establishment was the great recreation opportunities that the area could offer to the "hundreds of thousands of people living east of the Mississippi River" (S rpt 503, 1918). President T. Roosevelt supported the recreational potential of Acadia National Park in a letter to Congress stating that:

It is our one eastern national park and gives for the first time to the crowded eastern portion of the country the opportunity to share directly and immediately in the benefits of our national park system. Its striking ocean frontage makes it unlike every other park... It will give a healthy playground to multitudes of hardworking men and women (H rpt 932, 1919).

Due to Acadia's eastern location and accessibility by auto, train or boat to two thirds of the population of the U.S. "it will furnish recreation and pleasure to different types of people to an extent greater than any other park possible in this country" (Cong Rec 65-3, 1919).

⁸ Congressional Record (65-3) 1919.

⁹ Senate Report 503, 1918.



———— National Parks of Peak IV 1928 - 1944 ————

Figure 6.

PEAK IV (1928-1944)

The fourth peak period in national park establishment occurred in the years between World War I and the end of World War II. This period represented a transition between the earlier preference for rugged, monumental scenery and the ecological concerns that became predominant in the 1960s. Geographic reservation of land for national park status can be characterized into three major groups during this period:

1. Eastern parks - Great Smoky Mountains, Shenandoah, Mammoth Cave and Everglades.
2. Arid southwestern lands with unique geological features - Bryce Canyon, Carlsbad Caverns and Big Bend.
3. Ecological wetlands or coastal areas - Everglades, Isle Royale and Olympic.

In looking at the types of parks that were created during this period and the reasons for their establishment, a range of factors influencing the development of the national park system can be identified. As the period progressed, traditional concerns for scenic quality, economic worthlessness and recreational potential were reinforced, or in some instances replaced, with more recent concerns for biological importance or primitive characteristics of the area. Thus, the four major factors that influenced national park selection during this period included:

1. Traditional scenic and economic concerns
2. Recreational opportunities
3. Increasing concern for the scientific importance, especially biological significance
4. Emerging appreciation of wilderness areas.

(1) The persistence of scenic monumentalism, which dictated that the landscape must be of some **topographical** significance, continued to be a major determinant in the reservation of

park lands, especially at the beginning of this period. Rugged mountains or unique geological features were still the framework of preservation. The arid, weather worn park lands of the southwest were traditional additions to the park system, which proved the monumental scenery of the west still stirred much emotion. Two new southwestern national monuments, Arches and Capitol Reef (which both became national parks in 1971) were also added during this period to compliment Bryce Canyon National Park. Visits to these areas were frequent and the route between Bryce Canyon, Arches and Capitol Reef became known as the "Celestial Circuit". Rufus Steele, a popular writer of the early 1900s described the circuit as follows:

It leads to canyons set about with majestic peaks, and to other canyons that are filled with cathedrals and colonnades, ramparts and rooms, terraces and temples, turrets and towers, obelisks and organs [and similar] incredible products of erosion. (Runte, 1979).

The inclusion of Grand Teton National Park (1929) continued the monumental tradition and proved that Congress' commitment to preserving only economically worthless lands still prevailed. Only the Teton Mountains were set aside as a park with very little flat land included, due to its value for grazing. Yet the intent of the bill had been to preserve the whole area from tourist exploitation and the disruption and hunting of the elk herds, which resulted from the heavy tourist traffic through Yellowstone. Since 1905 attempts had been made to curtail the poaching of elk and protect the wilderness beauty of the area. However, it was not until 1950 that Grand Teton National Park was enlarged to take in a substantial portion of the valley and its wildlife habitat.

(2) The provision of outdoor recreation also continued from peak III to be a major factor in national park establishment. The 1923 Secretary of the Interior Albert Fall wrote in a letter to Congress that the national parks should embrace:

both natural objects demanding preservation and also recreation and playground features which are so much needed by the people of the United States... [and that national parks are] both museums of natural objects and recreational playgrounds and breathing places for the people of the United States who own them (H rpt 1729, 1923).

As a result of this growing desire for outdoor recreation, the Park Service strongly supported the establishment of more parks in the east, where two-thirds of the population resided. With the addition of Great Smoky Mountains, Shenandoah, Mammoth Cave and Everglades National Parks, the Park Service's goals were addressed and the eastern U.S. became the largest single region for new national park acquisitions during the fourth period.

(3) Although emphasis on scenic quality remained strong through out this period, other justifications, including the importance of flora and fauna, were being introduced to buttress the preservationist's arguments. For example, the commissioners supporting a park in the Appalachian Mountains stressed ruggedness as the primary criterion for national park status, but also mentioned the "primeval forest" and the diversity of plant and wildlife, reflecting a broader concern for the area (Runte, 1979). However, in the Smokies these features were singled out to lend support to the main issue of scenic quality. Wilderness areas and wildlife or botanical preserves were not recognized as important in and of themselves until the unprecedented establishment of Everglades National Park in 1934.

By the 1930s the concern for biological features of national parks had grown in intensity. These new concerns were publicized in the 1933 *Fauna of the National Parks of the United States* with the following statement: "The realization is coming that perhaps our greatest natural heritage [rather] than just scenic features is nature itself, with all its complexity and abundance of life." For the first time Americans realized that "awesome scenery" might be sterile without "intimate details of living things, the plants, the animals that live on them." (Wright, 1933)

Attempts were made to round out some existing national parks as effective biological units, but these attempts proved largely unsuccessful. Even the Everglades, which was expressively designed for wilderness and wildlife protection, failed to include the entire ecosystem, and thus, became vulnerable to outside development.

Isle Royale National Park (1931) came the closest to the ideal ecological preserve, due to its island status, isolation and complete ownership by the government. However, nothing in its enabling legislation actually bound the Park Service to manage the reserve for these values. The park's original supporters often singled out the island's "boldness" and "ruggedness", thus emulating the traditional standards (Runte, 1979).

(4) The final major factor influencing national park establishment during these years was the growing appreciation for primitive or wilderness conditions. Throughout the 1920s Aldo Leopold was pointing out the recreational, scientific and social values of wilderness, as well as its importance in determining the American character. He and other wilderness advocates, such as Robert Marshall and Stephen Mather supported the retention of wild lands in forest areas for public hunting grounds and in parks as public wildlife sanctuaries (Leopold, 1925).

An educational motive for national park establishment developed out of this increased appreciation of wilderness areas, as well as for the flora and fauna it supported. Stephen Mather pointed out the educational value of national parks as a means of interpreting natural wonders, while R.S. Yard added that "Americans were now awakening to the realization [that the national parks embody]...a mighty system of natural museums of the primitive American wilderness" (Yard, 1922). Other conservationists of the day supported Yard's comments with similar statements:

The national parks are much more than a playground. They are a refuge. They bring rest to their human visitors, but give life to uncounted numbers of wild creatures.¹⁰ [certainly the animals] are of no less consequence than the scenery. Herein lies the feature of supreme value in national parks, they furnish examples of earth as it was before the advent of the white man¹¹ [providing a suburb illustration] of the geological sequences of America's making...the tremendous processes of the upbuilding of gigantic mountain systems, their destruction by erosion and their rebuilding.¹²

¹⁰ Rhinehart, Mary "The Sleeping Giant". *Ladies Home Journal*. 38 (May, 1921):21.

¹¹ Grinnell, J. and Tracy Storer. "Animal Life as an Asset of National Parks". *Science*. 44 (September 15, 1916): 377.

¹² Yard, R.S. "Economic Aspects of Our National Park Policy". *Scientific Monthly*. 16 (April 1923): 384-385.

These statements reflected a changing attitude in park management, with a new emphasis given to wildlife and scientific value, as well as to scenery. As a result of this new attitude, the first park museums and interpretive programs were developed in the early 1920s. (Runte, 1979).

In 1935 the Wilderness Society was formed with the goals of preventing the demolition of existing wilderness and pushing the establishment of new wilderness areas. The attitudes toward wilderness expressed by the Society reflected an "intelligent humility toward man's place in nature", which foreshadowed later environmentalist's philosophies. These wilderness advocates wisely admitted that they "do not yet understand and cannot yet control" the natural interactions of the environment or all the consequences of land use technologies (Leopold, 1935). In 1939, through the efforts of Robert Marshall and the Wilderness Society, the Secretary of Agriculture signed regulations U-1 and U-2 to safeguard wilderness areas (greater than 100,000 acres) and wild areas (between 5,000 and 100,000 acres). Thus, by the 1940s, through the influence of men such as Leopold, Marshall, Muir and Mather, a sense of the importance of wilderness was growing and a wilderness preservation system was developing (Anderson, 1940; Zahniser, 1954).

Great Smoky Mountains National Park (1934)

While Great Smoky Mountain National Park was not established until 1934, the area was authorized for national park status in 1926, with the provision that when the suggested minimum acreage was acquired it could be opened to visitors and developed as a national park. Since the proposed boundaries included exclusively private land, the federal acquisition of sufficient acreage took over eight years to accomplish. The authorization of Smoky Mountains was prompted, in part, by the desire of the Park Service to provide the eastern U.S. with several additional parks. In 1925 the Committee on Public Lands reported that:

The Interior Department, recognizing the tremendous popularity of the national park system... has adopted a definite policy for the creation of additional national parks in the eastern section for the public use and general welfare of its millions of inhabitants. Most of these live in densely populated communities and can not afford the time or money required to visits the western National Parks... [however, they share in] the upkeep and maintenance of the national park system, and... should be entitled to recognition (H rpt 1320, 1925).

Thus, the same legislative act that authorized Smoky Mountains also included provisions for Shenandoah and Mammoth Cave National Parks.

A proposal for the establishment of a national park in the Appalachian Mountains containing "the highest mountains and the finest scenery in the whole Appalachian system, and... the largest area of virgin forest and the finest example of mixed forest in America" was first submitted to Congress in 1900 (S doc 58, 1900). The park was justified upon reasons of scenic beauty, superb forests, conservation, health and accessibility. However the strong influence of the conservationists was felt when, a year later, Congress recommended use of the land as a forest reserve instead of a national park (S doc 93, 1901). Apparently the commercial value of the timber outweighed its scenic and scientific values. The congressional report stated that the region contained "among the very best and richest hardwood forest of the United States", and added that:

The general conditions within the region are exceptionally favorable for the carrying on of large operations in practical forestry, and the weather is suitable for lumbering operations at all seasons of the year... It is fully shown... that such a reserve would be self supporting from the sale of timber under wisely directed conservative forestry (S doc 93, 1901).

It was not until 25 years later that the area was seriously considered again by Congress for inclusion into the national park system. In 1924 a committee was appointed to investigate the potential location of one or more national parks in the southern Appalachian Mountains. The report submitted to Congress in 1925 by the Southern Appalachian National Park Committee (SANPC) recommended both Great Smoky Mountains and Shenandoah as national parks primarily for their scenic, recreational and scientific values. The guidelines the committee used for selecting lands included the following:

1. Mountain scenery with inspiring perspectives and delightful details.
2. Areas sufficiently extensive and adaptable so that...millions of visitors might enjoy the benefits of outdoor life and communion with nature without the confusion and overcrowding.
3. A substantial part to contain forests, shrubs, and flowers, and mountain streams, with picturesque cascades and waterfalls overhung with foliage, all untouched by the hand of man.
4. Abundant springs and streams available for camps and fishing.
5. Opportunities for protecting and developing the wild life of the area and the whole to be a natural museum, preserving outstanding features of the southern Appalachians as they appeared in the early pioneer days.
6. Accessibility by rail and road. (H rpt 1320, 1925).

These guidelines revealed the continuing appreciation of rugged and picturesque mountain scenery as well as the more recent concerns for wildlife, primitive conditions and the educational value this type of environment could provide. Based on these criteria the committee reported that "the Great Smoky Mountains easily stand first because of the height of the mountains, depth of the valleys, ruggedness of the area, and the unexampled variety of trees, shrubs, and plants" (H rpt 1320, 1925).

Descriptions of the scenic aspects of the Smoky Mountains especially revealed traditional park standards as the area was repeatedly compared to western national parks and referred to as rugged, picturesque or beautiful. The committee stated that:

Several areas were found that contained topographic features of great scenic value, where waterfalls, cascades, cliffs, and mountain peaks with beautiful valleys... gave ample assurance that any or all of these areas were possible for development into a national park which would compare favorably with any of the existing national parks in the west (H rpt 1320, 1925).

Earlier reports of the Smokies also claimed that:

It is a region of exceptional beauty and picturesqueness... [containing] the highest and largest mountain masses and perhaps the wildest and most picturesque scenery east of the Mississippi River (S doc 93, 1901).

The potential for offering recreational opportunities to the eastern U.S. was a second major factor in establishing the area as a national park. A prime concern of the SANPC was to locate the park "where it will benefit the greatest number and... be of sufficient size to meet the needs as a recreational ground for the people not only of today but of coming generations" (H rpt 1320, 1925). The mild climate and central location of the Smoky Mountains provided ideal conditions for park establishment since the area "could be visited and enjoyed at all seasons of the year" and was "within easy reach of millions of people" (S doc 58, 1900).

While scenic and recreational concerns were highly stressed for the establishment of Smoky Mountain National Park, broader concerns for the scientific and educational values of the forests and wildlife in the area were also revealed. The Smokies were said to contain "the largest area in the South Atlantic region of virgin forest and the finest example of mixed forest... in America (S doc 58, 1900). An eminent botanist of the early 1900s stated that he:

encountered a greater number of indigenous trees in a trip of 30 miles through western North Carolina than can be observed in a trip from Turkey to England through Europe, or from the Atlantic coast to the Rocky Mountain plateau (S doc 58, 1900).

It is interesting to note that the Great Smoky Mountains National Park is now recognized as an area of unique geological and biological significance, harboring more native plants than any comparable area in the world (Newton, 1971).

Since much of this forest land was threatened with destruction by lumbering interests, the protection and conservation of the timber was viewed as particularly crucial. As the Southern Appalachian National Park Committee stated:

All that has saved these nearby regions from spoliation for so long a time has been their inaccessibility and the difficulty of profitably exploiting the timber wealth that mantles the steep mountain slopes. With rapidly increasing shortage and mounting values of forest products, however, we face the immediate danger that the last remnants of our primeval forests will be destroyed, however remote on steep mountain side or hidden away in deep lonely cove they may be (H rpt 1320, 1925).

In addition to the scientific importance of the Smokies, we see for the first time the wilderness or primitive characteristics stressed as an important factor in park establishment. In the 1926 hearings for Smoky Mountain National Park, Zebulon Weaver of North Carolina pointed out that:

the area constitutes a great wilderness, the greatest of its kind in the eastern Appalachians... with more than 18 peaks higher than Mount Washington... Its very remoteness, until the present time has preserved it in its primitive characteristics, and we want to preserve it,... as I think [the park] would be invaluable to the entire country (Hearings 69-1, 1926).

It is interesting that the economic criteria for park establishment did not weigh as heavily for Smoky Mountains as it did for earlier parks. Park boundaries were laid out to include "no hydroelectric power, no railroads... no great industries and no valuable cultural lands" (Hearings, 1926; S rpt 278, 1928). However, a shift in the concern for the economic value of the land was apparent. While in 1900 the value of the timber had outweighed scenic, recreational or other values of the land for park purposes, by 1925 recommendations were made to condemn valuable privately owned timber land due to its value for inclusion into the park. This type of action would have been unthinkable 20 years prior. However, economic concerns had certainly not disappeared from the scene. An important factor in establishing the national park was that it would involve no expense to the federal government for the purchase of lands, since all lands were to be secured from public or private donations. The responsibility of land acquisition was entirely turned over to the state (S rpt 824, 1926). However, due to the severe economic condition of the country in the 1930s, F.D. Roosevelt did recommend federal purchase of park land for emergency conservation work in 1934.

The purchase by the United States of such privately owned lands will permit work and improvements thereon that will provide protection for the aforesaid public lands from forest fires, floods and soil erosion,... and aid in the restoration of the country's depleted natural resources... the purchase of such lands will further provide employment for the citizens of the United States (H rpt 982, 1934).

Many national parks other the Great Smoky Mountains were influenced by Roosevelt's New Deal policies of restoring the economy by using federal spending for public projects. The national parks were ideal recipients for such a program, and Civilian Conservation Corps were assigned to national parks from coast to coast to build and repair buildings, roads and utilities.

Three new components of the park system were also incorporated during these years - National Historic Parks, National Parkways and National Seashores (Newton, 1971). With the authorization of Cape Hatteras National Seashore in 1937, the government reaffirmed the precedent set with the Everglades. This seashore was to be administered as a pristine wilderness in a manner compatible with the "preservation of the unique flora and fauna" and with the original "physiographic conditions". (Runte, 1979).

Everglades National Park (1934)

The creation of Everglades National Park in 1934 was an unprecedented achievement, because it was the first unmistakable pledge to total preservation. For the first time a major national park would lack outstanding topographic features such as great mountains, deep canyons or huge waterfalls. Preservation of the Everglades, instead reflected the growing concern for the environment and for natural ecological relationships, as preservationists accepted the protection of primitive conditions and native plants and animals as primary justifications for national park status. The importance of the wilderness character was stressed in section 4 of the enabling act: "The said area or areas shall be permanently preserved as wilderness", and no development within the park should "interfere with the preservation intact of the unique flora and fauna and the essential primitive conditions." (quoted in Runte, 1979 pp135-136). This clause alone marked a new evolution in the character and standards of the national parks.

In 1928, when the Tropic Everglades National Park Association was formed to promote the area as a national park, not all preservationists were in agreement as to the area's worthiness for national park status. Some suggested a state park would be more appropriate, while

others supported a botanical reserve. William Hornaday, a leading spokesman for wildlife conservation recalled his 1875 visits to the area and said:

I found mighty little that was of special interest, and absolutely nothing that was picturesque or beautiful... [Although he conceded] the saw-grass Everglades swamp is not as ugly and repulsive as some other swamps I have seen [yet] it is a long ways from being fit to elevate into a national park, to put alongside the magnificent array of scenic wonderlands that the American people have elevated into that glorious class. (quoted in Runte, 1979 p131).

Several special investigations followed for determining the suitability for national park status.

The first study in 1930 recommended a national park concluding:

the Everglades National Park project is one of outstanding merit, and the park... would measure up to the established national parks... The area is of national and not merely local interest. The tropical plant and animal life, the excellence of fishing, and the bird life, which is remarkable both for number of species and for the abundance of birds, evidences of prehistoric human occupation, and the present Seminole Indians, are sufficient to give the area a national interest (H doc 654, 1930).

The Olmsted/Wharton report of the area, which followed in 1932 also recommended park establishment based on the primitive conditions of the area and its important scenic, scientific, educational and inspirational qualities (S doc 54, 1932). While a range of reasons justifying Everglades National Park were expressed in the legislation concerning park establishment, the motives which received the strongest emphasis included the following:

1. Unique scenic quality
2. Scientific, educational and inspirational importance of the flora and fauna
3. Importance of preserving the wilderness characteristics
4. Recreational opportunities
5. Economic worthlessness of the land

Although scenic justifications were important in establishing Everglades National Park, the scenic characteristics of the Everglades differed radically from the standards set by earlier parks. No imposing topographic features were present and the scenery of certain sections was even described as possessing "a uniformity that may be said to approach monotony" (H doc 654, 1930). The intriguing scenic aspects of the Everglades were, thus, not bold monumental features, but were instead the strange uniqueness of the area and the unusual flora and fauna. In the hearings for Everglades, the area was described as "one of the most inter-

esting, unusual, spectacular, inspirational places in America". One park proponent added "I have never seen anything like it, and have never dreamed there was anything like it" (Hearings 71-3, 1931). Albright further compared the strange features of the Everglades to the scenic wonders of Yellowstone:

people go to Yellowstone to see Old Faithful... and those other wonderful manifestations of subterranean disturbance. That is what attracts most people. Now in the same way they would go to the Everglades. It is a strange land, full of strange plants. The landscape is strange. The coconut beaches are strange. There is an atmosphere of mystery and strangeness about the whole thing that attracts the attention of all who see the Everglades and will attract the multitude as much as... Yellowstone (Hearings 71-3, 1931).

Olmsted added an emotional aspect to the scenery in his comparison of the Everglades to other national parks. He admitted that a good deal of the Everglade is "somewhat confused and monotonous", but added that:

Its beauty... is akin to that of other great plains - perhaps subtle for the average observer in search of the spectacular; though sometimes very grand, especially when seen in solitude and at rest... But... there are extensive areas where even the most casual observer can hardly fail to be gripped and inspired by a sense of beauty linked with a sense of power and vastness in nature, essentially akin to the feelings inspired by great scenes in our existing national parks yet arising out of elements so different from these - indeed so wholly unfamiliar to the experience of most visitors to the national parks - as to have the special force of novelty (S doc 54, 1932).

Olmsted believed the outstanding scenic features of the area to be the mangrove forests and abundant birdlife. He described the forests as "picturesque and strange and full of stimulus to observation and thought", with "scenic compositions... endlessly varied and beautiful", while the birdlife received the following description:

No one who has been fortunate enough to see thousands upon thousands of ibis and herons flocking in at sunset from their distant feeding grounds... as the glow of the setting sun suffused their white plumage with delicate rose tints... can fail to have received an impression of sheer beauty, and of the multitudinous vastness of nature as exhibited in these great flocks of birds, no less arresting, no less memorable, than the impressions derived from the great mountain and canyon parks of the West... Such sights... rank among the natural spectacles of America (S doc 54, 1932).

Thus, to now "defend wildlife itself as scenery regardless of its physical backdrop, revealed how dramatically the national park idea might depart from the standards... of early park supporters." (Runte, 1979).

Traditional scientific justifications for national park establishment received a renewed importance in Everglades due to the increasing awareness of biological interactions. While most of the national parks were preserved for their geological features, Everglades was promoted as containing outstanding biological features particularly the unique tropical vegetation and wildlife (H rpt 40, 1932). Descriptions of the unique plant and animal life seemed unending in the legislation, and the area was typically described as containing "numerous species of plant and animal life that occur nowhere else in the United States, and some that occur nowhere else in the world" (H doc 654, 1930).

This is a special area, known to geographers and botanists the world over, and its preservation will be understood as something most desirable to do by every educated man or woman throughout the world who cares for wildlife (S rpt 34, 1932).

A significant facet of this increased concern for flora and fauna was the simultaneous awareness of the complex interactions between living things. This marked a crucial turning point in the criteria for national park selection. Instead of laying out boundaries to include only specific scenic features, the proponents of Everglades intended the boundaries to be large enough to encompass the complete biological systems. A boundary recommendation by Olmsted provides evidence of this new concern:

A very large extent of the hinterland of glades should be included, whether in itself interesting to most visitors or not, because it is an essential part of the biological and geographical unit with which we are concerned, containing the most important feeding grounds for the birds and breeding grounds for fish, and serving as a catchment place for rainwater that largely controls conditions throughout the region (S doc 54, 1932).

Thus, a primary concern in establishing Everglades National Park involved not only the protection of plant and animal life, but also the preservation of the delicate ecological balance found in such an environment. "It is to save the whole complex of living things which inhabit the southern tip of...Florida that the proposal has been made to make it a park" (S rpt 34, 1932).

The educational and inspirational values of preserving the flora and fauna of the Everglades was also stressed as important to park establishment. The 1933 Secretary of Interior Ray Wilber stated that the Everglades, "with its marvelous exhibits of birds and flora, fishes and

marine life...holds untold possibilities for the student and scientist, especially for the biologist" (H rpt 2049, 1933). He added that:

If this area is not conserved as promptly as possible, there is no question but that the wonderful displays of bird and plant life, already a mere remnant of former plenitude and which should be preserved as one of our great national assets, will be lost (Hrpt 2049, 1933).

However, the hearings for Everglades pointed out that "there is a distinction there between just preserving birds and animals, and the thrill that you get and the inspiration and the education you get out of going and seeing them". Thus, the intent of the park was to preserve the flora and fauna for future generations "not as dead museum exhibits, not in cages, not in glass tanks, but in a natural environment, as nature intended" (Hearings 71-3, 1931). A distinguished naturalist of the day, David Fairchild added support of the educational and inspirational value of the Everglades with the following statement:

How can anyone object to the establishment of a great wildlife park where swimming and flying inhabitants will inspire millions of American children and give them a glimpse of the fascination of the tropics, which circumstances may never permit them to see elsewhere. It will soon be within the reach of weekend excursionists from the crowded centers of American life, and will startle them out of the ruts which an exclusive association with the human animal produces on the mind (Hearings, 71-3, 1931).

In addition to preserving the flora and fauna of the area, another object of preservation was the wilderness character of the region. C.W. Hodgson, a member of the committee investigating Everglades for national park status claimed that he:

saw what comes nearer to a wilderness area than anything I have struck in a national park. It was inspirational to a high degree. It is not so geological but very elemental and primitive and certainly more biological than anything I have yet struck anywhere. No human touch in it at all. Some 20 by 40 mile of that kind of thing is hard to find anymore. It will soon be spoiled, however, unless we take it... (Hearings 71-3, 1931).

Many park supporters believed that large sections of the park should be retained in its primitive wilderness state, with either minimal or totally restricted access. The inaccessible areas would be established as sanctuaries "where birds and animals could find a safe haven to live and multiply under natural conditions" (H doc 654, 1930). Other sections of wilderness were to be accessible only by foot or boat. "People will go in there because they want to see something unusual or because they feel that they will be getting out in the wilderness, just

as they do in the western mountains" (Hearings 71-3, 1931). David Fairchild summarized the prevalent concern for preserving the wilderness qualities of Everglades in his statement that the area:

represents what may be called the last stand of a type of wilderness which we... have watched fade away before our eyes. With its fading has gone forever the opportunity for our children to enjoy and be inspired by these matchless combinations of wild living forms which have in the past made the American youth the keen, observing, resourceful personalities that they are today (S rpt 34, 1932).

Although scenic, biological and inspirational motives for establishing Everglades National Park were repeatedly emphasized, the country's need for recreational outlets for urban populations was also stressed. "Never has this country need the rest and recreation cure as now, and the need will ever increase..." (Hearings 71-3, 1931). Everglades was promoted as having the potential to meet these needs through the provision of recreational activities such as fishing, boating and camping. In addition, Everglades was to be accessible in the winter months when many of the other national parks were closed.

The final major justification for park establishment was the low economic value of the land. As we have seen with the other national parks, the land of the Everglades was said to possess little or no value for commercial purposes due to the difficulty in draining it.

Several attempts have been made to utilize the everglades and the tip of the peninsula for agricultural and other purposes, but in most cases the experiments have failed, and most of the area is at present a primitive wilderness. It is available for use as a national park and has but little value for other purposes (H doc 654, 1930).

In addition, the park was to involve no expense to the federal government, since land acquisition was turned over to the state of Florida.

Transition Period (1944-1962) and the Emergence of Environmentalism

During the 18 year period from 1944-1962, only one new national park, Virgin Islands, was added. The first part of this period was influenced by World War II (1940-1945), when appropriations were cut to the bone and the parks were opened up for emergency cutting of timber and mineral development. Many parks were temporarily dedicated to troop uses, resulting in high incidences of vandalism. For a decade following the war, the annual appropriations for the entire national park system never reached a third of what they had been before the war (Newton, 1971). However, the onslaught of peacetime tourists to the parks was very high. Pressures on the national parks also increased as water resource issues became prominent in the late 1940s, with many park lands examined as potential reservoir sites.

In 1951 Conrad Wirth assumed directorship of the National Park Service, with a major goal of restoring the parks and preventing them from becoming worn out by increasing numbers of visitors. In 1955, a ten year reassessment of the parks, called Mission 66, was launched, with the expectation of 80,000,000 visitors in 1966. Wirth outlined eight major objectives in his plan, aimed at improving accommodations, facilities and services, acquiring additional lands when needed, developing a coordinated nation wide recreation plan for all levels of government, and protecting and preserving wilderness areas (Newton, 1971; Brockman, 1959).

The late 1950s and 1960s brought a shift in values and ideals toward wilderness and the environment as man became more aware of environmental problems and the depletion of the planet's natural resources. These concerns were reflected in the emergence of a new natural resource management philosophy - Environmentalism. Environmentalists saw the importance of the interaction between man and the environment and realized that maintenance and renewal of resources were essential to insure the survival of both mankind and the environment. Thus, the concerns of environmentalists encompassed the totality of man's environment ranging from wilderness preservation to population control, pollution, depletion of non-

renewable energy sources and the dangers of nuclear power (Culhane, 1981). The term most frequently used to describe this new perspective of the interrelationship between man and the environment was "ecology", defined as the science of the relationships between living organisms and their surroundings (Environmental Law Institute, 1974).

In response to the environmental movement, wilderness preservation efforts and the appreciation of wilderness grew in intensity during the late 1950s and 1960s. As civilization became more advanced, Americans developed a growing importance for wilderness and began to realize that the survival of our culture depended on the conservation of natural resources. The feeling of mankind's dependence on and interaction with the environment was clearly evident in the following statement by Howard Zahniser (1954), a leading proponent of wilderness preservation:

In our wilderness we shall see preserved the unmodified wildness of our primeval origin, our natural home - the areas of unspoiled nature. Here we not only can seek relief from the stress and strain of our civilized living but can seek also that true understanding of our past, ourselves, and our world, which will enable us to enjoy the conveniences and liberties of our urbanized, industrialized, mechanized civilization - and yet not sacrifice an awareness of our human existence as spiritual creatures nurtured and sustained by and from the great community of life on this earth. (Zahniser, 1954 p37).

This statement is remarkably similar to earlier turn of the century statements of dissatisfaction with civilization, which spurred the original park preservation efforts, and similarly, statements such as Zahniser's led to organized preservation and management of wilderness areas within national parks and forests. Wilderness supporters of the 1960s emphasized the value of wilderness as a resource of **health, inspiration, knowledge and understanding**. Many Americans began to interpret natural resources as a "great reservoir of life", from which we evolved. Likewise, more theologically minded Americans supported their feelings of kinship with nature with the claim that "all things owe their gift of life to God". (Krutch, 1961) Many people felt that in the wilderness they were at "home". As Krutch (1961) stated: "Wilderness and the idea of wilderness is one of the permanent homes of the human spirit". Zahniser (1953) added that: "by going to the wilderness we are not escaping but, rather keeping ourselves in touch with true reality."

Legislative action which followed in the 1960s and 1970s clearly reflected these strong feelings toward wilderness as well as the broader concerns of environmentalists. New precedents were set with the Wilderness Bill of 1960 and the Wilderness Act of 1964, since for the first time in nearly 100 years of national park establishment, the government developed an overall policy for the preservation, administration and management of wilderness areas (E.Q., 1979). The intent of the Wilderness Act (1964) was to insure that some part of America always remained wild, primitive and unspoiled in its beauty, providing a place where man could find solitude and inspiration in nature (Thalman, 1979). By 1960, less than 2 1/2 percent of our land could still be defined as wilderness, and this land was almost exclusively in the west. Thus, Senator Humphrey, an original sponsor of the Wilderness Bill in 1957, added that: "the wilderness bill was based on the assumption that there would no longer exist any such area unless we acted now to preserve these lands." (Humphrey, 1956) Lands designated as wilderness were to be administered by either the National Park Service, Forest Service or the Bureau of Sport Fisheries and Wildlife. However, it was not until 1970, with the designation of Petrified Forest wilderness area, that wilderness lands became incorporated into the National Park System. Prior to that time, and for the better part of the 1970s, the U.S. Forest Service was the largest holder of wilderness lands (Wilderness Society, 1974).

By the early 1970s, widespread public concern about environmental issues was apparent, as was evidenced with the national celebration of "Earth Day" in April 1970 and the passage of the National Environmental Policy Act (NEPA) in January 1970. The report of the Senate Interior Committee in July 1969, in which NEPA was proposed, cited two reasons for the "growing concern for the quality of the environment and the manner in which it is managed":

First, the evidence of environmental mismanagement is accumulating at an ever increasing rate as a result of population growth, increased pressures of a finite resource base, and advancing technological development which have enlarged man's capacity to effectuate environmental change. Second, the American people - as a result of growing affluence, more leisure time, and a recognition of the consequences of continuing many present environmental trends - are placing a much higher value on the quality of the environment and their surroundings than ever before. (S rpt 296, 1969).



— National Parks of Peak V 1962 - 1980 —

Figure 7.

PEAK V (1962-1980)

The increased awareness of environmental concerns was strongly reflected in the additions to the national park system during the fifth peak of establishment, particularly in the later part of this period. The value of scientific study received a new emphasis and the concern of protecting entire ecosystems as well as suburb scenic features was evidenced with the addition of seven new expansive Alaskan parks. Based on these concerns, three noteworthy facets of the period were evident in the development of the park system during these years:

(1) The growing appreciation of wilderness, spurred by the environmentalists movement, contributed a new component to the national park system. In 1970 the wilderness preservation system, created in 1964, was extended into national parks with the designation of wilderness lands in Petrified Forest. However, it was not until 1976, 1978 and 1980 that the most significant additions of wilderness areas were incorporated into the national parks. The character of new acquisitions to the park system was also influenced by the increased appreciation of wilderness, since over half of the parks created between 1962 and 1980 contained wilderness lands within their boundaries.

(2) New motives of **inspiration** and **environmental integrity** were introduced as a major criteria for preservation of parklands, reflecting the increased importance that was associated with wilderness areas and the environment as a whole. In addition, the protection of wildlife received an increased emphasis as an essential purpose for park preservation. For the first time, the enabling legislation specifically outlined the species of animals as well as the specific natural features to be protected. The enabling legislation for Kobuk Valley National Park in Alaska provides one example of this new concern for the integration of environmental systems and processes by stating that the purposes for park preservation were:

To maintain the environmental integrity of the natural features of the Kobuk River Valley, including the Kobuk, Salmon, and other rivers, the boreal forest, and the Great Kobuk Sand Dunes,

in an undeveloped state; to protect and interpret, in cooperation with Native Alaskans, archeological sites associated with Native cultures; to protect migration routes for the Arctic caribou herd; to protect the habitat for, and populations of, fish and wildlife including but not limited to caribou, moose, black and grizzly bears, wolves, and waterfowl; and to protect the viability of subsistence resources. (16 U.S.C.S. Supp. 410 hh 6).

This statement contrasts rather severely with the 1917 enabling legislation for Mount McKinley National Park, which merely stated that the area:

is reserved and withdrawn from settlement, occupancy, or disposal under the laws of the U.S., and said tract is dedicated and set apart as a public park for the benefit and enjoyment of the people. (16 U.S.C.S. 347)

(3) The size of the national park system was more than doubled with the additions of the Alaskan parks and monuments. In 1977, the national park system consisted of 31.3 million acres. The passage of the Alaskan National Interest Lands Conservation Act of 1980 increased the holdings to 79 million acres (Nelson, 1981). Although only eight national parks are located in Alaska, these parks contribute nearly 69% of the total acreage of the national park system. The size of these parks is significant since they were large enough to finally allow for the protection of entire ecosystems, a goal toward which the Park Service had striven since the establishment of the Everglades in 1934.

The national parks created during this period can be categorized into three major groups:

1. Arid western lands with unique geographic features (Petrified Forest, Canyonlands, Arches, Capitol Reef, Guadalupe Mountains, Badlands, and Theodore Roosevelt). These lands were traditional additions to the park system, possessing either rugged monumental scenery or unique geologic formations.
2. Areas of interface between land and water (Redwood, Voyageurs, Channel Islands and Biscayne). These parks were innovative acquisitions, revealing an increased appreciation for marine environments and unique ecosystems. The preservation of Redwood marked a significant achievement since the scenic and scientific value of the giant coastal redwoods finally outweighed the commercial value. However, the battle for preservation was very controversial, resulting in the failure of Congress to protect the entire

watershed, subjecting the "saved" trees to the threat of flash floods and mudslides from clear cut logging on adjacent slopes.

3. Alaskan Parks (Glacier Bay, Katmai, Gates of the Arctic, Kobuk Valley, Lake Clark, Kenai Fjords and Wrangell St. Elias). The Alaskan parks represent a culmination of the values and goals of the national park service, since these areas contained awesome scenery as well as cultural resources and sufficient acreage to protect the unique ecosystems of Alaska.

Voyageurs National Park (1975)

Voyageurs National Park was an addition to the national park system that represented both the prevalent attitudes of the 1970s and the more traditional concerns of the Park Service. In its preservation we see current considerations for wilderness quality, ecological relationships and recreational demand, as well as more traditional concerns for scenic quality and historic and geological interest. Although scenic criteria was important in the establishment of Voyageurs, the landscape of the area differed radically from earlier western parks since it lacked bold monumental features. The principle scenic objects of preservation were, instead, the forests and interconnecting bodies of water. The preservation of a park comprised nearly 1/3 of water continued the precedent set with the Everglades by revealing a growing concern for marine environments and offering a new perspective for the Park Service as the water became the focus of attention instead of the terrain. This tradition was repeated with the addition of Biscayne National Park in Florida and Channel Islands National Park in California. However, an even more innovative perspective was introduced with these parks since the principle attraction was the **underwater** scenery.

Consideration was first given to the establishment of a national park in this section of Minnesota around the turn of the century. But at that time the area was not deemed to be special enough to warrant preservation. However, with the emerging environmental concerns of the 1960s, the area was again put under consideration for inclusion in the national park system when the state of Minnesota asked the Park Service to study the region. In 1964 national park status was recommended for the following reasons:

Because this area contains significant natural and geologic features worthy of national recognition, because it possesses nationally significant scenic and recreational values, and because it offers an opportunity to interpret, for the edification of the public, the historic role of the Voyageurs in our cultural heritage (S rpt 1513, 1970).

As a result of the hearings which followed in 1969 and again in 1970, Congress authorized Voyageurs National Park in 1971. Since much of the land within the proposed boundaries was privately owned, the same land acquisition procedures were followed as were utilized with the eastern national parks. By 1975 sufficient acreage had been obtained and the area was opened as a national park. The hearings and congressional reports enumerated several reasons both for and against park establishment. The opposing positions are discussed here in relation to the major points for park establishment, which included the following:

- Scenic quality
- Historic value
- Scientific value of geological and ecological features
- Wilderness quality
- Recreational potential
- Economic value in attracting tourist dollars

In scenic terms, Voyageurs was described as "breathtakingly beautiful in its natural beauty and wild scenery", containing land and water that "interlock in a lacework of greens and blues, with sparkling lakes jeweled with lush islands, frothy torrents, and steep gorges..." (Hearings II 91-2, 1970). It was added that "these lakes and the network of connecting waterways make this area a unique and beautiful setting... No other area of the national park system is quite like the region" (S rpt 1513, 1970).

However, Voyageurs was said to qualify not only for its "unique and fantastic water-oriented natural beauty", but also for its historic interest as the scene of the expeditions of the French Canadian Voyageurs.

The forested lake country along Minnesota's northern border was the scene of an epic chapter in North American history. For a century and a half, French-Canadian Voyageurs plied this maze of lakes and streams in frail canoes. Though the Voyageur may be gone, the lands and waters travelled remain essentially as he left them (S rpt 1513, 1970).

The educational value of the area as "living laboratories" for historical and scientific study was also pointed out and park museums were planned to depict the rich history of the area (Hearings 91-1, 1969).

The scientific importance of Voyageurs revealed traditional concerns for geologic formations as well as more recent concerns for the biological value of the wildlife and forests, and the importance of ecological relationships. The ecological concern was particularly significant since it reflected the growing importance of preserving the environmental integrity of lands included within the national park system. The inclusion within park boundaries of the Crane Lake area provided evidence of this new concern since with its incorporation, an "integrated ecological unit" could be created (Hearings II 91-2, 1970). The inclusion of this area, however, was a controversial issue. Crane Lake was already managed by the Forest Service as a recreation area providing access to the Boundary Waters Canoe Area and supplying valuable timber to local forest products industries. Many believed that the multiple use policy of the Forest Service was the best strategy to assure protection of natural resources while still allowing hunting, trapping and commercial harvesting of timber. However, in the end the ecological value of the area won out over commercial interests and Crane Lake was included as part of the park (H rpt 1552, 1970).

The importance of preventing timber harvesting in order to preserve the wilderness qualities of Voyageurs was also an issue that revealed the growing appreciation for wilderness and the heightened awareness of the overuse of natural resources. A primary attraction of Voyageurs was its "remoteness and serenity" and its "unusual integrity as a wilderness area" (Hearings

II 91-2, 1970). A statement of Donald Fraser, congressional representative from Minnesota, provides evidence of these recent concerns:

the recently awakened national awareness of the problems of environmental degradation provides strong argument for the establishment of this park. The Kabetogama peninsula is set apart geographically from the populous areas of Minnesota, and for that reason its integrity as an unspoiled wilderness region has been unusually well-maintained. The scope of our environmental problems nationally makes it imperative that we take adequate steps now to preserve for posterity those few areas of our country which still remain environmentally pure (Hearings, 91-2, 1970).

The potential of Voyageurs to offer unique recreational opportunities to the increasing populations of urban areas provided an additional incentive for park establishment. The growth in population, coupled with an increase in affluence, leisure time and mobility, led to a proportional rise in recreational demand, and consequently more natural areas were needed to meet this demand. One park proponent pointed out that "Our people need to replenish the spirits as much as they have to feed their bodies" (Hearings 91-1, 1969). Voyageurs was thus promoted as offering a wide variety of outdoor recreational pursuits, from fishing, boating and camping in the summer to snowmobiling in the winter. In addition, it offered a northern wilderness area for those who wanted to get out of the city, and was described as "a haven for the city-dweller who thirsts for clear skies and clean water, and a chance to escape the pressures of urban life" (Hearings II 91-2, 1970).

A controversial issue pertaining to recreation in Voyageurs National Park involved an original provision of the bill which would allow hunting and trapping in the park. Many felt that these were activities which had been going on in the area for many years, and thus, should be allowed to continue in the park regardless of Park Service policies. Others strongly disagreed with this provision stating that:

If an area is to be accorded the dignity and stature of designation as a national park, then many ordinary recreational and commercial influences, including hunting and trapping, must be subordinated to the larger achievement of preservation. While other avenues of national recognition can accommodate such uses, we cannot support the establishment of a national park which includes recreational or commercial hunting and trapping (S rpt 1513, 1970).

As a compromise, waterfowl hunting and trapping were allowed to continue in designated zones and at designated times, and deer hunting was permitted as a management tool by licensed hunters deputized by the Secretary of Interior.

A second point of interest relating to recreation in Voyageurs was the possible effect of too much public use on the resources. Contrary to the early years of national park history when active promotional campaigns were necessary to attract visitors, the national parks of the 1970s now faced the possibility of destruction through overuse. This threat spurred studies into the possibility of imposing restrictions on visitation if necessary to conserve the natural values of the parklands.

A final justification for Voyageurs was that national park establishment would provide a boost to the local economy of northern Minnesota by attracting tourists and supporting local businesses. Several residents of the area were skeptical of the projected economic gains, believing a national park would actually hurt the economy since it would remove large areas of land from the tax roll. However, the Secretary of Interior claimed that:

While tax revenues may be decreased initially in the first few years after establishment, it has been demonstrated that...national parks...do bring significant economic benefits to nearby communities. Economists...have estimated that gains to the recreation sector of the local economy brought by the park would more than make up for any other temporary losses (S rpt 1513, 1970).

Economic opposition to Voyageurs was also based on the belief that there was already too much publicly owned land along this waterway system. Other sites for a national park, which did not include any private land, were recommended by opponents of Voyageurs with the most favored site being the Boundary Waters Canoe Area. However, the Park Service rejected this area because of inferior access, possible administrative difficulties with Canada, and because Voyageurs National Park offered better defined ecological boundaries (Hearings 91-1, 1969).

A statement of the Governor of Minnesota summarizes the major benefits Voyageurs National Park would offer the country:

[the park] will provide a natural environment for the growing number of urban residents who wish to recreate in an environment unspoiled by man-made development,...will combine the mysteries of geology, the wonders of nature and the significance of our historic past for all people to see and understand, ...will add growth and diversity to the economy of northern Minnesota while providing additional unique recreational space for the citizens of the state and the nation (Hearings 91-1, 1969).

Gates of the Arctic and Other Alaskan Parks (1980)

The 1980 addition of seven Alaskan national parks to the park system by the enactment of the Alaska National Interest Lands Conservation Act was an unprecedented accomplishment of national significance. The undeveloped nature of the vast expanses of public land in Alaska offered the American people a unique opportunity to determine park boundaries that were "not dictated by urban sprawl or the expense of repurchasing former public land, but by ecological wholeness" (S rpt 413, 1979). Thus the costly mistakes and compromise of earlier national parks could be avoided. The House Subcommittee on Alaskan Lands pointed out in the 1977 hearings that in determining the lands that would be set aside for conservation purposes "we are confronting for the last time an opportunity which we have missed so many times before as our Nation's civilization has spread from coast to coast and border to border" (Hearings 95-1, 1977). Therefore, while attempts were being made in the lower 48 states to round out existing national parks into sound ecological units, Alaska offered the chance for vision and foresight to be employed in preserving the unique natural, cultural, biological and geological features as comprehensive ecological components of the national park system.

The background of the Alaska National Interest Lands Conservation Act (ANILCA) can be traced back to the 1959 Statehood Act admitting Alaska into the union. At that time the federal government owned and controlled 99% of Alaska. Thus, as part of the Statehood Act, Alaska was granted the right to select 105 million acres of public land for its resource base. However,

the issue of native claims in Alaska remained unsettled until 1971 when the Alaska Native Claims Settlement Act (ANCSA) was passed. ANCSA settled the long standing aboriginal claims, granted native corporations the right to select 44 million acres of public land, and in addition, authorized the Secretary of Interior to withdraw up to 80 million acres of federal land for inclusion into the National Park, National Forest, National Wildlife Refuge, and National Wild and Scenic River Systems. A deadline of December 1978 was set for Congress to act on these lands, with the provision that any land which was not chosen for special protection would revert to ordinary public land status (S rpt 413, 1979; Hearings 95-1, 1977).

The challenge that Congress faced was to provide sufficient protection of the scenic, natural, cultural and environmental values of Alaska, while at the same time providing adequate opportunity for economic and social growth of the State and its people. The lands granted to the State and to the native corporations were to provide the basis for economic development. However, the conservation system units were also viewed as economic assets to the State, offering a tremendous boost to the recreation industry. Although in the 1970s Alaska was ranked near the bottom in tourist related revenues, it was reported that:

Alaska's recreation industry is currently increasing at a rate of between 10 and 15 percent per year. Visits to Alaska's existing National Parks have more than quadrupled since 1971, growing more than 87 percent per year between 1971 and 1976 (S rpt 413, 1979).

With this increased public awareness, and with the new national parks, forests, rivers and wilderness areas as destination points, it was believed that only the surface of the potential tourist market had been scratched.

Following the passage of ANCSA the Secretary of the Interior withdrew, in 1972, 79.3 million acres of land for potential inclusion into the four management systems. During the period from 1972 to 1977 comprehensive studies, evaluations and environmental impact statements were conducted on these and other areas to assess, among other things, the oil, gas and mineral resources, the wilderness characteristics, the national need for oil and gas development, as well as the impact of development on the vegetation, wildlife, air and water quality,

cultural resources and wilderness character. In the fall of 1977 the Federal-State Land Use Planning Commission put forth detailed recommendations for new national parks, forests, wildlife refuges and scenic rivers. These recommendations were later included as part of ANILCA. However, as the 1978 deadline approached without enactment by Congress, the Carter administration took steps to protect the lands under consideration. In November 1978 Secretary Andrus withdrew approximately 110 million acres of land in Alaska as temporary three year withdrawals, and on December 1, 1978 President Carter designated 17 national monuments totalling 56 million acres (S rpt 413, 1979).

The Alaska National Interest Lands Conservation Act which subsequently passed in 1980 was considered by many to be "the most significant single land conservation act in the history of our country" (S rpt 413, 1979). The act designated approximately 105 million acres of land for federal protection, more than doubling the size of the national park system and national wildlife refuge system, and tripling the size of the wilderness preservation system. The purposes of this act reflected the broad environmental and ecological concerns of the 1970s as well as the cultural needs of native Alaskans.

It is the intent of Congress... to preserve unrivaled scenic and geologic values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation;... to preserve in their natural state extensive unaltered arctic tundra, boreal forests, and coastal rainforest ecosystems; to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing and sport hunting, within large arctic and subarctic wildlands and on free flowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems (S rpt 413, 1979).

Based on these purposes, we can clearly see that the Alaskan additions represented the broadest concerns for the environment as a whole as have yet been evidenced in the national park system. In addition, the recommendations were careful to represent an appropriate balance between the "economic needs of the state and the nation for the development of Alaska's natural resources with the need to protect a substantial portion of the nationally significant scenic, historic, wildlife, and scientific values for all the people" (S rpt 413, 1979).

While three other federal management systems were included in ANILCA, this discussion will focus on additions to the national park system exclusively. ANILCA established five new national parks, expanded and renamed Mount McKinley, and expanded and redesignated two existing national monuments established in the early 1900s. Thus a unique system of diverse parklands was created which offered the nation:

a full range of nature and history in Alaska, mighty landforms and entire ecosystems of naturally occurring geologic and geomorphic processes, intricate waterforms and spectacular shorelines, majestic peaks and gentle valleys, diverse plant communities and equally diverse fish and wildlife.

Some illustrate regional diversity, others evidence the on-going processes still shaping the landscapes; still others represent ecosystems of vegetation and successional stages of plant growth. Certain units have been selected because they provide undisturbed natural laboratories... These can serve as benchmarks where one can compare the effects of human activity on a similar landscape elsewhere.

Four of the units... Gates of the Arctic, Mount McKinley, Katmai and Glacier Bay National Parks - are intended to be large sanctuaries where fish and wildlife may roam freely, developing their social structures and evolving over long periods of time as nearly as possible without the changes that extensive human activities would cause (S rpt 413, 1979).

Although each of these additions to the national park system was individually selected and studied in great detail, their overall purposes were intertwined in this one comprehensive legislative act. Thus, while Gates of the Arctic was singled out in this thesis for a more detailed discussion, the discussion would be incomplete without interrelating the significance of the other units. In many ways the Alaskan additions paralleled the early national parks as they were all carved out of the public domain, they included awesome monumental scenery, and they offered an opportunity to protect part of our vanishing American frontier.

As we have seen, the motives for preserving the Alaskan parklands were extremely broad and included scenic, historic, cultural, scientific, geological, biological, ecological, recreational, educational and wilderness concerns. The scenic qualifications of Alaskan lands for national park status were undeniable and fully met traditional park standards. Thus descriptions of scenic value will be largely omitted from this discussion. The rest of the motives can be tied into four major areas of concern which significantly affected park establishment in Alaska.

1. The importance of environmental integrity

2. The consideration for the unique cultural values of native Alaskans
3. The appreciation for the vast areas of wilderness
4. The concern for economic development

As was previously mentioned, during the 1970s Americans realized the importance of looking beyond the scenic beauties of natural areas toward an understanding of the complex relationships that were a part of these environments. Thus, a major priority of the designation of parklands in Alaska was the desire to protect the environmental integrity of the unique ecosystems by protecting entire watersheds and habitats for the flora and fauna of the area. It is interesting that many of the Alaskan national parks established in 1980 had been put before Congress for possible inclusion into the national park system between 40-60 years prior. While the characteristics of these areas had not changed over the years, the concerns and power of the environmental community had strengthened sufficiently to influence preservation. Ecological concerns were clearly evident in the establishment of Gates of the Arctic National Park, when in 1974 the park was promoted in *The Northern Light*, Anchorage's daily newspaper, as offering:

the opportunity to preserve truly large, biologically and geographically complete northern ecosystems where all the scenic types and plant and animal communities are represented. Protecting such ecosystems is the number one priority in Alaska, and nowhere can it be better realized than in the Arctic.¹³

Based on the growing ecological concern, the scientific value of wildlife and plantlife also received focused attention. Detailed environmental impact studies were conducted on the types of flora and fauna in each park, as well as on the area required to support these populations and the impact different uses would have on them. Just as the boundaries in the new Alaskan parks were laid out to accommodate these biological systems, the boundaries of existing Mount McKinley and two existing national monuments, Katmai and Glacier Bay, were expanded to provide protected ecosystems and sufficient habitat to sustain the plant and animal populations. In Mount McKinley the additions were to be "managed as natural areas with

¹³ *The Northern Light*. Tuesday July 16, 1974. Included in *Final Environmental Statement - Gates of the Arctic National Park*. 1974.

primary objectives of preserving the large mammal ecosystems and the scenic beauty of the area" (FES, 1974).

Cultural consideration of the customs of native Alaskans was also an important component of park establishment. Not only were many archeological sites present of historic value, but there also existed numerous native villages whose residents had been living off the resources of Alaska for thousands of years. In fact, these villages may have represented "the last major remnant of the subsistence culture alive today in North America" (S rpt 413, 1979). This led to the controversial decision of whether to allow the continuation of subsistence uses, since these had historically been banned from all other national parks. However, it was recognized "that subsistence uses by local residents have been, and are now, a natural part of the ecosystem serving as a primary consumer in the food chain". Therefore, in order to preserve "the natural balance which has been maintained for thousands of years", the Park Service allowed the harvesting of wildlife to continue in certain national parks for permanent residents of those areas (S rpt 413, 1979). This provision was especially crucial to Gates of the Arctic National Park since an entire native village was included within the boundaries of the park.

A third major concern in the establishment of Alaskan parklands was the preservation of the large expanses of wilderness. As Senator Metzenbaum (OH) pointed out:

Wilderness is the very essence of the parklands... the American people want protected in Alaska. Here, as nowhere else in the country after four centuries of settlement, we have the opportunity to assure strong statutory protection for truly vast expanses of wild lands (S rpt 413, 1979).

The wilderness value of Gates of the Arctic was a major factor in its preservation. The area was described as a "vast wild region of superlative natural beauty and exceptional scientific value, the last such essentially untouched mountain area of its scale in the United States" (S rpt 413, 1979). The wilderness qualities of this area were, in fact, so pronounced that it was recommended that the area be classified as the park system's first "National Wilderness Park" and managed with a minimum of development to preserve these values. Although this classification was not adopted, it was added that:

America has always had places where the young and hardy could find the freedom of vast uncompromised wilderness. This park will ensure that in a world much tamed and shrinking, Americans will always have such an adventuring ground (FES, 1974).

As a consequence of this concern for wilderness, 4,800,000 acres were designated as wilderness within Gates of the Arctic National Park, and approximately 30 million acres were designated as wilderness within all the national park units in Alaska. These wilderness areas were important designations in national parks for three major reasons: (1) to protect many species of wildlife that require undisturbed habitats for continued existence, (2) to provide inspiration through the vast expanses of land entirely unaltered by human activity, and (3) to provide opportunities for recreation "ranging from the solitude and challenge of remote wilderness to the simple pleasures of hiking an accessible trail, or rafting down a crystal clear river" (S rpt 413, 1979). In instances such as Lake Clark National Park, wilderness was included in the mountainous sections to achieve a "balance between higher density recreation on the fringes of the area and high quality wilderness public use in the heart of the park" (S rpt 413, 1979). The following statement pointed out the recreational benefits of wilderness and associated frontier values with these areas.

Several of the new park units... most notably the Gates of the Arctic, Wrangell-St Elias, the Denali additions, and Lake Clark, encompass some of the most magnificent, remote and untouched mountain terrain in North America. Within these units, whole mountain ranges intersect in a spectacular jumble of unclimbed, uncharted peaks, with ragged spires, great glaciers and snowfields and deep, glacier-carved gorges. These features offer unparalleled opportunities for a whole range of climbing and mountaineering activities, from short day hikes and overnight trips to long treks and major expeditions in truly rugged and remote terrain... future management of these areas for such purposes will allow such recreational uses with minimal formal requirements, and with recognition of the desire for solitude, self-reliance and freedom of movement (S rpt 413, 1979).

Although Alaskan parks could provide opportunity for active recreation for many, these parks were relatively as inaccessible to the majority of the population of the country as Yellowstone was in 1872. However, there were many advocates who supported park establishment with the full realization that they might never get a chance to actually go there. One such advocate pointed out that:

the knowledge that somewhere there is a pristine area of great vastness and still very much in its natural state with its natural wildlife is a very comforting thought in this urbanized age...I think most of us will never climb Mount Everest, but it is still a stirring thing in our minds" (Hearings 95-1, 1977).

A final major consideration in the designation of Alaskan parklands was economic development. Much of Alaska was known to possess a great wealth of commercially valuable resources, especially hard-rock minerals and oil and gas, which were critical to the nation's energy needs. Thus, an important issue in the legislation was the struggle between the environmentalists' desire to preserve complete ecosystems and wilderness qualities and those who were interested in the economic development of the valuable resources of the state. As a compromise, areas of high economic value were deleted from park boundaries wherever possible. In addition, national recreation areas were proposed to allow sport hunting as well as mining and mineral development. Despite these concessions, Senator Gravel of Alaska believed the bill would do great economic damage by removing valuable resources from the national inventory, effectively freezing Alaska "permanently in the economic state it is now, with limited opportunities for growth or diversification" (S rpt 413, 1979). However, it is interesting that Senators Metzenbaum and Tsongas took the opposite stance on the same bill. They claimed the bill allowed too much development while inadequately protecting ecological integrity and wilderness values. In the final bill recreation areas were deleted and park boundaries were drawn to protect environmental values, while allowing resource development in less ecologically sensitive areas.

ANALYSIS/CONCLUSIONS

INTRODUCTION

In any given period of history there can be found a wide variety of attitudes toward the environment. For example, while Thoreau believed that "in wilderness is the preservation of the world", others of his day seemed to have little use for wilderness, except for potential economic development. However, it is possible to trace, in broad outline, the evolution of overall attitudes to wild nature in our country by examining the development of the national park system. Through such an examination, three predominate attitudes toward wilderness have become apparent:

1. Wilderness is an untamed wasteland that should be subdued or developed for man's economic gain. This idea was prevalent from the early 1600s to the mid 1800s and resulted in the disappearance of most wilderness lands in America.
2. Wilderness areas possess aesthetic, religious and national significance and should be preserved, to be used but not used up. The policy of retaining certain areas as national parks and forests is an indicator of this attitude which came into prominence from the late 1800s to the mid 1900s, through the influence of men such as Thoreau, Muir and Leopold.
3. Wilderness areas possess important inspirational, educational and ecological benefits and should be preserved absolutely unmodified. This attitude is reflected in the pronounced ecological concerns of the 1960s and 1970s, and in the concern for protecting entire ecosystems within national parks.

In this thesis, it was initially hypothesized that the national park system can be divided into peak periods of establishment which reflect evolving attitudes toward wilderness. It was also proposed that the parks of each period possess similar organizing characteristics, qualities and rationale for establishment. While each peak period can be associated with a unique

cluster of emergent attitudes, these attitudes rarely displace previous appreciations and can, therefore, be seen as additive. For example, several of the values initiated in the 19th century, such as concerns for spectacular scenery and unusual natural features, were still evident in the national parks of the 1980s.

ANALYTIC PROCEDURE

In developing support for the hypothesis discussion will focus on the following items of analysis:

- Analysis of the trends that developed over time in the selection of lands for national park status and how these trends reflected the national attitude toward wilderness.
- Analysis and comparison of the national parks created in each period to identify common characteristics or important dissimilarities occurring in each period as well as throughout the development of the national park system. Included will be a discussion of the rationale that influenced park establishment.
- Identification of important time lags or overlaps in the trends and discussion of how these phenomena influenced the Park Service policies.
- Prediction of possible future trends in national park establishment.

Many of these points of analysis are graphically examined with supplemental explanation included for key points. Trends in the national attitude toward the environment were plotted along the time line included in Chapter II. Many of the points included in this time line will

be mentioned in the following discussion, and thus it may be helpful to use the time line as a reference. Trends in the selection of land for national park status were identified through the use of a morphological array, which depicted physical characteristics, geographic placement and featured objects of park preservation for the parks of each peak period. The intent is not to follow the path of each park within the array, but rather to look at the pattern or trend created by all of the parks of the period. The trends of each peak period can then be compared to reveal gradual shifts from peak to peak. Specific information about each park is included in the tables of Appendix A.

Categories of the array have been selected to reveal specific common characteristics as well as broader general tendencies within each peak. A brief explanation of some of the categories of the array may be helpful in understanding their derivation and significance:

Region. Six geographic regions were utilized, which are depicted in Figure 8. The intent was to divide the U.S. into major geographic regions that possessed similar landforms and climatic conditions, and which were bounded by natural features or state lines to the greatest extent possible.

Prior Reservation. This category points out the national parks which were reserved as national monuments, preserves or reserves prior to their establishment as a national park. Several of the parks occurring in the fourth and fifth peaks were authorized as national parks prior to their official establishment. However, since the authorization dates generally occurred within the same period as establishment, these parks were specified in the array as possessing no prior reservation.

Wilderness. Although no lands were designated as national wilderness areas within national parks until 1970, many of the parks created prior to that time were examined in the 1960s and 1970s for inclusion into the wilderness preservation system. This cate-

gory, thus, identifies parks that currently incorporate national wilderness areas within their boundaries.

Base. This designation reveals whether the park is terrain-based, coastal or subterranean. A fourth component was added (terrain/coastal) for those parks which place equal emphasis on their coastal and inland features. The coastal designation includes all parks that employ major water bodies, including lakes, ocean or swamp, as principle features of the park.

Ecoregion. These reveal a range in climatic conditions, flora, fauna, etc., and were based on categorizations developed by the Department of Agriculture in 1976.¹⁴

Physical Division. These divisions represent the major landforms of the country and were based on U.S.G.S. maps prepared in 1964¹⁵ and 1965.¹⁶

Focus. The focus of national parks tends to take one of two forms - unifocal or multifocal. By unifocal, it is meant that the park tends to highlight one or more spectacular feature as the major attraction(s) of the park. For example, most visitors of Grand Canyon National Park go there to see the immense canyon and the unique erosional geology. Multifocal parks tend to be areas that are broader in scope, and which do not feature a single mountain peak or specific natural phenomenon. For example, Rocky Mountain National Park was preserved not for any particular feature in the park, but rather because that entire section of the Rocky Mountain Range yielded a diversity of attractions.

¹⁴ *Ecoregions of the United States.* prepared by Robert Bailey. Department of Agriculture, U.S. Forest Service, 1976.

¹⁵ *Physical Divisions of the United States.* prepared by Nevin M. Fenneman, U.S.G.S. 1964.

¹⁶ *Land Surface Forms - Physical Subdivisions.* Edwin H. Hammond compiler. National Atlas Series, U.S.G.S. 1965.

Features. This category points out the major features within the parks that were the focus of preservation, according to the *Index of the National Park System (1982)* and other guide books of the park system.



— Geographic Regions of the United States —

Figure 8.

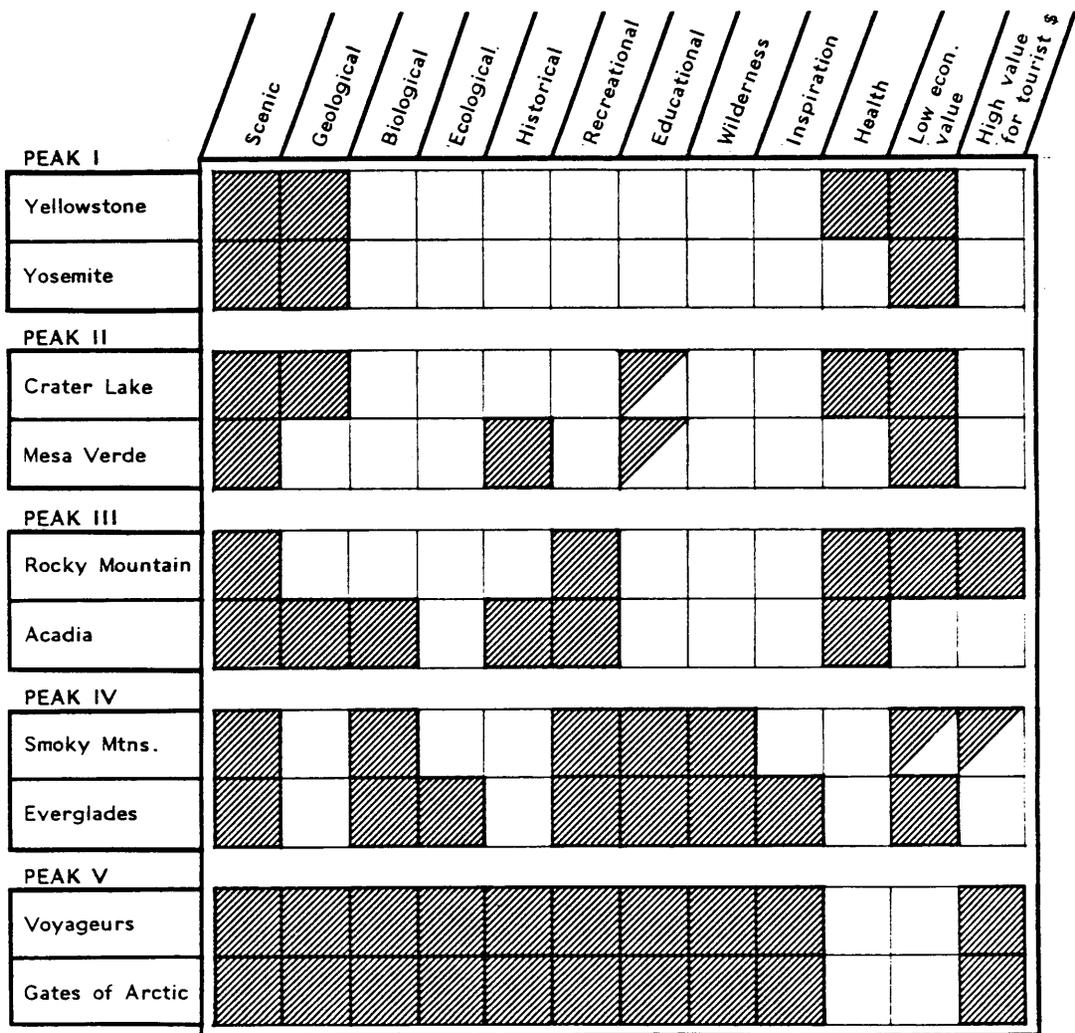
TRENDS IN NATIONAL PARK ESTABLISHMENT

In examining the trends of land selection in the national park system, we shall be interested in seeing how the inclusion of physical features, as outlined in the morphological array, squares with the official rationale for park establishment. Based on information contained in the congressional documents, a matrix of the rationale for park establishment for each of the ten national parks studied in detail was developed (Figure 9). The matrix provides a framework for the following discussion, which will be supplemented with more comprehensive research findings.

Although a range of diverse natural areas is represented in the national park system, several overriding rationale for preservation can be identified throughout the entire system:

- Scenic quality
- Economic concerns
- National importance
- Uniqueness

While these four motives were important in nearly every national park, each peak introduced new rationale for establishment resulting in a gradual broadening of concerns and motives. By comparing the rationale for each peak against the similarly broadening circle of physical features included within national parks, the role national attitudes played in influencing park development becomes clearly evident.



Rationale for National Park Establishment

 Primary

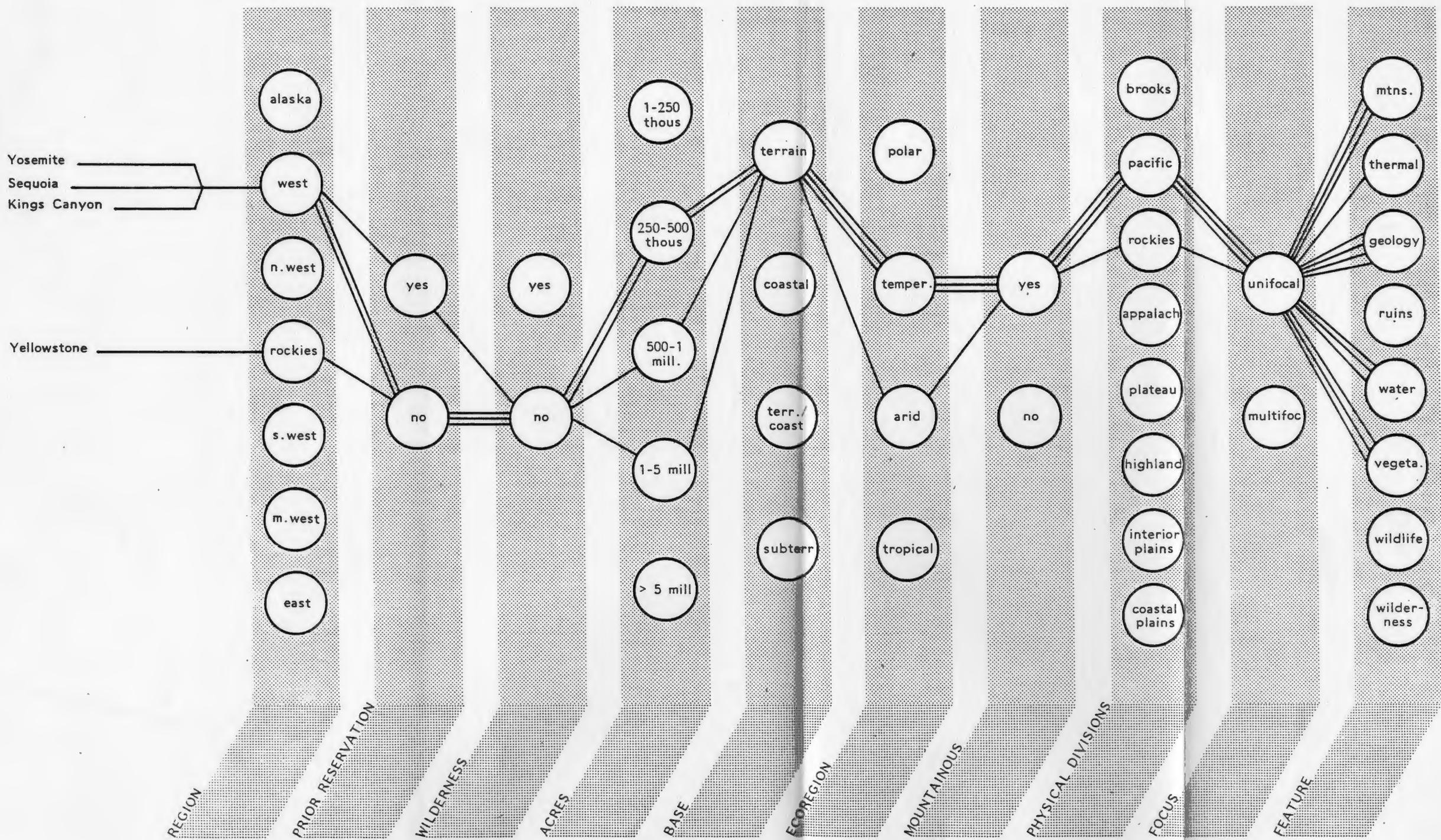
 Secondary

Figure 9.

PEAK I (1872-1890)

PHYSICAL FEATURES - In Peak I the predominate trend included temperate, terrain-based, mountainous regions of the Pacific range. In addition, each of these parks was unifocal in nature, highlighting specific natural features such as giant trees, enormous canyons, thermal areas, huge waterfalls and rugged geology.

RATIONALE - The principle motive for park preservation during this period - scenic quality - was strongly influenced by romantic preferences for sublime and picturesque scenery, transcendentalist philosophies, and the spirit of nationalism. Consequently, early park preservation centered on monumental landscapes, consisting of rugged mountains or unique geologic features. The desire to protect wilderness per se during the late 1800s and early 1900s was overridden by more romantic and aesthetic concerns, which were evident in the legislative labelling of early parks as "pleasuring grounds", an 18th century term used to describe domesticated landscapes rather than wilderness areas. In addition, these parks were considered to be ideal settings for health resorts, due to the thermal waters and pure mountain air.



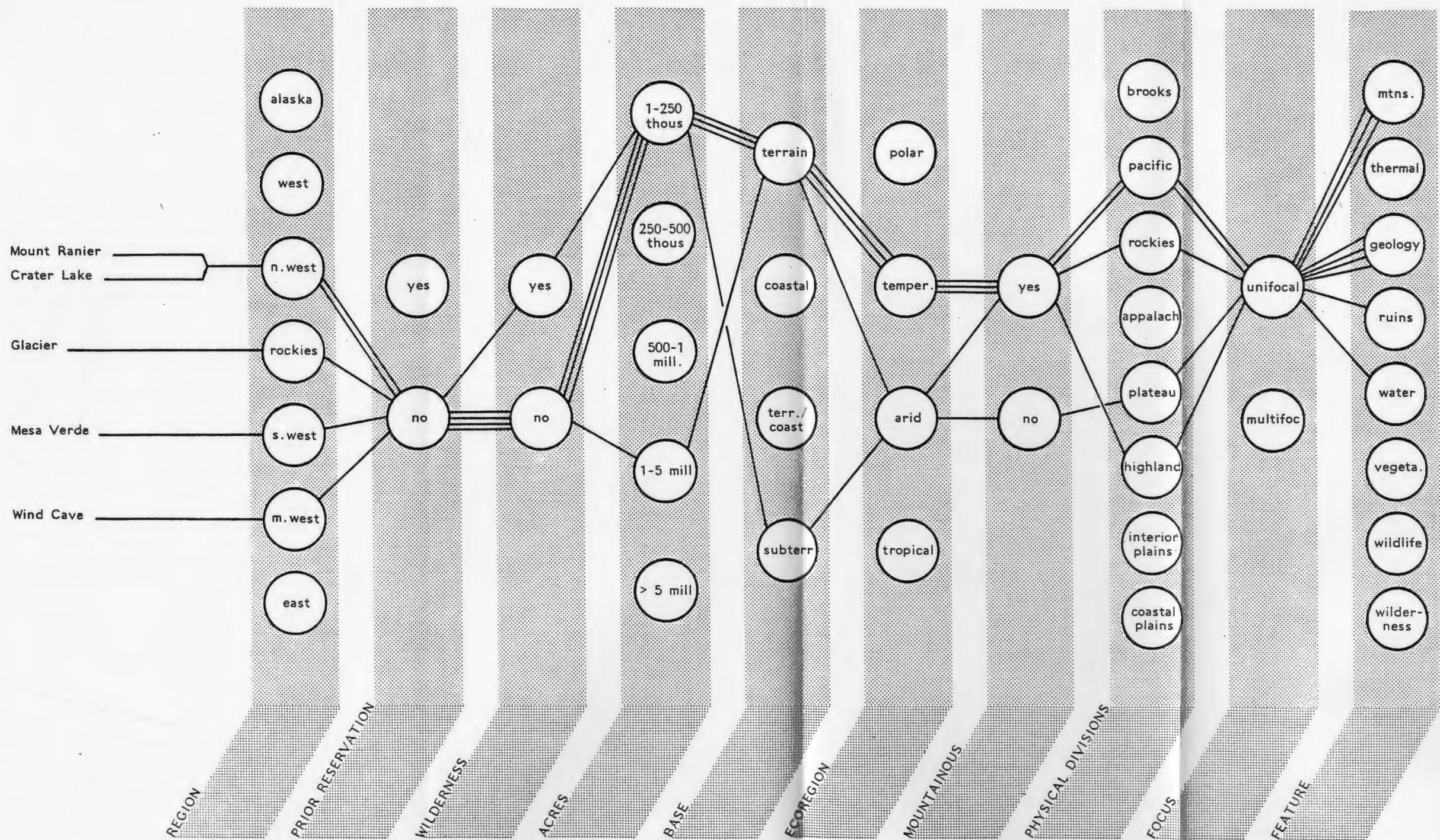
Trends in National Park Selection: Peak I 1872 - 1890

Figure 10.

PEAK II (1899-1910)

PHYSICAL FEATURES - The parks of Peak II took a very similar track as Peak I, with a strong tendency toward preserving temperate, terrain-based mountainous regions of the western U.S. which focused on rugged scenery and geology. All of the parks possessed geological features including volcanic mountains, erosional cliffs or caverns. As in Peak I, the majority of the parks in Peak II were created with no prior reservation and with no later wilderness designation. It could be that the unifocal nature and relatively small acreages of these areas tended to detract from overall wilderness qualities.

RATIONALE - Romantic aesthetic preferences, transcendentalist philosophies, and nationalistic attitudes continued from Peak I to dictate the motives for park preservation during the second peak, as reflected in the desire to protect remnants of the vanishing frontier through the preservation of monumental wonders of the west. However, an overall broadening in scope was apparent as scientific and historic values were introduced as principle motives for park preservation.



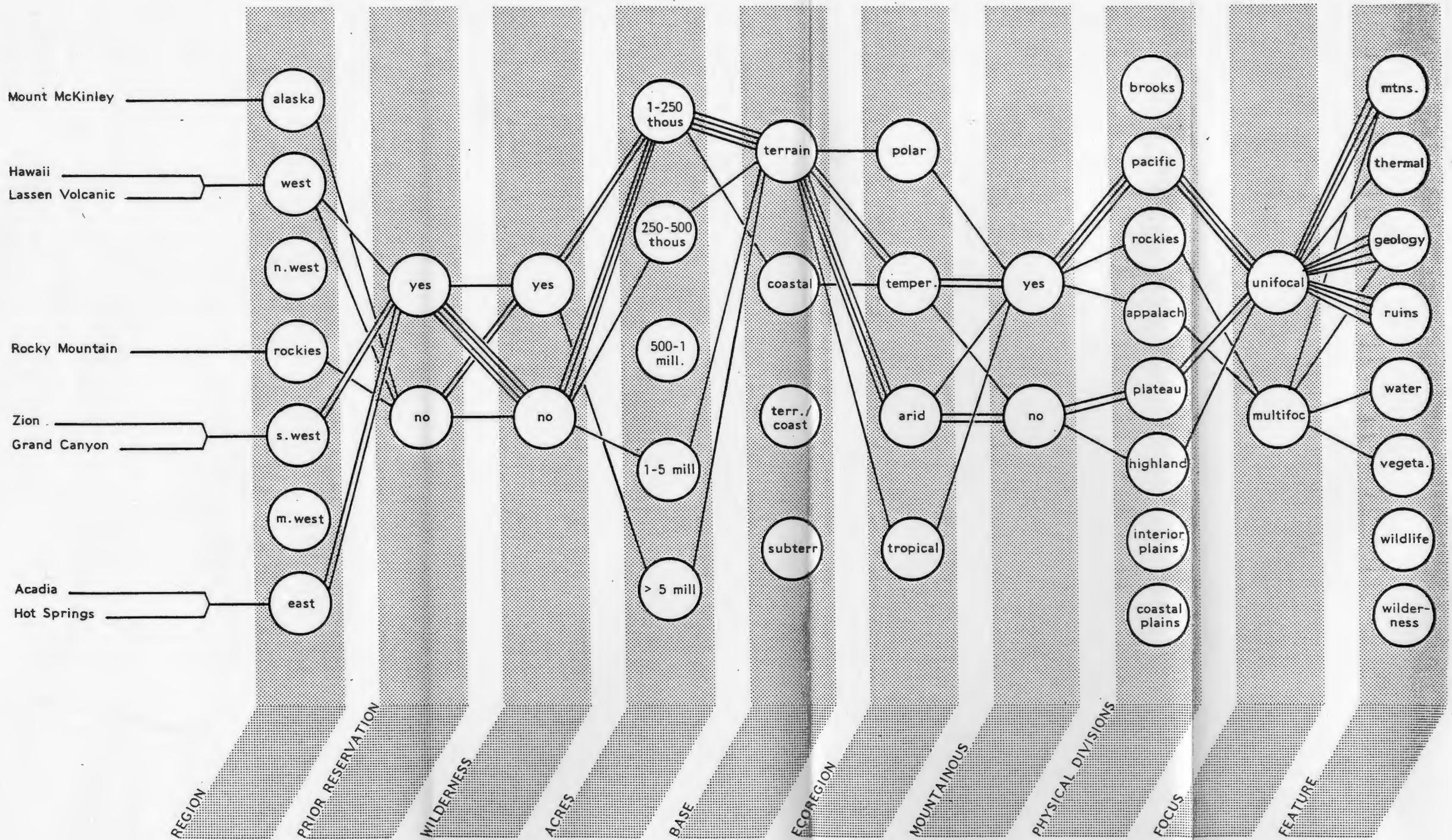
Trends in National Park Selection: Peak II 1899 - 1910

Figure 11.

PEAK III (1915-1921)

PHYSICAL FEATURES - Most of the parks established in Peak III were created from previously withdrawn lands, thus reflecting concerns and characteristics of earlier years, since unifocal geologic features were the principle objects of preservation. In addition, several parks contained archeological ruins, reflecting the historic concern initiated with Mesa Verde in Peak II. However, several new aspects were introduced in this period as well, including: (a) greater diversity in geographic regions, as evidenced with the establishment of the first eastern park, Acadia, and the first Alaskan and Hawaiian parks; (b) a noticeable shift toward more nonmountainous, arid regions, although mountainous parks still predominated the period; and (c) a broader focus for preservation, as introduced by Rocky Mountain and Acadia since no particular feature tended to dominate these landscapes.

RATIONALE - Romantic and nationalistic concerns continued to influence motives for park preservation during the third peak, however a shift was apparent toward a growing concern for outdoor recreation and the physical and mental health benefits that contact with natural settings could provide. Due to the success of the promotional campaigns for the park system, the third peak represented the first period that national parks were actually being used and enjoyed for recreation. Consequently, increased use of parks led to shifts in economic criteria for national park establishment as the Park Service realized that scenery could be marketed as an economic asset. This shift in economic concerns is significant since, historically, the economic worthlessness of parklands had to be proven in order to insure national park designation.



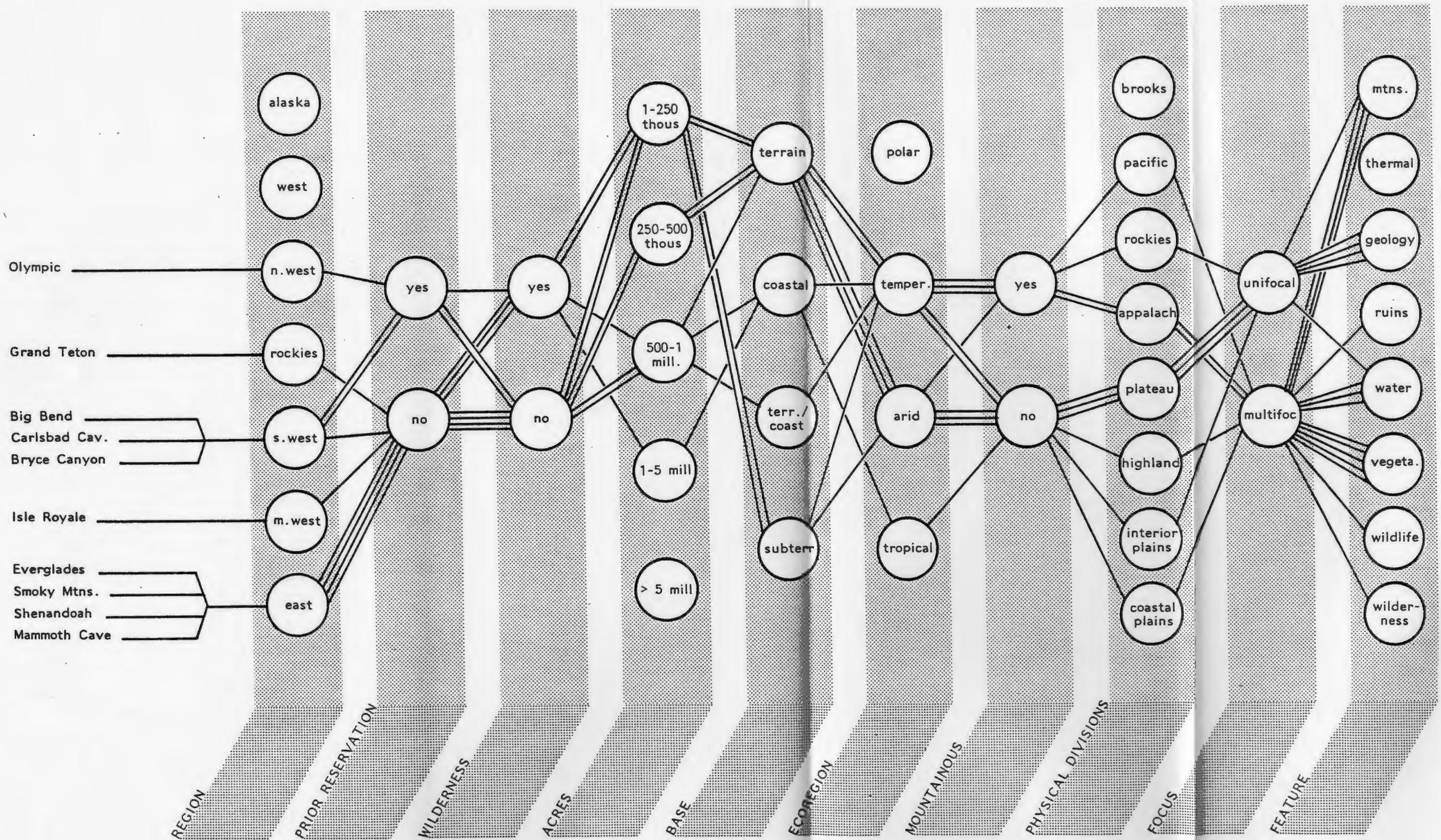
Trends in National Park Selection: Peak III 1915 - 1921

Figure 12.

PEAK IV (1928-1944)

PHYSICAL FEATURES - Peak IV represents a transitional period in both its featured objects of preservation and rationale for establishment, thus reflecting traditional patterns and trends yet to come. Due to its transitional state, great diversity is apparent in geographic region, acreage, base and physical divisions. Despite the diversity in this period, several predominate characteristics are apparent. The largest geographic region represented was the east, followed closely by the southwest. For the first time a significant shift was also apparent away from terrain based parks to coastal and subterranean areas, as well as toward greater wilderness designation, preservation of nonmountainous regions and a broader multifocus perspective.

RATIONALE - Although conservationist and preservationist policies dominated the scene during the fourth period, the emerging influence of the environmental movement was apparent through the increased biological importance associated with flora and fauna and the growing appreciation for wilderness areas. Everglades, Isle Royale and Olympic National Parks represented examples of the new concern to preserve biological units, however due to economic compromises these attempts failed to protect the entire ecosystems. Earlier concerns were apparent in the continued preference for rugged monumental scenery and in the continued importance of offering opportunities for outdoor recreation, particularly to the densely populated eastern United States.



Trends in National Park Selection: Peak IV 1928-1944.

Figure 13.

PEAK V (1962-1980)

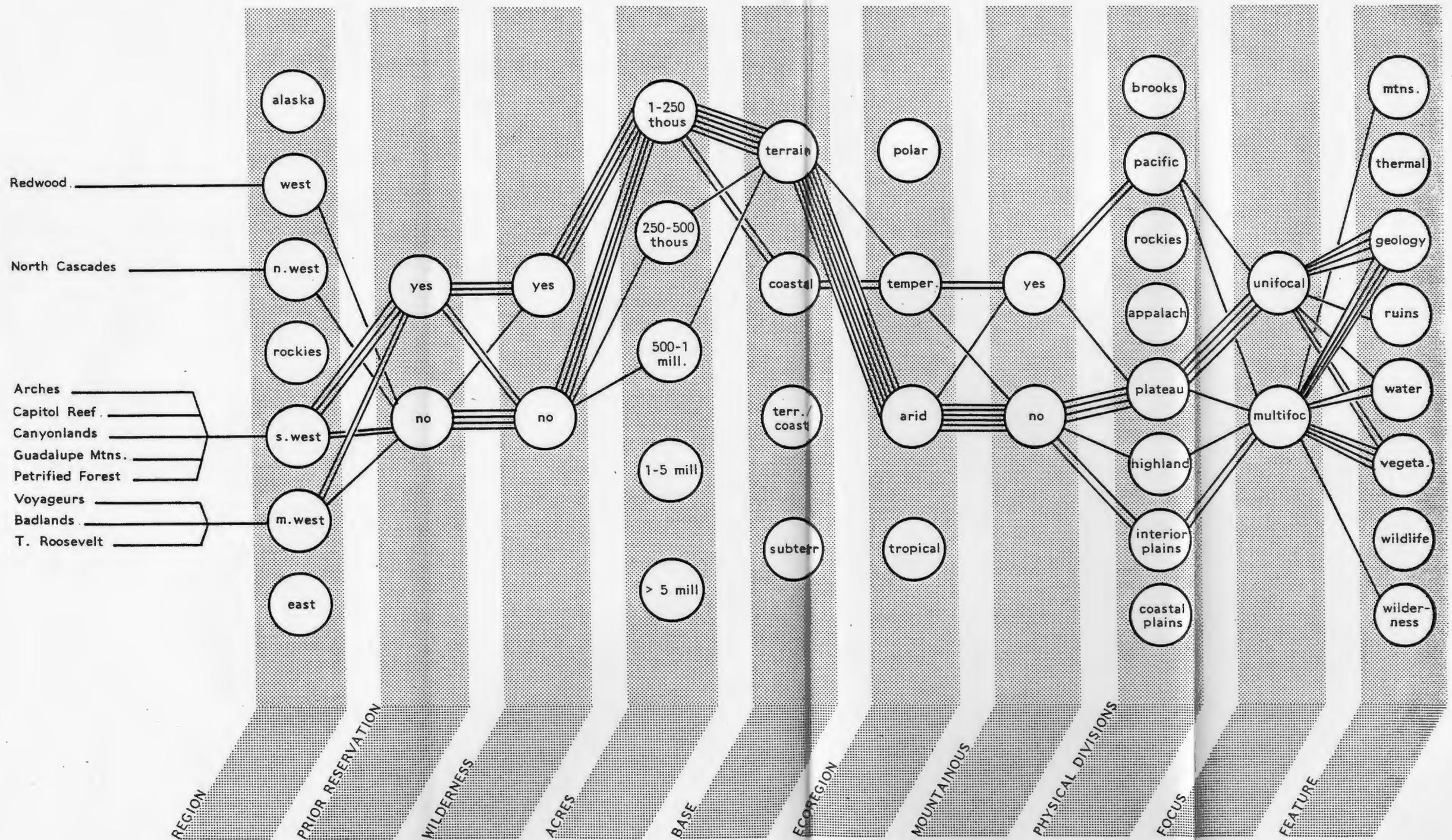
PHYSICAL FEATURES - Due to the large number of parks established between 1962-1980, the period was divided into two parts: (1) parks established prior to 1979, and (2) parks established after 1979. This effectively divided the period into equal parts in terms of number of parks, and each part possessed its own major trend. In the first part of the fifth period, the strongest tendency was toward small, arid, southwestern, terrain based, nonmountainous parks, containing unique geological formations. Most of these parks were redesignated from national monuments created in the early 1900s. In the second part of the fifth period the Alaskan parks dominated the scene. These parks tended to be expansive mountainous regions with multifocal perspectives and with large acreages of wilderness lands within their boundaries.

By combining the patterns for both parts of the fifth period a third major trend was revealed for the period as a whole. This trend indicated a preference for coastal environments of both a mountainous and nonmountainous nature. A truly innovative perspective was introduced with Biscayne National Park since the underwater environment was the principle object of preservation. It is very possible that we could see this concern for marine environments become a dominate trend for future national parks.

RATIONALE - By the fifth peak of park establishment, the concerns of the environmental community had become a major influence in the preservation of national park lands. Although traditional concerns for monumental scenery and unique geologic formations were reflected in the high number of southwestern park acquisitions of the first part of the period, the overall motives for park preservation had broadened in scope, encompassing all aspects of environmental relationships. The preservation of wilderness and the protection of environmental integrity were paramount in the rationale for park establishment as reflected in the Alaskan parks and in Voyageurs, Redwood, Channel Islands and Biscayne. In addition, the concern

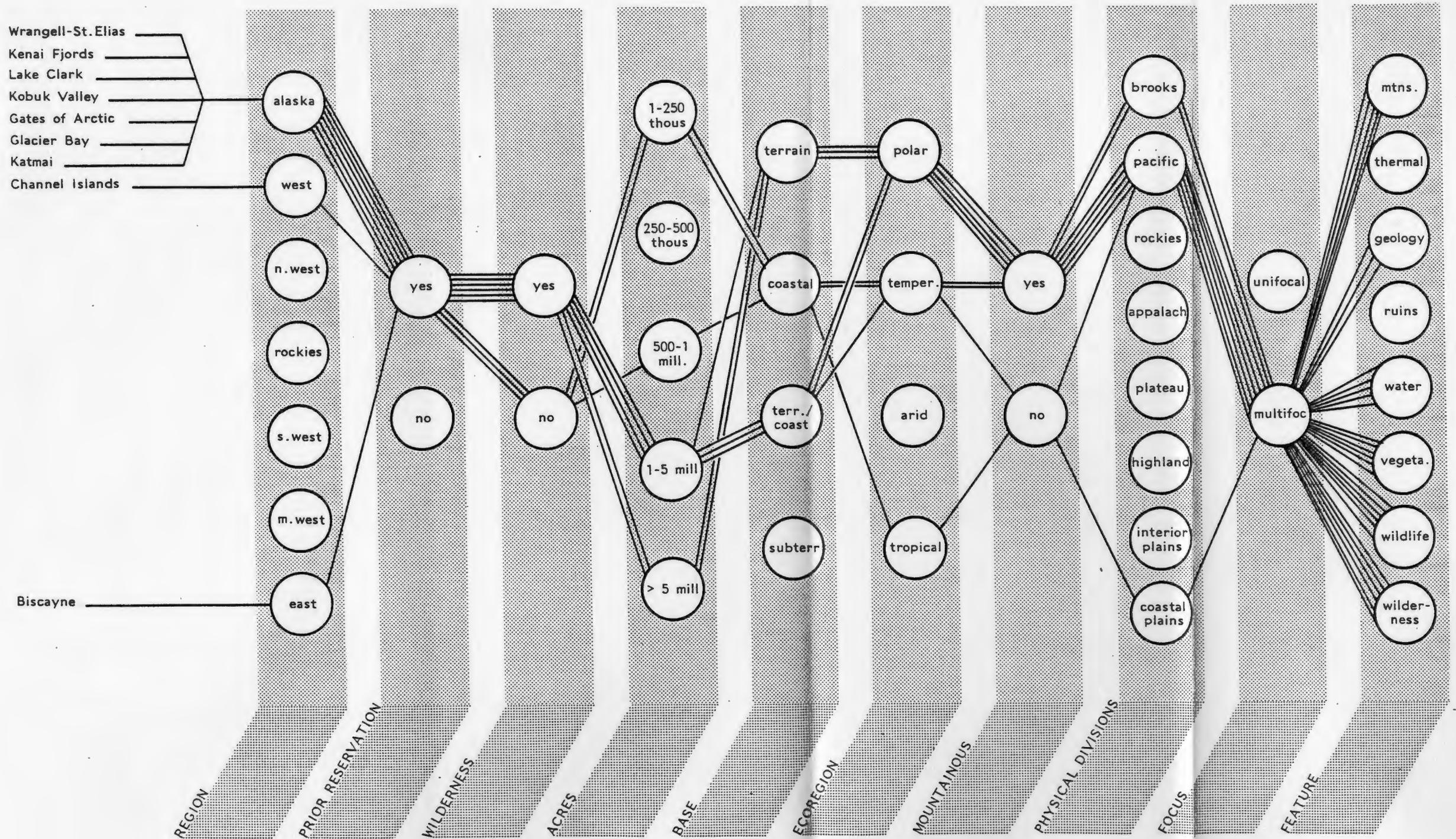
for public health that was evident in the early 1900s had shifted to a concern for the inspirational and spiritual benefits derived from contact with pristine wilderness.

In many ways the emergence of the national wilderness preservation system and the preservation of Alaskan parklands paralleled earlier turn of the century concerns which led to the establishment of the first national parks. Alaska represented the last expansive sections of remote wilderness in the U.S., reminding Americans of their frontier roots.



Trends in National Park Selection: Peak V 1962 - 1980

Figure 14. Peak V Part 1 (1962-1978)



Trends in National Park Selection: Peak V 1962 - 1980

Figure 15. Peak V Part 2 (1979-1980)

FUTURE TRENDS

In order to predict what future developments will occur in the national park system, it is important to examine the present condition of the national parks. For nearly 100 years energies have centered on making parks more accessible and comfortable for visitors, by providing hotels, restaurants, shops, trailer hook-ups, etc. As a result of the national prosperity following World War II, coupled with society's greater mobility, affluence and leisure time and a growing appeal for the out of doors, the national parks of the 1980s have become the national playgrounds of America. In fact visitor use is presently so heavy that many of the unique qualities for which parks were preserved are now threatened with destruction through overuse. It is ironic that park supporters of the early 1900s believed the survival of the national park idea rested on the ability to attract more visitors and provide better accommodations. Supporters of Yellowstone repeatedly appealed to Congress for appropriations "without which the park would remain a trackless wilderness". It is interesting that the preservation of trackless wilderness areas was a major rationale in the establishment of numerous Alaskan parks in 1980.

The dilemma the Park Service now faces is between the preservation of the natural resources or the provision of recreation to the public; two goals which seem to be mutually exclusive.

In regard to this dilemma the Conservation Foundation (1972) posed the question:

Do we circle back to original concept, or permit further spin-off into stultifying mediocrity?... [Do the parks] remain the 'crown jewels' of our heritage to be cherished, protected, and preserved, and worthy of self-imposed restraints, or permitted to degenerate into the commonplace?

Although recreation and preservation have historically been given equal attention, in the future recreation objectives may have to be subservient to the larger preservation objective if quality natural environments are to be maintained. Several parks already impose restrictions on number of visitors and length of stay. However, more is needed than just restrictions. Several strategies have been suggested to meet both objectives, but one strategy proposed by the Conservation Foundation (1972) stands out as offering the greatest potential. This strategy involves minor redesignations of park system units, with recreation areas and national wilderness parks being two of the key components, but with a range of other types of national parks falling in between. **National Recreation Areas** would be included to meet the high density recreation needs of urban populations and to ease the pressure on more sensitive environmental areas. **National Wilderness Parks** would be designated from large existing national parks or other areas requiring ultimate protection of the resources. The intent of these parks would be to protect intact ecosystems, and visitors would be expected to accept a wilderness lifestyle in these areas. A wilderness park was first suggested for Gates of the Arctic National Park, but was rejected.

To many Americans time, comfort and the "quick thrill" are important elements of their vacations. Many have lost the deep appreciation for the beauty and inspiration found in wilderness, and instead use national parks merely as backdrops for their photos or trailer sites. It is often the comfortable amusements that are sought after in nature, such as a guided whitewater raft trip with all provisions and meals provided. This type of adventure is more reminiscent of a roller coaster ride than a genuine encounter with nature. For people such as these, recreation areas are well suited to meet their needs.

However, there exist many other Americans who still crave the solitude, inspiration and rejuvenation that an encounter with pristine wilderness can provide. For these people a national wilderness park, designed to preserve natural ecological conditions and wilderness features, would be highly appreciated. The performance criteria for this type of park would

be the quality of visitor experience rather than the quantity of visitors. The Conservation Foundation (1972) added that in a wilderness park:

man can find and be a partner once again in the elementary processes of an undisturbed ecosystem and recapture with awe, the spiritual exaltation, the acute awareness of the very roots of life from which he sprang.

In addition to wilderness parks, other types of national parks are likely to occur in the future. In looking for sites for future national parks, it is helpful to examine the areas that are negligibly represented in the national park system. There are currently four major sections of the U.S. that lack adequate representation: the deep south, the northeast, the southern great lakes region and the great plains of the Midwest. The lack of national parks in these regions is largely due to their dense populations and lack of public lands. However, these barriers have been overcome in the past, and with a favorable change in sentiment toward any of these areas, national park authorization could be possible. Since so few flat lands are represented in the park system, areas such as the grasslands of the great plains, the swamps and marshes of the south, or the deserts of the southwest could be prime targets for future national park nomination. In addition, it is very likely that we may see more marine environments and coastal areas preserved, following the precedent set with Everglades and Biscayne National Parks in Florida.

CONCLUSION

Although the age of technology is scarcely 100 years old, the effects of technology on the environment have been devastating. It has only been within our generation that the absolute destruction of the world's remaining wilderness has become a distinct possibility. Therefore, the assessment of our present attitudes toward wilderness and the manner in which these attitudes have been altered over time are matters of immediate concern.

The federal agency which we presently consider to be one of the largest protectors of our country's wilderness lands - the National Park Service - has not always employed wilderness preservation as a major criterion for national park establishment. In fact, it was not until the fourth period of park establishment that wilderness preservation was introduced as an important concern, and it was not until the fifth period that wilderness preservation became a dominant concern. While several of the early parks were described as "primitive" areas, their value was derived from associations with frontier roots, national pride and health benefits, rather than from the inspirational and ecological benefits we now associate with wilderness lands. This change in attitude was a result of numerous factors, which correspondingly influenced the development of the national park system. The early years of national park history were romantic times, with aesthetic and nationalistic rationale heavily influencing the type of parks created. As the park system grew the scope of concerns broadened considerably, as reflected in the rationale for park establishment, the featured objects of preservation, the groups supporting preservation and the economic factors influencing establishment. With each peak period of park establishment new rationales were introduced, reinforcing the traditional aesthetic concerns with scientific, historic, recreational, educational, biological, and finally ecological concerns. The result was that by the fifth period a whole range of environmental interactions was represented with each national park acquisition.

The focus of park preservation also broadened in scope from the spectacular, monumental, unifocal landscapes of the early years to the featuring of entire ecosystems and multifocal wilderness areas in the fifth period. An additional broadening was apparent in the type and number of supporters that influenced park preservation. Preservation of early parks such as Yellowstone and Yosemite was a direct result of a handful of supporters dedicated to the preservationist cause. As the park system continued to grow, public awareness and support of national park establishment also grew in intensity, with scores of individuals, representing local and national interests, offering testimony in behalf of park establishment. By the time

of the Alaskan additions the list of concerned parties could cover pages upon pages, with most parties based outside of the state of Alaska.

This overall broadening in park perspectives is apparent in the comparison of two statements on national park policy written in 1918 and 1932. Since there existed no national policy for park establishment before 1916, we can only compare policies for Peaks III, IV and V. The following 1918 statement of the Secretary of Interior, Franklin Lane, was included in legislation concerning Lafayette National Park and underscored the aesthetic and nationalistic concerns important during the early 1900s.

In studying new park projects, you should seek to find scenery of supreme and distinctive quality or some natural feature so extraordinary or unique as to be of national interest and importance. You should seek distinguished examples of typical forms of world architecture, such, for instance, as the Grand Canyon, as exemplifying the highest accomplishment of steam erosion, and the high rugged portion of Mount Desert Island as exemplifying the oldest rock forms in America and the luxuriance of deciduous forests (H. rept. 932, 1919).

The second statement was included in Hearings for Everglades National Park, but was taken from a publication entitled "National Park Standards - A Declaration of Policy." Although this policy statement was written in the 1930s, it was foresighted in scope and thus also represents the standards for park establishment in the fifth period, since the concerns for wilderness preservation and ecological interactions were specified as important criteria. According to this statement national parks are defined as:

spacious land areas essentially in their primeval conditions and so outstandingly superior in quality and beauty to average examples of their several types so as to demand their preservation intact and in their entirety for the enjoyment, education and inspiration of all the people for all time.

It was additionally stated that new park projects must meet the following criteria:

1. That park areas must be of national interest...
2. That the area for each park must be a logical unit, embracing all territory required for effective administration and for rounding out the life zones of its flora and fauna.
3. That each park area shall be a sanctuary for the scientific care, study, and preservation of all wild plant and animal life within its limits, to the end that no species shall become extinct.
4. That wilderness features within any park shall be kept absolutely unmodified.
5. That with respect to any unique geological formations or historic or prehistoric remains within its confines, each park shall be regarded as an outdoor museum, the preservation of whose treasures is a sacred trust.

6. That the existence of the park is justified and insured by the educational and spiritual benefits to be derived from contact with pristine wilderness.
7. That parks must be kept free from all industrial use, and that sanctuary, scientific, and primitive values must always take precedence over recreational or other values. (Hearings, Everglades, 1932).

To conclude, the changes that have occurred in national attitudes toward wilderness throughout the development of our country have played an important role in shaping the quality and extent of our remaining wilderness. We have seen attitudes shift from fear and distaste of wilderness to admiration and respect; policies shift from exploitation to preservation; and aesthetic preferences shift from the tamed and picturesque to the wild and remote. It has become apparent that a genuine appreciation for wilderness tends to develop only when there is very little of it left to appreciate.

We have also seen man's relationship with the environment shift over time from an enemy or conqueror to a partner or steward. In relation to the national park system, this man/environment relationship has played, and will continue to play, an important role. In the early days of Yellowstone, man was isolated in his dialogue with the environment and viewed the parks as scenic amusements. He gradually communicated more directly with the environment as he began to study the parks scientifically and historically, then use them for recreation, then develop an understanding of the complex biological and ecological interactions occurring within them; and in the process he began to overuse them. It is ironic that in order to protect the unique environments we have preserved over the past century, it may become necessary to exclude or restrict man from these environments, once again placing the park system on a similar status it upheld in the late 1800s, when only a few individuals were able to view the "wonders" we possessed. The primary difference is that today's wonders - the remaining acres of unspoiled wilderness - would have seemed commonplace and certainly not wondrous to the 19th century mind.

Appendix A. Summary of the National Parks of the United States

Year	Park	State	Acres	Region	Ecoregion	Physical Division	Prior Reservation	Wilderness	Feature
1872	Yellowstone	WY/MT	2,219,823	rockies	arid	rocky mtn.	—	—	<ul style="list-style-type: none"> • rugged mountain • thermal area • geol. formations
1890	Yosemite	CA	760,917	west	temperate	pacific range	1864 - state park	—	<ul style="list-style-type: none"> • rugged mountain • giant trees • geol. formations
1890	Sequoia	CA	403,023	west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • rugged mountain • giant trees • geol. formations
1890	Kings Canyon	CA	460,136	west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • rugged mountain • giant trees • geol. formations
1899	Mt. Rainier	WA	235,404	n. west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • volcanic mountain • geology
1902	Crater Lake	OR	160,290	n. west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • volcanic mountain • lake • geology
1903	Wind Cave	SD	28,292	m. west	arid	interior plains	—	—	<ul style="list-style-type: none"> • cavern • geology
1906	Mesa Verde	CO	52,085	s. west	arid	plateau	—	1976	<ul style="list-style-type: none"> • ruins
1910	Glacier	MT	1,013,595	rockies	temperate	rocky mtn.	—	—	<ul style="list-style-type: none"> • volcanic mountain

PEAK I (1872-1890)

PEAK II (1899-1910)

Year	Park	State	Acres	Region	Ecoregion	Physical Division	Prior Reservation	Wilderness	Feature
1915	Rocky Mtn.	CO	263,790	rockies	arid	rocky mtn.	—	—	• rugged mountain
1916	Lassen Volcanic	CA	106,372	west	temperate	pacific range	1907 - monument	1972	• volcanic mountain • geology
1916	Hawaii	HI	229,117	west	tropical	pacific range	—	1978	• volcanic mountain • trop. vegetation
1917	Mt. McKinley	AK	6,033,695	alaska	polar	pacific range	—	1980	• rugged mountain
1919	Grand Canyon	AZ	1,218,375	s. west	arid	plateau	1893 forest pres. 1908 monument	—	• erosional geology
1919	Zion	UT	146,547	s. west	arid	plateau	1909 monument	—	• erosional geology
1919	Acadia	ME	38,524	east	temperate	appalachian	1916 monument	—	• rugged mountain • coast
1921	Hot Springs	AR	5,826	east	temperate	highland	1832 set aside 1880 reserve	—	• thermal area

PEAK III (1915-1921)

Year	Park	State	Acres	Region	Ecoregion	Physical Division	Prior Reservation	Wilderness	Feature
1928	Bryce Canyon	UT	35,835	s. west	arid	plateau	1923 monument	—	• erosional geology
1929	Grand Teton	WY	310,516	rockies	arid	rocky mtn.	—	—	• rugged mountain
1930	Carlsbad Cavern	NM	46,755	s. west	arid	plateau	1923 monument	1978	• cavern • geology
1931	Isle Royale	MI	571,796	m. west	temperate	highland	—	1976	• water • forests
1934	Smoky Mtns.	NC/TN	517,368	east	temperate	appalachian	1926 authorized	—	• mountain • forests
1934	Everglades	FL	1,398,800	east	tropical	coastal plains	—	1978	• water • wildlife • grassland
1935	Shenandoah	VA	194,328	east	temperate	appalachian	1926 authorized	1976	• mountain • forests
1938	Olympic	WA	908,720	n. west	temperate	pacific range	1909 monument	—	• rugged mountain • forests
1941	Mammoth Cave	KY	52,129	east	temperate	interior plains	1926 authorized	—	• cavern • geology
1944	Big Bend	TX	708,118	s. west	arid	plateau	1935 authorized	—	• river • erosional geology

PEAK IV (1928-1944)

Year	Park	State	Acres	Region	Ecoregion	Physical Division	Prior Reservation	Wilderness	Feature
1962	Petrified Forest	AZ	93,493	s. west	arid	plateau	1906 monument	1970	<ul style="list-style-type: none"> • petrified veg. • erosional geology • ruins
1964	Canyonlands	UT	337,570	s. west	arid	plateau	—	—	<ul style="list-style-type: none"> • erosional geology
1968	Redwood	CA	109,027	west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • forest • coast
1968	North Cascades	WA	504,780	n. west	temperate	pacific range	—	—	<ul style="list-style-type: none"> • rugged mountain
1971	Arches	UT	73,379	s. west	arid	plateau	1929 monument	—	<ul style="list-style-type: none"> • erosional geology
1971	Capitol Reef	UT	241,904	s. west	arid	plateau	1937 monument	—	<ul style="list-style-type: none"> • erosional geology
1972	Guadalupe Mtns.	NM/TX	76,293	s. west	arid	plateau	1966 authorized	1978	<ul style="list-style-type: none"> • erosional geology
1975	Voyageurs	MIN	219,128	m. west	temperate	highland	1971 authorized	—	<ul style="list-style-type: none"> • water • forests • geology
1978	Badlands	SD	243,302	m. west	arid	interior plains	1929 monument	1976	<ul style="list-style-type: none"> • erosional geology
1978	T. Roosevelt	ND	70,345	m. west	arid	interior plains	1947 memorial park	1978	<ul style="list-style-type: none"> • arid land • ranch

PEAK V (1962-1980)

Year	Park	State	Acres	Region	Ecoregion	Physical Division	Prior Reservation	Wilderness	Feature
1980	Katmai	AK	4,089,402	alaska	polar	pacific range	1918 monument	1980	<ul style="list-style-type: none"> • rugged mountain • diversity
1980	Glacier Bay	AK	3,275,344	alaska	temperate	pacific range	1925 monument	1980	<ul style="list-style-type: none"> • rugged mountain • rain forest • coast
1980	Channel Islands	CA	249,354	west	temperate	pacific range	1938 monument	—	<ul style="list-style-type: none"> • water • islands • diversity
1980	Biscayne	FL	180,276	east	tropical	coastal plains	1968 monument	—	<ul style="list-style-type: none"> • water • islands • underwater life
1980	Wrangell-St. Elias	AK	13,204,359	alaska	temp/polar	pacific range	1978 monument	1980	<ul style="list-style-type: none"> • rugged mountain • wilderness
1980	Kenai Fjords	AK	676,667	alaska	temperate	pacific range	1978 monument	—	<ul style="list-style-type: none"> • rugged mountain • rain forest • coast
1980	Lake Clark	AK	4,039,420	alaska	polar	pacific range	1978 monument	1980	<ul style="list-style-type: none"> • rugged mountain • diversity
1980	Kobuk Valley	AK	1,749,037	alaska	polar	brooks range	1978 monument	1980	<ul style="list-style-type: none"> • rugged mountain • wilderness • diversity
1980	Gates of Arctic	AK	8,441,393	alaska	polar	brooks range	1978 monument	1980	<ul style="list-style-type: none"> • rugged mountain • wilderness • diversity

PEAK V (1962-1980)

BIBLIOGRAPHY

- Anderson, Harold, C. "The Unknown Genesis of the Wilderness Idea". *The Living Wilderness*. 5:5 (July 1940), 15.
- Bolin, L.A. *National Parks of the United States*. New York: Alfred A. Knopf. 1962.
- Brockman, C. Frank. *Recreational Use of Wild Lands*. New York: McGraw-Hill Book Company, Inc. 1959.
- Brooks, Paul. "Man's Way with the Wilderness". *Horizon*. 2 (1960), 13-16.
- Buck, Paul H. *The Evolution of the National Park System of the United States*. Masters Thesis, Ohio State University, 1921.
- Butcher, Devereux. *Exploring Our National Parks and Monuments*. Boston: Houghton Mifflin Company. 1969.
- Chamberlain, Allen. "Scenery as a National Asset". *Outlook*. 95 (May 28, 1910), 157-169.
- Conservation Foundation. *National Parks for the Future*. Washington: U.S. Government Printing Office. 1972.
- Cranz, Galen. *The Politics of Park Design*. Cambridge: The MIT Press. 1982.
- Culhane, Paul J. "Public Lands and the Clash of Conflicting Interests". *Public Lands Politics*. Baltimore: John Hopkins University Press. 1981.
- Diller, J.S. "Crater Lake, Oregon". *Annual Report of the Smithsonian Institute*. July, 1897. Washington: U.S. Government Printing Office, 1897.
- Ellis, Havelock. "The Love of Wild Nature". *Contemporary Review*. 95 (January-June, 1909), 180-199.
- Environmental Law Institute, Dolgin, Erica L. and Thomas G. Guilbert, ed. *Federal Environmental Law*. St. Paul: West Publishing Co. 1974.

- Environmental Quality, Tenth Annual Report of the Council of Environmental Quality. "Natural Resources".* Washington: U.S. Government Printing Office. 1979.
- Environmental Quality, Thirteenth Annual Report of the Council on Environmental Quality.* Washington: U.S. Government Printing Office. 1982.
- Gregg, W. "Two New National Parks?". *Outlook*. 141 (December 30, 1925): 667.
- Grinnell, J. and Tracy Storer. "Animal Life as an Asset of National Parks". *Science*. 44 (September 15, 1916): 377.
- Hayden, F.V. "Wonders of the West - II". *Scribner's Monthly*. 3:4 (February, 1872), 388-396.
- Huth, Hans. "Yosemite: The Story of an Idea". *Sierra Club Bulletin*. 33:3 (March, 1948), 47-78.
- Huth, Hans. *Nature and the American, Three Centuries of Changing Attitudes*. Lincoln: University of Nebraska Press. 1957.
- Ise, John. *Our National Park Policy*. New York: Arno Press. 1979.
- Krutch, Joseph, W. "Man's Ancient and Powerful Link to Nature, A Source of Fear and Joy". *Life*. 51:25 (December 22, 1961), 112-123.
- Leopold, Aldo. "Wilderness as a Form of Land Use". *Journal of Public Utility Economics*. (October, 1925).
- Leopold, Aldo. "Why the Wilderness Society". *The Living Wilderness*. 1 (September, 1935).
- Marshall, Robert. "The Problem of the Wilderness". *Scientific Monthly*. (February 1930), 141-148.
- Marx, Leo. *The Machine in the Garden*. New York: Oxford University Press. 1964.
- Mills, William J. "Metaphorical Visions: Changes in Western Attitudes to the Environment". *Annals of the Association of American Geographers*. Volume 66, No 2, June, 1976.
- Muir, John. "The Wild Parks and Forest Reservations of the West". *Atlantic Monthly*. 81 (January, 1898), 15-28.
- Nash, Roderick. "The American Cult of the Primitive". *American Quarterly*. 18:3 (Fall, 1966), 517-537.
- Nash, Roderick. "The Romantic Wilderness". *Wilderness and the American Mind*. New Haven: Yale University Press. 1967.
- Nash, Roderick, ed. "Rejuvenation Through Conservation". *The Call of the Wild (1900-1916)*. New York: George Braziller. 1970.
- Nash, Roderick. "The American Invention of National Parks". *American Quarterly*. 22:3 (Fall, 1970), 726-735.
- National Park Service. *Index: National Park System and Related Areas: as of June 1, 1982*. Washington: U.S. Government Printing Office. 1982.
- Nelson, Robert H. "Public Lands". *Current Issues in Natural Resource Policy*. Paul R. Portney, ed. Baltimore: John Hopkins University Press. 1982.

- Newton, Norman, T. "The National Park System: 1929-1964". *Design on the Land*. Cambridge: Belknap Press of Harvard University Press. 1971. 538-554.
- Rinehart, Mary R. "The Sleeping Giant". *Ladies Home Journal*. 38 (May, 1921): 21.
- Runte, Alfred. "The West: Wealth, Wonderland and Wilderness". *The American Environment: Perception and Policies*. J. Wrenford Watson and Timothy O'Riordan, ed. New York: John Wiley and Sons. 1976.
- Runte, Alfred. *National Parks: The American Experience*. Lincoln: University of Nebraska Press. 1979.
- Shepard, Paul. "Dead Cities in the American West". *Landscape*. 6:2 (1956-1957), 25-28.
- Shepard, Paul. *Man in the Landscape*. New York: Alfred A. Knopf. 1967.
- Tuan, Yi-Fu. "Mountains, Ruins and the Sentiment of Melancholy". *Landscape*. 14:1 (Autumn, 1964), 27-30.
- U.S. Congress. House. *The Yellowstone Park*, H. Rept. 26, 42nd Cong., 2nd sess., 1872.
- U.S. Congress. House. *Yellowstone Park*, H. Exdoc. 147, 43rd Cong., 1st sess., 1874.
- U.S. Congress. House. *Yellowstone National Park*, H. Exdoc. 75, 45th Cong., 2nd sess., 1878.
- U.S. Congress. Senate. *The Report of Lieutenant G.C. Doane upon the so-called Yellowstone Expedition of 1870*, S. Exdoc. 51, 41st Cong., 3rd sess., 1871.
- U.S. Congress. Senate. *An Engineering Report of the Reconnaissance of the Yellowstone River in 1871*, S. Exdoc. 66, 42nd Cong., 2nd sess., 1872.
- U.S. Congress. Senate. *A Report of the Superintendent of the Yellowstone National Park in 1872*, S. Exdoc. 35, 42nd Cong., 3rd sess., 1873.
- U.S. Congress. House. *J.M. Hutchings, J.C. Lamon*, H. Rept. 2, 41st Cong., 2nd sess., 1870.
- U.S. Congress. House. *Report of the Acting Superintendent of the Yosemite National Park*, H. Exdoc. 1, 52nd Cong., 1st sess., 1891.
- U.S. Congress. House. *Report*, H. Rept. 1485, 53rd Cong., 3rd sess., 1894.
- U.S. Congress. House. *Private Land Claims Within Certain National Parks*, H. Rept. 1547, 55th Cong., 2nd sess., 1898.
- U.S. Congress. Senate. *Report - Yosemite*, S. Rept. 185, 40th Cong., 2nd sess., 1868.
- U.S. Congress. Senate. *Report - Yosemite National Park*, S. Rept. 599, 52nd Cong., 1st sess., 1892.
- U.S. Congress. Senate. *Report - Yosemite National Park*, S. Rept. 863, 54th Cong., 1st sess., 1896.
- U.S. Congress. House. *National Park in the State of Oregon*, H. Rept. 533, 56th Cong., 1st sess., 1900.

- U.S. Congress. Senate. *National Park in the State of Oregon*, S. Rept. 1318, 57th Cong., 1st sess., 1902.
- U.S. Congress. House. *The Mesa Verde National Park*, H. Rept. 3703, 58th Cong., 3rd sess., 1905.
- U.S. Congress. House. *Mesa Verde National Park*, H. Rept. 4944, 59th Cong., 1st sess., 1906.
- U.S. Congress. Senate. *Mesa Verde National Park*, S. Rept. 1428, 59th Cong., 1st sess., 1906.
- U.S. Congress. House. *Rocky Mountain National Park, Colorado*, H. Rept. 1275, 63rd Cong., 3rd sess., 1915.
- U.S. Congress. House. *Extension of Rocky Mountain National Park, Colorado*, H. Rept. 502, 64th Cong., 1st sess., 1916.
- U.S. Congress. Senate. On the establishment of Rocky Mountain National Park. S 8403, 62nd Cong., 3rd sess., February 1913. *Congressional Record*, vol 49.
- U.S. Congress. Senate. On the establishment of Rocky Mountain National Park. S 6309, 63rd Cong., 2nd sess., 8 October 1914. *Congressional Record*, vol 51.
- U.S. Congress. House. *Lafayette National Park*, H. Rept. 932, 65th Cong., 3rd sess., 1919.
- U.S. Congress. House. On the establishment of Lafayette National Park. S 4957, 65th Cong., 3rd sess., 17 February 1919. *Congressional Record*, vol 57.
- U.S. Congress. Senate. *Lafayette National Park*, S. Rept. 576, 65th Cong., 2nd sess., 1918.
- U.S. Congress. Senate. *Mount Desert National Park, ME*, S. Rept. 503, 65th Cong., 2nd sess., 1918.
- U.S. Congress. Senate. *Extension of Boundary Limits of Lafayette National Park, ME, and Changing Name of Park to Acadia National Park*, S. Rept. 1425, 70th Cong., 2nd sess., 1929.
- U.S. Congress. House. *Appalachia National Park, VA*, H. Rept. 1729, 67th Cong., 4th sess., 1923.
- U.S. Congress. House. *Providing for the Acquisition of Lands in the Southern Appalachian Mountains for Park Purposes*, H. Rept. 1320, 68th Cong., 2nd sess., 1925.
- U.S. Congress. House. Committee on Public Lands. *Shenandoah, Great Smoky Mountains, and Mammoth Cave National Parks. Hearings before the Committee on Public Lands*, 69th Cong., 1st sess., 1926.
- U.S. Congress. House. *To Establish a Minimum Area for the Great Smoky Mountains National Park*, H. Rept. 982, 73rd Cong., 2nd sess., 1934.
- U.S. Congress. Senate. *Memorial of the Appalachian National Park Association*, S. Doc. 58, 56th Cong., 1st sess., 1900.
- U.S. Congress. Senate. *Forests of the Southern Appalachian Mountain Region*, S. Doc. 93, 56th Cong., 2nd sess., 1901.

- U.S. Congress. Senate. *Shenandoah and Great Smoky Mountains National Parks*, S. Rept. 824, 69th Cong., 1st sess., 1926.
- U.S. Congress. Senate. *Establishing a Minimum Area for Shenandoah National Park*, S. Rept. 278, 70th Cong., 1st sess., 1928.
- U.S. Congress. House. *Tropic Everglades National Park*, H. Doc. 654, 71st Cong., 3rd sess., 1930.
- U.S. Congress. House. Committee on Public Lands. *Establishment of Everglades National Park. Hearings before the Committee on Public Lands*, 71st Cong., 3rd sess., 1931.
- U.S. Congress. House. *Everglades National Park*, H. Rept. 40, 72nd Cong., 1st sess., 1932.
- U.S. Congress. House. *Establishment of Everglades National Park in the State of Florida*, H. Rept. 2049, 72nd Cong., 2nd sess., 1933.
- U.S. Congress. Senate. *The Proposed Everglades National Park*, S. Doc. 54, 72nd Cong., 1st sess., 1932.
- U.S. Congress. House. *Authorizing the Establishment of the Voyageurs National Park in the State of Minnesota*, H. Rept. 1552, 91st Cong., 2nd sess., 1970.
- U.S. Congress. House. Committee on Interior and Insular Affairs. *Voyageurs National Park. Hearings before the Subcommittee on National Parks and Recreation of the Committee on Interior and Insular Affairs*, 91st Cong., 1st sess., 1969.
- U.S. Congress. House. Committee on Interior and Insular Affairs. *Voyageurs National Park - Part II. Hearings before the Subcommittee on National Parks and Recreation of the Committee on Interior and Insular Affairs*, 91st Cong., 2nd sess., 1970.
- U.S. Congress. Senate. *Authorizing the Establishment of the Voyageurs National Park in the State of Minnesota*, S. Rept. 1513, 91st Cong., 2nd sess., 1970.
- U.S. Congress. House. Committee on Interior and Insular Affairs. *Inclusion of Alaska Lands in National Park, Forest, Wildlife Refuge, and Wild and Scenic River Systems. Hearings before the Subcommittee on General Oversight and Alaska Lands of the Committee on Interior and Insular Affairs*, 95th Cong., 1st sess., 1977.
- U.S. Congress. Senate. *Alaska National Interest Lands*, S. Rept. 413, 96th Cong., 1st sess., 1979.
- U.S. Department of Interior. *Gates of the Arctic National Park - Final Environmental Statement*, October, 1974.
- U.S. Department of Agriculture. *Ecoregions of the United States*. Robert Bailey, preparer. U.S. Forest Service. 1976.
- U.S. Geological Survey. *Physical Divisions of the United States*. Nevin M. Fenneman, preparer. 1964.
- U.S. Geological Survey. *Land Surface Forms*. National Atlas Series, 1965.
- Watson, J. Wrenford. "The Image of Nature in America". *The American Environment: Perception and Policies*. J. Wrenford Watson and Timothy O'Riordan, ed. New York: John Wiley and Sons. 1976.

Wooley, Mary. "The Development of the Love of Romantic Scenery in America". *American Historical Review*. 3:1 (1898), 56-66.

Wright, George, Joseph Dixon and Ben H. Thompson. *Fauna of the National Parks of the United States: A Preliminary Survey of Fauna relations in National Parks*. Washington: U.S. Government Printing Office: 1933. p 2.

Yard, Robert Sterling. "Economic Aspects of Our National Park Policy". *Scientific Monthly*. 16 (April, 1923): 384-385.

Yard, R. S. "The People and the National Parks". *The Survey*. 48 (August 1, 1922): 547.

Yard, Robert, Sterling. "Saving the Wilderness". *The Living Wilderness*. 5:5 (July, 1940), 3-4.

Zahniser, Howard. "Our World and Its Wilderness". *The Living Wilderness*. 19:49 (Summer, 1954), 36-37.

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