# On the Road

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Before the automobile revolution, extended vacations away from home were the privilege of the rich. The average middle-class family could not afford railroad fares to a remote national park and a long stay at a luxury hotel. With the advent of the Model T and improved roads, the automobile outing and the automobile vacation became middle-class American institutions. As Foster Rhea Dulles points out in his history of American recreation, the automobile "greatly stimulated the whole outdoor movement, making camping possible for many people for whom the woods, mountains, and streams were formerly inaccessible." [1]

Until the late 1920s, however, automobile touring, especially to remote western parks, was severely limited by poor roads. Despite the efforts of bicycle organizations, automobile clubs, and farmers, the good-roads movement had accomplished little up to the outset of the Model T era. Roads meandered from town to town without forming a system of interconnected highways. They were poorly marked when marked at all. Roadside services for tourists were virtually nonexistent. Over 90 percent of the roads were unsurfaced, and impassable much of the year. Only 8.66 percent of the roads in the United States were surfaced at all in 1909, a gain of only 1.5 percent over 1904, when the first census of American roads was taken. These few improved roads most commonly had gravel surfaces, which automobile traffic quickly destroyed by sweeping the gravel into windrows, rather than packing it down as did much slower horse-drawn traffic. Macadam was no solution, for the weight and speed of motor vehicles quickly broke down macadamized surfaces too. Brick roads were satisfactory, but their cost was prohibitive. Until 1909 there was not a single section of paved road in a rural area.

At the Second Annual Good Roads Convention in 1909 at Cleveland,

Ohio, "the two dominating influences ... were the American Automobile Association, representing the autoists and the cities, and the National Grange, representing the farmers. Cooperating with these organizations were the American Road Makers' Association, the National Association of Automobile Manufacturers, and the American Motor Car Manufacturers' Association." Automobile interests predominated in the Lincoln Highway Association, organized on July 1, 1913, to promote the construction of a coast-to-coast highway taking "the shortest, best, and most direct route." The first demonstration "seedling" mile of the Lincoln Highway was opened at Malta, Illinois, in October 1914.[2]

Through the combined lobbying efforts of automobile interests and farmers newly made mobile by the Model T, the primitive road network of 1910 was transformed into an interconnected system of concrete highways by 1930. By the end of 1912 a number of major road-building projects were under way; outstanding county/township road bonds totaled over $155.6 million and authorized state good-roads expenditures totaled nearly $136.9 million. By the end of 1914 the United States had 257,293 miles of surfaced roads, of which 75,400 miles were paved with macadam, 1,591 with brick, and 2,349 with concrete.

Concrete was used to surface the 24-mile stretch of highway built in 1908–1910 out to the Ford Highland Park plant in Wayne County, Michigan. Concrete also was used in the construction, begun in 1908, of the first American limited-access highway exclusively for automobiles—the Long Island Motor Parkway. This privately built toll road ran 45 miles from Great Neck to Lake Ronkonkoma, New York. "Although the northeastern states were still experimenting with the concrete surface," Peter J. Hugill observes in his study of early U.S. road building, "California embraced it enthusiastically, because of the transportation needs of its agriculture and the relative lack of railroads. By 1914, 35 percent of the 2,600 miles of improved roads in California was covered with concrete. In contrast, New York with almost 9,300 miles of improved roads had only 244 miles of concrete surface." California is also credited by Hugill with the innovation of concrete curbs to prevent soil erosion during floods and with banked roadbeds for safety. He reports that concrete roads "were more expensive per mile than other types of roads, but the excellent record of concrete pavement in California and in eastern United States [*sic*] under wartime conditions and the low maintenance costs contributed to the wholesale adoption of concrete roads throughout the United States in the early 1920s."[3]

The federal government gave its first support to building a national system of roads with passage of the 1916 Federal Aid Road Act, which appropriated $75 million to be spent over a five-year period by the secretary

of agriculture for the improvement of post roads. Then, following World War I, the federal goverment made available as military surplus to state highway departments for road building some 25,000 heavy trucks and 1,500 caterpillar tractors. Demonstration of the value of long-distance trucking during the war and growing automobile registrations after the war led to passage of the Federal Highway Act of 1921, which provided federal aid to the states, through fifty-fifty matching grants, for building an interconnected interstate system of highways. Some $75 million was appropriated for 1922 alone, and that year 10,247 miles of federally financed highways were built, 3.5 times more than in the preceding five years under the 1916 legislation. States were required to select and designate not more than 7 percent of their highways as part of an interconnected system eligible for federal aid. In 1924 the amount of federal aid per mile was stabilized at $15,000. In 1925 a uniform plan was adopted for designating and numbering the U.S. highways that were part of the system.

Western states with sparse populations could not pay for roads out of property taxes or general funds. To finance highway construction and maintenance, the gasoline tax was innovated in Oregon, New Mexico, and Colorado in 1919. By 1929 all states and the District of Columbia collected gasoline taxes, which amounted to some $431 million in revenue for highways that year. Rates of three or four cents a gallon were common. In 1921 road construction and maintenance were financed mainly by property taxes and general funds, with only about 25 percent of the money for roads coming from automobile registration fees. But by 1929 gasoline taxes were the main source of revenue for highway expenditures, and twenty-one states no longer used any property taxes or general funds for main roads. The reasoning was that the gasoline tax "was superior as a user tax because the amount of gasoline consumed in a vehicle was a good measure of the use of the road and also of the damage that a vehicle did to a road ... the tax was 'equitable' in itself and also that those who paid it benefited directly." The chief collector of the gasoline tax in Tennessee exclaimed in 1926, "Who ever heard, before, of a popular tax?" John C. Burnham points out that "never before in the history of taxation has a major tax been so generally accepted in so short a period." It is remarkable, he writes, to what extent Americans "were willing to pay for the almost infinite expansion of their automobility." [4]

## Automobility and the National Parks

The concept of both democratic access to and preservation of scenic and wilderness areas, exemplified by our national parks, is one of America's

most significant contributions to world civilization and has been exported around the globe. On March 1, 1872, by an act of Congress, Yellowstone, our first national park, was "dedicated and set apart as a public park or pleasuring ground for the enjoyment of the people." The 1976 bicentennial years of American independence was celebrated in part by over 267.7 million visits to 293 units of our National Park System, representing "treasured historical aspects of our past, cultural aspects of our people, and natural aspects of our land." [5]

Our national parks were the product of what Alfred Runte calls a "pragmatic alliance" between upper-class preservationists and western railroads seeking to boost their passenger traffic. Jay Cooke and Company, promoters and financiers of the Northern Pacific Railroad extension project, were centrally involved in winning congressional approval for Yellowstone. Southern Pacific Railroad lobbyists campaigned for Yosemite, Sequoia, and General Grant, and the Southern Pacific became the leading booster of West Coast national parks. Grand Canyon was pushed by the Santa Fe Railroad. Louis W. Hill of the Great Northern enthusiastically supported the creation of Glacier National Park as part of his railroad's "See America First" campaign. Western railroads spend vast sums of money advertising the national parks and also were responsible for inaugurating "proper" tourist facilities—the grand hotels at major visitor attractions.[6]

Stays in the parks had to be long, because although the railroad transported one swiftly and in comfort to the park periphery, travel through the park by horse-drawn coach over the few crude roads was slow and arduous. Consequently, the grand hotels and other tourist facilities had to be clustered not only within park boundaries but also in close proximity to major scenic attractions. Because the parks were visited by so few people, Congress was reluctant to provide money for road building. Consequently, roads were built as cheaply as possible, most often following stream beds or connecting major scenic attractions along the easiest natural routes available.

A presidential order of August 25, 1916, established the National Park Service (NPS) to regulate the national parks and the national monuments under a directive "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for future generations." Stephen T. Mather, the first director of the NPS, recognized that park development was linked intimately to the growth of tourism, so he energetically built a second "pragmatic alliance," this one between the NPS and automobile interests throughout the country. The early impact of automobility on the national parks has been summarized

succinctly by Robert Shankland in his biography of Mather: "The auto reached swarming ubiquity fast—faster than people now remember. As the auto prospered so did the national parks." Preservationist Edward Abbey claimed that the slogan "Parks are for people" decoded came to mean that "Parks are for people-in-automobiles." [7]

Automobiles were first admitted into Mount Rainier in 1908, General Grant in 1910, Crater Lake in 1911, Glacier in 1912, Yosemite and Sequoia in 1913, Mesa Verde in 1914, and Yellowstone in 1915. As early as 1916 more visitors entered Yosemite by automobile than by railroad, and the largest source of revenue for the newly formed NPS already was automobile admission fees—levied for paying for park roads and improvements. Along with other prominent preservationists, Mather welcomed the automobile into the parks: he recognized the potential political power of the automobile industry, automobile clubs, and the growing number of automobile tourists. A broad base of popular support was deemed essential to the parks both to obtain adequate congressional funding for development and maintenance and to thwart mounting pressure for the exploitation of park resources from commercial interests and other governmental agencies. The main opposition to opening the parks to the automobile came, significantly, not from the preservationists but from park concessionaires who operated horse-drawn stage lines. Their fears were borne out when Mather ordered Yellowstone's stage lines motorized in 1917, a scant two years after the automobile was admitted into that park. Automobilists also were prominent in many preservationist organizations, a prime example being that the Save the Redwoods League originated at the Pacific Auto Show of 1920.

The Federal Highway Act of 1921 and the universal adoption of the gasoline tax to fund highway improvement by 1929 resulted in an interconnected system of paved highways that made even the more remote western parks accessible from the east coast. Moreover, as the outcome of agitation by the National Parks Highway Association, formed in 1915, a route that interconnected all of the national parks had been laid out and signposted by the early 1920s. This interpark route was not totally paved. Nevertheless, it served as a psychological as well as a physical link among the national parks and encouraged people to travel to them.

Until at least the mid-1930s, however, good roads ended at the boundaries of the national parks. In 1915 Yellowstone was the only park with sufficient road mileage to make driving worthwhile, and all park roads not only were unpaved but were too narrow and had grades too steep for automobile traffic. By 1924 a total of only $3.5 million had been spent on park roads; there were only 12 miles of paved road in the entire National Park System, and Glacier and Mount McKinley still lacked

through roads. Although by 1924 Yosemite had 138 miles of rutted wagon road, all except 20 miles were private. With 356 miles of unpaved road for a land area larger than several of our eastern states, Yellowstone still had the best road system of any national park.

The turning point came in 1923, when Congress appropriated $7.5 million for road building in the national parks between 1924 and 1927. Altitude, a short working season, rocky terrain, and preservationist considerations made the cost of building new paved park roads extremely high—$20,000 to $60,000 a mile. Consequently, although some 360 miles of new park roads were planned, paving the bulk of either these or existing park roads was out of the question. So the appropriation was used primarily to reduce grades, straighten sharp curves, and widen existing wagon roads to handle automobile traffic.

The philosophy of park road building early adopted by the NPS was first laid down by Hiram Chittenden, the Army Corps of Engineers officer in charge of building many of Yellowstone's wagon roads: "The park should be preserved in its natural state to the fullest degree possible ... and the great body of the park should be kept inaccessible except on foot or horseback. But a road once found necessary should be made as perfect as possible. So far as it may detract from scenery it is far less objectionable as a well-built work than if left in a rough or incomplete state." [8] Translated into policy, this meant a limitation to one well-built, low-speed, scenic through road per park—an NPS policy that remains in effect to this day.

Roads were first made adequate to the demands of automobile traffic in our national parks as a by-product of increased governmental spending to stimulate the economy during the Great Depression of the 1930s. Although the number of park visitors remained about the same as in 1929, park appropriations were nearly doubled in 1931; and between January 31, 1931, and July 21, 1932, Congress appropriated over $13 million specifically for road building and improvement in the national parks and monuments. Where the Hoover administration measured, the Roosevelt administration poured funds, inaugurating what has been called "the golden age of park development." From 1933 to 1940 the National Park Service received $220 million from a variety of New Deal agencies. The major use of these funds was for a massive program of rebuilding and paving park roads, as well as for the addition of several impressive new scenic through roads, including the Zion–Mount Carmel Road and Tunnel, the Wawona Tunnel and Road in Yosemite, the Cape Royal Road in Grand Canyon, the Paradise Valley and Yakima Park Highway in Mount Rainier, the Sylvan Pass Road in Yellowstone, and the Going-to-the-Sun Highway in Glacier.

This represented only a small part of huge New Deal expenditures on road construction from 1933 to 1942. After Roosevelt came to power, federal aid was extended from designated sections of interstate highways to urban segments of primary roads in 1934 and to secondary "feeder" roads in 1936. John Rae points out that this represented "a major change in national highway policy." As a "time-honored method of relieving unemployment," the federal government attempted to offset declines in state and local expenditures for roads and streets. "By 1939 relief and recovery accounted for 80 percent of all federal expenditures for roads and 40 percent of the total outlay on highways from all sources," Rae reports. "Between 1933 and 1942 federal relief agencies spent $4 billion on roads and streets." [9]

With saturation of the market for new cars, informed observers doubted that such expenditures were justified by the volume of automobile traffic. The President's Research Committee on Social Trends, for example, concluded in 1933: "Should there be no further increase in the volume of motor vehicle traffic, the utility of new construction and improvement projects would naturally diminish as present highway programs approached the period of completion. This in turn would lead to a more careful weighing of the relative advantages of additional highway facilities as against a reduction of highway taxes." [10] There was so little enthusiasm for express highways in the 1930s that the Pennsylvania Turnpike Commission was unable to sell its bonds.

During World War II, visits to the national parks declined so drastically that the parks might as well have been closed for the duration of the war. The further development of park roads was abruptly curtailed, as the National Park Service operating budget was cut from $21 million in 1940 to a low of $5 million in 1943. Although the war's end brought a record 22 million visitors to the national parks in 1946, NPS budgets remained stringent through the Korean War. The result was that in 1949 it was estimated that some $321 million was needed to rehabilitate park facilities, whereas the NPS budget was only $14 million. William Everhart points out that by 1954 the parks were receiving 54 million visitors a year, "with a level of staff and the run-down facilities [including park roads] designed for the 17 million visitors in 1940." [11]

In the mid-1950s preservationists viewed these inadequate appropriations and deteriorating facilities as the main problems of the National Park System. Therefore, they enthusiastically supported Mission 66, the 1956 federal program that brought national park facilities up to standards by 1966 at a cost to the taxpayers of over one billion dollars. The increased park use that resulted was further magnified by the reciprocal impact of the Interstate Highway Act of 1956, the most ambitious public-works

program undertaken in American history. That act committed the federal government to pay, from a nondivertible Highway Trust Fund, 90 percent of the construction costs for 41,000 miles of toll-free express highways, scheduled to be completed by June 30, 1976.

The Interstate System capped ambitious express highway building programs begun at the state level after World War II. Between 1947 and 1970 the combined highway expenditures of the local, state, and federal governments in the United States totaled $249 billion; and Senator Gaylord Nelson calculated that 75 percent of government expenditures for transportation had been for highways, as opposed to only one percent for urban mass transit. The lion's share of this gigantic, disproportionate expenditure for highways continued to come from the gasoline tax and other special use taxes on cars, automotive parts, tires, and lubricants.

A significant point is that virtually no one was concerned about "overuse" of the national parks prior to the combined impact of express highways and modernized park facilities in exponentially increasing park use by the mid-1960s. Nor was there concern that the impact of the road and the car was deleterious to park environments. Preservationist thinking rapidly changed, however, to the view that Mission 66 had encouraged too many people demanding too many conveniences to spend too much time in our national parks. Because these people came in automobiles, the road and the car came in for particular criticism.

This abrupt change in preservationist attitudes was part of a broader reaction against the road and the car in the late 1960s and early 1970s. Concern about the automobile in the parks coincided with widespread acceptance of what might be called the Yosemite fallacy. On June 24, 1966, the *Wall Street Journal* published a front-page story under the headline, "Ah Wilderness; Severe Overcrowding Brings Ills of the City to Scenic Yosemite." The article claimed that on an average summer day the Yosemite Valley had a population density three times that of Los Angeles County. "The damp night air, heavy with a fall of eyewatering smoke, is cut by the blare of transistor radios, the clatter of pots and pans, the roar of a motorcycle, and the squeals of teenagers. Except for hundreds of shiny aluminum trailers and multicolored tents squeezed into camping areas, this might be any city after dark."

The writer did not mention that the same criticism had been made as early as 1937 by Lewis Gannett, who complained that "the floor of Yosemite is an amusement park, as crowded a city as New York's Central Park, and only twice as large.... Nothing in America is less wild than the floor of Yosemite Valley."[12] The grandeur of its scenery notwithstanding, Yosemite had not been a wilderness park for over a generation, and its valley no longer had much of a natural ecosystem to preserve. Yosemite

also was one of the few national parks within an easy drive from two major population centers, the San Francisco Bay area and the Los Angeles area. And in no other national park were nearly as many automobile tourists being accommodated—1.7 million annually, in an area only seven miles long by two miles wide that was also particularly pollution prone because it was bounded by sheer granite walls. Nevertheless, facile overgeneralization by the media built the case that Yosemite was a harbinger of impending disaster for Yellowstone and Grand Teton—a land area larger than the states of Rhode Island and Delaware combined, remote from population centers, and easily accommodating two million automobile tourists a year.

No firm evidence supported the widely held belief that "the park experience" and park ecosystems faced imminent ruin from too many people in automobiles. These allegations were investigated, for example, by Robert Cahn, who reported his findings in a sixteen-article series for the *Christian Science Monitor*, "Will Success Spoil the National Parks?" that won a Pulitzer Prize for reporting in 1969. After six months of research and 20,000 miles of travel, Cahn found that there was overcrowding in the parks, but "only during the peak periods of use." "On the basis of my observations," he concluded, "the National Park System appears to be in relatively good physical condition. No disaster situation is evident." Similarly, the blue-ribbon National Parks Centennial Commission concluded in 1973 that after two generations of coexistence with mass personal automobility, "the properties entrusted to the [National Park] Service are generally in far better condition today than at the time they were taken into the [National Park] System." [13]

Hysteria in the late 1960s and early 1970s over the alleged destruction of the parks by people in automobiles resulted in large part from the almost complete absence of a historical perspective on park development and problems. To begin with, road building in the national parks had consistently lagged well behind the increase in park automobile traffic and had only moderately exceeded the increase in park area. From 1924 to 1947, for example, $107 million was spent on national park roads, and total park road mileage was increased about five times—from 1,060 to 5,387 miles. During this same period, however, total park area almost tripled—from 13,320 to 33,720 square miles. On the other hand, the number of automobiles entering the parks skyrocketed from 330,000 in 1924 to over 7 million in 1947, an increase of twenty-one fold. Thus the impact of the automobile on road building in the national parks was at most incremental rather than dramatic. John Ise, the foremost historian of the national parks, in 1961 described the minimal impact of the road and the car on wilderness: "In an hour's walk from the most congested area of

Yellowstone, one can lose himself in a wild forest where there is little scent of man. The lover of nature who does not like to drive his car over the glorious Going-to-the-Sun Highway in Glacier can walk or ride horseback across the divide—horseback if he can get a horse. He has about every freedom that he had before the road was built." [14]

The automobile also inherited and minimally changed the ecologically unsound park development patterns established by early dependence on rail and horse-drawn transportation—that is, the clustering of tourist service facilities in close proximity to major scenic attractions and the building of roads along the easiest natural routes to interconnect these scenic attractions. Indeed, dependence on the automobile led to great improvement of the enviroment in the vicinity of the grand hotels at scenic locales. Ise vividly describes conditions in Yellowstone in the pre-automobile era: "With hundreds of horses around, stabled near the hotels, it was inevitable that there should be a great deal of unpleasant litter and flies.... The hotels were good but around the stables there were masses of manure, rubbish, waste material, and dump from the hotels, as there were also around the permanent camps. The horse and buggy days lacked a few points in sanitation." [15]

In other respects too the impact of people in automobiles on park ecosystems was not only moderate but even beneficial. Although mass personal automobility tremendously increased the number of visitors to the parks, it also drastically reduced the average length of the park visit—from several weeks in the railroad and horse-and-wagon era to only thirty-one hours in Yellowstone by the early 1970s. The vast majority of automobile tourists have little impact on park ecosystems, because they are content to view wildlife and scenery in close proximity to their cars and spend almost all of their time in the park driving, stopping at a few major visitor centers, or chatting with the people in the next campsite. Paul Schullery, a former Yellowstone ranger, observes that hikers, "who generally regard themselves as the most environmentally holy, dig trail ruts and cause erosion. It can be argued that a single hiker traveling on foot through a park's back country does far more damage to the natural systems than does the average car- and road-bound automobilist." [16]

The speed and flexibility of the automobile permitted the development, in the gateway towns outside park boundaries, of tourist facilities that otherwise, even given a far lower level of park visitors, undoubtedly would have continued to proliferate near major scenic attractions within the parks. Had mass personal automobility not developed in the United States, it also seems doubtful that transportation within the parks would forever have relied on the horse and wagon traveling over primitive roads. Street railways were common in cities, and it seems probable that, lacking

the automobile, sooner or later major visitor attractions in the parks would have been interconnected by systems of fixed rails and overhead wires, incurring at least as much damage to park ecosystems as park roads have.

Democratic access by automobile, furthermore, was and remains the main reason for strong public support for the acquisition of park lands and the protection of park resources from exploitation. That the infamous Hetch Hetchy Dam and Reservoir, built in Yosemite in 1913 to provide water for San Francisco, remains the only such structure in the parks is no accident. Schemes to build a series of dams on the Yellowstone River in the 1930s and in the Grand Canyon on the Colorado River in the 1960s failed for one significant reason: congressmen received countless letters from irate constituents who recognized the value of preserving the parks because they had visited one in an automobile.

Even though coach-class fares between Chicago and points west were halved between 1921 and 1926, automobile travel still was cheaper and more convenient for a family than travel by train. "The automobile represented a new democratization of vacation travel," Earl Pomeroy writes. "In the same years [the 1920s] when the average American had more time for trips away from home and more money to spend on them, he could buy gasoline to carry his whole family from his own front door for what he alone would have to pay to ride the train. The growing western highway systems, growing in response to his demands, represented his expanding opportunity and the opportunity of the sections that they fed." Pomeroy continues, "What the motor cars and the motorists did to the outdoors would be long debated, but there is little doubt that the age of the automobile was the age in which the average American vacationer first found the West within his reach." With this democratization of travel, "a mass market became more important to the tourist industry as a whole than the patronage of the elite. The great profits in the western tourist and vacation industry came not from serving squab to the few but from selling gasoline, hamburger sandwiches, and postcards to the many."[17]

The validity of Pomeroy's statements depends on what one considers "democratization" and whom one considers "average." Of the 100 working-class families on whom Robert and Helen Lynd collected data on income and expenditures for their 1929 study, 66 reported spending nothing on vacations, and the amounts spent by the remaining 34 ranged from $1 to $65, with the notable exception that one family of three earning $1,680 a year spent $175 on a vacation and $492 on their automobile. The Lynds concluded, "Use of the automobile has apparently been influential in spreading the 'vacation' habit. The custom of having each summer a respite, usually of two weeks, from getting-a-living activ-

ities, with pay unabated, is increasingly common among the business class, but it is as yet very uncommon among the workers."[18]

A 1968 survey showed visitors to our national parks still to be almost exclusively white and middle class. As Everhart says, "No one would seriously contest that visiting parks and historic sites is an activity directly proportional to income. National parks are essentially a middle-class experience.... The culturally disadvantaged are not a significant part of the statistics of national park travel, and black families are seldom encountered in the campgrounds." The extent to which this remains true was revealed in testimony given in the United States Senate on June 8, 1977, before the Subcommittee on Parks and Recreation of the Committee on Energy and Natural Resources. Robert L. Herbst, an assistant secretary in the Department of the Interior, reported that about 75 percent of all national park visitors were "members of the 15 percent upper-income segment of the population (35 million upper-middle-income Americans account for 170 to 180 million park visits). The remaining 180 million Americans, with lower economic status, make up the remaining 85 to 90 million park visits."[19]

Although rail travel to the national parks continued to increase into the 1930s, it had been surpassed in volume by cheaper automobile travel to the parks a decade earlier. The railroads managed to hang on, providing alternative transportation to the parks, until the 1960s, when one by one they discontinued service. The western national parks are still linked, about a day's travel apart, by a system of railroad tracks that fell into disuse with massive indirect government subsidization of competing highway transportation after 1956. Visitation to the western national parks is largely a summer business, whereas the profitable running of an unsubsidized interpark railroad system would require year-round passenger traffic. With the cost of rail transportation estimated at $50 to $75 per person per day in the early 1980s, access to the national parks by motor vehicle remains much cheaper as well as much more convenient for families. Consequently, over 90 percent of the visitors to the national parks continue to arrive in motor vehicles.

Camping in the national parks used to mean tent camping by people in passenger cars or by backpackers who left their wheels at the trail heads. Neither required elaborate facilities. Increasingly in the 1960s, however, visitors tended to arrive in the park in pickup trucks with over-the-cab campers, station wagons pulling house trailers, or enormous "mobile homes" equipped with television sets and noisy generators. Often they came as well with trail bikes hooked fore and aft, and/or a motorboat in tow. These slow-moving, oversize rigs congested narrow park roads and parking areas originally designed for Model Ts. Their operators demanded

hookups for water and electricity and waste disposal stations. And in winter snowmobiles came to ply park roads.

Traditional views of camping have been outmoded by these realities. "Many campgrounds, once primitive and small, are now large and intensively developed with water systems, flush toilets, paved roads, increased supervision, and special facilities for trailers that now house nearly half of all campers," Roger N. Clark, John C. Hendee, and Frederick L. Campbell point out in a 1971 study of modern camping culture. "Campers are no longer required to forfeit many comforts of the urban environment to enjoy outdoor recreation. Equally important, the range of available camping behaviors, once limited by primitive conditions, has increased." The pattern has been one of the "invasion and succession" by the masses of naturally attractive locations initially accessible only to wilderness campers. "Consequently, a new camping style emerged with associated behavioral expectations less dependent on direct environmental contact, more compatible with highly developed structures, and increasingly social conditions.... Although recreationists seem to subscribe to the traditional goals associated with camping such as contact with the environment and isolation, they apparently feel that they can pursue such values in highly developed campgrounds." [20]

Preservationists have always considered the appropriate use of the national parks to be for nature appreciation, while recreationists view the parks mainly as arenas for activities such as sport fishing, boating, horseback riding, and snowmobiling. Mass recreation has tended more and more to compete with nature appreciation as the main park use. This is chiefly a result of the overuse and exhaustion of available public recreation land in close proximity to major population centers, a phenomenon attributable in the main to mass personal automobility. In 1969 Secretary of the Interior Walter Hickel estimated that it was in the urban areas that almost 80 percent of current recreation needs were located, and that it would require "in excess of $25 billion above existing expenditure levels to give urban dwellers the same amount of nearby recreation opportunity by 1975 that was available on the average nationwide in 1965." A notable example is that public access to stream fishing of the quality found a generation ago near large cities in several eastern and midwestern states now exists only in remote places such as Yellowstone Park and its environs. In 1978 the NPS issued some 218,000 free fishing permits in Yellowstone, one for every ten visitors. "There are at least twelve states that have fewer licensed anglers than that," Schullery notes. "Fishing is an industry in Yellowstone. Anglers spend about $4 million annually in and near the park, so that a local economy depends in part on their trade." [21]

Despite substantially higher gasoline prices following the 1973 and 1979 oil shocks, demand for the park experience from people-in-automobiles was expanding. Visits to units of the National Park System increased from 276.7 million during the 1976 bicentennial year to 284.2 million in 1979 and to 334.6 million in 1983. However, cutbacks on camping facilities and the imposition of moderate campground fees and two-week time limits have led to a dramatic decline in overnight visits. From a record high of 9.4 million in 1968, overnight stays in NPS-operated campgrounds fell to 7.9 million in 1971. After rising to slighly under 9.3 million during the 1976 bicentennial year, they have stabilized at 7.9 million in 1979 and 7.8 million in 1983. Total overnight stays in the national parks, including hotel and lodge-type facilities as well as campgrounds, have stabilized at about 16 million annually.

More visitors now stay at motels and privately operated campgrounds outside the parks in the gateway towns, and the trend promises to continue. Especially in the large parks, however, maintaining substantial overnight facilities for automobile tourists is essential. "At Yellowstone, for example, a visitor must travel a 140-mile loop to view the park's principal natural features," the Stanford Research Institute reports. "Without overnight facilities inside the parks, each visitor would have to complete the loop between sunup and sundown, substantially diminishing the park experience and congesting the park entrances at sunup and sundown hours."[22]

During the 1970s about one fourth of all travel over 100 miles from home by Americans was for purposes of outdoor recreation or sightseeing. Government statistics make evident the central role that the national parks and other public lands, such as state parks and the national forests, played in encouraging this recreational travel. Even if, as earlier noted, some three fourths of the visitors to our national parks in 1977 were among the richest 15 percent of our population, on the other hand government statistics on participation in outdoor recreation for the bicentennial period July 1, 1976, through June 30, 1977, reveal that fully 62 percent of Americans twelve years old and over participated in sightseeing at historic or scenic national sites, 30 percent camped in developed and an additional 21 percent in undeveloped areas, and 28 percent hiked or backpacked.

Tourism, then—fostered by increased affluence and expanding automobile ownership in the post–World War II period, together with the effects of Mission 66 and the 1956 Interstate Highway Act—is an essential part of American life and the American economy. And that democratic access to wilderness has remained compatible with wilderness preservation in the form of our national parks is both a signal achievement of American civilization and a major benefit of the automobile revolution.

## Development of the Tourist Infrastructure

The development of an infrastructure of tourist services from 1910 to 1945 is brilliantly analyzed by Warren J. Belasco. He demonstrates how "autocamping, an inexpensive, individualistic sport with antimodernist implications, gave birth to the motel, a nationally standardized up-to-date roadside business ... how, in an emerging mass-consumption society, hunger for escape was directed into conservative commercial channels." His thesis is that early upper-class automobile tourists were "deliberately seeking to escape crowded, overly institutionalized vacation places. In a consumption-based economy, however, the ability to purchase contrast cannot usually be confined to a small elite.... With numbers comes a specialized tourist infrastructure to control, service, and exploit the increased flow."[23]

Small-town hotels were oriented toward serving the needs of traveling salesmen who journeyed from town to town by train with their wares. Automobile-touring families found hotels expensive and overly formal, yet often lacking in cleanliness. After registering at the desk, tipping the bellhop for carrying up luggage from the curb, and finding a place to garage the car, the family had to bathe to remove road grime and change into suitable attire before going down to dinner. This might not be accomplished before the hotel dining room closed.

An estimated several hundred thousand middle-class families escaped from this expense and inconvenience of "the monopolistic rail-hotel complex" in the 1910–1920 decade by going "gypsying" in their cars, stopping each night along the roadside to cook simple meals over campfires and to sleep in tents. "In five minutes you set up a hotel of canvas that is much more satisfying than any builded of brick and stone," enthused an autocamping advocate. "No more hanging around on a dewy morning waiting for a cafeteria to open, or the sleepy garage owner to appear and release the family Lizzie. They appear with the lark, or a few jumps ahead of him, hustle the breakfast ... dismantle camp, and are on their way once more."[24]

Ingenious autocampers designed their own equipment, including fold-out tents from cars and fold-down beds in them, portable iceboxes and stoves, and equipment racks and trailers. The camping equipment industry grew spectacularly in the 1920s, by marketing equipment that appealed especially to comfort-conscious women—large tents, folding cots with springs, air mattresses, portable gas stoves and lamps, and elaborate yet compact kits of kitchen utensils.

Camping was made still easier by the establishment of free municipal

campgrounds on major routes of travel around 1920. This resulted from the pressures of local merchants, who wished to lure the growing automobile tourist trade to their stores, combined with the need for social control of camping as sanitation problems and altercations with property owners proliferated. On 10- to 15-acre sites, the camps accommodated 50 to 60 cars a day with campsites that included running water, electricity, privies, cold showers, laundry rooms, and central kitchens. Groceries and gasoline could be bought at nearby mom-and-pop markets and filling stations, so large amounts of supplies did not need to be carried. Estimates of the number of autocampers in the early and mid-1920s range from 10 million to 20 million annually, and the number of municipal autocamps from 3,000 to 6,000.

In part to defray rising maintenance expenses in municipal park budgets, but mainly to screen out itinerants and low-budget tourists, in 1923 some towns began to charge small fees at campgrounds, opening the field to competitive private entrepreneurs. A 1921 survey revealed that autocampers included not just middle-class tourists, emigrants, and farmers out to buy supplies, but migrant workers and "plain hoboes," who contributed nothing to local economies while freeloading at municipal parks. Some were year-round tourists who "violated the cardinal rule that motor gypsying be a temporary vacation, not a lasting occupation.... The goal of an auto trip was to reactivate one's loyalty to job, home, and family. Few wanted a permanently wandering population."[25] Consequently, nightly fees of 50 cents, time limits from as short as 24 hours to as long as a week or two, and registration came to be generally imposed after 1924 to screen out the "automobile tramps" from the "better class" of "bonafide tourists."

Between 1925 and 1928 there was a marked shift toward private camps charging fees. The movement began in Southern California, where year-round sunshine not only made tourism a uniquely profitable business but attracted the largest number of undesirable migrants. Municipal camps rapidly reverted to daytime picnic areas, as local entrepreneurs took over the overnight camping trade with the blessings of town officials. By the mid-1930s most of the remaining municipal camps had been shut down by state health inspectors as public nuisances.

Some campgrounds began to provide cabins, which were constantly upgraded in the late 1920s and the 1930s to attract a higher class of patronage. The "cabin camps," as they came to be called, were in the main mom-and-pop operations, cheaply constructed and run with family help. They remained the predominant type of roadside lodging for noncampers until after World War II. They appealed to the "suitcase" tourist, who found autocamping too primitive and difficult and who had continued to

patronize hotels. The cabin camps offered easy access from the highway, free parking, no clerks or tipping, informality, and, above all, privacy. As Belasco says, "Privacy spared shy or inexperienced travelers the ordeal of the public lobby 'gauntlet'; it allowed speeding motorists to come and go more freely; and it also attracted middle-class young people and well-dressed unmarried couples desiring to rendezvous in secrecy. Thus the same informality endeared cabin camps to families, mileage fiends, and roadhouse patrons."[26]

Expenditures related to tourism plunged from $872 million in 1929 to $444 million in 1933, while hotel occupancy rates fell from 70 percent to 51 percent. With hard times the patronage of automobile tourists further shifted from hotels to more economical cabin camps. Hotel occupancy recovered to only 56 percent in 1937, and the American Automobile Association (AAA) estimated that the proportion of its touring members staying in hotels had declined from 75 percent in 1929 to 60 percent in 1936.

In the 1930s the first "motor courts" were built in California, Florida, and Texas. These establishments combined the advantages of the cabin camp with sturdier construction and hotel-type conveniences such as indoor plumbing and private bathrooms. The first to use the word "motel" was James Vail's Motel Inn, in San Luis Obispo, California, a hotel with automobile facilities designed by Arthur S. Heineman and opened in 1925. Coast-to-coast chains of such "motor inns," offering full hotel services, professional staffs, and national advertising, were planned by several oil companies. "By 1930 the Holiday Inn style was already outlined: yet such chain schemes proved premature," Belasco explains. "Touring was still too seasonal in most of the country to support a heavily capitalized motor hotel that required year-round patronage to break even ... [and] expensive motor hotels needed very affluent customers, yet wealthier non-campers were only beginning to come to the roadside.... Big capital would have to await the return of prosperity after 1945, by which time the motor hotel concept would be well defined and nationally feasible."[27]

An article in *Harper's* declared in 1933, "The commercial houses, the railroad hotels down by the switching yards, where lonely drummers [traveling salesmen] chew cigars in fetid lobbies, are so infinitely more dreary than even the second-rate tourist cabins that no motorist who has learned the simplicity and cheapness of Camp Joy or U Wanna Kum Back will ever go near such hotels as these again." The AAA reported some 30,000 "tourist cottage and camp establishments" along the nation's highways. This new roadside industry catering to Americans on the move was "one of the few features of the American landscape that the depression is causing to grow by leaps and bounds."[28]

By the late 1930s early domestic cottage and regional themes in tourist cabin architecture were being replaced by modern-style flat-roofed cubes with curvilinear windows and rounded corners. And the motto of tourist courts had changed from "all the comforts of home" to "more than the comforts of home." There was a general tendency to upgrade facilities as, in Chester Liebs's words, "depression-weary manufacturers ... discovered that each of the thousands of cabins lining the American roadside was a potential showcase for their wares ... [and] wooed court owners with advertising and discounts so their items might be put on display and tried out by thousands of overnight guests. At the same time, the more enterprising court owners, eager to maintain a competitive edge, cooperated by snapping up large quantities of everything from inner spring mattresses and coin-operated radios to deluxe bathrooms with sunken tubs and hot and cold running water." *Business Week* summed up the economic impact of this in 1940: "Their total investment in furniture runs to about $50,000,000 and in plumbing and bath fixtures about $37,000,000. They use 560,000 beds and mattresses (403,200 of them inner spring), 245,000 gas stoves, and over 100,000 fans. So attractive are sales opportunities that such big suppliers as Simmons Co. (mattresses) are creating special divisions to service the auto courts."[29]

Tourism ended in 1942 with the World War II ban on passenger car production for the civilian market and wartime rationing of gasoline and tires, but revived to unprecedented levels with the great expansion of automobile ownership and use after the war. "By the 1950s, the roadside-lodging field was ripe for an invasion by corporate chains," Liebs observes. He cites a *Fortune* analyst who explained in 1959: "You had these thousands and thousands of little courts run by middle-aged, semi-retired couples. They had the world by the tail—a market yelling for improvements—and they couldn't handle it. Then, almost overnight, the big money began to flood in from everywhere—and I mean from everywhere."[30]

Referral chains of motels had their origins in the late 1930s as an outgrowth of the AAA's tourist facilities rating and recommendation service for its members and of the efforts of state and regional associations of tourist court owners, who began setting up minimum standards for members that used common logos and trade names. The best example of a referral chain is Best Western, which was founded in California in 1946 by motel owner M. K. Guertin with 50 member motels and came to have some 2,700 affiliates worldwide by 1980.

The franchised motel chain was pioneered most significantly by Holiday Inn, the brainchild of Kemmons Wilson. "In 1951," he later recalled, "my wife Dorothy and I loaded our five children into our station wag-

on and started on a vacation to Washington, D.C., from our home in Memphis. It didn't take long to find that motels had cramped, uncomfortable rooms—and they charged extra for children."[31] Wilson joined forces with Wallace E. Johnson, a prefabricated-home builder who had gained a reputation as the "Henry Ford of the home building industry." The first Holiday Inn, three single-story buildings clustered around a swimming pool, was opened on the outskirts of Memphis, Tennessee, in 1952. Wilson and Johnson franchised the right to use their trade name and logo and the benefits of national advertising and a national referral network to local investors, who erected and maintained motels according to Holiday Inn standards of design and service. Hotel corporations that directly owned their properties, such as Sheraton, entered the motel business in the mid-1950s, after which directly owned motels were added to the franchised ones in the Holiday Inn chain.

A year after the first Holiday Inn opened, Howard Johnson began selling franchises for motor inns adjacent to his franchised roadside restaurants. Johnson had, by the mid-1930s, parlayed a Quincy, Massachusetts, soda fountain acquired in 1925 and an ice cream manufacturing business that sold ice cream richer in butterfat at seaside stands into a string of roadside restaurants along the Massachusetts coast. He had begun franchising his restaurants in 1935. By 1940 some 125 Howard Johnson restaurants, a third of them company owned, were in business from Maine to Florida, grossing $14 million a year. Johnson had opened the largest roadside restaurant in the world on Queens Boulevard in New York City to serve visitors to the New York World's Fair. And he had secured an exclusive contract to built restaurants at the rest stops on the recently opened Pennsylvania Turnpike.

"Johnson's success derived from an uncanny ability to recombine current ideas into a new synthesis that unerringly appealed to a middle-class family on the road," writes Liebs. "Ice cream, for instance, was an extremely common treat, but Johnson's restaurants offered an unusual selection of flavors embellished with a touch of showmanship—he served it in a distinctive cone-shaped scoop that formed a rim of extra ice cream at the bottom, suggesting to the customer that he was getting an exceptionally large portion." Another shrewd step was his merging under one roof a full-meal dining room service and a quick-bite lunch counter with a fast-food menu, whereby he "addressed most everyone's needs in a single stop."[32] By the late 1950s some 500 Howard Johnson restaurants across the United States—next to many of which now stood motels belonging to his new standardized chain—were serving up identical menus to middle-class Americans on the road.

# Hard Times

# 11

During the 1920s automobility became the backbone of a new consumer-goods-oriented society and economy that has persisted into the present. By the mid-1920s automobile manufacturing ranked first in value of product and third in value of exports among American industries. In 1926 motor vehicle factory sales had a wholesale value of over $3 billion, and American motorists spent over $10 billion that year in operating expenses to travel some 141 billion miles. The automobile was the lifeblood of the petroleum industry, one of the chief customers of the steel industry, and the biggest consumer of many other industrial products, including plate glass, rubber, and lacquers. The technologies of these ancillary industries, particularly steel and petroleum, were revolutionized by the new demands of motorcar manufacturing. The construction of streets and highways was the second-largest item of governmental expenditure during the 1920s. The motorcar was responsible for a suburban real estate boom and for the rise of many new small businesses, such as service stations and tourist accommodations. In 1929, the last year of the automobile-induced boom, the 26.7 million motor vehicles registered in the United States—one for every 4.5 persons—traveled an estimated 198 billion miles, and in that year alone government spent $2.237 billion on roads and collected $849 million in special motor vehicle taxes. The eminent social and economic historian Thomas C. Cochran, noting this central role of automobility, asserts: "No one has or perhaps can reliably estimate the vast size of capital invested in reshaping society to fit the automobile. Such a figure would have to include expenditures for consolidated schools, suburban and country homes, and changes in business location as well as the more direct investments mentioned above. This total capital investment was probably the