

80 HORSES 80

Want to take a one-day Trail Ride in the Pecos Wilderness and enjoy the company of knowledgeable people? Then join our trip Oct. 1 that precedes AFA's Santa Fe meeting. Trail boss will be Elliott Barker. More details on pages 4 and 5.

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The American Forestry Association, publishers of American Forests, is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

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COVER

New Mexico's enchanted mesa—wrapped in a shroud of legend and steeped in antiquity—is beckoning to members of The American Forestry Association who will attend the 86th Annual Meeting of the Association at Santa Fe Oct. 1-4. Stellar attractions such as towering Shiprock, Indian pueblos, heavily timbered Santa Fe National Forest, Ghost Ranch Museum, and Bandelier National Monument—all are on the bill of fare. Another stellar attraction will be the keynote address by a great public lands Senator from a public lands state—the Hon. Clinton P. Anderson, of New Mexico

AMERICAN FORESTS is published monthly by The American Forestry Association at 919 Seventeenth Street, N. W., Washington 6, D. C. Subscription price is \$6 a year. Editors are not responsible for loss or injury of manuscripts and photographs while in their possession or in transit. The Editors are not responsible for views expressed in signed articles. Second-class postage paid at Washington, D. C., and at additional mailing offices. Copyright, 1961, by The American Forestry Association.



Forest Service Photo

The White Mountain National Forest in New Hampshire looms important in planning future recreation complex for the East

OVER the past few years many forest managers have felt harassed because their lands were being used more and more for outdoor recreation. Some still feel that raising timber is "productive" while providing for recreation is either frivolous, wasteful, or both. In the face of mounting public demand for recreational outlets, to consider the need for shelter more basic and important than the desire for rest and relaxation misses the point—at least in a society as complicated and affluent as ours. Forest managers must continually re-appraise their plans and objectives if they are to meet the challenge posed by a rapidly changing society.

A major obstacle has been the lack of a dynamic planning process.

It is essential that a satisfactory selection of outdoor recreation activities is made available to those

who use recreation facilities. This is so obvious that it hardly seems worthwhile saying, but experience shows that this aspect of recreation planning has often received too little attention and, therefore, constitutes an important problem.

To eliminate later problems in recreation planning it is best to begin with a comprehensive, clear-cut plan which would encompass the entire recreation complex of a forest sub-region. A concept is needed that will visualize the task of planning recreation facilities as a whole and not just in pieces and fragments.

Major Problems

Recent studies have emphasized the diversity of human activities that fall under the prescribed rules of "outdoor recreation," and the variety of resources that people use in their leisure time. The Outdoor

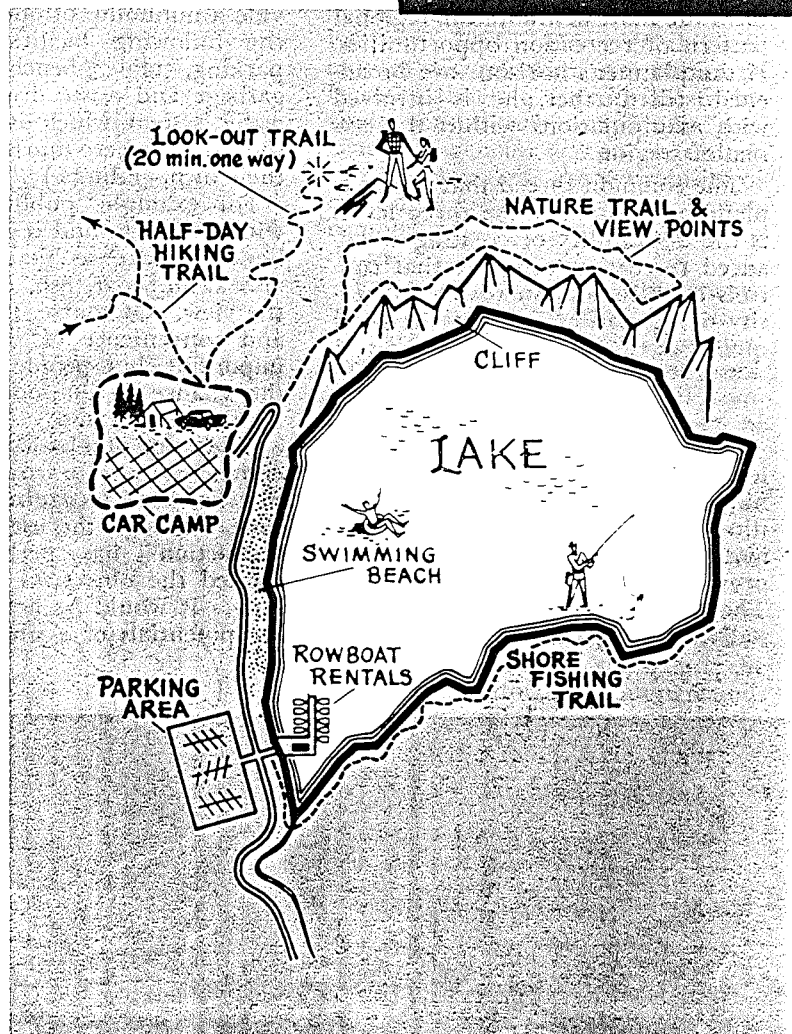
Recreation Resources Review Commission's progress report notes that "It now appears to the commission that the dominant problem in approaching a study of outdoor recreation is threefold: 1) the broad range of human activities involved; 2) the different resources needed to enjoy these activities; and 3) the differences in investments required."

It is also apparent that several kinds of outdoor facilities are ordinarily used in the course of a typical excursion. Even a multiple equation has been proposed as a mathematical expression of the number of activities a person engages in while at a recreation area. These ideas suggest not only that land managers should plan to provide individual recreation facilities where they are needed, but also that they should organize these facilities to complement and supplement each other as

Planning a Recreation Complex

By E. M. GOULD, JR.

Project Leader in Economics
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much as possible and thus enlarge the public's opportunity for enjoyment.

Also, recreation preferences change over time and it is difficult to predict these shifts very far in advance. This suggests that frequent reassessment of need should be an important part of any recreation planning process. If relatively unpredictable change is the order of the day, then an important part of any proposed plan is the capacity it provides for changing old developments and re-orienting new ones with a minimum of waste and waste motion.

Finally, there is ample evidence that a land manager must consider the quality of the recreation experiences that he promotes in his developments. Some conflicts between activities are obvious—clearly, automobiles are inappropriate in a wilderness area and water skiing can

endanger swimmers—but other relationships are more subtle and difficult to define. The positive value of grouping related activities is perhaps even more important and must not be overlooked in the scramble to reduce conflicts between uses. The importance of the quality of recreation opportunities should prompt the planner to consider the impact not only of appropriate grouping of recreation facilities, but also the desirability of separating or excluding incompatible activities.

Much of our present outdoor recreation plant has grown piecemeal, like Topsy, without adequate planning and integration. This outdated process worked fairly well as long as needs did not press too hard on available land resources and cash investments were insignificant. However, that time has passed, and the growing scarcity of resources for

development requires careful allocation based on full recognition of the variety and interrelated nature of future outdoor recreation requirements.

Applying the Concept

It is for this reason that specific planning for the recreation complex is proposed—to emphasize the chance that land managers have to create recreation values by providing diversified activities of high quality in such a way that required future changes can be made most efficiently. The basic concept for a recreation complex can be applied to at least three planning situations that are sufficiently distinctive to warrant separate discussion.

At the ground level there is the problem of planning investments designed to improve or safeguard an individual site or area for recreation

purposes. At a higher administrative level the concern is with the coordinate development of a number of sites, so that together they form the most desirable sub-regional pattern of recreation opportunities. If the planner's horizons are broadened still further, he is involved with manipulations within the recreation region.

The common thread that connects planning effort at these three levels is the desirability of creating a balanced recreation complex that controls conflicts and increases a diversity of recreational outlets of good quality at the lowest long run cost.

Site Complex

The first characteristic set of problems that can be clarified in planning for the recreation complex is illustrated by the experience that most foresters have had when improving specific sites for public use. They have found that any basic installation, is generally enhanced by

the recreation opportunities that are closely associated with it.

(By definition, the Forest Service says a basic installation should provide a minimum of one family with the following facilities: campsite, parking, table, benches, fireplace, garbage and waste disposals, and a water system which is optional in some areas where tourists must carry their own.—Editors.)

For example, public satisfaction with a campground is greater if it is beside a lake so that people can also swim, boat, fish, or just enjoy the view. Of course, the sightliness and convenience of the camp are important, but people usually seek the chance to do something more than simply camp.

The value of a basic installation is enhanced by a nearby "attraction" that has been recognized for a long time, although the use of the word "attraction" has perhaps unduly limited the objectives of site planning. It would be better to define the potentials of a site in terms of

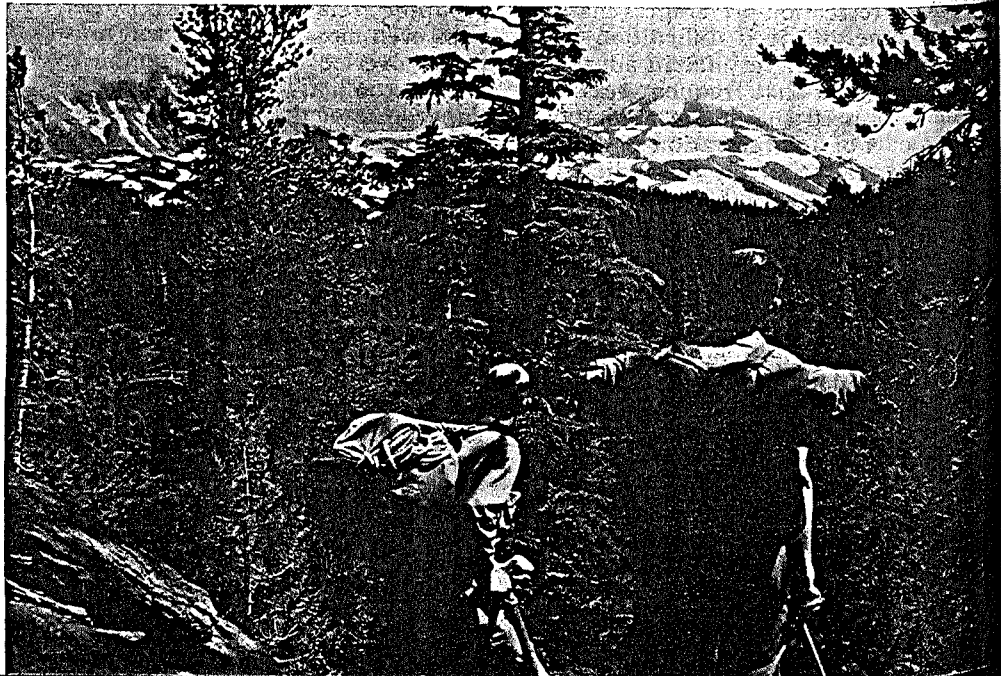
the various compatible recreation opportunities that can be reasonably developed there for joint use. Then the area planned to create a site complex would include not only the space for the core activity, but also the land needed for building up a fringe of supplementary activities.

Although a major attraction is desirable, there may be many less spectacular activities for recreation whose development and promotion will increase the value of a campground, picnic area, road, or other facility. Thus, the construction of a series of well-marked loop trails will tempt car campers and picnickers to take short walks, or even day hikes, and thus enjoy more intimate contact with the landscape. Nature trails can also help people understand and enjoy the scene around them. These facilities may be used considerably even though they do not have outstanding "attractions." A pleasant walk beside a brook or to a minor vantage point gains in importance because it supplements the basic recreation installation and widens the user's chance to enjoy forest recreation of another kind. There are many ways in which the planner's familiarity with the local terrain and his imagination can expand the site complex. Many of these recreation improvements can be installed gradually and for very nominal investment, but their total importance is probably much greater than their cost would indicate.

The idea that it is worthwhile to enrich the variety of opportunities in an area to serve several purposes can be applied to all sorts of recreation situations. A properly designed highway can serve the double purpose of serving as both a transportation artery and a scenic attraction.



Charcoal-broiled hamburgers always taste better in the Mirror Lake region of Utah's Wasatch National Forest—a true recreation paradise

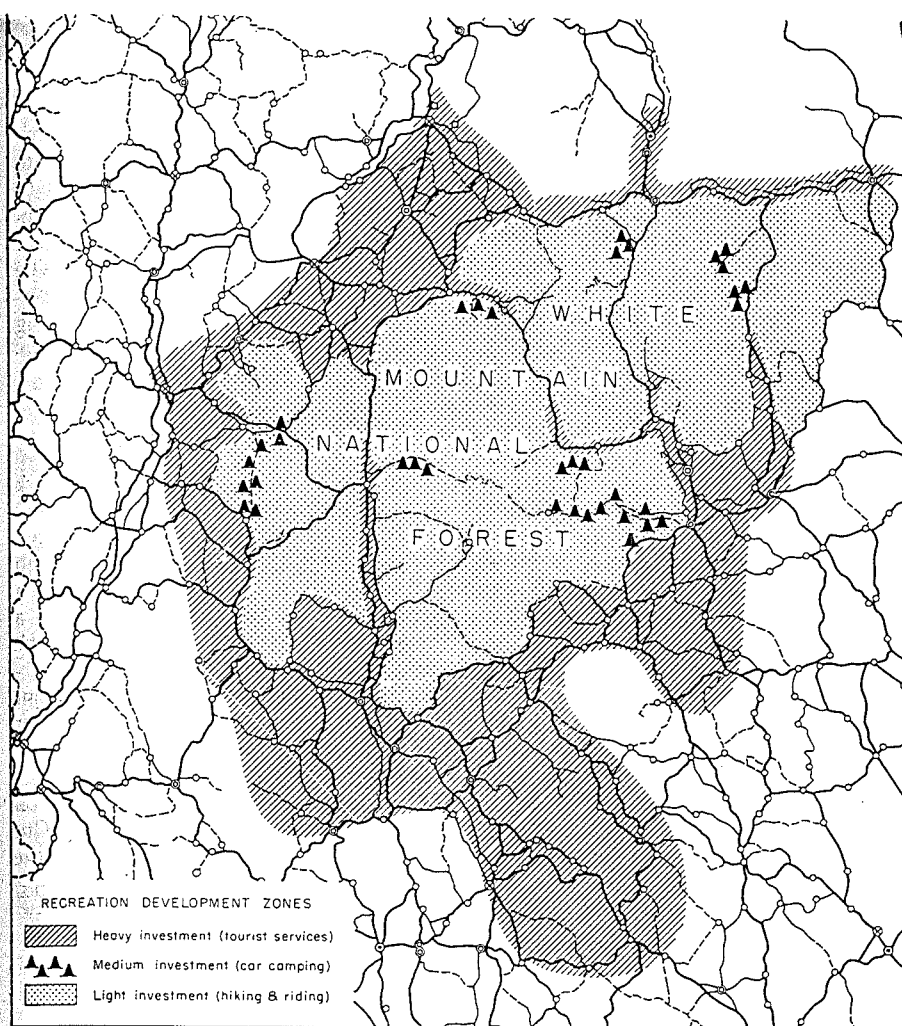


Backpackers pause to admire sensational view in Oregon's Three Sisters Wilderness in the Deschutes and Willamette National Forests

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White Mountain area, with four major roads, extends across New Hampshire roughly 60 miles east and west and 45 miles to the north and south

Supplementary developments like picture points, views, rest areas, and picnic spots, all increase the value of a recreation facility serving a variety of purposes. In short, variety is the spice of outdoor recreational activity—something to suit all tastes.

Several other concepts for a recreation complex can be applied to a specific site. These include creating a basic installation that serves the somewhat different needs of tent, trailer, and pickup truck campers. Or proper design may create facilities capable of handling heavy loads during peak demand periods. These ideas demonstrate some of the ways the recreation complex idea can help identify the site planning problems with which designers must cope.

Sub-Regional Complex

Practical experience suggests that variety of activities is also desirable beyond a specific site. Thus, we find that national forests and national parks usually contain within their boundaries a fairly extensive recreation plant that gives visitors plenty of choice among outdoor activities and associated services. Although

the Forest Service and the Park Service operate under different congressional directives, both seem to have found that people enjoy doing a lot of things—all the way from passive sightseeing to active wilderness hiking. A recent review of the federal provisions made for outdoor recreation in California, for example, shows that these agencies have each woven an amazingly wide range of facilities and activities into a broad pattern of recreation opportunities. This pattern constitutes a "sub-regional" recreation complex. (By definition, the Forest Service says a sub-region is part of a National Forest Region. The region may cover several states. For example, northern California is a sub-region of Region 5 which encompasses the whole of the state of California. A sub-region may include one or several forests within its boundary.—Editors.)

In line with its resources and objectives, each service has given its own special character to its mixture of recreation opportunities, but these differences are mainly in emphasis; the patterns themselves are

surprisingly similar. True, some people dislike certain recreation opportunities developed by specific agencies. (See "Our National Park in Jeopardy," the *Atlantic Monthly*, February, 1961.) However, this is a natural disagreement over choice of facilities that are appropriate to include within each complex as governed by agencies, acts and traditions but does not deny the desirability of creating a comprehensive recreation complex wherever it is possible to do so.

Close study of any administrative unit like a national forest or national park shows that the diversified complex serves several purposes. First of all, the sub-regional complex satisfies the wide variety of recreation desires embraced by the entire public, and it also provides for individually changing tastes in outdoor experiences.

Although about half the recreation attractions in California are for sightseers—car-bound tourists who need roads, restaurants, hotels, and motels—many want to spend the night in comfortable campgrounds or trailer parks. Some prefer the more primitive conditions of a small, remote car camp; others come mainly to boat or fish. A small but increasing proportion of visitors are leaving their cars entirely, for a walking or riding trip into the back country, and a few of these are looking for the chance to explore in solitude the wonders of an unspoiled wilderness.

The knowledge that people want the opportunity to take part in all these forms of recreation, and that each activity requires a different kind of facility and natural setting, leads planners to take advantage of the full range of resources at their disposal. In addition, the way the elements of their recreation complex are distributed over the landscape to form a pattern gives managers an important degree of control over the distribution of people. The heavy investment needed to accommodate a lot of visitors helps draw the very crowd it was designed to serve. This not only promotes full use, but also protects other areas where use will destroy the enjoyment these areas provide.

White Mountain Natural Forest Recreation Complex

The White Mountain National Forest and its environs in northern New England is a good illustration of the pattern of facilities that has grown up to constitute a sub-regional recreation complex. This is a

very old, settled area of the country with about 30 per cent of the nation's people living less than 500 miles away. Recreation use started early in the 19th century and has been an important activity ever since. The present pattern has come about partly through the accidents of history and partly as the result of careful planning.

The White Mountain area extends across the state of New Hampshire roughly 60 miles east and west and 45 miles north and south. It has four major roads which cut historic passes, called "notches." Along its major highways are clusters of private tourist accommodations of all kinds—summer camps, homes, businesses, etc. Many of the residents in these adjoining towns depend almost entirely on trade with "summer people" or winter skiers, or both. This private investment in recreation facilities has grown over the years, and has now reached sizeable proportions. Much of it has permanently changed the landscape, and represents a high and rather inflexible commitment to present forms of use.

The Forest Service campgrounds, picnic areas, and other facilities located mostly in a relatively narrow zone just inside the fringe of private development, are on secondary and stub roads. They range from the big Dolly Copp campground north of Pinkham Notch to small car camps and picnic spots on obscure gravel roads. Many hiking trails connect these facilities with the mountainous hinterland and short loops make local points of interest accessible to those who want only a brief walk.

The large mountain and valley core that forms the center of the national forest is covered by an elaborate network of foot trails—carefully signed, mapped, and maintained. The Appalachian Mountain Club and its affiliates developed many of the trails long before the forest was established. They also started a series of free shelters, and built the famous "Hut System"—hostels that provide food and lodging for hikers who want to travel light. The A.M.C. and the Forest Service have worked in close concert to keep this network of back country facilities working smoothly and to integrate it with other forest uses.

Although many interior parts of the forest are used sparingly, there is no wilderness area in the "western" sense of the word. With this one qualification, the full range of opportunities for outdoor forest

recreation is well represented in the White Mountain recreation complex. This pattern might be shown schematically as a central area with primitive development for hiking and related activities, where investment per acre is low, user density is least, and flexibility to meet change is still high. Surrounding this is a band of car-oriented facilities with a moderate recreation investment per acre, fairly dense use, and a lesser degree of flexibility.

The outer zone of tourist facilities on private land has been created by a high investment per acre that is relatively fixed in its capacity to meet change, and where use is most concentrated. Thus, recreation investment per acre, and the impact of it on the landscape, diminishes as one goes from the developed outer ring to the primitive central area; and conversely, flexibility for adjusting uses increases.

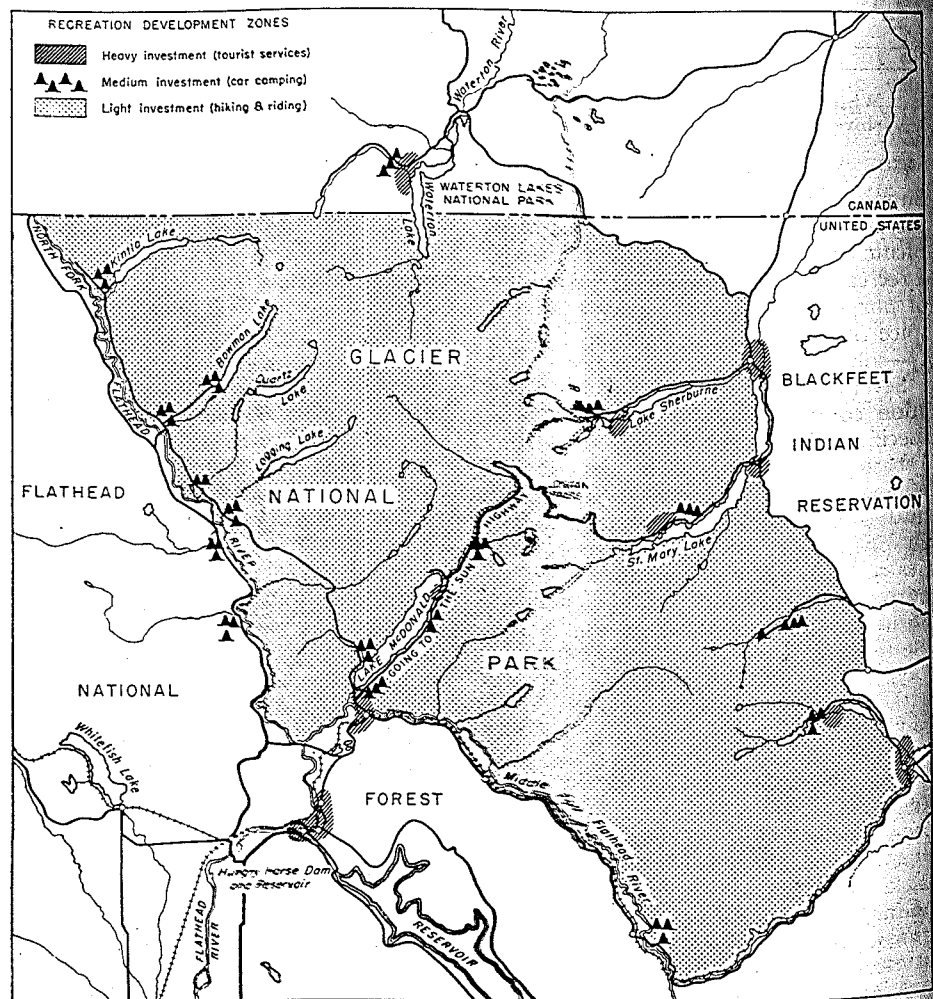
It is obvious from this example that facilities within each of the three zones have an impact on each other. Public investments supply

opportunities not found on private land and extend the array of activities open to visitors. The private facilities supply services essential to users of public land so that developments in all three zones supplement and complement each other. The nature of these inter-locking relationships is highlighted by observing the whole assemblage as a sub-region recreation complex.

Glacier National Park Recreation Complex

The area of Glacier National Park is another example of a sub-regional recreation complex that has been fitted together within and around an administrative unit. The pattern here is somewhat different in that a main attraction of the area is the park's scenic Going-to-the-Sun Highway. Heavy tourist development has been concentrated near the outer ends of this road and at many glaciers on federal and private land. The park has campgrounds also on eastside stub roads at Babb, Cut Bank, Two Medicine, and on the

Glacier National Park features Going-to-the-Sun Highway—is a good example of a sub-regional recreation complex built around one key unit.



southern circle highway, U. S. Route 2.

Many horse and foot trails connect these areas of concentrated use with interior attractions like Grinnell Glacier. Shelters and chalets are also available for walkers. The large central park areas, north and south of Going-to-the-Sun Highway, have been kept primitive for hikers and riders—and the northwest side has only a few small and remote car and hiking camps. Altogether, the full range of opportunities for recreation is present in a way suited to the resources and objectives of the park. The way people use the various parts of this recreation complex suggests that managers can create a pattern of facilities within which heavy investment zones furnish a substantial degree of protection to primitive zones. Up to a point, overcrowding can be prevented by attracting people to places better equipped to accommodate them.

To date, development on the northwest side of the park has been held at a low level; however, a proposed new highway up the North Fork of the Flathead to Waterton Lakes National Park in Canada may make this area accessible for heavy tourist traffic and use. Most of this road may be located on the west side of the river on Forest Service land and the problem of coordinating recreation development between the two agencies and with timber use is being carefully studied.

This suggests that this approach to the whole complex can help identify planning problems that commonly overlap several operating units in federal, state, or even private agencies or ownership. The public interest may be served best if the North Fork problem is viewed as one of creating a sub-regional recreation pattern, rather than as unrelated development problems to be dealt with by each agency separately. In this way, the institutional relationships, responsibilities and working arrangements may be clarified and development within each of the administrative units may be balanced.

The extent of the area included in plans for the whole recreation complex depends on the problem being studied and the requirements of emerging solutions. The landscape, resources, and agencies relevant to the North Fork problem, for instance, may initially include the Glacier National Park, the Glacier View District of the Flathead National Forest, and a few other landowners in the watershed.

However, an early analysis suggests that joint use of the new highway by log trucks and tourists might create an intolerable conflict. If this happened, one solution might be to coordinate harvest cutting on the Glacier View District with that on another area to reduce the trucking load during the critical tourist season. If this proved most desirable, then the administrators of the other lands would have to be included in planning the pattern of the sub-regional recreation program.

Regional Complex

Finally, this diversified approach can help forest managers put their plans in regional perspective. The White Mountain area is a case in point—where the historic trend of land use is a factor conditioning estimates of future recreational need. Over and above this, however, is the popular image of the section held by visitors and potential visitors from New York City and environs and other key population centers in the East. The whole of New England has been developed and advertised to the point where many people think of it as a vast winter and summer playground. Lake, mountain, and seashore resorts are interspersed with campgrounds and summer homes, historic and scenic points of interest are developed and accessible, and cultural events like the Tanglewood Concerts draw many visitors. All of these developments have created a public image of the region as a rich source of satisfying recreation experiences.

Forest managers are faced with the problem of how they can use their resources not only to maintain this regional balance of recreation opportunities, but also to expand and enrich recreation facilities for future generations. Although there is a great deal of room in New England for private business development, the pressure on public forest managers is acute because they control only five per cent of the land.

Federal holdings are even more limited—the Forest Service, for instance, controls a unique mountain and valley landscape that plays a critical role in the regional complex.

The wild beauty of the forest not only sets the character of a whole sub-region, but also supplies the opportunity for outdoor recreation of a type found nowhere else in New England. Although heavy investment for mass recreation in the back country might be made and used extensively, this could only be done at the expense of the present recrea-

tion found in the area. Such a move would correspondingly impoverish the whole regional complex, reduce the array of choice open to visitors, and lessen the capacity for land use adjustments in the future.

In the Northeast the management of recreation on public forest land is critical, partly because these areas contain such a small, but crucial part of the recreation complex of the region. In California and much of the west, on the other hand, public foresters are concerned with recreation development because they control such a large proportion of the suitable land resource.

The California Public Outdoor Recreation Plan, for example, shows that federal land managers will be responsible for meeting a large and vital segment of future needs. The cities and counties should logically satisfy much of the demand for day recreation in places close to population centers, while the state and federal government should concentrate on overnight and vacation facilities because their lands are more distant from populous areas. However, responsibility is not always clear cut; some federal holdings are right in the background of population centers—like the Angeles National Forest perched above Los Angeles.

In such a situation, the idea of creating a diversified and flexible plan with the recreation complex of high quality and responsive to changing needs over the years, can help planners and administrators assess alternative courses of action. The obvious need is for a planning process that assists managers to make continuing analyses of pressing problems, to evaluate the impact of competing solutions on the regional recreation complex, to identify costs and beneficiaries, and to assign specific projects to responsible agencies. Any process that does all these things will be complicated, but this overall view of the whole recreation complex can help in the first step of identifying problems.

The examples cited suggest that the recreation concept can help define recreation problems in cogent terms at several administrative levels. At the "grass roots" various ideas about specific site design and improvement can be clarified. In a somewhat larger context, managers can be helped to integrate various areas and facilities to form a desirable sub-regional recreation pattern. Beyond this the desirability of specific opportunities must be judged within the context of a regional recreation matrix.