

foreword

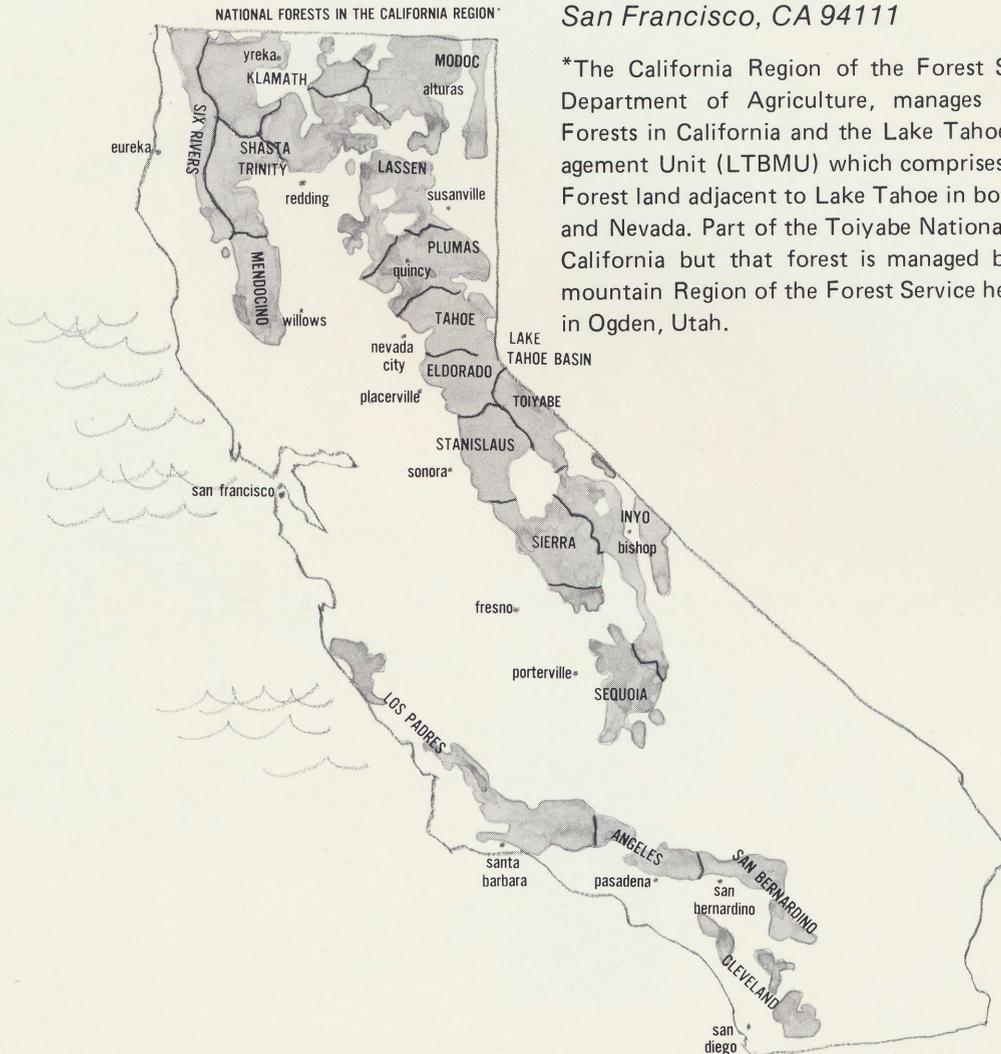
This booklet takes a look at the National Forests in California and some of the goods and services they provide. It also reviews how the Forest Service is planning and managing the forests to insure a reliable flow of those goods and services for the future.

We invite you to get to know more about your National Forests and contribute your ideas about how these great resources can be used

and managed to meet the needs of our own and future generations.

To learn more about your National Forests and how you can become involved in their future, contact the Forest Service office nearest you or write to:

*Regional Forester
California Region
U.S. Forest Service
630 Sansome Street
San Francisco, CA 94111*



*The California Region of the Forest Service, U.S. Department of Agriculture, manages 17 National Forests in California and the Lake Tahoe Basin Management Unit (LTBMU) which comprises all National Forest land adjacent to Lake Tahoe in both California and Nevada. Part of the Toiyabe National Forest is in California but that forest is managed by the Intermountain Region of the Forest Service headquartered in Ogden, Utah.

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What's a national forest
got
to do with me?



For many Americans the future is perpetually "on location" in California, with a show that includes everything from Nobel Prize winners to rock stars, and wildfires to taxquakes.

And in a State that has already given the Nation *Star Wars*, the *pet rock*, and Proposition 13, it's understandable that the National Forests aren't going to dominate the news.

So if today's paper announced that the natural resources of the 17 National Forests in California were no longer available, the story probably wouldn't be relegated to the Food Pages, but a common reaction from readers might be: "What's a National Forest got to do with me?"

Of course a logger and his family in Yreka or Redding could answer that question right away, because loss of the timber resource could mean his job's at stake (about half the trees harvested in California each year come from the National Forests).

And for a rancher near Descanso, Kernville, or Alturas, the pinch might move from his boot to his wallet fairly fast if he lost his National Forest grazing allotment (about 1,600 ranch families in California depend on annual National Forest grazing allotments).

But most of the 22 million residents in California spend more time in traffic than in the saddle or handling a chain saw, and for them the management and productivity of 20 million acres of National Forest land in the State can seem remote.

Certainly if you live in an apartment in San Diego, Los Angeles, or San Francisco, getting your landlord to fix the plumbing or your neighbor to turn down his stereo is a greater concern than whether the Cleveland, Sequoia, or Modoc National Forest starts a range re-vegetation program, or the Inyo, Stanislaus or Eldorado National Forest starts a watershed restoration project.

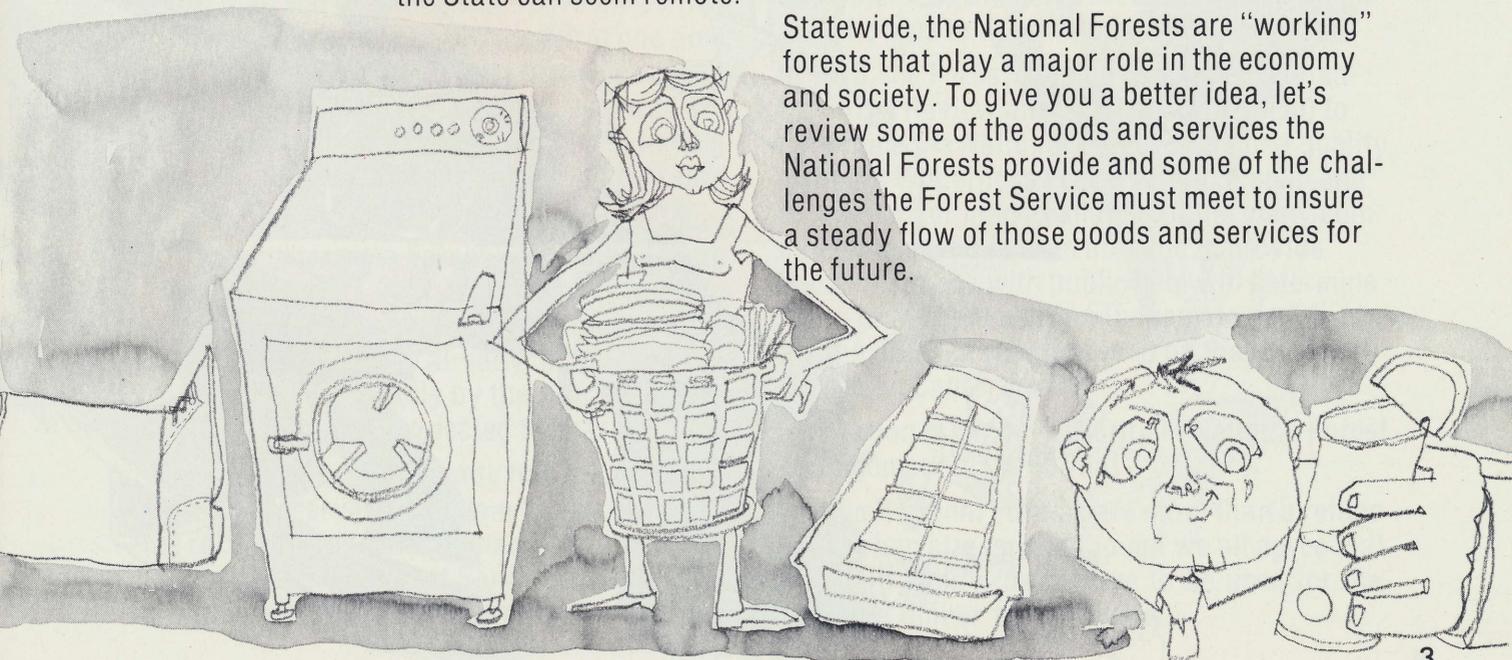
And for the commuter in Fresno, San Jose, or Davis, making payments on a house and 1/4-acre lot can dwarf the importance of reforestation projects on the Klamath, Shasta-Trinity, or Six Rivers National Forests.

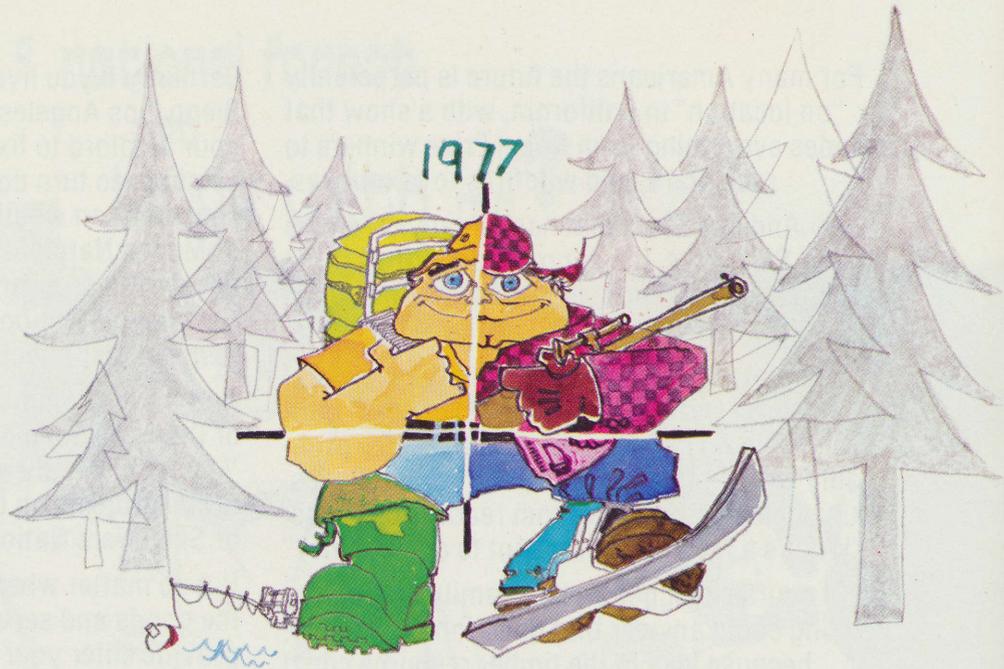
But no matter where you live in the State, the goods and services the National Forests provide enter your life, directly or indirectly.

For example, the drink you relax with after work may come from Kentucky or Scotland, but the water in your ice tray probably started out on the Inyo, Stanislaus, Eldorado, or other National Forest (about 50 percent of the water used in California does). To say nothing about the irrigation water used to grow the vegetables served at your favorite salad bar, or water supplied to the local laundromat.

And even if the only beef you see grazes the kitchen range, chances are it was helped along by forage on the Sequoia, Los Padres, Cleveland, Modoc, or other National Forest (about 400,000 animal unit months of grazing in 1978 alone).

Statewide, the National Forests are "working" forests that play a major role in the economy and society. To give you a better idea, let's review some of the goods and services the National Forests provide and some of the challenges the Forest Service must meet to insure a steady flow of those goods and services for the future.





1977

trees

2020



With pavement underfoot, smog overhead, concrete and glass in huge Euclidean forms all around, it's no wonder people miss the feel of broken ground, pine-scented air, sunlight on the rough hide of trees, the ambling line of a mountain ridge. In the topography of everyone's imagination there is a place of harmony with Nature, and that place always includes trees. An attainable version of that harmony can be found in California's wild country.

Many Californians think of the National Forests mainly as scenery and places for recreation (about 40 million visitor days were spent on the National Forests in California in 1978).

are sanity

Every year more and more people backpack, camp, ski, hike, fish, hunt, and rockhound on the National Forests, and their workweek certainly would cast a longer shadow without the outstanding recreation opportunities the Forests provide:

- more than 2.1 million acres of classified wilderness;
- 14,000 miles of riding and hiking trails, including the Pacific Crest Trail
- more than 950 developed campgrounds with a total capacity of 110,000 people at one time;
- 20 million acres for wandering and camping;
- matchless lakes, streams, and wild and scenic rivers for boating and fishing;
- miles of roads for driving pleasure.

But it's the "more and more" that is providing the challenge to Forest Service managers. Millions of cars and campers roll toward the woods every weekend and throughout the summer peak season already, but that's nothing to what's likely by the year 2020 when recreation demand is expected to nearly double.

Although we have already had to use a computerized reservation system to accommodate the recreation demand at many popular campgrounds, the Forest Service is not content with more and more restrictions as a way to

provide quality recreation in the future.

We have a major program for acquiring prime recreation land through purchase and land exchange, especially in areas where urban demand for recreation is greatest. In the Lake Tahoe Basin the Forest Service has purchased more than 29,000 acres since 1971, and land around Big Bear Lake in the San Bernardino National Forest has been purchased to insure public access to this popular recreation area. We also acquired 39,000 acres to "round out" the Salmon-Trinity Alps Wilderness proposal, 17,000 acres of prime waterfowl wetland and rangeland in the Modoc National Forest, and 3,000 acres to consolidate public ownership along the wild river sections of the Middle Fork of the Feather River.

We are also emphasizing dispersed camping and other less intensive recreation uses which will allow us to accommodate more visitors.

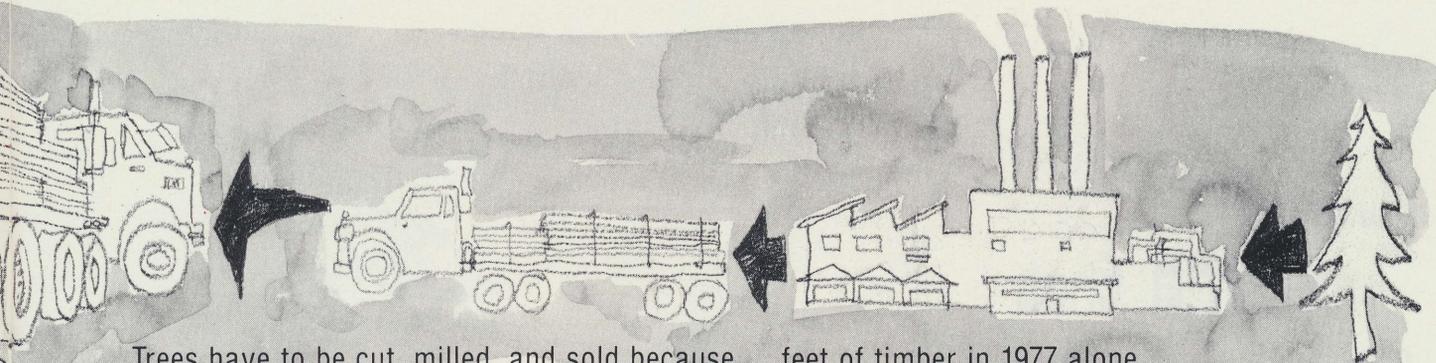
In 1978, the Forest Service conducted a Roadless Area Review and Evaluation (RARE II) to determine the National Forest share of a quality National Wilderness Preservation System and to make other land available for the many commodity uses the forests are able to provide. Decisions made with public help will determine many of the land uses on the remaining 6.2 million acres of roadless land on the National Forests in California.

Recreation is a major priority in National Forest management in California.

But the National Forests are more than a refuge from urban stress, and though we all agree that trees are sanity, trees have to be used for the valuable timber they provide.

the future
was
yesterday





Trees have to be cut, milled, and sold because the American dream is still made mostly of wood. Much of the nearly 2 billion board feet of timber harvested in California National Forests in 1978 went to build the houses everyone wants.

Part of that yield also went to restore the Victorian houses in San Francisco, Oakland, and Sacramento that everyone admires.

And part went to renew rundown urban and rural housing that everyone hopes to improve.

But wanting, admiring, and hoping can't substitute for affording, and the cost of timber is rising because the available supply is declining. It is now estimated that the demand for softwood for construction may exceed the supply by as much as 19 percent by the year 2020.

And because it takes 30 years or more to get a return on commercial tree plantings, the last chance we had to increase the growing stock affecting the timber supply even for the year 2000 was in 1970!

In respect to short-term timber supply, the future was yesterday.

But the Forest Service works on the principle that for the long-term, the future is now. We are increasing timber production on the 5 million acres of prime commercial forest land on the National Forests in California through several programs.

We are improving the planting stock for reforestation (Forest Service nurseries will have a capacity of 42 million bareroot and 2 million container seedlings annually). We also are searching for a combination of timber management techniques and technology (for example infrared aerial detection that permits early discovery and attack on insects and disease) to limit the effects of forest insects and disease that killed nearly 3 billion board

feet of timber in 1977 alone.

In addition, recent successful research on how to plant true fir means that we will be able to restore burned and disease-ravaged stands of true fir, and to perpetually grow and harvest true fir species that make up nearly 30 percent of the commercial stand in the Sierras and Cascades.

We are working with private landowners to improve their timber stands, and with millowners to insure that the harvest is used efficiently.

A Forest Service cooperative program with millowners called the Sawmill Improvement Program was introduced in 1973. It has helped owners increase mill production by 6.5 to 20 percent through use of computer-calculated log cutting and other improved milling practices.

A forester can get excited about that kind of news, but you probably won't notice the effects until you need lumber for a sun deck or an extra room in your house. Investment in improved timber management will help us meet much of the demand for timber in the future, and advances in technology will stretch the supply we do have.

As a renewable resource, and as the most efficient storehouse of solar energy we have, the forests can provide indefinitely for our needs — whether it be for fuel, structural timber, paper products, or fabrics and chemicals made from cellulose.

But ultimately the extent to which the supply of wood is adequate will depend on consumer attitudes. We need more economical and efficient use of wood products (through recycling and conservation, in addition to improved technology) by a public accustomed to thinking in terms of a "cheap" wood supply.

woodsman

spare that

Pityopus californicus

The Endangered Species Act of 1973 got a lot of wild animals out of the courtroom and back into the woods (or *vice versa*, depending on your point of view). And most people agree we needed a Bill of Rights for animals.

Of course we all can get enthusiastic about the bighorn sheep, the bald eagle, or the peregrine falcon. But it probably takes a little more effort for the average person to get concerned about the blunt-nosed leopard lizard, which has protected habitat on the Los Padres National Forest, or the black toad on the Inyo, or the Northern California river snail on the Shasta-Trinity, or the southern rubber boa on the Angeles.

These are just four of more than 20 animals protected as threatened, endangered, rare, and unique species on the National Forests in California under Federal and State law and the commitment of the Forest Service to their survival.

We even extend our protection to the unarmored threespine stickleback (a fish on the Angeles National Forest), and in 1977 we adjusted a timber harvest on the Six Rivers

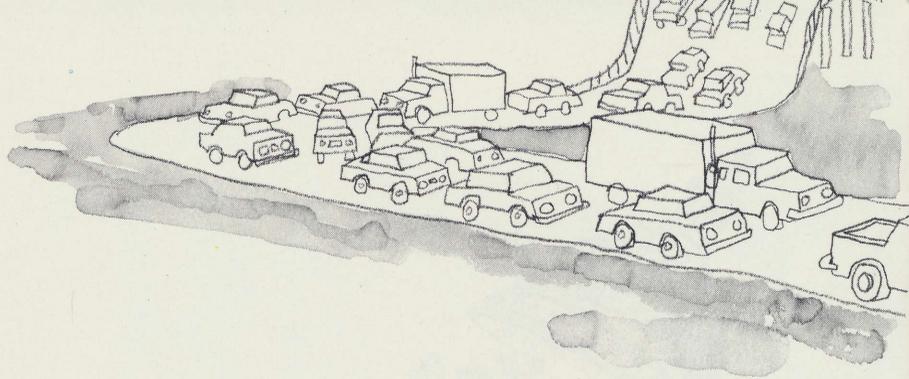
National Forest to protect a critical population of the plant *Pityopus californicus*. (Plants are not yet legally classified for endangered or threatened status, but this species may be eligible for such classification when they are.)

The California Region also has major programs for game and nongame wildlife management for fishing, hunting, and naturalist use. For example, Operation Swimup is a program to eliminate upstream barriers to passage of anadromous fish (like salmon and steelhead) to spawning areas. When you consider that the salmon catch on the Six Rivers National Forest alone draws 50,000 anglers every year and is valued at more than \$9 million, that program makes good sense.

Other programs include the North Kings Deer Herd management project for westside Sierra herds that is an attempt to arrest the decline of deer populations, and a wetlands management program on the Modoc National Forest to attract migratory ducks and Canada geese. All projects are done in cooperation with the California State Department of Fish and Game.

Forest Service programs will insure that the wild animals will be there to fascinate, scare, and delight future generations as they do our own.





You've been there!

Shopping lists, appointments, trivia on your mind as you turn onto the freeway. Then, miles from the nearest station, you run out of gas. Consider multiplying that by 220 million people.

The energy crisis is coming. And even a wallet full of identification cards won't prevent the identity crisis that could occur if we don't find an alternative way to run an automobile.

Of course by 2020 we probably will have a combination of nuclear, solar, tidal, geothermal or other sources of power to partly replace petroleum. But whatever happens, the National Forests are going to play a major role in supplying energy.

For example, geothermal energy sources have been confirmed or are predicted by geologists on the Lassen, Modoc, Inyo, and Mendocino National Forests.

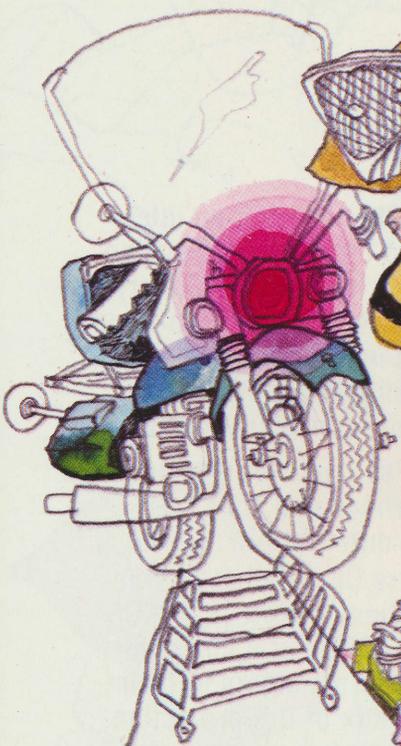
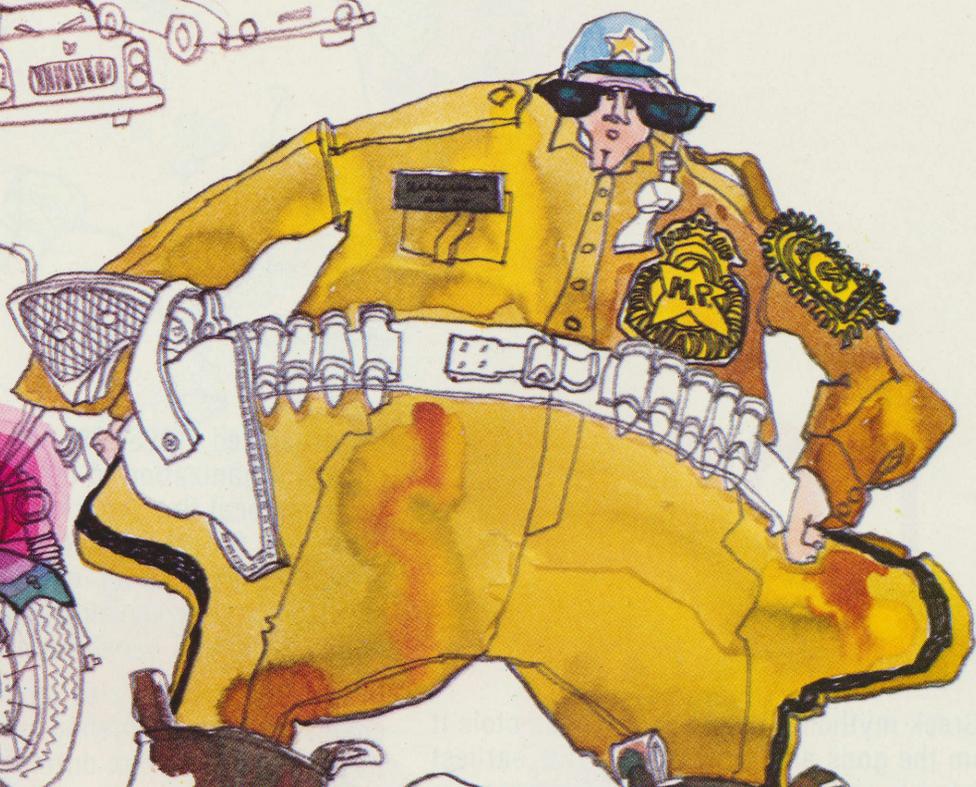
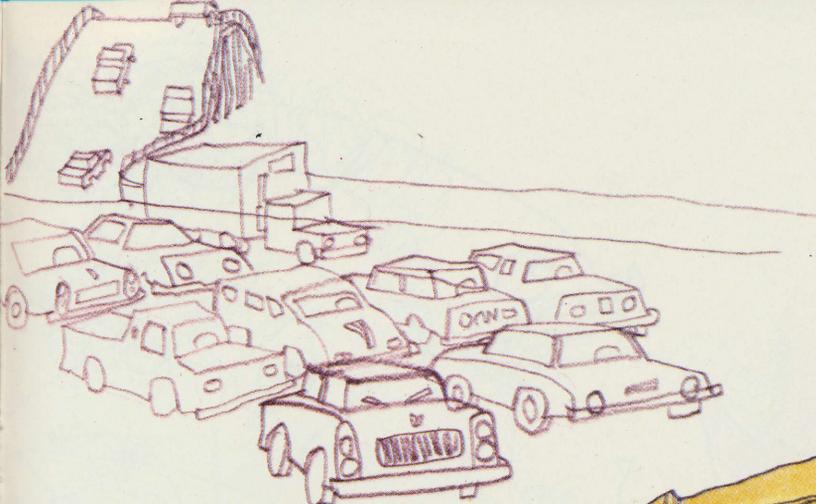
In addition, advances in technology have already made wood fuels competitive with fossil fuels for the first time in 200 years. Techniques have been developed to transport wood chip by pipeline, and research is underway, and succeeding, to produce fuel by high temperature compression of waste wood products.

About 50 mills in California now use wood for fuel, and it is estimated that waste plant material from the forest lands in California could supply 15 to 25 percent of the energy needs of the State. Chaparral, which burns like gasoline and has been considered a nuisance plant and fire hazard for years, conceivably could become a fuel source for the L.A. Basin.

Another potentially critical area for the future is minerals production, especially critical minerals needed by American industry.

Potential or producing deposits of critical minerals on the National Forests in California include asbestos on the Shasta-Trinity and Klamath; chromite on the Los Padres, Mendocino, Six Rivers, Shasta-Trinity, and Klamath; nickel on the Six Rivers; and tungsten on the Stanislaus, Sierra, Inyo, and Sequoia.

The Forest Service is encouraging exploration and review of the potential for energy and industrial minerals production on the National Forests in order to determine the extent to which these resources can meet the needs of our economy in the future.



but i
checked
the
gauge
this
morning





fire

Greek mythology says Prometheus stole it from the gods and gave it to us (the earliest recorded example of industrial espionage), for which he spent the rest of his life on a rock, suffering.

A lot of Southern Californias would like to arrange some way to give it back.

But in the meantime, the Forest Service continues its best known job — firefighting.

We are increasing our fuels management program (including controlled burning) to reduce the fire hazard on all forests, and we are improving our technology for fighting fires (everything from parachute teams to helicopter and aircraft attack fleets). But the job isn't getting any easier as dispersed camping and residential construction in areas of high fire hazard increase.

We organized FIREScope¹ in 1977, an inter-agency organization to improve cooperation between local fire departments, and County, State, and Forest Service firefighters in Southern California. And an infrared aerial sensing system has been developed to detect abandoned campfires beneath the forest canopy.

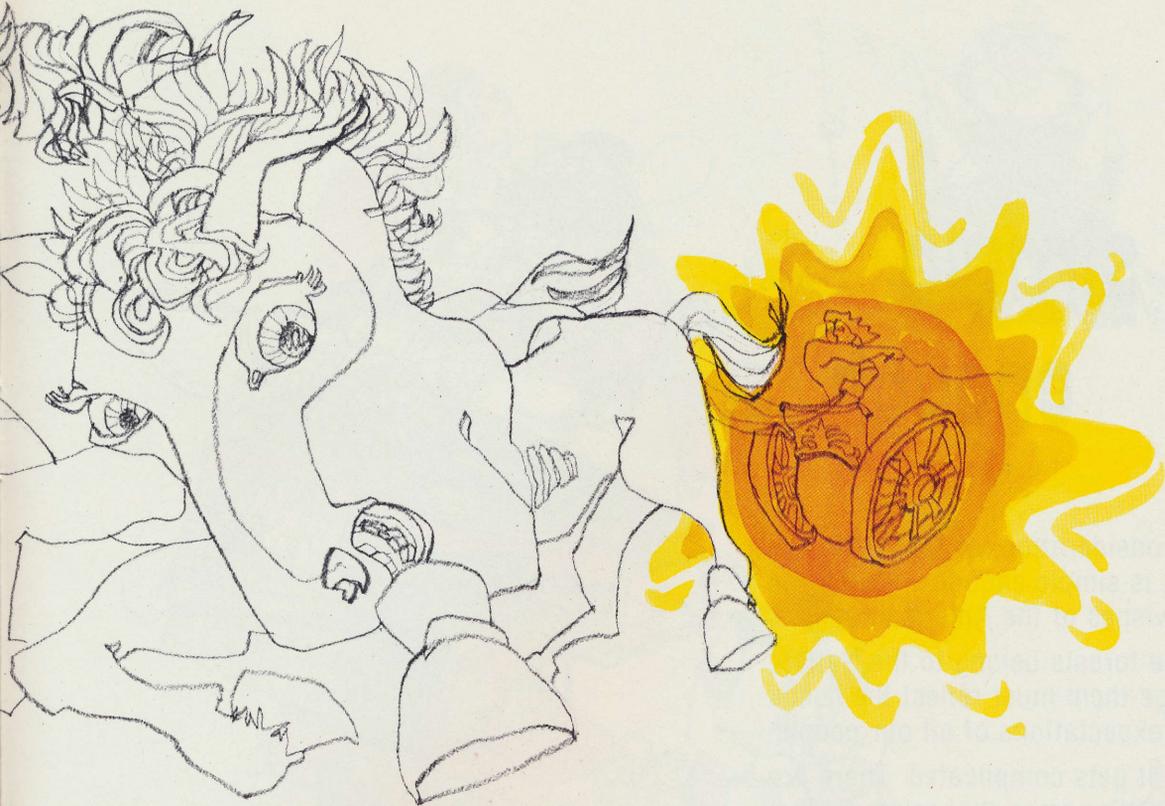
Infrared technology also has been developed to enable us to track firelines and spot fires through dense smoke during a fire.

Another advance is Fire Operational Characteristics Using Simulation, known as FOCUS for bitesize reference. FOCUS is a computer program that assists fire managers in their evaluation of the best mix of fire protection alternatives. It will be implemented on all 17 National Forests in California by 1981.

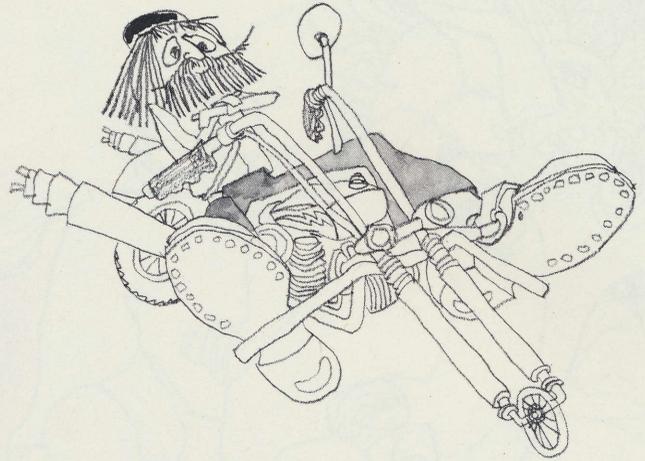
Early detection and accurate prediction of fire behavior is helping us attack sooner and more effectively.

But that doesn't mean that campers can forget about wildfire and just worry about snakes and bears. The hazard is still severe, and unfortunately more than 40 percent of wildfires each year in California are caused by careless people.

¹Firefighting Resources of Southern California Organized for Potential Emergencies.



simple enough



The main consideration for managing the National Forests is simple enough — fulfill the wishes of the American people.

And because the forests belong to the Nation, how we manage them must reflect the needs and expectations of all our people.

That's where it gets complicated. There are at least 45 Acts of Congress that relate to Forest Service activities, and countless State and local laws and regulations also pertain to Forest management. Interpreting the provisions of various laws and regulations, where objectives appear to be incompatible, has led to a body of court rulings which also affect forest management.

And very importantly, there is a large body of public opinion on issues of forest use and management that is not established by law but must be considered as part of public involvement in forest land management planning.

Increasingly the Forest Service has had to determine tradeoffs between divergent resource needs. Many issues are hotly contested. For example, skiers have vigorously supported development of downhill ski areas at Mineral King and Independence Lake, and environmental groups have equally vigorously opposed.

Issues such as use of herbicides for reforestation and status of mineral rights on public land are supported at both ends by strong protagonists.

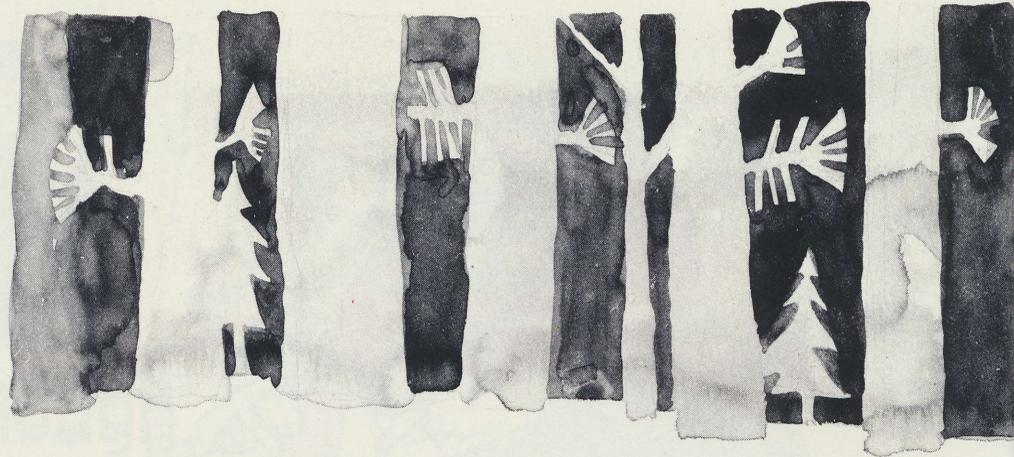
In order to get public opinion about resources issues, the California Region has actively pursued a public involvement program. We believe it is our obligation to inform you of the costs and benefits of various alternative land use decisions and provide information on technical aspects of resource problems.

We can't reconcile all differences between ORV groups, backpackers, loggers, wilderness users, ranchers, and the many other users of National Forest goods and services.

We can bring them together so that they understand the various tradeoffs available within the range of responsible choices that are consistent with professional resource management.

Of course, we will never be able to elect an average American and get his definitive opinion on resource issues. So the Forest Service will continue its efforts to reach you and learn *your* opinion about how the National Forests should be managed.





Some people seem to know a lot about the future — we're going to deplete our natural resources, we're going to have too many people, and in general we will be running into each other and out of everything else.

But the fact is that 90 percent of the population lives on less than 5 percent of the land base, and resources are there, abundant, and renewable if used prudently.

the inevitable never happens

We even have the luxury of not yet having to choose between economic yield, social benefits, and natural preservation. We can harvest timber, establish wilderness and developed recreation areas, and save the blunt-nosed leopard lizard at the same time.

We enjoy this flexibility because of sound management and investment in our resource base by past generations. They made mistakes, but they did leave us the means to correct them. Future generations will judge us not so much by our mistakes as by the extent to which we pass on that legacy of flexibility.

The key word is investment.

Sound investment now will insure that future generations will have the timber, recreation areas, mineral and energy resources, and wildlife and natural attractions the National Forests provide.

The Forest Service is completing plans for all National Forests as directed by the Forest and Rangeland Renewable Resources Planning Act (RPA) of 1974. These plans are submitted for public comment and review. They are designed to provide a balanced yield of goods and services for the present and well into the future.

The plans are based on the premise that the future isn't an inexorable development toward an inevitable outcome. It is what we plan and work to make it. They also assume that the ingenuity and enterprise characteristic of Americans in the past simply proves that what some people consider inevitable never happens, unless we let it.





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