A SURVEY OF AMERICA'S LAND

WHO OWNS IT—WHO CONTROLS IT

HOW MUCH IS LEFT

by Peter Meyer

bout two years ago I witnessed for the first time an American event that in the past decade has become so saturated with meaning as to assume the significance of ritual. It was an early weekday evening in Salem, Oregon, a small but growing city like many others around the country. Downtown, in a local government building emptied of employees except for a janitor waxing and polishing the marble floor, ten or fifteen people were standing outside a small conference room, talking casually about their families, their work, their animals, and the weather. Among the group were a carpenter, a lawyer, a housewife or two, a farmer, an interior designer, a reporter, a jeweler, an electrician and his wife, and a student—as varied a group as could be found milling about the front doors of church on a Sunday morning. Some were devout believers, others only Sunday practitioners. But their devotion was to the same idol: property. The event was a land planning commission meeting convened by the three elders of the board, which was to decide whether to approve a proposed housing development on ten acres of wooded land just south of the city.

It was a raucous two-hour meeting, and it seemed that most of the participant-landowners, whose title claims ranged from as little as a quarter-acre residential lot to as much as thirty acres of farmland, opposed the development planned in their backyards. Toward the end of the session a gentleman farmer, prominent in the town as a jeweler, stood to state his objections. After a few minutes of kindly debate—the commissioners arguing that the proposed subdivision land was located within the established "urban growth boundary" and would be subdivided eventually anyway, and that, in any case, the owner had a right to use his property the way he saw fit; the longtime resident saying that that was all right as long as he would be left alone—the official behind the table decided to end the discussion. "Mr. Jackson," he said in an effort to summarize, "I don't think your property is really at issue here. It's a case of apples and oranges, and our board has to concern itself with the proposal at hand. But thank you very much for your comments.'

The group waited for Jackson to take his seat. The gray-haired man, who had lived most of his seventy years on his eight acres of land, remained standing, rocking to and fro, his hands on the folding chair in front of him. Finally, with most of the eyes in the room now turned in his direction, Jackson blurted, "Hell! I'm not talking about apples or oranges! I'm talking about bananas!"

Stone-faced, Jackson slowly sat. His unexpected reply had prompted a burst of supportive applause and laughter from his neighbors, but it was only a symbolic victory. Several minutes later the three commissioners voted to ap-

prove the development.

A few months after that, the city council, on the recommendation of the planning commission, agreed to annex the property to the city, thus guaranteeing that the subdivision would be provided with sewer, water, and electrical lines and police and fire protection. Then, because of a state law that forbade "islands" of non-city land within city limits, most of the property of owners who had fought against the development was automatically annexed to the city. Next came a flock of other developers, now assured of city services, knocking on the doors of once-irate residents, offering as much as \$8,000 for an acre of land that—only months before—was worth \$1,000 at best. The tax assessors came, too: not only would tax rates be higher—to pay for the added services the city was obliged to provide all of its residents—but the assessed value of the property would have to be adjusted to reflect the change in market value. Almost overnight, property taxes jumped wildly. One by one the residents, many of whom had owned their ten or twenty or thirty acres of green and wooded hillsides for a generation or more, sold. Those who didn't soon began receiving notices from the city asking for permission to cross their land with sewer or water lines to the new developments. If permission was refused, the city began "condemnation" proceedings to acquire an easement on, or title to, the land it needed. Legal fees soon became another major cost of owning the land. Meanwhile, earthmoving machines were leveling hillsides, bulldozers were uprooting trees, huge dump trucks were unloading their tons of gravel, steamrollers were packing the new asphalt streets and four-lane thoroughfares were being laid over old country roads in anticipation of the

I happened recently to meet one of the landowners who had early on decided to subdivide his sixteen acres of orchard land. The man, a retired carpenter and part-time farmer, was riding his ancient caterpillar tractor, scratching away at the land owned by one of his neighbors—a man who for years had resolutely refused to sell his property to developers or make concessions to the city. When the farmer stepped down from his machine to say hello, I asked him why he was bulldozing land that wasn't his.

He bristled a bit. "The city owns this land," he said, "and this is where the street into my subdivision is going to be."

Coincidentally, I had just seen the deed to the land, and it showed that his neighbor owned it. I asked what he meant.

"Well, hell," he muttered, "the city gets what it wants anyway; and they've already given permission for the street—yesterday. If they don't own it now, they will later. So what's the difference?" With that, he turned around, climbed back on his tractor, and continued his leveling.

n almost every section of the country these days at least half the citizens in any given town or agency seem to be embroiled in a passionate land dispute. Over the past year, while sorting through hundreds of pages of reports, documents, studies, and statistics purporting to describe these arguments, I came to understand that they had as much to do with vivid myths and dreams as with the so-called facts of the matter. The metaphor of the land (whether as Eden, homestead, utopia, farm, refuge, or fortress) still exerts a commanding force on the American imagination.

This is true even though nobody knows very much about what is happening to the land or who owns it or how much of it remains open to what kind of use and settlement. Some observations, however, can be made with a certain degree of confidence. In the decade between 1965 and 1975 the value of land of all kinds and descriptions increased at an average rate of 150 percent. During the same period the population increased by 11 percent, the consumer price index by 80 percent, and the divorce rate by 100 percent. It is possible that people were paying such high prices for land only for speculative reasons, because it provided

them with a defense against inflation.

But I suspect that the prices also reflected a collective and unconscious fear that American land might be slipping away from beneath people's feet and that its loss entailed the defeat of the great national dream. Everywhere the courts were besieged with suits from people trying to retain their holdings against what they perceived as heavy odds. Last year as much as onefifth of the American estate was being contested in courtrooms, in legislatures, before town councils and government commissions. Huge corporations were buying more land (not that they didn't already own a great deal), and many individuals were finding themselves helpless to correct what they saw as the wanton destruction of the environment-mountainsides clearcut of timber, water courses polluted with industrial wastes, hillsides scraped bare of soil. People aligning themselves with both the commercial and the environmental interests beseeched the government at every level (municipal, state, federal) to intercede on their behalf and to help them bring about the proper management of the public lands that they regarded as part of their private inheritance.

The clamoring of people with different visions of the landscape has resulted in what one federal official described as a decade of "quiet revolution." Responding to the many and contradictory appeals for justice, the federal government gradually has assumed the role of gardener and caretaker, not only for the 761 million acres that it already owned but for almost all of the 2.2 billion acres of America's vast estate. To the extent that this revolution has become known to people, it has encouraged yet another fear-that government itself will usurp the individual's right to own property. There is an irony in this worthy of a literature not yet written. Seeking to assert the inalienable right to hold property, it is possible that people have given their rights away. The unhappiness of the small landowners in Oregon testifies to the not only lingering but still powerful belief in the American dream; it also testifies to the bleak and melancholy possibility that the circumstances of modern America may no longer warrant holding to such a belief. The disputes currently going forward in the country have as much to do with preserving a political and economic system as with preserving the land itself. We still know very little about the land, but apparently we know even less about the dreams that govern and sustain it.

LAND OWNERSHIP

Who owns the land, how it is owned

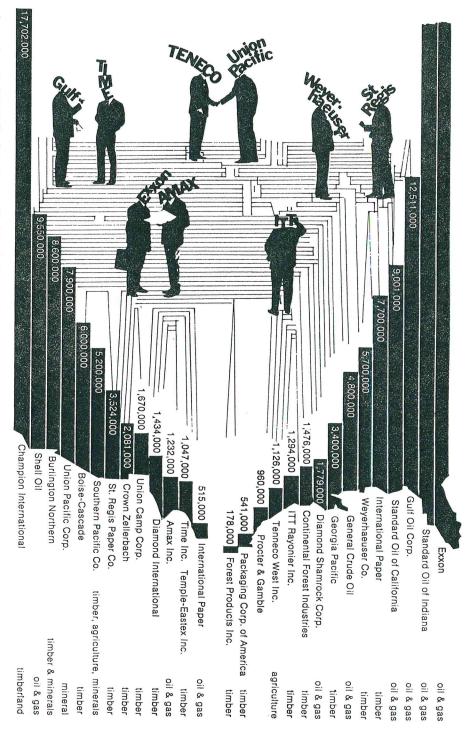
TERRA INCOGNITA

lmost everything about American land is known except who owns it. Somehow our vast mineral resources are assessed and quantified, mountains are measured, and ground cover and soil are analyzed. A mineral atlas can highlight in colorful detail areas of the country where uranium deposits will or will not be found, or pinpoint a vast tract of land near the Colorado River that "will yield at least twentyfive gallons of shale oil per ton," or bathe in gold a large area surrounding Truth or Consequences, New Mexico. to show that it is a region containing potentially valuable geothermal steam resources. Somehow scientists are able to say that coal represents as much as 90 percent of the total fossil-fuel reserves in the United States. It is known, too, that 4,300 square miles of California's San Joaquin Valley have sunk more than a foot since 1920 because of increased pumping of underground water; that the area around Baytown, Texas, near Houston, has suffered more and more tidal flooding because the land surface has dropped an average of eight feet since 1920 and will sink another seven by 1995 if surface water is not substituted for ground water; that earthquake hazards for the next fifty years are greatest in identifiable areas of New Mexico, Nevada, California, Missouri, and Arkansas; and that the bountiful Ogallala aquifer under Nebraska and Texas is drying up. The earth sciences, in short, have made the land accessible to topographers and other tinkerers who want to map and understand and preserve and exploit it.

The concept of land ownership is quite another story. It isn't part of American topography, and no atlas charts or maps the contours of proprietorship that play such an integral role in the shaping of the landscape. Yet land has always been one of the most valuable of capital assets in a country where capital is preeminent. In 1977 some \$87 billion of national income originated in the real estate sector of the economy. At the end of 1975, according to estimates by the Conference Board of New York, nearly 15 percent

SOME CORPORATIONS AND THEIR AMERICAN LANDHOLDINGS

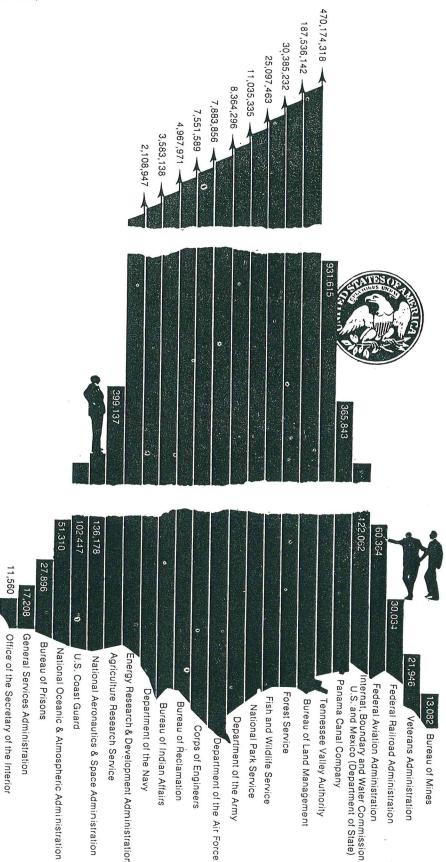
(in acres)



Oil and gas holdings often include offshore acreage.

SOME FEDERAL AGENCIES AND THEIR LANDHOLDINGS

(in acres)



of the national wealth-about \$1.2 trillion-was bound up in land holdings. Eleven-and-a-half percent of government wealth is in land, 12 percent of personal wealth, and 18 percent of business wealth. And this says nothing of the resources extracted from the land. In the words of Dr. Gene Wunderlich, an economist with the Agriculture Department's Economic Research Service, "Land is a means for distributing and exercising power."

With so much wealth tied up in land, with many of the nation's largest and most powerful corporations relying on land resources (oil, gas, coal, food) for their profits, and with federal and state governments making decisions daily about how the land should be used, how is it possible that so little is known about who owns it and who controls its resources? Sen. Henry Jackson, sponsor in 1972 (and again in 1975) of one of the most comprehensive federal land-planning programs to grace the halls of Congress (see page 57), believes that rational land use planning is "impossible without knowledge of patterns of land ownership." Since Jackson's '72 proposal, there have been scores of public decisions about how the land should be used, but not one survey of United States land ownership patterns.

Curiously, in the United States the link-between control of the land and its resources and political and economic power-has rarely been seen as an organizing theme in decisions about either the use and abuse of the land or the people dependent on it. Unlike the literature about the problems of nonindustrialized nations, with its talk of "land reform," "redistribution of wealth," "green revolutions," and "absentee landlords," the debate in the U.S. is imbued with such phrases as "land use," "conservation of resources," "stopping urban sprawl," and "protect-

ing the environment."

As the United States seeks to protect itself from too many future demands on its land and natural resources, much of the world already lives with the expected results of such a future. It is sobering to peruse the reams of statistics, to pay attention to the controversies and contradictory scientific analyses about whether the world will be able to feed itself in the year 2000, when already 15 million people die annually from starvation. The problem, as the Third World has learned with regard to nutrition, is not simply or even primarily the land's ability to supply food, nor necessarily a population grown too large. Despite, for example, a world cereal stockpile

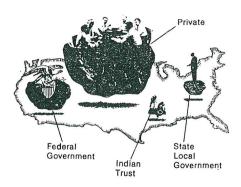
of 160 million tons at the end of the 1976–77 season—about 18 percent of the total annual consumption—the United Nations' Food and Agricultural Organization reported with considerable understatement that those cereal stocks "may be considered 'surplus' only in relation to the effective demand in the market, since there are still many millions of people too poor to purchase sufficient food to meet their nutritional requirements."

Even in the United States, where the majority of people stopped being farmers long ago, there are still obvious links between control of agricultural land and the problem of poor nutrition. In 1972, the Bureau of the Census announced that 10 million to 12 million Americans were sick because they had too little to eat. In the decade just previous to this report 1961-1972, between 37 million and 64 million acres of cropland annually lay idle as a result of federal crop-diversion programs, by which the government paid farmers not to till their soil. Another million acres of land, in 1972, was devoted to golf courses.

Gene Wunderlich has studied land ownership patterns in the U.S. for a decade, using whatever data have been available, and still, he says, he can make only "rationalized estimates" about the intricate web of proprietorship he believes crucial to understanding the nature of economic and political power. Of the 1.3 billion acres of private land in the United States (about 58 percent of the total), a scant 2 percent (26.3 million acres) is residential, and seems, by Wunderlich's estimates, to enjoy the broadest distribution among individual landowners: the 26.3 million acres are owned by some 50 million "entities." (The use of the word entity is purposeful, because Wunderlich must rely on information about tracts of land and not people; he thus has no way of knowing whether hundreds of those owner/entities are not, in fact, the same individual or corporation.) Another 40 million acres of private land (about 3 percent of the private sector) is classified as commercial. industrial, nonfarm, waste, and miscellaneous land and is owned by about 3 million entities. Finally, the concentration of ranch-, farm-, and forest-land ownership appears to be highly constricted. It encompasses 1.2 billion acres (95 percent of privately held land) but is owned by only 7.5 million entities. At best, a generous interpretation of Wunderlich's figures (that is, the assumption that each entity is indeed a different individual) would suggest that about 3 percent of the

population owns 55 percent of all American land and 95 percent of the private land.

OVERALL OWNERSHIP OF U.S.



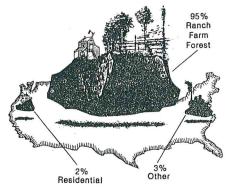
Federal Government
State and Local
Government
Indian Trust Land

761 million acres 136 million acres

st Land 50 million acres Private 1,317 million acres

TOTAL 2,264 million acres

OWNERSHIP OF PRIVATE SECTOR



ecent studies that have been undertaken, however, show that the concentration of ownership is far more skewed than even Wunderlich's estimates suggest. A recently completed study by the Economic Research Service, modestly titled "Corporate Land Holdings: An Inquiry into a Data Source," is, to date, the closest thing to a comprehensive national survey. After two years of scouring available public information sources, the ERS concluded that 568 companies controlled (either through direct ownership of the title or lease arrangement or purchase of some type of right to the land, such as mineral rights or surface rights for the cutting of trees) 301.7 million acres of United States land-more than 11 percent of the total land area of the entire country and 23 percent of all U.S. land in private

hands. Those same companies' land interests worldwide comprise a total area larger than that of Europe—almost 2 billion acres.

Various regional studies have come to much the same conclusions:

• A 700-page 1973 report, The Politics of Land, by a Ralph Nader study team, found that twenty-five landowners held more than 61 percent of California's private land—more than 8 million acres. Among the large owners were Standard Oil, Southern Pacific, the Times Mirror Corporation, Penn Central, Boise-Cascade, and Leslie Salt.

• The Austin-American Statesman reported in 1977 that just eleven Texas landowners (Gov. Dolph Briscoe included) controlled 5.8 million acres of the state, an area roughly equivalent to the size of New Hampshire.

• Another Nader study (The Paper Plantation, 1974) reported that seven "absentee corporations" (International Paper, St. Regis, and Diamond International, headquartered in New York; Great Northern-Nekoosa in Stamford, Connecticut; Scott Paper in Philadelphia; Georgia Pacific in Portland, Oregon; Oxford Paper, a division of Ethyl Corp., in Richmond, Virginia) owned 32 percent of Maine's 20 million acres.

• The New York Temporary Study Commission on the Future of the Adirondacks found in 1970 that more than 50 percent of the private land within an upstate study area—an area altogether one-fifth the size of the entire state—was held by 1 percent of the landowners. Three timber companies owned more than 100,000 acres each.

There are other ways to try to extract some facts about land ownership patterns in this country but at best they offer only clues. The 1974 Census of Agriculture, for instance, indicated that 330 million acres of land in farms -almost 40 percent of all private farmland-was owned by nonfarmers. And in the past twenty-five years, from 1945 to 1970, even though the quantity of land in farms has remained almost constant, the number of farmers who own their own land has decreased some 62 percent. While these figures don't say who owns the land, they do indicate who doesn't.

In agricultural societies, where the standard of living depends directly on how much food a person is able to produce, the link between land ownership concentration and individual wealth is clear. But in an industrialized country like the United States, the opposite holds true: despite the great amounts of wealth that are continuously gotten from the land, so very little is known about who owns it.

THE AGRI-INDUSTRIAL COMPLEX

Who tends the land, who reaps the harvest

Seventy-five years ago, 320 acres for a husband and wife for irrigated land was all they could handle. Now, with massive development and large machinery, a larger acreage is necessary for an economically viable farm operation.

-President Jimmy Carter

he increasing imbalance in the concentration of land ownership is perhaps best and most directly seen in agriculture, an industry (agribusiness) that still uses almost half the surface area of America. In the past decade the total number of farms has decreased by almost 500,000. From 1960 to 1977, more than 46 percent of all American farms disappeared. Rather than indicating a crisis in food production or a shriveling of the agricultural land base, these facts merely illustrate the phenomenal rate at which farmland ownership concentration has proliferated. Despite the precipitous decline in the number of farms, agricultural output has risen and the total amount of land devoted to farming has changed only slightly in the past thirty years. Since 1959 the average size of an American farm has jumped 101 acres-from 288 to 389a trend pushed along not so much by little farms becoming larger as by big farms becoming bigger: there was a 10 percent increase in the number of farms with more than 1,000 acres of land. The average-farm-size figure is more misleading when one considers that included in the definition of "farms" are the thousands of places with annual sales of agricultural products of as little as \$250 and comprising as few as ten acres of land. It is also misleading if taken as a guide of the extent of ownership concentration because average-farm-size figures speak only to operating units and do not indicate the fact that many different "farms" are actually owned by the same person.

In California, where 25 percent of the nation's food is produced and the average farm is 571 acres, a report from the Council of State Governments said that corporate farms in 1969 produced 89 percent of the melons, 62 percent of the lettuce, 35 percent of the carrots, 38 percent of the cotton, and 30 percent of the citrus. In Kansas,

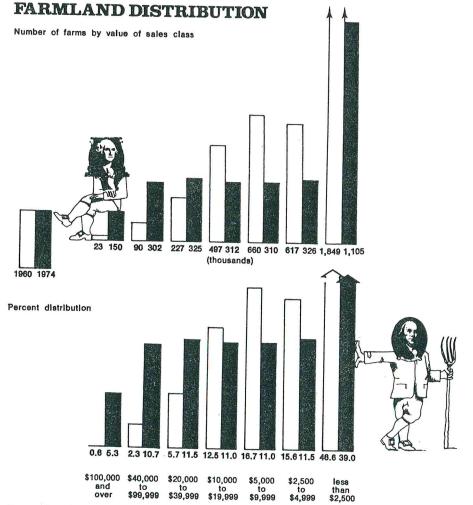
which, like many other states, has had corporate-farm legislation since 1931, it was discovered in 1972 that 5–10 percent of corporate farming operations in the western part of the state exceeded the 5,000-acre statutory limitation.

With the massive use of new technologies, between 1940 and 1970 crop output increased nearly 70 percent, with a corresponding drop in farm labor input. Fertilizer use increased nearly ninefold, and mechanical power and machinery inputs grew by 23 percent over the same period.

All this is of little advantage to the "small" farmer, who finds his place in the scheme of things increasingly difficult. Russell Parker, formerly an assistant to the director of the Bureau of Economics at the Federal Trade Commission, has pointed out one interesting fact that has probably played havoc with the small farm. The USDA index for the average farm price of raw food commodities (the money paid to the farmer) in 1971 was identical to that of 1948. During the same period, however, the average price consumers

paid for food products in grocery stores increased by 35 percent. What happened? "Higher marketing margins," Parker claimed, "which rose more than 80 percent during the period, were solely responsible." No wonder striking farmers in 1977 were frustrated in their attempts to remain independent in the face of economic factors over which they had little control. One spokesman was quoted as saying, "We don't want subsidies; we don't want price supports; we don't want bureaucracies; we want a law that states very simply that no agricultural product will be bought, traded, or sold at less than a fair price in the marketplace."

It has become an economic necessity to buy more land, to capitalize and expand. Farming is tied ever more closely to traditional industry, dependent on manufacturers for its machinery, on chemical companies for its fertilizer, pesticides, and herbicides, and on the food and fabric industry for its marketing outlets. Not surprisingly, traditional industry has responded by buying farms, trundling into agribusi-



Source: Farm Income Statistics, Economic Research Service, USDA, July, 1978.

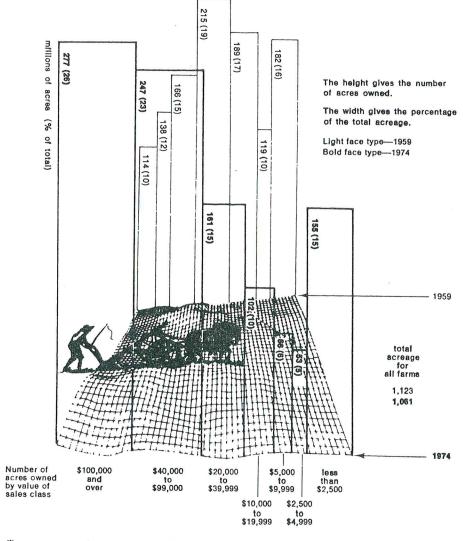
ness, and increasing its ownership of the land. For instance:

- Del Monte, with annual sales of almost \$1.5 billion, dries, cans, freezes, refrigerates, and markets some 250 kinds of food, and operates warehousing, building-maintenance services, real estate development businesses, and trucking lines. It also runs eleven U.S. and twenty-five foreign farms, ranches, and plantations, owns outright 96,400 acres, and holds through lease or agreement another 161,700 acres of farmland in California, Hawaii, the Northwest, Midwest, and Mountain states, Canada, Kenya, the Philippines, and Latin America.
- One of the nation's largest producers of raw sugar and the leading producer of macadamia nuts and cardamom spice, C. Brewer and Company, Limited, is a 54-percent-owned subsidiary of IU International (formerly International Utilities), a conglomer-

ate whose revenues in 1976 were \$2 billion. C. Brewer owns 127,000 acres of land in Hawaii and offers "consulting services" to agribusiness "in several developing nations."

The Tenneco Corporation of Houston (\$6.3 billion in sales in 1976) has 3.5 million acres of oil and gas interests; manufactures farm equipment (J. I. Case Company); builds ships (Newport News Shipbuilding and Dry Dock Company); manufactures and sells paperboard, folding cartons, and corrugated shipping containers (The Packaging Corporation of America, which itself has rights on 138,000 acres of Michigan forestland and 403,000 acres of timberland in Alabama, Mississippi, and Tennessee). Tenneco also owns 85,675 acres of irrigated farmland in the U.S.-a figure that dilutes considerably the significance of the USDA's average American farm size of 389 acres.

ACRES OF FARMLAND OWNED



(figures may not add because of rounding)

Source: Bureau of Census, 1959 Census of Agriculture and 1974 Census of Agriculture

DOLLAR VALUE OF AN AVERAGE ACRE OF FARMLAND

	February, 1976	February, 1978	% of increase
NORTHEAST Maine New Hampshire	\$ 369 610	\$ 441 729	19 19
Vermont	500	597	19
Massachusetts	1,040	1,242	19
Rhode Island Connecticut	1,623 1,647	1,939 1,962	19 19
New York	549	589	7
New Jersey	2,004	2,057	14
Pennsylvania	815	1,092	34
Delaware Maryland	1,155 1,278	1,500 1,578	30 23
LAKE STATES			
Michigan	604	860	42
Wisconsin Minnesota	$\frac{490}{521}$	690 730	41 40
CORN BELT			
Ohio Indiana	856	1,263	47
Illinois	878 1,052	1,303 1,581	48 50
Iowa	903	1,268	40
Missouri	446	602	35
NORTHERN PLAINS North Dakota	228	972	20
South Dakota	163	$\begin{array}{c} 273 \\ 227 \end{array}$	29
Nebraska	355	385	8
Kansas	330	380	15
APPALACHIÁN Virginia	620	732	18
West Virginia	375	403	7
North Carolina	637	694	9
Kentucky Tennessee	504 495	671 608	33 23
SOUTHEAST	490	000	23
South Carolina	486	543	12
Georgia	476	564	18
Florida Alabama	726	838	15
Alabama DELTA STATES	404	452	12
Mississippi	381	464	22
Arkansas	465	571	23
Louisiana	538	669	24
SOUTHERN PLAINS Oklahoma	332	402	21
Texas	267	316	18
MOUNTAIN			
Montana	132	168	27
Idaho Wyoming	368 94	445 105	21 13
Colorado	219	274	25
New Mexico	81	93	15
Arizona	114	125	10
Utah Nevada	212 87	248 97	17 11
PACIFIC	٠.	, .	
Washington	420	528	26
Oregon California	265 6 68	303	14
48 STATES—AVERA		761 490	14 26
40 STATES—AVERA	000 ava	490	

SOURCE: United States Department of Agricul-

THE PRICE OF LAND

"Dirt cheap" is ancient history

From 1967 to 1977 the total dollar value of United States land jumped 154 percent-from \$590 billion to \$1.5 trillion. In 1976, nineteen of the country's largest banks had more than \$21 billion out in real estate loans. That same year property taxes accounted for nearly a quarter of the \$66 billion of revenues received by city governments and \$2 billion of the \$89 billion raised by states. Almost everywhere the price of land has risen faster than the consumer price index. Between 1971 and 1975, according to a report by the National Conference of State Legislatures, assessed property values increased 45 percent, while personal income grew by 39 percent and retail sales rose about 36 percent. Land values were outpacing population growth by ratios of ten to one, usually by much more. At the end of last year the average price of residential land was rising two to four times faster than the price of the house that would sit atop it; and the ratio of land value to total new-house price was beginning to hit 40 percent, compared with the 15-20 percent of the recent past. Elton Barnett of the Los Angeles real estate firm of Walker and Lee said in mid-August that the price of residential land around Los Angeles had jumped 80 percent in the past two years, the largest single increase of any two-year period since World War II.

So, land everywhere is getting harder and harder to come by, and, with considerable help from rising property taxes, more and more difficult to hold onto. Though real estate brokers claim there is no easy formula for describing, let alone predicting, exactly why land prices do what they do (a phenomenon that seems to be part of the appeal in the land-speculating game), in talking with them a common theme recurs: land values are determined as much by the supply of political legislation and regulation as by the supply of land itself, of which there is a finite quantity.

• In the southern part of New Hampshire, for example, land is going "up like a skyrocket" because Massachusetts residents are spilling over the border to escape a high personal-property tax.

• The average price of an acre of land in Orange County, New York, has continued to drop in the past few years after overspeculation caused by rumors that a giant jetport serving the New York City area would be constructed there.

• According to Advance Mortgage Corporation of Detroit, residential lot prices around many major cities at the end of last year were increasing rapidly because of moratoriums and environmental restrictions on new developments and because of growth-management ordinances, all of which put severe limitations on the areas where development could take place.

• Land prices in upstate New York have risen with the influx of money from Canadians worried about the effects of the Quebec separatist movement

Population density remains an important factor in the price of land: an acre of midtown Manhattan may bring as much as \$20 million, some 20,000

times more than an acre 80 miles to the north.

A small survey of real estate companies in various parts of the country at the end of August indicated at least one sure thing about the price of land: It isn't cheap.

Average acreage values of prime urban office space, 1978:

New York City	\$13.0-\$17.4	million
Chicago	\$10.9-\$13	million
Washington, D.C.	\$ 8.7-\$10.9	n.illion
San Francisco		million
Portland and Seattle	\$ 6.5	million
Houston	\$ 3.5-\$ 5.6	million
Minneapolis/St.		
Paul	\$ 4.3-\$ 5.2	million
Los Angeles	\$ 4.3	million
Denver	\$ 2.6-\$ 5.6	million
Miami	\$ 1.3-\$ 2.6	

Average acreage values of prime residential land within a fifty-mile radius of a large city:

Harris County near
Houston
(the "1960 Area") \$ 50,000-\$200,000
Orange County
(south and east of
Los Angeles) \$125,000
Hunterton County,
New Jersey (50 miles
from Manhattan) \$ 20,000-\$ 60,000

According to Robert Mylod of Advance Mortgage Corporation, "To find cheaper land, it is necessary to go sixty-five miles out from the city center in New York-Long Island, forty-five to fifty miles out in Los Angeles, forty miles out in Philadelphia, the Washington area, and San Francisco. In Chicago, it can't be found no matter how far out."

sources: Coldwell Banker of Los Angeles, Friendswood Corporation of Houston, Cross and Brown Company of New York, Land Auction, Inc., of New York, and Walker and Lee of Los Angeles.

FEATURES OF THE LANDSCAPE

TREES

With 6 percent of the world population, the U.S. consumes 30 percent of the world's annual industrial wood output, and is, in fact, a net importer of wood products.

Of the almost 500 million acres of commercial timberland in the country, only 14 percent is owned by the forest industry. The bulk of the timberland (59 percent) is owned by farmers and nonfarm citizens, and 27 percent by federal, state, and local governments.

INLAND WATERS

The U.S. has more than 50 million acres of permanent inland water surface that includes, according to Bureau of Land Management definitions, lakes, reservoirs, and ponds having forty acres or more in area; streams, sloughs, estuaries, and canals one-fourth of a statute mile or more in width; deeply indented embayments and sounds, and other coastal waters behind or sheltered by headlands or islands separated by less than one nautical mile of water; and islands having less than forty acres of area.

Alaska has 12,787,200 acres of inland water surface, three times more than Texas, the second largest.

WETLANDS

Only recently have wetlands been given credit for being something more than useless wasteland. Swamps, bogs, potholes, wet meadows, and river overflow land act as "giant sponges," absorbing and transforming impurities, storing reserve supplies of potable water, stabilizing groundwater flow. They provide homes for diverse forms of wildlife, serve as natural firebreaks, and can be used almost harmlessly for the production of timber, marsh hay, wild rice, blueberries, cranberries, and peat moss. More than half of the country's original wetland acreage remains-70 million acres scattered throughout the forty-eight contiguous states.

The National Wilderness and Preservation system: 14.814,630 acres ... National Parks: 15,618,891 acres ... Elysian Park, Los Angeles: 600 acres ...

LAND USE

The mystery of the shifting landscape

PLOWING UNDER, PAVING OVER, DIGGING UP

here are layers of complex and contradictory facts behind simple statements like Sen. Henry Jackson's claim that over the next thirty years an additional 19.7 million acres of "undeveloped" land will be "consumed by urban sprawl," or a report by U.S. News & World Report that each year 2 million acres of farmland "disappear ... before advancing urban sprawl" both statements conjuring up visions of a nation of nothing but Manhattans or Scottsdales; metropolises and suburbs ranging helter-skelter through heartland America, crunching and "consuming" vast areas of valuable farmland. No one can dispute the fact that urban areas in the U.S. have expanded. But as with most land-use debates, questions remain: To what extent has that expansion harmed the nation as a whole or to what extent is it a trend unbalanced by other trends? Is it caused by cities somehow forcing their way outward, or is it the result of changing patterns of rural life, agricultural techniques, and farming economics?

What are we to make of the fact that between 1950 and 1970 New York State lost 5.8 million acres of farmland-about 290,000 acres a yearbut added only about 600,000 acres to its urban area? What happened to the 5.2 million acres that weren't urbanized? What about the fact that between 1967 and 1975, when concern over urban sprawl and disappearing cropland was most critical, almost 14 percent of nonfederal land in the country -some 210 million acres-was converted from one use to another-forests were turned to cropland, cropland to timberland, deserts to fertile fields, fertile fields to shopping centers-but only a little more than 3 million acres was added to the country's urban area? That in roughly the same decade total commercial timberland decreased by 8 million acres? When, during the same period, there was no decrease in the country's agricultural output (in fact, there was a substantial increase), and net annual timber growth increased

MAJOR USES OF THE LAND

The proportions have changed only slightly since the turn of the century, despite a population increase of more than 100 million.

(millions of acres/percentage of total land area)

1920 1950 1974 CROPLAND 402/18% 409/18% 382/17% GRASSLAND PASTURE AND RANGE 731/32% 701/31% 681/30% FOREST AND WOODLAND 721/32% 721/32% 718/32% OTHER LAND 416/18% 442/19% 482/21% (10)/ .4% (15)/ .6% Urban (18) / .7% (35)/1.5% (19)/ .8% (3)/ .1% Highways (21) / .9% (3) / .1% Railroads (4)/.1%Airports (1) / .04% (2)/.08%TOTAL

(variable because of reservoirs and other man-made waterways, and changes in measuring techniques)

2,271

(figures do not add because of rounding) Source: USDA

2,270

ACREAGE

2.264

by 14 percent? No one seems to know for sure how each year an area almost the size of Ohio—about 26 million acres—is shifted to a new use with such negligible overall impact.

What the statistics show is that the United States remains a nation of farms and forests-if no longer one of farmers and woodsmen. Nearly a fifth of the two-and-a-quarter billion acres of land is used for crops. Thirty percent is grassland pasture and range. Another third-more than 700 million acres-is forest, and this does not include the national and state parks, wilderness and primitive areas, and state and federal wildlife areas, which account for an additional 85 million acres. Even after the vast expanses of "useful" land have been tallied, there remain the almost 300 million acres that are tossed into the "miscellaneous" category—the Alaskan tundra, the deserts, the acres of bare rocks and swamps and marshes-that defy the inroads of even the most humble of man's civilizing instincts.

The proportions have changed only slightly since the turn of the century, despite a population increase of more than 100 million. Among nations, the United States is still blessed: distributed equally, five acres of agricultural land alone could be given to every man, woman, and child in the country (in France each person would have 1.6 acres; in Italy, nine-tenths of an acre; in India, half an acre; in Egypt, less than one-fourth). Even in California, the most populous state, there is twenty-one times more cropland, pasture, and forest than there is urban land; in New York, where almost 90 percent of the state's 18 million people live in metropolitan areas, one half of the state—almost 15 million acresremains forested. In the nation as a whole, even though land devoted to urban uses has grown by two-thirds since 1950, metropolitan areas still occupy only 1.5 percent of the total area. Some 73 percent of the population live on less than 2 percent of the

Many bleak conclusions may be drawn from the kinds of statistics that U.S. News & World Report gathered to document the public "alarm" over urban sprawl. More often than not, however, the conclusions are closer to apocalyptic vision than realistic interpretation. In 1976, for instance, when so much attention was being given to Malthusian projections about the disappearance of millions of acres of indispensable cropland, the Soil and Conservation Service casually reported that some 24

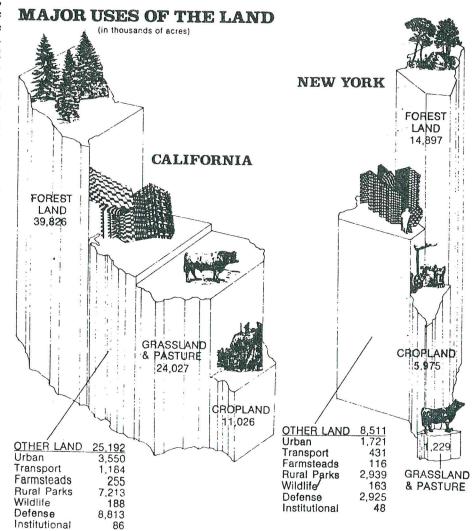
million acres—equivalent to the total area of Indiana—of prime farmland was not being used and "could be converted simply by beginning tillage." By 1975 standards those 24 million acres could have yielded in one year 180 million bushels of wheat, 27 billion pounds of rice, 516 million bushels of corn, and 8 billion pounds of peas—enough rice, corn, peas, and wheat to supply the needs of New York City residents for almost a decade.

None of the Agriculture Department studies seem to indicate that advancing urban sprawl is choking America's food-producing capacity. A 1974 study concluded that "the amount of agricultural land taken each year for urban uses has had little impact on the total supply of U.S. cropland." Much of the cropland loss that did occur (17 million acres in the Fifties, 8 million in the Sixties, and 2 million from 1969 to 1974) was attributed to shifts from high- to lower-intensity agricultural or forestry uses, or was idled because cropping was no longer profitable: the soil in many areas lost

its fertility, the terrain proved unsuitable to efficient use of modern machinery, or a decision was made that the best use of the acreage was as grassland. In other words, not all the lost cropland "disappeared before advancing urban sprawl," and not all the land "consumed" by urbanization was cropland or "choice farmland."

These conclusions seem valid even in regions of the country that have felt the most pressure to urbanize. In a study of fifty-three counties, where 20 percent of the 1960 to 1970 population increase occurred, the USDA found that there had been a 27 percent increase in the area devoted to urban uses (almost twice the national average), but only a 7 percent decrease in cropland. Of the cropland that was lost, less than half went to any urban use, and again "more new cropland was developed than was lost to urban development."

If there are problems in interpreting the trends in land use even with fairly demonstrable statistics from the past, there are also enough unpredict-



III.

able and potentially counterbalancing variables to play havoc with projections for the future. A 1975 report by two USDA economists pointed out that a sudden increase in foreign demand for food and fiber on top of the sustained domestic demand had depleted available stocks and prompted the federal government to drop its program of incentive payments to farmers who didn't cultivate their lands (30 percent of American cropland was producing food and fiber for export during this time). Was the food-supply system so precarious that a couple of years of increased demand would alter cropland use so radically? Perhaps. But there was a parallel trend that was more heartening: a shift in foodconsumption patterns—from animal to crop products-that, because it takes about seven times as much acreage to produce proteins through livestock as to produce proteins in crop products, could eventually decrease

Then there is the weather, which is always fickle. Though it has been given credit for the increased productivity during the Fifties and Sixties, and blamed for the per-acre cropland-productivity decreases between 1970 and 1974, in the end, say the USDA economists, we still have little knowledge of the influence of cyclical weather patterns on agricultural production.

cropland needs.

The list of unpredictables goes on: an energy crunch could bring about a shortage of necessary pesticides and fertilizers and fuel; coal mining and electric generation, especially in the West, will divert significant amounts of water from irrigation; and the web of environmental controls may further restrict the use of chemicals. At the same time, decreases in the rate of population growth (down to .7 percent-a trend that, if continued, would give the country zero population growth by the year 2020) mean urbanization of rural land will be below present rates.

In the end, the future of the land appears neither as bleak nor as bright as it does uncertain. Things may have changed considerably since Daniel Boone complained that he had "not been two years at the licks before a damned Yankee came and settled down within a hundred miles of me," but it should be remembered that if the city folk stayed in the city, and the rural folk had the run of the countryside, the city dweller might be cramped (with a quarter acre of land), while 66 million rural dwellers would have more than 30 acres each.

LAND

A proliferation of programs

PRIVATE PROPERTY AT THE END OF ITS TETHER

My final apostasy from the American Creed was loss of faith in private property. I am now persuaded that there no longer is such a thing as truly private property, at least in land. That was a luxury we could afford only when the continent was sparsely settled. Today, the use a man makes of his land cannot be left to his private decision alone, since eventually it is bound to affect everybody else. This conclusion I reached in anguish, since I own a tiny patch of land and value its privacy above anything money can buy.

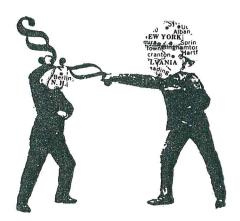
> -John Fischer, Harper's April, 1970

red Boselman of the Practising Law Institute and co-author of the compendium Federal Land Use Regulation has called this the "decade of quiet federalization" of controls over the land; ten years of "quiet revolution" that have effected a dramatic shift in the focus of decisions made about what is done with and to American land. So far the revolution has proceeded willy-nilly, powerful but unguided, with laws issuing from Congress governing, among other things, clean air, agricultural pest control, electric utility siting, petroleum reserves, land and water conservation, surface mining, wetlands acquisition, wilderness lands, noise control, mineral leasing, coastal zone management, national-forest management, waste disposal, natural gas pipeline safety, weather modification, and endangered species.

Three years ago, President Ford remarked on a "consensus that the unrestrained private use of land is not consistent with the public good." And as of this writing, President Carter was considering a proposal by his Reorganization Project to form a new Executive Department of Natural Resources, to "consolidate all public and

private land and land-related resource functions in a single agency." A formidable task, considering the extent to which government controls have already multiplied.

Two years ago, Congressman Morris Udall counted nearly 140 separate federal programs that have a significant effect on state and local land-use decision making—programs ranging from direct regulatory controls to the funding of state efforts at regulation; from requiring land-use plans from both public and private bodies to direct grants for land acquisition, site improvements, or construction; from broad guidelines—like an Agriculture Department official's recommendation that local, state, and federal agencies take more action "essential to supplement [the] land market process in allocating land resources among conflicting users"to the detail of a Housing and Urban Development book (almost 300 pages)



on property standards for one- and two-family dwellings ("revision No. 5"), which mandates such things as that "quantities of trees and shrubs shall be sufficient to fulfill the needs of the property, as interpreted by HUD, based on site design analysis and customary planting treatments in the general locale."

Almost 500 land-use disputes were brought to the state courts in 1976. Federal courts were repeatedly asked to rule on the validity of numerous environmental regulations, growth-manage-

AN ACRE DEFINED

There are 43,560 square feet in one acre and 640 acres in one square mile. 9.2 regulation-size basketball courts equal one acre. as do just slightly more than three Olympic-size swimming pools. The Super Bowl is played on a land surface of 1.3 acres.

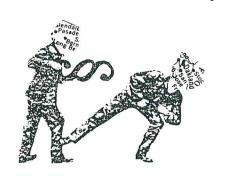
ment statutes, and literally any government action that may have constituted an unlawful "taking" of private property. The Supreme Court, which had accepted only a few zoning cases since its landmark 1926 approval of such regulations, heard arguments in three different zoning disputes in 1976. While the courts were busily sorting out the meaning of past laws, legislators were just as diligently passing new ones. The American Society of Planning Officials reported nearly 200 new state laws governing land use in 1976 e.g., regulating mobile-home locations, managing geothermal resource allocation, rewriting property-tax laws, setting criteria for waste disposal systems, preserving open space, changing building codes, fencing off junkyards, zoning and rezoning, and so on. The Environmental Information Center, a prosperous private publishing firm and itself a product of sorts of the demand for comprehensible information on the burgeoning land-use legislation industry, reported that in the second session of the 94th and first session of the 95th Congress, the Senate passed some eighty land-use laws, of which nearly two-thirds were signed into law.

Most of the environmental regulations have a substantial impact on how a landowner can use his land. The Clean Air Act, for example, requires states to review the location of all possible pollutant sources (including indirect ones like parking facilities, highway projects, and airports), and in many cases demands that special permits be issued. The controls in other instances are more oblique. Access to any federally related loan for the acquisition of property or the improvement of it is precluded if a community in a HUDdesignated "hazardous" area does not participate in a National Flood Insurance or Flood Disaster Protection program. The Federal Highway Administration, for its part, makes construction grants (a total of \$4.4 billion in 1975) contingent on such things as the location of junkyards and outdoor advertising. The National Park Service has condemnation prerogatives for acquiring private land. The Coast Guard must approve the location of all navigable-waterway bridges in the United States. And the Forest Service has authority over an area that includes 20 percent of the country's commercial forest land, 40 percent of the supply of salable timber, and 60 percent of all softwood saw timber.

According to a report by the shortlived Office of Land Use and Water Planning, the financial impact of all the loan and grant programs affecting private land use is monumental: an outlay of \$40 billion by the federal government in 1975, five times more money than was needed to construct the Alaska pipeline (see chart, page 58).

The tenderfoot of federal regulatory agencies, the Environmental Protection Agency, promised \$48.5 million in 1975 to assist states in planning air pollution programs, \$40 million for preventing water pollution, and \$3.7 billion in project grants for the construction of municipal waste-treatment facilities. (By way of comparison, General Motors had a net income of \$2.9 billion in 1976.) The Department of Housing and Urban Development, through at least ten different agencies, funneled \$11 billion into flood insurance programs, community development programs, and forty-one different programs to provide grants and loans for purchasing, constructing, and rehabilitating multifamily housing, mobile homes, farm structures, et cetera. Other federal moneys were distributed for the management of land and water resources, purchasing land for highways, planning and constructing mass transit systems, and assisting Indian tribes in real estate transactions.

Last year the Justice Department's Land and Natural Resources Division spent more than \$58 million on behalf of such federal agencies as the Army Corps of Engineers, the National Park Service, the Bureau of Land Management, and the General Services Administration just to acquire private land for the government by condemnation, "a means of last resort." It was swamped



by 900 suits about everything from enjoining the replacement of Manhattan's West Side Highway to deciding on the use of a small island for a bombing range. And of some worry to the Division is the increasing number of cases being filed against the government charging "a taking of property" because of acts of officials, the promulgation of regulations, or even the enactment of statutes, all of which allegedly make the plaintiffs' land either valueless or unavailable for its highest and best use. There were \$500 million worth of "taking" claims pending against the federal government at the end of 1977.

A recent study for the Council on Environmental Quality noted that there were at least 100 different federal periodical reports on the state of the environment. Since 1972 the EPA's Office of Water Enforcement has issued more than 50,000 permits for the discharge of industrial, municipal, and federal wastes into navigable waters. Some 30,000 actions of federal agencies were assessed for "environmental effects" in 1975, more than 1,000 environmentalimpact statements were filed, and 363 court cases arose for failure to file. The impact statements often ran to thousands of pages, and, as one Carter Administration official was quoted as saying, they have "become an end in themselves . . . often [with] no effect on preserving the environment." Some have suggested that in paper use alone, the federal government has, while writing its guidelines, interpretations, reg-

JUSTICE ON THE LAND

s a barometer of the scope of federal activity on the land, the Land and Natural Resources Division of the Department of Justice is almost without rival. Formed in 1909, the division has grown into a typically large branch of the Justice Department, with nine different sections (land acquisition, pollution control, marine resources, Indian claims, general litigation, Indian resources, appellate, appraisal, and administrative) and a staff of 120 lawyers and 200 nonlegal personnel.

The Division considers under its jurisdiction everything from clean air to burro populations in national parks. In fact, there is little it can't consider. Its bureaucratic mandate is, in the words of the Attorney General's Annual Report, "to protect the general environment,...to protect and enhance the quality of...air and water," and concern itself with "America as a physical entity, in all its vastness and variety."

The following sampling of cases, in which the government condemns private land and battles big business and big cities, indicates the truth of the legal maxim that land extends "up to heaven and down to hell."

ulations, and reports on environmental protection, been responsible for the clearcutting of mountainsides of valuable timber.

Disagreement about the proliferation of uncoordinated federal programs, grants, regulations, and sanctions that have become increasingly unmanageable and often counterproductive is not the problem; what to do about it all is. Proposals for comprehensive federal planning for the use of the nation's land have wound their way in and out of Congress since 1972. Sen. Henry Jackson's 1975 Land Resource Planning Assistance Act was a controversial scheme to coordinate and strengthen local, state, and federal land-use programs by giving \$100 million a year to states that would establish planning boards to manage, arbitrate, and influence the conflicting demands on the land. The bill promised a Federal Office of Land Resource Planning Assistance to distribute the grants, offer advice to those participating in the program, and act as a central data bank on land resources and "past, present, and projected land-use patterns."

Sensitive to criticism that the bill appeared to go further than ever before toward shifting the focus of decision making about how land should be used-out of the hands of individual landowners and local political units into those of the central government-Senator Jackson tried to assure skeptics that his plan was "the best protection possible for basic property rights," and promised that the annual \$100 million "would be provided absent any conditions allowing the federal government to substitute its own policies for those of the states." For those who read S.984 closely, however, the Senator's claims appeared to be wishful thinking. The bill actually detailed numerous prerequisites "as a condition of continued eligibility" for the funds. It required the states to establish methods for "guiding the use of land," "influencing the location of new communities," "controlling land sales or development projects," "promoting the continued use and productivity of prime food- and fiber-producing lands," and more

Further undermining of Senator Jackson's claims that S.984 was a "states' rights bill" came from its supporters, many of whom were enchanted more with the proposal's promise of a nationally coordinated planning scheme than with any idea of letting the states make their own decisions. Morris Udall, the most outspoken advocate of the bill in the House, claimed the crux of the land resource problem to be "no real order, no overall policy to cope with future land development and the struggle between speculators and preservationists." That this was the key to the Land Resource Planning Assistance Act and other such proposals was further evidenced by the variety of supporters it attracted, generally divided between two types of conservationists: those of the environment and those dominating the economic status quo. Favorable testimony came from the National Wildlife Federation as well as from Exxon; from the Izaak Walton League as well as the

Pollution Control:

Cases pending: 961 (1975) 1,341 (1977)

• Allied Chemical, the large and diversified energy company, was forced to pay criminal fines of \$225,000 for polluting with its coke plant the air of

Ashland, Kentucky.

• When the Reserve Mining Company in Minnesota was charged with dumping mineral wastes into Lake Superior in violation of the Federal Water Pollution Control Act, a court ordered not only the payment of \$837,500 in fines and penalties but also the construction of an onland disposal system.

 The Water Pollution Control Act was also invoked to bring a large number of suits to prevent the dredging or filling of wetlands and to require that the wetlands be restored

to their prior state.

• Other water pollution fines were received from U.S. Steel Corp. (\$3.25 million); N-L Industries (\$1.1 million); Beaunit Corp. (\$200,000).

• Pursuing even municipal governments, the Justice Department filed pollution suits against the cities of New York, Detroit, Los Angeles, Kansas City, Camden, and Providence.

Land Acquisition:

Acres acquired:
499,912 (1971)
558,920 (1975)
Acquisition cases pending:
10,379 (1975)
18,000 (1977)

The federal government acquired in 1975 more than 2,000 different tracts of land by condemnation. Some of the division's best "clients" in condemnation proceedings were the Army Corps of Engineers, the National Park Service, the Bureau of Reclamation, and the Department of Energy.

Often the most difficult part of these disputes is not whether the government has a right to take the land, but how much it must pay the owner as

compensation.

• Still pending at the end of 1977 was U.S. v. 88.28 Acres of Land in Guadalupe County, New Mexico, and Andrieus A. Jones, et al. The defendants' claim against the government was \$500 million, some \$5.5 million an acre.

• Also pending was U.S. v. 134,960.62 Acres of Land in Klamath County, Oregon, and U.S. National Bank of Portland, Trustee for the Enrolled Members of the Klamath Tribe, et al. Defendants' claim: \$135 million.

General Litigation:

Total National Environmental Policy Act cases pending: 304 (1977) Total other cases pending: 1,320 (1977)

Two cases in 1977 posed unique and complicated questions in areas far beyond even the broad limits traditionally accorded land and natural resources:

• In Natural Resources Defense Council v. Export-Import Bank, NRDC argued that the bank must develop and implement National Environmental Policy Act compliance procedures when it gives credit assistance for exports of offshore drilling equipment, power plants, and similar material.

• The Environmental Action
Foundation brought a suit against
former Secretary of Defense Donald
Rumsfeld that challenged the B-1
bomber program: the EAF charged
the Defense Department with failure
to "consider the effect on the environment of using the weapon system
to transport nuclear bombs in a
future war."

Bank of America; from the Conservation Foundation, the United Automobile Workers, the National Association of Realtors, the New York Times, the National Farmers' Union, and Gov. Jimmy Carter. Just as the environmentalists were concerned with finding the most consistent way of preserving all of America's natural heritage, so national and multinational corporations and special-interest groups preferred a system that would minimize the risks inherent in an uncoordinated and decentralized approach to land-use planning and natural-resource allocation. In the words of an Exxon executive, testifying before the Senate Committee on Interior and Insular Affairs, "We believe the time has come for a more orderly, disciplined way of planning for and managing the future growth of the nation."

Not everyone was willing to admit that the time had come. Intense lobbying efforts by groups like the Liberty Lobby and the National Association of Chambers of Commerce eventually succeeded in killing the bill. Senator Jackson accused them of waging "a campaign of strident sloganeering": an aide maintained that they "still lived under the myth that there were no controls on private land"; and Morris Udall said simply that "the right wing did a hell of a job on landuse legislation."

THE FEDERAL BUDGET

hough federal and local governments own outright more than a third of the United States, they control-directly or indirectly-most of the rest. Many states have inaugurated metropolitan land planning acts and growth management statutes, bought development rights on agricultural land, granted tax concessions to those who preserve open space, allowed cities to establish population ceilings, and declared moratoriums on development.

For its part, the federal government has left few land-use stones unturned. In 1975 the Interior Department, through its newly formed Office of Land Use and Water Planning, sponsored a study to find out how significant the federal impact on the private sector had become. Ironically, the results of the study contributed to the abrupt demise of the Office, which had been formed in 1973 in anticipation of the adoption of Sen. Henry Jackson's national land-use planning scheme.

What the Land Use Office discovered was that more than 12 percent of the \$324 billion of 1975 federal expenditures was actually earmarked to affect nominally nonfederal land. Shortly afterward the Senate Appropriations Committee cut off all funds and the

study commission died quietly. ("The Office," says James Flannery of the Interior Department, "touched too many sensitive nerves," especially among conservative Senators from the landrich West, who were "incensed" by Jackson's plan.)

Despite the widespread negative opinion about the continuing proliferation of programs, no federal agency since the Office of Land Use and Water Planning has attempted to quantify or analyze comprehensively the impact of public moneys on the use of private land.

The former director of the Land Use Office, Lance Marston, estimates that there has been "at least—at least -a 20 percent growth in land-use programs in the past three years." Jack Donahue of the Office of Management and Budget, the agency directing Carter's government reorganization project, admits that the OMB has received criticism for not exploring the link between the public and private sectors, but his boss at the Natural Resources/ Environment Division, Bill Dinsmore, while allowing that federal programs have a "significant impact" on the use of private land, says the OMB has no plans to detail the impact.

PROGRAMS AND LAND-USE DOLLARS IN THE PRIVATE **SECTOR, 1975**

6.570 9,700

Department of Agriculture

water resources planning; purchase and construction of housing; development of recreation facilities; rural community development; improvement of telephone service; loans to rural electric companies; rural waste-treatment improvement; loans for farm improvement and purchase

2,490 8.820 7.500

Housing and Urban Development planning grants to local governments; improving the use of land; diversifyng neighborhoods; preserving property; construction and rehabilitation of private nonprofit hospitals; purchase, construction, and rehabilitation of houses

6,300 9.200

Department of Transportation purchase of land; improvement of airports; building and improving mass transit systems; highway construction

cost of land-use programs total expenditures, 1975

(millions of dollars)

2,500

Environmental Protection Agency grants for planning and developing pollution control programs; construction of wastewater treatment facilities

87,100 Department of Defense

Army Corps of Engineers' land acquisition and design, and project management of such things as docks, harbors, dams, canals, and aqueducts

2.100

Department of the Interior water resources projects: irrigation, municipal water supplies, hydroelectric power plants, flood-control systems; grants for planning outdoor recreation 1.600

Department of Commerce construction of water and sewer systems; building of access roads to industrial parks; development of port facilities; constructing flood-control systems

loan guarantees

219 112,400

Department of Health, Education and Welfare grants and loans for construction of public health facilities

92.500

Miscellaneous other agencies such as the Water Resources Council; General Services Administration; Veterans Administration; the Appalachian Regional Commission; and the Small **Business Administration**

16.160 23 990 324,600

Source: Office of Land Use and Water Planning, Department of the Interior

LAND RUSH

"This land is your land" "This land is my land"

f sometime in the past 200 years law was brought to the land, still there has never been much order. Today's disputes defy easy classification: the following examples cover everything from conservation to the exploitation of mineral resources, the use and abuse of rivers and lakes, the zoning of cities and towns, broad-based land-use planning schemes, the fixing of boundaries, and quarrelsome claims to ownership. In just ten of the examples on these two pages, more than 80 million acres of land were in one way or another the subject of controversy last year. If Alaska were added to this incomplete list, at least a fifth of America would

be up for grabs. A rash of "growth control" ordinances have been passed in recent years by cities and towns worried about strains on existing water and sewer systems, overcrowded schools, overworked police and fire departments, and similar phenomena. City planners have laid the blame on a combination of "runaway" growth and "leapfrogging" expansion. The city of Boulder, Colorado, adopting an increasingly common solution to the problem, put a ceiling on the number of building permits it would issue each year. Springfield, Nebraska, with a population of 900, wanted not only to limit the number of building permits it passed out, but also to approve the type of home and the size of the lot upon which the home was built. Suffolk County on Long Island simply appropriated \$21 million from its budget to purchase "development rights" on undeveloped land as yet another way to manage growth. In 1974 the Supreme Court decided its first zoning case in forty

years (The Village of Belle Terre [N.Y.] v. Borass). Though the high court ruled in favor of restrictive zoning in the Belle Terre case, the judicial trend in the past few years has been in the opposite direction. In 1975, for example, a New Jersey court told Mt. Laurel Township that its prohibitions against apartments, town houses, and mobile homes were unconstitutional because, in part, they failed to provide for "the living"

welfare of people" who needed homes in the area. In the affluent New York county of Westchester, the town of New Castle was rebuffed by a State Supreme Court justice who called its zoning regulations "exclusionary." New Castle, where homes at the time ranged in value from \$80,000 to \$100,000, had prohibited the construction of multifamily housing units.

- More than 1.5 million acres of prime agricultural land in seventeen Western states is at stake in the battle over claims to federal water. The 1902 reclamation law prohibits those using the water from the federal projects (a key factor in the value of the land) from owning more than 160 acres of land in any particular water district. If the law is enforced, the 1.5 million acres would have to be redistributed. In the Westlands Water District west of Fresno, California, the largest affected area, an average farm is now about 2,500 acres, fifteen times the prescribed limit.
- Nominally protected by federal law, endangered and threatened species like the Houston Toad, the American Alligator, and the Blunt-Nose Leopard Lizard of the San Joaquin Valley are still "losing their natural habitats at phenomenal rates," according to the Fish and Wildlife Service. So far the federal government has taken no legal action against private developers, and the only effect of the well-known snail-darter case (a private suit) has been to prompt Congress to lossen restrictions imposed by the Endangered Species Act.
- At present there are sixty-nine commercial nuclear plants in operation, eighty-nine under construction, and thirty-nine on the drawing boards in thirty-five different states. There are in addition more than 4,000 acres of temporary radioactive dumps scattered around the country, and the Carter Administration has said that "permanent" disposal of the nuclear garbage cannot be achieved before 1988. The Department of Energy is searching for landowners willing to put up with the lethal material, but it will have big problems if states (thirty-six are being assessed as possible depository sites) refuse the dumping-ground honor. Gov. James Thompson of Illinois, for one, said he didn't want his state to assume responsibility.
- Because of a shift in a river, South Carolina and Georgia are not sure where one state begins and the other ends. At stake are 10,000 acres of water and water bottom and 3,000 acres of high ground and marshland

in and along the Savannah River, the border established by treaty in 1787. The Supreme Court will decide what happens when a river changes course.

California and Nevada have also gone to the Supreme Court: Nevada is claiming that its western boundary, some 612 miles stretching from Oregon to Arizona, should be moved to the west by an average of 1.5 miles. If the high court rules in Nevada's favor, California could lose some 1,000 square miles of land, including a sizable portion of its part of the lucrative Lake Tahoe resort.

- In Oregon last November, antiplanning advocates tried for the third time to persuade voters to throw out one of the country's strictest landuse laws (just over 60,000 signatures were required to put the referendum on the ballot). They lost, but it was no landslide: 40 percent of the voters (almost 330,000) said yes to the proposal. Eight counties, four cities, and a number of other local governmental units had already filed suit against the state, claiming that the 1973 Land Conservation and Development Commission Act is unconstitutional. The plaintiffs have charged, in part, that the LCDC Act, which requires strict and comprehensive land-use planning from every locality, artificially depresses property values and therefore represents an illegal "taking" of private property.
- Since January of 1977, according to the USDA, foreigners have acquired 600,000 acres of American land (in addition to the 4.9 million they are already thought to own.) Concern about the foreign invasion prompted Sen. Herman Talmadge of Georgia, who discovered that 6 percent of the farmland in one of his Peach State counties was owned by aliens, to write to four different federal agencies and a Senate committee complaining of the lack of data on foreign landownership and asking that some of the agencies research and monitor all (not only foreign) agricultural land transactions. If the project is successful, it will be the first time the government has monitored in a comprehensive way the exchange of private agricultural landholdings.
- In a classic test of public interest versus individual property rights, Lowry, Minnesota, became, in the words of one protesting farmer, "the Bunker Hill of the twentieth century." Two electrical companies were building 427 miles of high-voltage lines for the benefit of "one million people who depend on us for power." The farmers whose land the lines cross

contend that their lives will be disrupted and their livestock and farming operations damaged. The electrical cooperatives successfully battled the landowners through twenty-five different court cases; they claim that vandalism, sabotage, and harassment cost them some \$139 million on the project, finally completed last fall. Some 300 landowners along the Ohio River have filed a series of complicated lawsuits against the Army Corps of Engineers, charging the federal agency with fraud and deception in obtaining easements on 22,000 acres of river frontage. The property holders on the 980-mile stretch of water from Pittsburgh to Cairo, on the southern tip of Illinois, claim that the corps failed to establish a valid high-water mark at the river's edge, and after constructing numerous navigation dams willfully flooded the thousands of acres, causing serious erosion. Many of these cases against the corps have been in preparation for almost eight years; final opinions are not expected until later this year. In Rhode Island, Maine, Massachusetts, New York, Connecticut, and South Carolina, American Indian

tribes have been claiming title to some 10 million to 12 million acres of land, much of it prime development and timber acreage, all allegedly taken from the tribes illegally in the nineteenth century. So far only the Wampanoag Indians of Cape Cod have received a negative judgment—their claim to 11,000 acres in the town of Mashpee was dismissed by a federal court because it was held that the Indians had not constituted a tribe when the land was taken. (Tom Tureen, counsel for most of the Indian claims, called the Wampanoag decision "ridiculous" and is appealing it.) In Maine, where the largest amount of land is at stake, the Penobscot and Passamaquoddy tribes had claimed title to more than half the 19.7 million acres of the state, most of it now owned by a few large timber companies. As of last November the Indians seemed likely to accept a settlement from the federal government in which they would receive \$27 million cash and \$10 million in land (at present values, about 100,000 Maine acres.)

• The many conflicting demands being made on the vast Alaskan land

-one-fifth the size of the forty-eight contiguous states—prompted an Interior Department official to remark, "Long after our children are in their graves, they'll be fighting over Alaska." Industry and commercial interests want to reserve resource-rich acres for exploitation; the federal government, which already owns some 93 percent of the 375 million agres, wants to put almost half the state into wildlife preserves and national parks; the state government wants the federal government to stay out; and the Alaskan natives are still quarreling with the Interior Department over 40 million of the 44 million acres promised them by the 1971 Alaska Native Claims Settlement Act. While the debate goes on, the Bureau of Land Management is spending \$8 million a year just to map the region adequately. The Senate Energy and Natural Resources Committee was debating eight different Alaska land bills this past summer, spawning more adversary testimony than any legislation since the civil rights bills of the Sixties. One spokesman was doubtful that any of the bills would get to the full Senate before the end of the year, "if at all."

A NOTE ON DATA GATHERING

list of the published reports, government agencies, public-interest groups, periodicals, corporations, and experts of various sorts queried for information to include in this survey of American land would be a long one. To name a few: the Urban Land Institute; the Conservation Foundation; the U.S. Geological Survey; the Bureau of Land Management; the Economic Research Service of the Department of Agriculture; the Environmental Information Center; the Independent Petroleum Association of America; the Environmental Protection Agency; the U.S. Golf Association; the Federal Aviation Administration; the Regional Plan Association; the Practising Law Institute; the International Shopping Center Council; and the many spokesmen and publications of these and other groups.

I wasn't far into my research on land before I realized how very few all-encompassing facts or figures there are to be had about the subject. For nearly every fact uncovered, there are usually dozens of qualifications and interpretations. Asking who owns American land, for instance, is not at all like asking the height of Mt. Shasta. Owning a parcel of land is laying claim to a bundle of rights to the land, and those

rights may be divvied up in a number of ways, given to (sold to, taken by) any number of individuals. One person may hold the title to a plot of land—strictly speaking, the owner—another may lease it, another may have the sole right to mine it, another to harvest its timber, another to graze cattle on it, another to use its water, another to build a highway or sewer line or waterway or utility line through it; another (government) to tax it or condemn it or zone it or annex it.

The list of major corporations and their American landholdings on page 47 is not therefore a list of landowners in the literal sense so much as it is a sampling of those who, in one way or another, hold control of the land. Though all the figures were taken from the companies' own 10-K forms filed with the Securities and Exchange Commission, annual reports, Moody's Industrial and Transportation Manuals, and, in a few rare instances, company officials (and represent information available as of the end of 1976), the list is neither complete nor exhaustive and must be read with a number of caveats. One is that, as an Exxon official explained, "we don't disclose anything we don't have

to." Another is that there is very little consistency in the manner of re-porting. "Holdings," for instance, may mean possession of all the rights in the bundle (very rare and nearly impossible) or having only one or two of the rights. Tenneco neatly divided its agricultural holdings between "owned" and "leased" land in California and Arizona (856,654 acres of the former and 269,453 of the latter). Standard Oil of California, on the other hand, reported it held more than 9 million acres of land in "fee," under lease, with "options" or "reservations" (not bothering to differentiate) and had "substantial" commercial, residential, and agricultural land in the Western states (giving no acreage figures). Dow Chemical, which is not on the list, told the SEC that it owned natural brine deposits in Michigan; rock salt de-posits in Louisiana, Texas, Ontario, and West Germany; limestone deposits in Texas; and land worth more than \$110 million, but nowhere did the company report the number of acres of land it owned. Mobil Oil, for its part, reported to the SEC only real estate development land, though it may be assumed that Mobil, like Exxon, has other interests as well.

Owned by Mobil Oil Estates Ltd. (U.S.): 5,750 acres ... Habitable land per person (U.S.): 9.6 acres ... Habitable land per person (world): 2.5 acres ...