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Major Uses of Land in the United States, 1992

Arthur B. Daugherty



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Major Uses of Land in the United States, 1992. By Arthur B. Daugherty. Natural Resources and Environment Division, Economic Research Service, U.S. Department of Agriculture. Agricultural Economic Report No. 723.

Abstract

Major uses of the Nation's nearly 2.3 billion acres of land in 1992 were: cropland, 460 million acres (20 percent); grassland pasture and range, 591 million acres (26 percent); forest-use land (total forest land exclusive of forested areas in parks and some other special uses), 648 million acres (29 percent); special uses (which includes parks, wilderness, wildlife and related uses), 281 million acres (12 percent); and miscellaneous other land (which includes urban land), 283 million acres (13 percent). U.S. cropland composition was quite stable, but total area declined from 464 million acres in 1987. Grassland pasture and range, forest-use land, and miscellaneous other land were basically unchanged in aggregate. Special-use area increased less than 1 percent from 1987.

Keywords: Land use, land use trends, cropland, pasture, rangeland, forest land, agricultural land, nonagricultural land.

Acknowledgments

I thank the many individuals in the numerous Federal agencies who manage or otherwise account for Federal lands and who provide information about a wide variety of land uses.

Many thanks are due to Thomas H. Frey for the insights provided by the historical materials in the files from his earlier work on five previous "Major Uses" reports. I also thank Roger Hexem who coauthored *Major Uses of Land in the United States: 1982* and provided much helpful information and advice during my preparation of the 1987 report. I want to acknowledge and thank Marlow Vesterby for his work in compiling data on State-owned land and in projecting urban land area from decennial Census data both for this report and the 1987 report.

Thanks to Robbin Shoemaker, Merritt Padgett, Ralph Heimlich, and Marlow Vesterby for their comments and suggestions on earlier drafts of this report.

Preface

The Economic Research Service has regularly inventoried the major uses of land in the United States at intervals coinciding with the censuses of agriculture since 1945. Data from the census, public land management and conservation agencies, and other sources are used to calculate State estimates of the use of several broad classes and subclasses of agricultural and nonagricultural land (Barnard and Hexem, 1988). This publication presents the latest inventory of U.S. major land uses (1992) and includes a brief analysis of changes and trends in land use.

Estimates of land use were developed to compare as closely with earlier estimates in the series as possible. Even so, comparability was sometimes hindered by changes in the characteristics of data available over time. In some instances, cropland data more recent than 1992 are available and are incorporated where appropriate.

This report uses a specific set of land use categories, defined in the appendix. In addition short definitions appear in the text at the term's first mention. Readers not familiar with this land use series are urged to review the terminology in the appendix prior to reading the report.

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Summary

Cropland used for crops and idled cropland fell from 399 million acres in 1987 to 393 million in 1992, a 20-year low. Cropland acreage varies from year to year, responding chiefly to the annual and long-term Federal acreage diversion programs and to weather conditions. The decline may also reflect some cropland losses due to the declining number of farms.

Cropland accounted for about 20 percent of the Nation's nearly 2.3 billion acres of land in 1992. Another 26 percent was in grassland pasture and range, 29 percent in forests, and 25 percent in other uses. Total acreage of U.S. cropland (including cropland used for pasture) has hovered in the range of 460-472 million acres since 1969. However, the cropland total declined by about 5 million acres between 1982 and 1987, then dropped another 4 million acres between 1987 and 1992 to 460 million, the lowest since 1964.

Land in urban areas totaled 55.9 million acres in 1990, up from 47.3 million in 1980. Urban areas absorbed an average of 900,000 acres per year from other land uses during the 1980's. That's down from its rate of 1.3 million acres per year during the 1970's. Land used primarily for agricultural production (cropland and nonforested grazing land) totaled 1.06 billion acres in 1992, which amounted to 46 percent of the Nation's land area. Forest-use land accounted for 648 million acres (29 percent) and other land accounted for 564 million acres (25 percent).

Those proportions vary greatly by region, however, reflecting differences in soils, climate, topography, and patterns of population settlement. The Northeast, for example, has about 13 percent of its land in cropland compared with 61 percent for the Corn Belt. The proportions are about reversed for forest land: 61 percent in the Northeast, 19 percent in the Corn Belt. Following the Corn Belt in land use for cropland are the Northern Plains (55 percent), Lake States (35 percent), and Southern Plains and Delta (both at 26 percent). Forest land is most prevalent in the Appalachian, Southeast, and Northeast regions, where the topography is often rolling to mountainous and precipitation is ample.

Government landholdings (846 million acres) covered 37 percent of total U.S. land area in 1992, with 651 million acres held by the Federal Government and 195 million acres held by State and local governments. Another 53 million acres were managed in trust by the Bureau of Indian Affairs. About 38 percent of all Federal land was in Alaska in 1992.

In 1994 (preliminary totals), acreage of specific crops included: corn, 72.9 million; wheat, 61.8 million; soybeans, 61.1 million; hay, 58.7 million; cotton, 13.3 million; sorghum, 9.0 million; barley, 6.7 million; oats, 4.0 million; sunflowers, 3.4 million; and rice, 3.3 million.

The top 10 States in cropland in 1992 were: Texas, 39.1 million acres; Kansas, 32.5 million; North Dakota, 29.6 million; Iowa, 28.6 million; Illinois, 25.6 million; Nebraska, 24.1 million; Minnesota, 23.5 million; South Dakota, 20.4 million; Missouri, 20.1 million; and Montana, 18.5 million.

Major Uses of Land in the United States, 1992

Arthur B. Daugherty *

How the Land Is Used

The United States has a land area of about 2.3 billion acres (fig. 1). About 20 percent of the land area was cropland in 1992, 26 percent was grassland pasture and range, 29 percent was forest-use land (total forest land comprises 33 percent when land in parks and other special uses is included), and 25 percent was special-use and unclassified land, including urban land (table 1). These proportions are significantly affected by the land area of Alaska, which has very little cropland and pasture but large areas of forest-use, special-use, and miscellaneous other land (app. table 1).

Land used for agricultural purposes in 1992 totaled more than 1.2 billion acres, 53 percent of total U.S. land area (table 2). Cropland, grassland pasture, and range accounted for most of the agricultural land, but the total also included forest land used for grazing, and land in farmsteads, farm roads, and farm lanes. In contrast to the estimate above, the Bureau of the Census estimated 946 million acres of land in farms in 1992 (19)¹. Land used for agricultural purposes, as defined in this report, and the Census's "land in farms" differ by the amount of grazing lands (both forested and nonforested), which is not defined as being in farms, and by adjustments to cropland to account for underenumeration by the Census (1).

Land classified as cropland totaled 460 million acres (table 1, fig. 2) in 1992. Cropland used for crops--harvested, failed, and summer fallowed--totalled 338 million acres, 73 percent of total cropland (table 2). The remaining 27 percent includes idle cropland and cropland used only for pasture.

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¹ Italicized numbers in parentheses refer to References cited at the end of this report.

Livestock grazing was the primary use of an estimated 591 million acres of permanent grassland pasture and range. (Forest land grazed is counted as forest land.) Some grazing land also has other uses. When cropland pasture (67 million acres) and forested grazing land (145 million acres) are added to the

Table 1--Major uses of land, United States, 1992

Land use	Acreage		Proportion of total	
	48 States	United States	48 States	United States
	Million acres		Percent	
Cropland ¹	460	460	24.3	20.3
Grassland pasture and range ²	589	591	31.1	26.1
Forest-use land ³	559	648	29.5	28.6
Special uses ⁴	136	281	7.2	12.4
Miscellaneous other land ⁵	150	283	7.9	12.5
Total land area ⁶	1,894	2,263	100.0	100.0

¹ All land in the crop rotation, including cropland used for crops, idle cropland, and cropland used for pasture only.

² Permanent grassland and other nonforested pasture and range.

³ Total forest land as classified by the U.S. Forest Service, excluding an estimated 89 million acres used primarily for parks, wildlife areas, and other uses.

⁴ Rural transportation areas, areas used primarily for recreation and wildlife purposes, various public installations and facilities, farmsteads, and farm roads, including approximately 89 million acres that overlap with forest land.

⁵ Includes urban areas, areas in miscellaneous uses not inventoried, and marshes, open swamps, bare rock areas, desert, tundra, and other land generally having low value for agricultural purposes.

⁶ Includes streams and canals less than one-eighth mile wide, and ponds, lakes, and reservoirs covering less than 40 acres. Distributions by major use may not add to totals due to rounding.

Sources: Estimates are based primarily on reports and records of the Bureau of the Census and Federal and State land management and conservation agencies.

Figure 1
Major uses of land, 1992

Million acres

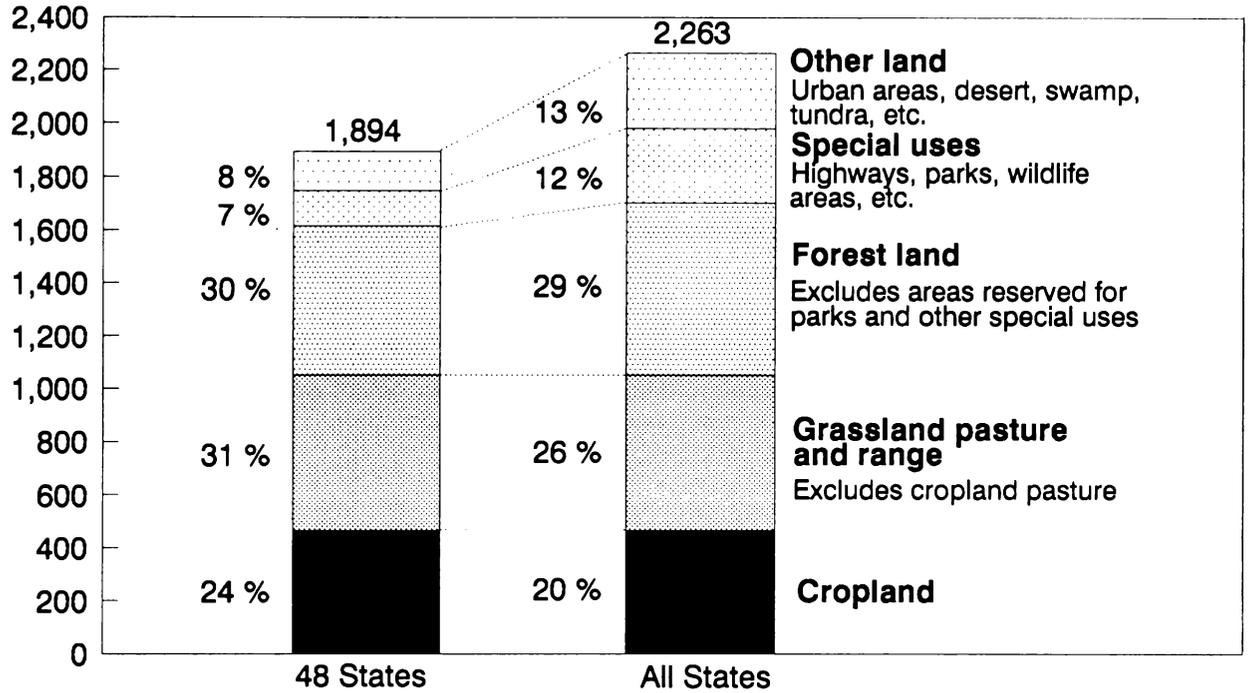


Figure 2
Major uses of U.S. cropland

Million acres

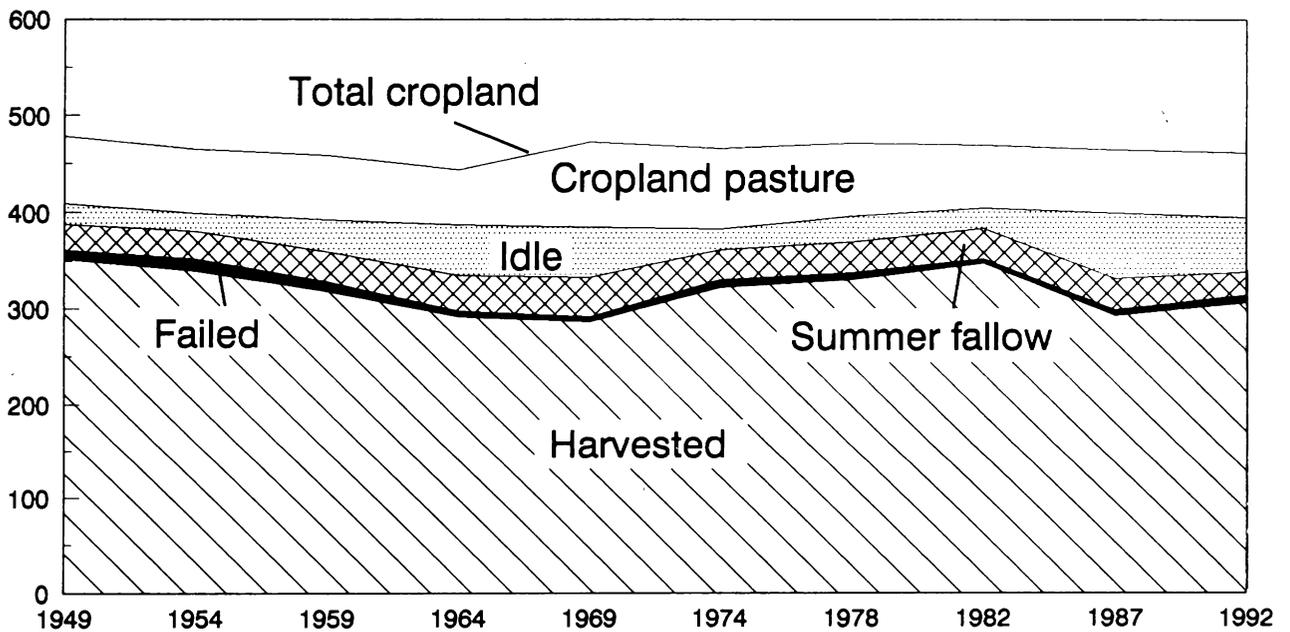


Table 2—Agricultural and nonagricultural uses of land, United States, 1992

Land use	Acreage		Proportion of total	
	48 States	United States	48 States	United States
	<i>Million acres</i>		<i>Percent</i>	
Agricultural:				
Cropland--				
Cropland used for crops ¹	337	338	17.8	14.9
Idle cropland	56	56	3.0	2.5
Grazing land--				
Cropland used only for pasture	67	67	3.5	3.0
Grassland pasture and range	589	591	31.1	26.0
Forest land grazed	145	145	7.7	6.4
Special uses--				
Farmsteads, farm roads	6	6	0.3	0.3
Total agricultural land ²	1,200	1,203	63.4	53.2
Nonagricultural:				
Forest-use land--				
Forest-use land not grazed ³	414	503	21.9	22.2
Special uses--				
Transportation uses ⁴	25	25	1.2	1.1
Recreation and wildlife areas ⁵	87	229	4.6	10.1
National defense areas ⁶	19	20	1.0	0.9
Miscellaneous other land ⁷	150	283	7.9	12.5
Total nonagricultural land ²	693	1,059	36.6	46.8
Total land area ²	1,894	2,263	100.0	100.0

¹ Cropland harvested, crop failure, and cultivated summer fallow.

² Breakdown of land uses may not add to totals due to rounding.

³ Excludes approximately 89 million acres of forest land in parks and land in other special uses (see app. table 1).

⁴ Rural highways, road and railroad rights-of-way, and rural airports.

⁵ National and State parks and related recreational areas, national and State wildlife refuges, and national wilderness and primitive areas.

⁶ Federal land administered by the Department of Defense for military purposes and land administered by the Department of Energy.

⁷ Includes urban areas, miscellaneous uses not inventoried, and areas of little surface use such as marshes, open swamps, bare rock areas, desert, and tundra.

Sources: Estimates are based primarily on reports and records of the Bureau of the Census and Federal and State land management and conservation agencies.

permanent grassland acreage, total grazing land comprised about 803 million acres, 35 percent of the total U.S. land area.

Forest-use land not grazed (total forest land minus land grazed and in special uses, such as in national and State parks) amounted to 503 million acres and was the predominant nonagricultural category of land (table 2).

Nonagricultural special-use areas (excludes 6 million acres of special-use land in farmsteads and farm roads) were estimated to account for more than 274 million acres, 12 percent of the Nation's land area.

Transportation uses accounted for 25 million acres. Federal and State parks, wildlife refuges, and related areas occupied 229 million acres, and defense and other public installations and facilities totaled 20 million acres.

The remaining 283 million acres of the Nation's land area included urban areas and minor acreages in special uses not inventoried, including Alaska tundra, deserts, bare rock areas, swamps, and marshes.

Table 3—Major uses of land, United States, 1959-92

Land use	1959	1964	1969	1974	1978	1982	1987	1992
	<i>Million acres</i>							
Cropland ¹	458	444	472	465	471	469	464	460
Cropland used for crops	359	335	333	361	369	383	331	338
Idle cropland	34	52	51	21	26	21	68	56
Cropland pasture	65	57	88	83	76	65	65	67
Grassland pasture and range ²	633	640	604	598	587	597	591	591
Forest-use land ³	728	732	723	718	703	655	648	648
Grazed forest-use land	245	225	198	179	172	158	155	145
Other forest-use land	483	507	525	539	531	497	493	503
Special-use areas ⁴	123	144	141	147	158	270	279	281
Miscellaneous other land ⁵	329	306	324	336	345	274	283	283
Total land area ^{1,6}	2,271	2,266	2,264	2,264	2,264	2,265	2,265	2,263

¹Distribution of land uses may not add to totals due to rounding.

²Other grassland pasture and nonforested range (excludes cropland used only for pasture and grazed forest land).

³Excludes forest land in parks and other special uses of land.

⁴Includes land specified in app. table 4.

⁵Includes urban areas, areas in miscellaneous uses not inventoried, and areas of little surface use such as marshes, open swamps, bare rock areas, desert, and tundra.

⁶Totals differ over time due to remeasurement of the land area.

Trends in Major Uses of Land

Cropland used for crops or idled fell from 399 million acres in 1987 to 393 million acres in 1992 (table 3). This continued decline (from 404 million acres in 1982) reversed the 1969-82 trend when total cropland, excluding cropland pasture, increased 20 million acres. The loss of cropland reflects the diminishing number of farms and amount of land in farms.

Estimates of the combined acreage of cropland pasture and grassland pasture and range increased 2 million acres during 1987-92. This acreage has generally declined since 1949, continuing a longer term trend (3). During 1949-69, conversions of cropland and forest to pasture were more than offset by shifts of semiarid Federal range to nongrazed or special uses. The 1969-87 decrease in pasture accelerated due to conversion of pasture to cropland.

Forest-use land, exclusive of the forest area in special uses, remained unchanged from 1987 to 1992 at 648 million acres. This differs from the Forest Service's estimate of 737 million acres (app. table 5), which includes multiple-use areas. Total forest land, including multiple-use areas, declined from colonial times until about 1920, increased from 1920 to 1960,

and trended downward again until 1987 (13). In 1992, total forest land was estimated to be about 6 million acres above the 1987 levels.

Special-use areas, including transportation and recreation, totaled 281 million acres in 1992, compared with 279 million acres in 1987 and 158 million acres in 1978. The large increase between 1978 and 1987 mainly came from establishing national parks, wilderness areas, and wildlife refuges in Alaska in what was once inventoried as forest or other unclassified land use. Alaska now has more than 50 percent of the acreage for special uses and accounts for 89 percent of the U.S. increase in special-use acreage since 1978.

Land in urban areas, as measured by the Bureau of the Census, totaled 55.9 million acres in 1990 (21) up from 47.3 million acres in 1980. Urban area absorbed an average of only 900,000 acres per year from other land uses during the 1980's, compared with 1.3 million acres each year during the 1970's (4). Both the total and annual changes are liberally measured because they include significant acreages of agricultural land encompassed by urban development. Appendix table 7 estimates urban land based on the historic use of land per capita in urban areas and the

Table 4—Major uses of land, by region, 1992

Region	Cropland ¹		Grassland pasture and range ²		Forest-use land ³		Special uses and miscellaneous other land		Total land area	
	Mil. acres	Percent	Mil. acres	Percent	Mil. acres	Percent	Mil. acres	Percent	Mil. acres	Percent
Northeast	14.3	13	3.0	3	68.5	61	25.6	23	111.4	100
Lake States	42.5	35	5.3	4	48.3	40	25.9	21	122.1	100
Corn Belt	99.6	61	12.3	7	31.3	19	21.4	13	164.6	100
Northern Plains	106.6	55	69.7	36	3.7	2	14.3	7	194.3	100
Appalachian	29.1	24	6.0	5	71.6	58	17.0	14	123.7	100
Southeast	18.1	15	9.8	8	73.4	59	22.1	18	123.4	100
Delta States	23.8	26	6.4	7	48.3	53	12.9	14	91.2	100
Southern Plains	55.1	26	118.7	56	21.7	10	16.2	8	211.6	100
Mountain	46.7	9	303.5	55	112.7	21	85.1	16	547.9	100
Pacific	23.9	12	54.5	27	79.3	39	46.2	23	203.9	100
48 States	459.7	24	589.0	31	558.7	29	286.7	15	1,894.1	100
Alaska	.1	0	1.2	0	87.9	24	275.8	76	365.0	100
Hawaii	.3	7	1.0	24	1.4	34	1.4	34	4.1	100
United States	460.0	20	591.2	26	648.0	29	564.0	25	2,263.3	100

¹ Total cropland including cropland used for crops, cropland used only for pasture, and idle cropland.

² Open permanent pasture and range, both in farms and not in farms, excluding cropland pasture.

³ Total forest land, including areas used for parks, wildlife refuges, livestock grazing, and other multiple purposes.

1992 population. The U.S. total (58.8 million acres) implies an increase averaging 1.4 million acres per year since 1990. Other estimates of the rate of urbanization based directly on changes in land use have ranged as low as 726,000 acres per year (23).

the topography is often rolling or mountainous and precipitation is ample. There is similar variation among States within a region (figs. 3-6).

Basic Regional Land Use Patterns

Land used primarily for agricultural production (cropland and nonforested grazing land) accounted for 46 percent of the Nation's total land area in 1992; forest-use land accounted for 29 percent; and other land accounted for 25 percent. But, these proportions vary greatly by region, reflecting differences in soils, climate, topography, and patterns of population settlement (table 4). For example, proportions of cropland are vastly different in the Northeast (13 percent) and the Corn Belt (61 percent). Limited precipitation in semiarid areas, for example the Southern Plains and Mountain regions, means that a large proportion of the land is most suitable for grazing. Forest land is most prevalent in regions such as the Northeast, Appalachia, and the Southeast where

Cropland

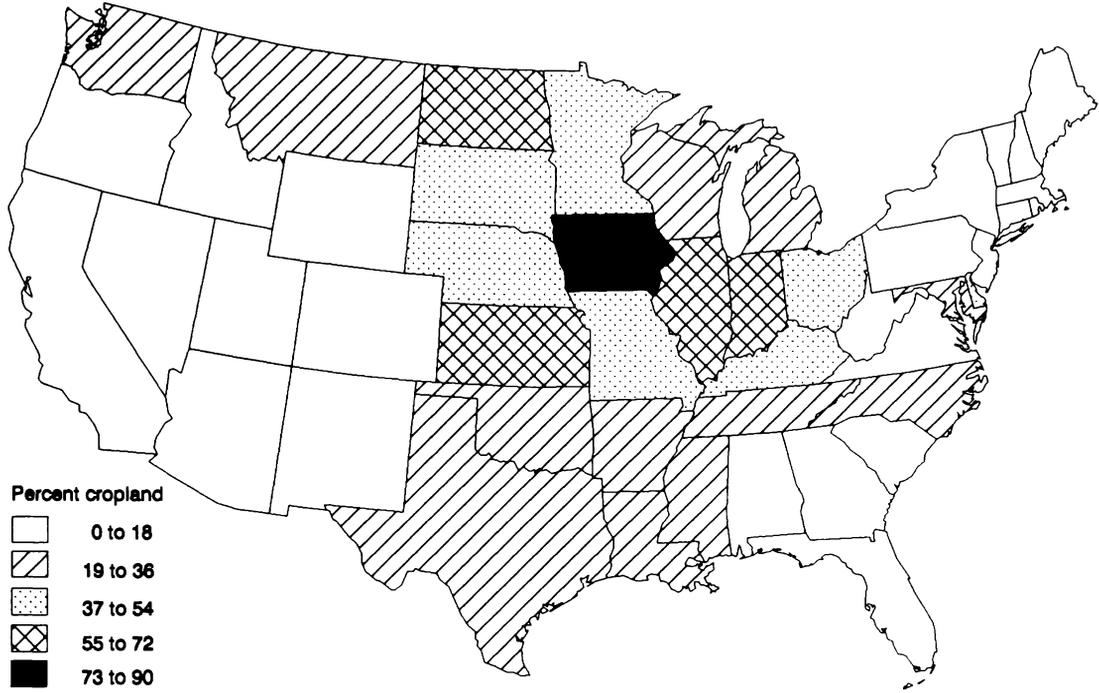
Cropland includes five components. The sum of three components--cropland harvested, crop failure, and cultivated summer fallow--is cropland used for crops or the acreage devoted to crop production in any year. The other two components, cropland pastured and idle cropland, are not directly involved in crop production in a given year, but may rotate into production in another year.

Cropland Used for Crops

In 1992, the last year in which all cropland was inventoried, about 338 million acres, or 73 percent of the Nation's cropland base, was used for crops (table 5). Acreages used for crops were largest in the Northern Plains and Corn Belt, followed by the Lake States, Mountain, and Southern Plains regions. As a proportion of total cropland, cropland used for crops was above the national average in the Lake States,

Figure 3

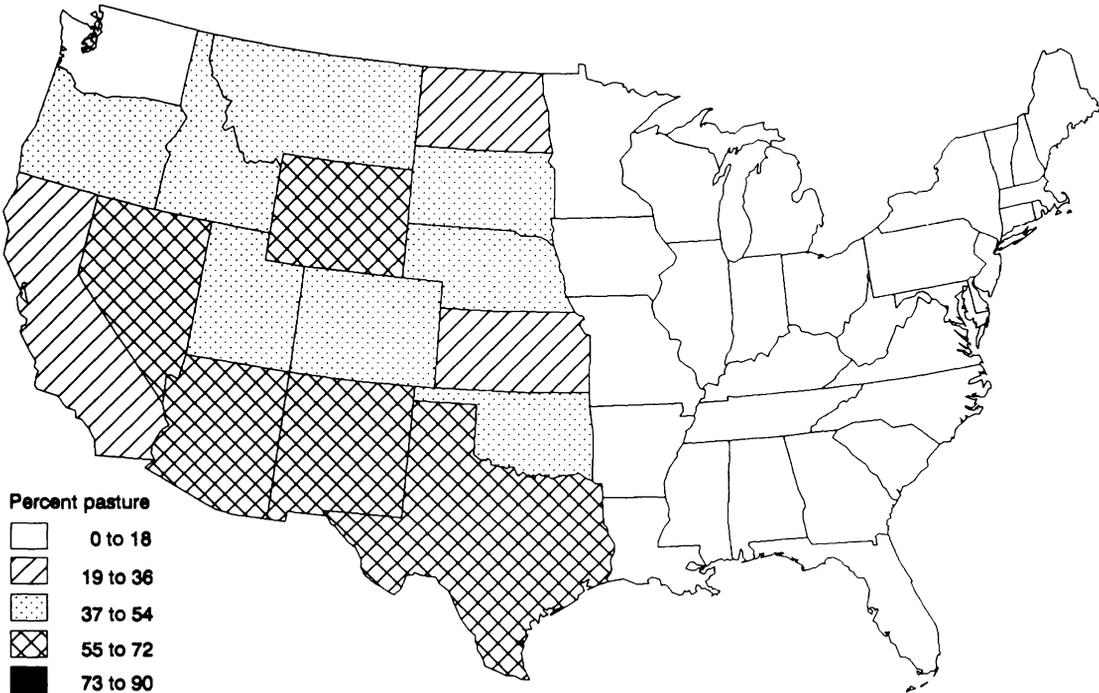
Proportion of State land area in cropland, 1992



Alaska and Hawaii fall in the 0-18 category.

Figure 4

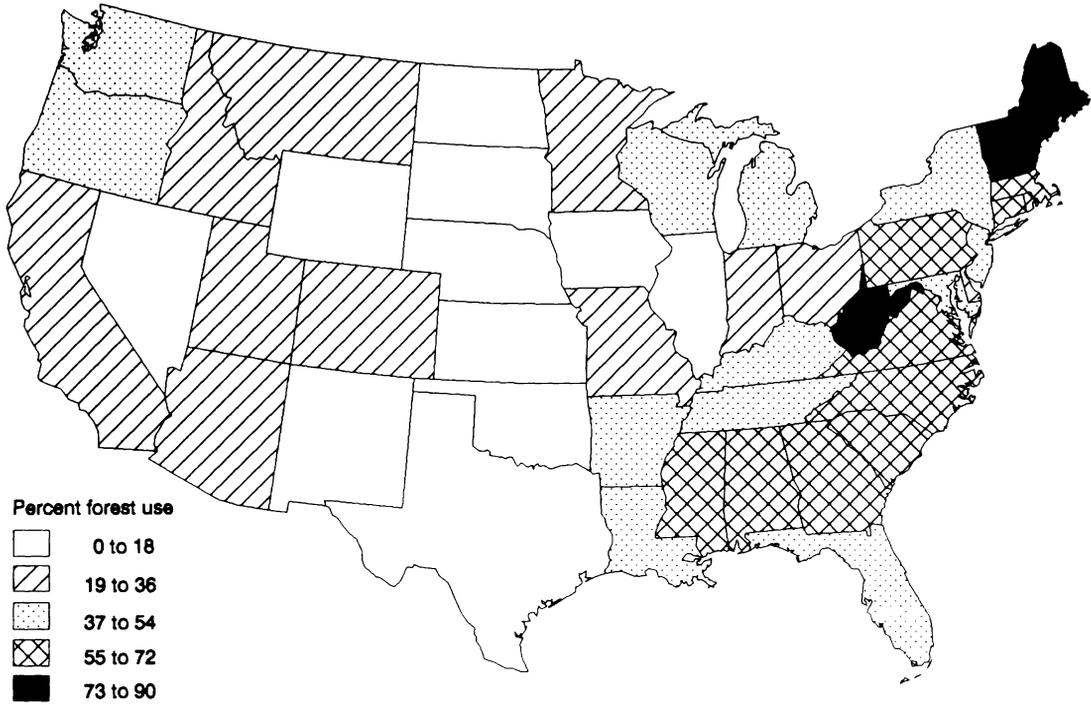
Proportion of State land area in grassland pasture, 1992



Alaska falls in the 0-18 category. Hawaii falls in the 19-36 category.

Figure 5

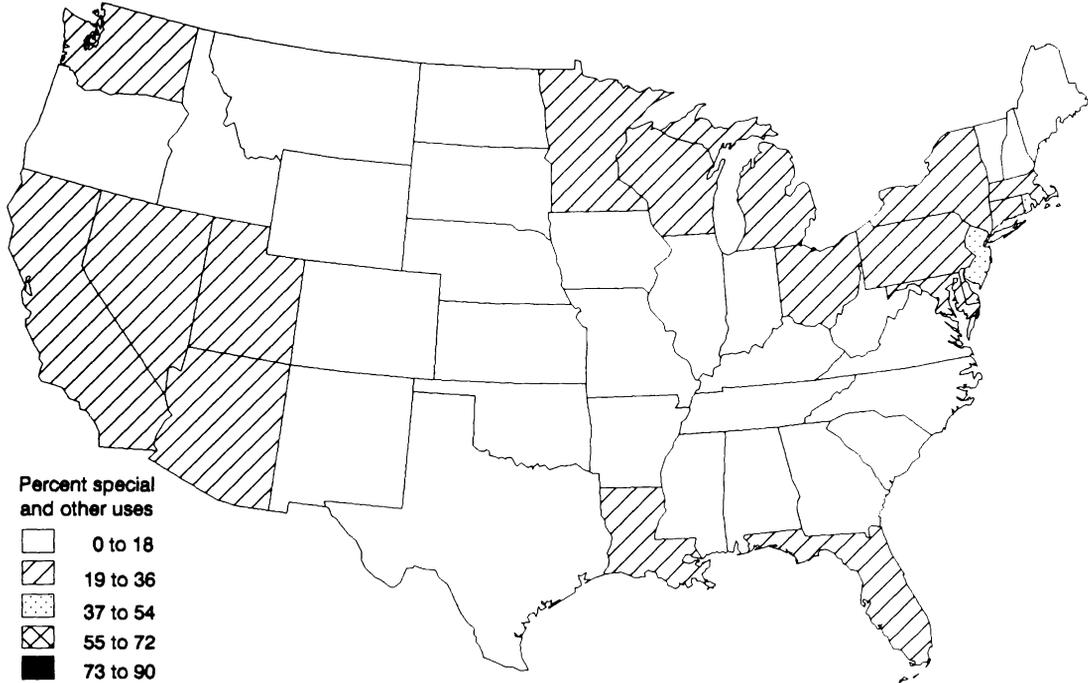
Proportion of State land area in forest-use land, 1992



Alaska and Hawaii fall in the 19-36 category.

Figure 6

Proportion of State land area in special uses and miscellaneous other land, 1992



Alaska falls in the 73-90 category. Hawaii falls in the 19-36 category.

Table 5--Cropland by major components and region, 1992

Region	Cropland used for crops				Idle	Pasture ³	Total cropland ²
	Harvested	Failed	Fallowed ¹	Total ²			
	<i>Million acres</i>						
Northeast	10.8	0.3	0	11.1	1.2	2.0	14.3
Lake States	34.0	.7	0	34.7	5.2	2.6	42.5
Corn Belt	80.1	.6	0	80.7	8.8	10.1	99.6
Northern Plains	71.0	1.9	11.7	84.5	11.5	10.6	106.6
Appalachian	16.4	.2	0	16.6	3.4	9.1	29.1
Southeast	10.1	.3	0	10.4	3.4	4.2	18.1
Delta States	16.3	.2	0	16.5	3.0	4.3	23.7
Southern Plains	28.2	2.4	1.0	31.6	8.0	15.5	55.1
Mountain	23.3	1.2	8.5	33.0	7.9	5.7	46.7
Pacific	15.4	.2	2.7	18.2	3.1	2.6	23.9
48 States ²	305.7	7.9	23.9	337.4	55.5	66.8	459.7
Alaska	--	--	0	--	.1	--	.1
Hawaii	0.1	--	0	.1	.1	--	.3
United States ²	305.8	7.9	23.9	337.6	55.7	66.8	460.0

-- = Less than 50,000 acres.

¹ Cultivated summer fallow.

² Distribution may not add to totals due to rounding.

³ Cropland used only for pasture.

Sources: Estimates based on data from (14, 19).

Corn Belt, Northern Plains, Northeast, and Pacific regions, and below average in the Mountain region and in the four southernmost regions from the Southern Plains east. Proportions ranged from 81 percent in the Corn Belt to 57 percent in the Southern Plains and Appalachian regions. Planted acreages of principal crops were not greatly different in 1992 from 1990-91, but cropland idled by Federal programs was 55 million acres, the lowest level since 1986--the first year cropland was enrolled in the Conservation Reserve Program. Some regions alter cropland used for crops each year in response to producer enrollment in Federal acreage diversion programs.

Cropland harvested, 306 million acres in 1992 (table 5), includes row and closely sown crops, tree fruits and nuts, small fruits, and wild hay. The regional distribution of harvested acreage mirrored that of cropland used for crops except in the Northern Plains, Mountain, Pacific, and Southern Plains regions, which had a substantial area in cultivated summer fallow.

Harvested acreage was highest in the Corn Belt, Northern Plains, Lake States, Southern Plains, and Mountain regions.

Harvested acreage as a proportion of total cropland was above the national average (66 percent) in the Corn Belt, Lake States, Northeast, and Delta States; about average in the Northern Plains and Pacific regions; and generally below average in the Appalachian, Southeast, Southern Plains, and Mountain regions. The proportion of cropland harvested ranged from 51 percent in the Southern Plains, which had substantial crop failure in 1992, to 80 percent in the Corn Belt and Lake States.

Crop failure occurred on nearly 8 million acres, or less than 3 percent of the acreage planted for harvest in 1992. This failure rate is a little above average for recent years (app. table 6). About 70 percent of the failure occurred in the Northern Plains, Southern Plains, and Mountain regions where annual precipitation is more uncertain.

Cultivated summer fallow refers to cropland in subhumid regions that is cultivated for a season or more to control weeds and accumulate moisture before small grains are planted. This component totaled nearly 24 million acres in 1992. Summer fallow is necessary for dryland small-grain production in much of the semiarid West. Nearly 49 percent of the fallow acreage was in the Northern Plains, 36 percent was in the Mountain region, and the remainder was in the Southern Plains and Pacific regions.

Other Cropland

The rest of the cropland acreage was used only for pasture (67 million acres) or was idle (56 million acres) in 1992. Much of the 67 million acres of cropland used for pasture is rotated between crop and pasture use, although the rotation period varies. Part of the acreage, however, is marginal for crop use and may remain in pasture indefinitely.

Cropland used only for pasture accounted for nearly 15 percent of all cropland in 1992, but was more than double that rate in the Appalachian region and well above average in the Southeast and Southern Plains regions. Only about 6 percent of the cropland in the Lake States was pastured. The largest acreages were in such agriculturally diverse regions as the Southern Plains and the Corn Belt, but were pastured for different reasons. In the Corn Belt, the only land available for pasture on many farms may be of cropland quality. In contrast, the large acreages of cropland pasture in the Southern Plains and much of the South are associated with higher proportions of marginal cropland.

Idle cropland includes both land completely idled and land seeded to soil-improvement crops but not harvested or pastured. Idle cropland totaled nearly 56 million acres in 1992, about 12 percent of U.S. cropland. This is the second largest idled area--to 1987--ever reported in the major land use series, which began in 1945. Idle cropland ranged from 8 percent in the Northeast to 19 percent in the Southeast. Some cropland is idle each year because of adverse weather and soil conditions at planting time, or lack of economic incentives. Almost the entire 1992 total represented land idled under Federal farm programs. Of the total 56 million acres idle, 36 million were enrolled in the CRP. In 1987, 22 million of the estimated 68 million acres of idle land were in the CRP. (CRP land not included in the idle component is cropland on farms enrolled in the CRP and planted to trees--and reported as being woodland in the census.)

CRP land planted to trees may have been misclassified as idle. The Census acknowledged excluding nearly 7 million acres of CRP because the whole farm had been placed in the CRP and no longer met the farm definition (19). For this report, the excluded CRP land was added to idle cropland. In addition, some CRP land--perhaps formerly cash-rented to farm operators and after being enrolled in the CRP no longer counted as land in farms by the Census--was also added to the census data on idle cropland. The 22.8 million acres of CRP land reported in the 1992 Census were counted in the use reported by the farm operator. The other 12.6 million acres were included as idle cropland. As a result, some of these acres may be misclassified as idle cropland when in fact the land has been planted to trees. As of 1992, 2.4 million acres of CRP enrollment had been planted to trees. It is unknown how much of this area was included in the CRP land on farms in 1992 and how much was on land excluded or missed by the Census and, as a result, misclassified as idle cropland. Based on the ratio of CRP acres on farms to total CRP acres, it could reasonably be less than a million acres.

Trends in Cropland Uses

Cropland acreage has undergone little net change since World War II. The acreage steadily declined from 478 million acres in 1949 to 444 million acres in 1964 but has been at or above 460 million acres in each census year since 1964 (table 6). Excluding cropland pasture (which has been inconsistently enumerated in some of the censuses of agriculture) changes the trend slightly, to show a generally declining acreage during 1949-74; an increase each census during 1974-82; and a decline from 1982-92. The early period of decline was associated with surplus production and subsequent acreage control programs. The 1974-82 increase was in response to expanding exports and limited use of Federal acreage control programs. However, 55 million acres were enrolled in annual and long-term Federal programs in 1992 compared with just 11 million acres in Federal programs in 1982.

Although the total acreage classified as cropland has not changed greatly for several decades, important changes have occurred in component acreages. These changes largely follow set-aside requirements of Federal crop programs. Federal program enrollments, in turn, reflect supply and demand for agricultural products.

Table 6—Major uses of cropland, selected years, 1949-92

Year	Cropland used for crops			Idle	Pasture ³	Total cropland	
	Harvested	Failed	Fallowed ¹				Total ²
	<i>Million acres</i>						
1949	352	9	26	387	22	69	478
1954	339	13	28	380	19	66	465
1959	318	10	31	359	33	66	458
1964	292	6	37	335	52	57	444
1969	286	6	41	333	51	88	472
1974	322	8	31	361	21	83	465
1978	330	7	32	369	26	76	471
1982	347	5	31	383	21	65	469
1987	293	6	32	331	68	65	464
1992	306	8	24	338	56	67	460

¹ Cultivated summer fallow.

² Distribution may not add to totals due to rounding.

³ Cropland used only for pasture.

Sources: Estimates of cropland used during 1949-87 are from (2); those for 1992 are based on data from (14, 15, 19). Estimates of idle cropland are based largely on data from periodic censuses of agriculture (19).

Cropland used for crops varied widely in the 1980's (app. table 6), but except for 1993, has fluctuated within a fairly narrow range (337-341 million acres) since 1989. The drop in cropland used for crops in 1993 reflects the flooding and wet weather conditions that year.

Changes in cropland harvested parallel changes in cropland used for crops, except when cropland undergoes abnormal changes in crop failure and cultivated summer fallow. Thus, the 1949-92 annual total ranged between 286 and 352 million acres, a range slightly larger than the range in cropland used for crops.

Estimates of cultivated summer fallow have ranged from 24 million to 41 million acres. When demand for commodities is high (and land idled by Federal programs low), less land is fallowed. Conversely, when demand is low (and land idled by Federal programs high), more land is fallowed. However, the CRP program idled considerable acreage that would normally have been fallowed in 1987-88.

Land marked by crop failure has ranged between 5 million and 12 million acres since 1957 (app. table 6). Crops failed on 64 million acres in 1934. Crop failure was 10 million acres in 1988, a year of severe drought, and 11 million acres in 1993 due to extensive flooding and wet weather.

Acreages of idle cropland generally vary inversely with those used for crops. Idle cropland increased during the 1950's and 1960's as large acreages shifted from crop production, and declined in the early 1970's as acreage returned to production (table 6). Since 1982, idled acreage has increased in response to Federal crop programs and 10-year CRP contracts.

Cropland used only for pasture totaled 67 million acres in 1992, compared with a high of 88 million acres in 1969 and a low of 57 million acres in 1964 (table 6). These acreages may not be strictly comparable, primarily because of inconsistent classifications between cropland pasture and permanent grassland pasture (see definitions in appendix).

Regional Changes in Cropland Used for Crops

The acreage used in crop production is subject to sharp annual variation, as exemplified by the large drop in 1987 when 76 million acres were idled under Federal programs. Regional comparisons are made for 1963 and 1992-94, when acreage diversion was relatively high, and 1981, when there was no acreage diversion by Federal programs (table 7).

In 1963, with 56 million acres diverted by Federal programs, cropland used for crops fell to a near-record low of 337 million acres. In 1981, the

Table 7—Cropland used for crops, by region

Region	1963	1981	1992	1993	1994 ¹	Change		
						1963-81	1981-92	1963-92
<i>Million acres</i>								
Northeast	14.2	13.6	11.1	10.9	10.8	-0.6	-2.5	-3.1
Lake States	34.5	40.3	34.7	32.7	35.0	5.8	-5.6	.2
Corn Belt	72.5	87.5	80.7	79.4	81.7	15.0	-6.8	8.2
Northern Plains	87.1	93.5	84.5	84.7	87.8	6.4	-9.0	-2.6
Appalachian	15.2	19.4	16.6	16.5	16.8	4.2	-2.8	1.4
Southeast	12.1	14.8	10.4	10.2	10.6	2.7	-4.4	-1.7
Delta States	13.1	19.6	16.5	15.9	16.2	6.5	-3.1	3.4
Southern Plains	34.8	38.0	31.6	28.8	28.6	3.2	-6.4	-3.2
Mountain	34.0	38.1	33.0	33.1	32.9	4.1	-5.1	-1.0
Pacific	19.8	22.2	18.2	18.2	18.1	2.4	-4.0	-1.6
48 States ²	337.3	387.0	337.4	330.4	338.5	49.7	-49.6	.1

¹Preliminary.

²Distribution may not add to totals due to rounding.

Sources: Estimates for the 48 contiguous States based on data from (12, 14, 19).

most recent year without diversion programs, acreage used for crops peaked at 387 million acres. As cropland increased in the 1970's and early 1980's, (app. table 6), these changes were accompanied by regional shifts that further concentrated the acreage used for crops in the major crop-producing regions (table 7).

The near-zero net change in cropland used for crops at the national level from 1963 to 1992 resulted from a collective decline of more than 13 million acres in the Northeast, Northern Plains, Southeast, Southern Plains, Mountain, and Pacific regions; a very slight increase in the Lake States; and a collective increase of 13 million acres in the other farm production regions. About 62 percent of the increase occurred in the Corn Belt, while the Delta States accounted for another 26 percent. The gains are attributable to gradual but persistent drainage of wetlands and transfers from the cropland pasture acreage in the Corn Belt and to large-scale drainage and clearing in the Delta States.

Net declines in cropland used for crops during 1963-92 ranged from 1.0 million acres in the Mountain region to 3.2 million acres in the Southern Plains and, proportionally, from 3 percent in the Mountain region to 22 percent in the Northeast. Although cropland acreage increased significantly in

all regions except the Northeast during 1963-81, these increases were not sufficient to offset the large declines experienced by several regions since 1981, primarily the result of increased idling of cropland in Federal programs.

Changes in Principal Crops Harvested

Changes in total acreage of principal crops harvested are closely associated with levels of cropland diverted through Federal programs. For example, harvested acreage of principal crops peaked at 354 million acres in 1981 when no cropland was diverted by Federal programs. Strong growth in the export market and rapid expansion through double-cropping soybeans and small grains marked the 1970's and early 1980's. The acreage of principal crops harvested increased by nearly 68 million acres during 1963-81, but then decreased greatly (54 million acres) from 1981 to 1992 (table 8). About 55 million acres were diverted from production by Federal programs in 1992.

Diverted acres increased to 60 million in 1993; harvested acreage of principal crops consequently dropped to 289 million as a result not only of the increased Federal program participation but a smaller planted area and a widespread crop failure from flooding and wet weather. In 1994, with a smaller area idled by all Federal programs (49 million acres)

Table 8—Principal crops harvested, 48 contiguous States

Crop ¹	1963	1981	1992	1993	1994 ²	Change	
						1963-81	1981-92
<i>Million acres</i>							
Food crops:							
Wheat	45.5	80.6	62.8	62.7	61.8	35.1	-17.8
Soybeans	28.6	66.2	58.2	57.3	61.1	37.6	-8.0
Rice	1.8	3.8	3.1	2.8	3.3	2.0	-.7
Rye	1.6	.7	.4	.4	.4	-.9	-.3
Peanuts	1.4	1.5	1.7	1.7	1.6	.1	.2
Sunflowers	NR	3.8	2.0	2.5	3.4	3.8	-1.8
Dry edible beans	1.4	2.2	1.5	1.6	1.8	.8	-.7
Dry edible peas	.3	.1	.2	.1	.1	-.2	.1
Potatoes	1.3	1.2	1.3	1.3	1.4	-.1	.1
Sweet potatoes	.2	.1	.1	.1	.1	-.1	0
Sugar beets	1.2	1.2	1.4	1.4	1.4	0	.2
Sugarcane	.5	.7	.9	.9	.9	.2	.2
Total	83.8	162.1	133.6	132.8	137.3	78.3	-28.5
Feed crops:							
Corn, all	68.3	83.2	72.1	62.9	72.9	14.9	-11.1
Sorghum, all	17.0	15.5	12.0	8.9	9.0	-1.5	-3.5
Oats	21.3	9.4	4.5	3.8	4.0	-11.9	-4.9
Barley	11.2	9.0	7.3	6.8	6.7	-2.2	-1.7
Hay	66.4	59.6	58.9	59.7	58.7	-6.8	-.7
Total	184.2	176.7	154.8	142.1	151.3	-7.5	-21.9
Other crops:							
Cotton	14.2	13.8	11.1	12.8	13.3	-.4	-2.7
Flaxseed	3.2	.6	.2	.2	.2	-2.6	-.4
Tobacco	1.2	1.0	.8	.7	.7	-.2	-.2
Total	18.6	15.4	12.1	13.7	14.2	-3.2	-3.3
Total, all crops	286.6	354.2	300.5	288.6	302.8	67.6	-53.7

NR = Not reported.

¹ Principal crops harvested as classified and reported in (14, 15, 17, 18).² Preliminary.

and a more typical 7-million-acre crop failure, principal crops rebounded to nearly 303 million acres harvested.

Although aggregate changes during 1963-81 and 1981-92 were nearly offsetting, major changes in the mix of crops occurred. Food crops, led by increases in soybean and wheat acreage, some of which was double-cropped, increased by over 78 million acres between 1963 and 1981. Feed crops, on the other hand, declined by nearly 8 million acres. Other crops--cotton, flaxseed, and tobacco--declined by more than 3 million acres. During 1981-92, the acreage of food crops declined, but only by 36

percent of their 1963-81 gain. More than 60 percent of the decline was in wheat acreage. Feed crops declined sharply during 1981-92, with more than half of the decline in corn acreage. "Other crops" also continued to drop, with nearly 82 percent of the 1981-92 decline in reduced cotton acreage.

Pasture and Range

All pasture and range accounted for more than 803 million acres in 1992, nearly 36 percent of the land area of the country. The total includes three major types--cropland pasture, other grassland pasture and

Table 9—Pasture and range, by type and region, 1992

Region	Nonforested pasture and range			Forest land grazed ⁴	Total pasture and range	
	Cropland pasture ¹	Grassland pasture and range ²	Total ³		Acreage ³	Portion of land area
	<i>Million acres</i>				<i>Percent</i>	
Northeast	2.0	3.0	5.0	1.4	6.4	6
Lake States	2.6	5.3	7.9	3.1	11.0	9
Corn Belt	10.1	12.3	22.4	6.6	29.0	18
Northern Plains	10.6	69.7	80.3	1.6	81.9	42
Appalachian	9.1	6.0	15.0	5.2	20.2	16
Southeast	4.2	9.8	14.0	7.3	21.3	17
Delta States	4.3	6.4	10.6	15.9	26.5	29
Southern Plains	15.5	118.7	134.2	11.6	145.7	69
Mountain	5.7	303.5	309.2	66.7	376.0	69
Pacific	2.6	54.5	57.1	25.6	82.7	41
48 States ³	66.7	589.1	655.8	145.0	800.8	42
Alaska	--	1.2	1.2	.1	1.2	*
Hawaii	--	1.0	1.0	.4	1.4	34
United States ³	66.8	591.2	658.0	145.5	803.5	36

-- = Less than 500,000 acres.

* = Less than 0.5 percent.

¹Cropland used only for pasture as reported in (19).

²Grassland and other nonforested pasture and range in farms (19) plus estimates of open or nonforested grazing land not in farms.

³Distribution may not add to totals due to rounding.

⁴Woodland grazed in farms (19) plus an approximation of forested grazing land not in farms.

range, and forest land on which grazing occurs as a multiple use--but excludes land grazed before or after crops were harvested (table 9). Examples of the latter include fall and winter pasturage of small grains and after-harvest pasturage of hayland. Also excluded were 65 million acres in Federal grazing districts and range allotments that have little value for grazing but are intermingled and managed with productive Federal range. The three types of grazing land differed greatly in terms of acreage, distribution, productivity, and other characteristics. (See (3) for a summary of U.S. grazing lands during 1950-82.)

Cropland Pasture

Cropland pasture, the smallest but generally most productive component of grazing acreage, occupied 3 percent of total U.S. land area and accounted for 8 percent of total pasture and range acreage in 1992. Cropland pasture is considered part of the cropland base, but may be marginal for crop use and remain in pasture for extended periods. Two-thirds of the 67 million acres in this category were concentrated in the Northern Plains, Southern Plains, Corn Belt, and

Appalachian regions. Cropland pasture made up a relatively high percentage of total pasture and range in the Appalachian (45 percent), Corn Belt (35 percent), Northeast (31 percent), and Lake States (24 percent) regions.

The reasons for the large acreages of cropland pasture in the Corn Belt and Northern Plains differ from those for the Appalachian region and Southern Plains. In the better agricultural areas, cropland pasture acreage tends to be land of relatively high quality. It expands when demand for crop production is low and contracts when demand is high. In regions east and south of the Corn Belt, cropland pasture constitutes a higher proportion of total cropland and is less affected by changes in demand for crop products. Here, cropland pasture is associated with small, irregularly shaped, and scattered fields unsuitable for crops now typically worked with large machinery.

Table 10—Total pasture and range, by type, United States, 1949-92

Year	Cropland pasture	Grassland pasture and range	Subtotal	Forest land grazed	Total
	<i>Million acres</i>				
1949	69	632	701	319	1,020
1954	66	634	700	301	1,001
1959	66	633	699	245	944
1964	57	640	697	225	922
1969	88	604	692	198	890
1974	83	598	681	179	860
1978	76	587	663	172	835
1982	65	597	662	158	820
1987	65	591	656	155	811
1992	67	591	658	145	803

Sources: Estimates based on reports and records of the Bureau of the Census and Federal and State land management and conservation agencies. Estimates for years prior to 1992 from (3, 4, 5, 7, 8, 24, 25, 26).

Grassland Pasture and Range

Grassland pasture and (nonforested) range is the dominant use of land in the Mountain and Southern Plains regions and the predominant agricultural use in the Northern Plains and Pacific regions, Alaska, and Hawaii. Among the major types of grazing land, grassland pasture and range dominates in all regions except the Appalachian and Delta regions. This varied-cover type accounted for more than half of all land in the Mountain region and the Southern Plains; 36 percent of the area in the Northern Plains, where a relatively larger proportion of the land area was used for crops; and 27 percent in the Pacific region, where forest-use land predominated. These four regions have about 546 million acres (92 percent) of U.S. grassland pasture and range. In other regions, except Hawaii, the proportion of total area in grassland pasture and range varied from 8 percent in the Southeast to less than 1 percent in Alaska. More than a third of the land in Hawaii is grazed, but because of the State's small size, grassland pasture there contributes little to the national acreage sum.

Forest Land Grazed

The 145 million acres of grazed forest land includes the acreage in open forest, land reverting to forest, and similar areas that have grass or other forage growth grazed to some extent. Regional acreages of grazed forest land ranged from less than 2 million acres in the Northeast and Northern Plains to 67 million acres in the Mountain region. Acreages of

this pasture type are relatively high throughout the West, Southwest, and South, but represent the dominant pasturage only in the Delta States. The regional variation in the amount of grazed forest land reflects productivity, demand for grazing, the amount of forest land, and such factors as species composition and stand density.

Forage values are relatively high on open stands of pine in the South where climatic conditions permit grazing throughout the year. However, upland hardwoods, with a more complete canopy, allow little production of forage, although substantial acreages are grazed because of their availability on farms. Ponderosa pine and other open-forest types in the West have value for seasonal grazing, but thick growing trees, such as fir, offer little grazing value.

Trends in Pasture and Range Acreages

Grazing lands are less economically competitive for crop production than other lands. Pasture and range acreages have been converted to cropland when demand for crop products was high. Substantial acreages of land previously used for grazing have been shifted to recreational, wildlife, and environmental purposes. Under favorable growing conditions, particularly in southern regions, pasture land reverts to forest. Some acreages are lost to urbanization. These forces have combined to cause a

Table 11—Trends in nonforested pasture and range acreage, 1949-92¹

Region	1949	1954	1959	1964	1969	1974	1978	1982	1987	1992
	<i>Million acres</i>									
Northeast	11	11	11	10	7	6	6	5	5	5
Lake States	12	12	13	13	12	10	8	9	8	8
Com Belt	31	31	35	32	31	29	26	24	23	22
Northern Plains	82	82	84	85	84	85	83	79	77	80
Appalachian	20	20	22	20	21	19	17	15	15	15
Southeast	11	15	18	16	16	17	15	15	14	14
Delta States	12	14	15	14	15	14	11	12	11	11
Southern Plains	103	114	120	127	128	128	128	136	137	134
Mountain	352	335	318	319	319	313	311	309	308	309
Pacific	66	64	59	58	56	57	56	55	55	57
48 States	700	698	695	694	689	678	661	659	653	656

¹ Includes cropland pasture and grassland pasture and range.

Sources: Estimates for the 48 contiguous States based on reports and records of the Bureau of the Census and Federal and State land management and conservation agencies. Estimates for years prior to 1992 are from (3, 4, 5, 6, 7, 8, 24, 25, 26).

long-term net decline in pasture and range acreage, from just over 1 billion acres in 1949 to 803 million acres in 1992 (table 10).

Grazing land acreage continued to decline between 1987 and 1992. Net cropland pasture increased by about 2 million acres from 1987. Grassland pasture and range was estimated to be unchanged, and grazed forest land contracted by 10 million acres as 1987-92 changes generally followed long-term trends.

The combined acreage of cropland pasture and grassland pasture and range consistently declined from 1949 through 1987, with a small increase estimated for 1992. This nonforested pasture also declined from 1969 to 1987 in 9 of the 10 farm production regions (table 11). (The Southern Plains increase reflected substantial reclassification of land from noncommercial forest to open rangeland.)

During 1949-69, a substantial increase in pasture and range in the Southern Plains and smaller increases in the Northern Plains and the South were more than offset by declines in the Mountain and Pacific regions. The increases in regions east of the Rocky Mountains were associated with declines in acreages used for crops and with clearing and reclassification of forest land, especially in the Southeast and Southern Plains. A part of this increased acreage had been classed as forested grazing land, mitigating the net increase in nonforested grazing land. The large decreases in the Western States mainly involved

Federal range that was withdrawn for parks, wilderness, and similar areas, or that was reclassified as unsuitable for grazing.

Among reasons for the decline in forested grazing land were fewer farms and less land in farms, changes in forest species, increases in stand density, and improvements in both livestock feeding and forest management practices. All of these factors have been especially important in the South, where woodland grazing acreage has been high.

Forest Land

Forest land totaled nearly 737 million acres in 1992 (table 12). About two-thirds was classified as timberland (commercially productive forest land) and the remainder as a combination of productive reserved forest land (timberland that is withdrawn from timber utilization by statute or administrative regulation) and other forest land (unproductive and urban forest land) (10).

Total timberland declined from 1962 to 1987 but increased slightly from 1987 to 1992 (table 13). Although each category of non-Federal forest owners increased their holdings in 1987-92, nonindustrial private owners, including farmers, accounted for most of the increase. Woodlands on farms declined by

Table 12—Total forest land, by major class and region, 1992

Region	Timberland			Reserved timberland and other forest land ¹	Total forest land		
	Federal	Non-Federal	Total		Federal	Non-Federal	Total
<i>1,000 acres</i>							
Northeast	1,515	66,018	67,833	5,720	1,933	71,320	73,253
Lake States	5,886	41,250	47,136	3,348	7,227	43,257	50,484
Com Belt	2,427	28,787	31,214	1,411	2,724	29,901	32,625
Northern Plains	993	2,536	3,529	701	1,104	3,129	4,233
Appalachian	6,104	65,449	71,553	2,037	7,738	65,852	73,590
Southeast	4,710	68,024	72,734	2,183	5,942	68,975	74,917
Delta States	5,021	43,248	48,269	459	5,261	43,467	48,728
Southern Plains	1,172	17,498	18,670	8,062	1,291	25,441	26,732
Mountain	38,751	20,348	59,099	76,401	95,043	40,457	135,500
Pacific	25,839	28,213	54,052	31,691	43,419	42,324	85,743
48 States ²	92,414	381,374	473,787	132,014	171,679	434,123	605,802
Alaska	4,241	10,827	15,068	114,063	77,401	51,730	129,131
Hawaii	0	700	700	1,048	52	1,696	1,748
United States ²	96,655	392,901	489,555	247,125	249,132	487,549	736,681

¹ Includes 89 million acres of forest land in parks, wildlife areas, and other special land uses.

² Distribution may not add to totals due to rounding.

Sources: (10) and unpublished material furnished by the U.S. Forest Service.

Table 13—Timberland in the United States by type of ownership, periodically 1952-92

Type of ownership	1952	1962	1977	1987	1992
<i>1,000 acres</i>					
Federal:					
National Forest	94,707	96,845	88,701	85,211	84,661
Bureau of Land Management	18,116	17,230	13,237	5,800	5,754
Other Federal	5,234	4,828	4,949	6,041	6,239
Total Federal ¹	118,056	118,903	106,887	97,052	96,655
Non-Federal:					
State, county, and municipal	27,380	27,254	31,282	33,974	34,840
Forest industry	58,979	61,434	68,937	70,347	70,455
Nonindustrial private	304,440	307,528	285,249	283,564	287,606
Total non-Federal ¹	390,799	396,216	385,468	387,885	392,901
Total timberland ¹	508,854	515,118	492,355	484,936	489,555

¹Distribution may not add to totals due to rounding.

Source: (10).

nearly 6 million acres from 1987 to 1992 (19), so nonindustrial privately owned timberland not on farms increased by about 11 million acres.

Federal ownership of timberland has been consistently declining as land is transferred into wilderness areas or other uses. The forest land is not lost but merely reclassified. The new classifications still provide uses and benefits other than timber production.

Much of the forest area serves multiple purposes. For example, nearly a fifth of the acreage is grazed by livestock, and large acreages are available for recreational use. Forest land provides watershed protection and wildlife habitat, and, excluding the area grazed, the portion used primarily for parks, and other special purposes, totals about 503 million acres.

All forest land acreage is about equally divided between the humid eastern half of the country and the western half, including Alaska (table 12). The proportion of land area in forest is particularly large in the Northeast, Appalachian, and Southeast regions, comprising 59-66 percent of all land. In the Lake States, Delta States, and Pacific region, forest accounts for 41-53 percent of all land. Acreages in the Mountain region and Alaska are quite large, but make up a smaller proportion of total area.

About 47 percent of the reserved timberland and other (unproductive) forest land is in the Southern Plains, Mountain, and Pacific regions, where it accounts for nearly half of all forest land. Much of the remainder is in Alaska, where it accounts for 88 percent of all forest land. In contrast, acreages of reserved timberland and other forest land in the Eastern regions are relatively small (10).

Estimates of total forest land increased from 731 million acres in 1987 to 737 million in 1992. Except for the Northeast, forest land in most of the eastern and central regions increased. Forest land in the Mountain and Pacific regions declined, while that in Alaska and Hawaii changed very little. However, when areas in parks or other special uses were subtracted, the remaining "forest-use" land declined slightly.

Special and Miscellaneous Other Uses

Land for all special uses--including rural highway, road, and railroad rights-of-way and parks and related recreational areas--comprised nearly 281 million acres in 1992 (table 14). Rural transportation areas accounted for 25 million acres, about 9 percent of the total. National and State parks and related wilderness and primitive areas totaled 130 million acres. An

Table 14--Trends in special uses of land, 1959-92

Special-use areas ¹	1959	1964	1969	1974	1978	1982	1987	1992
	<i>Million acres</i>							
Nonagricultural:								
Intensive uses	25.0	26.0	26.0	26.3	26.7	26.8	25.7	25.2
Highways and roads	20.2	21.2	21.0	21.2	21.5	21.5	21.2	21.0
Railroads	3.4	3.3	3.2	3.1	3.0	3.0	2.3	2.0
Airports	1.4	1.5	1.8	2.0	2.2	2.3	2.2	2.2
Extensive uses	87.7	107.4	107.0	112.5	122.8	234.9	245.8	249.3
National and State parks	29.7	31.9	35.0	36.8	38.5	89.7	96.0	94.3
Wilderness and primitive areas	14.5	14.6	14.3	14.8	18.1	26.0	32.5	35.7
Federal and State wildlife areas	17.2	29.0	32.1	35.9	41.3	95.2	96.4	98.8
National defense and industrial areas	26.3	31.9	25.6	25.0	24.9	24.0	20.9	20.5
Agricultural:								
Farmsteads, farm roads, and lanes	10.1	9.2	8.4	8.1	8.4	8.0	7.1	6.2
Total ²	122.8	142.6	141.4	146.9	157.9	269.7	278.6	280.8

¹ Definitions and procedures are given in footnotes to app. table 4, showing special-use areas by State.

² Distributions may not add to totals due to rounding.

Sources: Estimates are based on reports and records of the Bureau of the Census and Federal and State land management and conservation agencies. Estimates for years prior to 1992 are from (2, 5, 6, 7, 8, 9, 26).

additional 99 million acres were administered by Federal and State wildlife agencies, and more than 20 million acres have been set aside for defense and atomic energy purposes. Land in farmsteads, farm roads and farm lanes is a relatively minor use and has been decreasing steadily since 1959 with the continuing decline in farm numbers.

Acreage used for transportation, recreation, wildlife, and other nonagricultural special uses increased from 113 million acres in 1959 to 275 million acres in 1992. This net increase resulted from an increase of less than 1 million acres in transportation uses, an increase of nearly 167 million acres in recreation and wildlife areas, and a decrease of nearly 6 million acres in national defense and related areas. Transportation areas increased more than indicated, as some land in this category was reclassified from rural to urban as urban areas expanded.

Land for special uses, like that used for agricultural purposes and forestry, is distributed very unevenly. Rural transportation areas reflect the influence of both population densities and historical land settlement patterns. Acreages in parks, wildlife areas and, to a lesser extent, national defense areas, are concentrated in the Western States and Alaska, where large public domain holdings have been set aside, and in less productive areas of the East.

Many areas, particularly the national park and wilderness systems, were selected because of specific or unique site characteristics. Some State parks and wildlife areas entered State ownership almost by chance and then were designated to a specific use. National defense areas differ mainly in that location counted most in the selection process, and much of the land is characterized by high value and intensive use.

The 158-million-acre increase in special uses during 1959-92 did not include much land of cropland quality, although some rangeland was involved. Relatively little of the land used primarily for recreation and wildlife purposes had been used previously for intensive agriculture (app. table 4). Of the 229 million acres used for recreation and wildlife purposes in 1992, 25 percent was in the Mountain and Pacific regions and 62 percent was in Alaska. Much of this land was withdrawn from the public domain and included such rugged areas as the Mt. McKinley, Grand Canyon, Yellowstone, and Yosemite National Parks. An additional 10 percent spans forested or

wetland areas east of the Rockies, including areas in New York, Pennsylvania, Minnesota, Tennessee, and Florida.

The above totals exclude acreage in urban use, the most important special use of land in terms of impact on cropland supplies. Appendix table 7 contains estimates of acreage in urban areas (as contrasted to urban use), developed by the Bureau of the Census in conjunction with the 1960, 1970, 1980, and 1990 decennial censuses of population. Urban area is not incorporated as a mutually exclusive category in the special land-uses category, but is considered a major portion of miscellaneous other uses. The census data show a total of 56 million acres of urban land in 1990 as defined by the Bureau of the Census (urbanized areas plus places of 2,500 or more inhabitants outside urbanized areas), and an average annual increase of 0.9 million acres per year from 1980 to 1990, down from 1.3 million acres per year during 1970-80. Both are generous measures because they include substantial acreages of rural land.

A second measure of urban area is available from the 1992 National Resources Inventory (NRI) conducted by USDA's Soil Conservation Service (now the Natural Resources Conservation Service). Under a different definition, the area classified as "urban and built up" in this survey totaled 65 million acres (16). The NRI definition includes more parcels of rural land than the census definition does.

Appendix table 7 shows estimates of urban land, by State and region, taking into account the historic use of land per capita in urban areas and the 1992 population. The estimated total of nearly 59 million acres of urban land points to an increase averaging 1.4 million acres per year since 1990, higher than in the preceding two decades. Vesterby, Heimlich, and Krupa published a more detailed study of land use change which estimated that 740,000 acres per year were converted to urban uses during the 1970's (23). This estimate did not include land in nonurban uses encompassed in urban areas. Therefore, the land encompassed in census urban areas and in the 1992 estimate may significantly overestimate the land actually in urban uses (4, 23).

Excluding the land in urban areas, the remaining 224 million acres of the Nation's miscellaneous other land uses consist largely of marshes, open swamps, desert, tundra, and minor acreages in special uses that were not inventoried. Acreages of this unclassified land are relatively large in arid portions of the West and

several Atlantic and gulf coastal areas, and are particularly large in Alaska, which has 132 million miscellaneous-use acres, nearly 59 percent of the total.

Major Uses of Land, by Class of Ownership

Nearly 29 percent of the land area of the United States is federally owned, about 60 percent is privately owned, and the remainder is owned by State and local governments or is Indian trust land (table 15). These proportions change only gradually over time, except in Alaska where large acreages of Federal land have recently been transferred to State and native (private) ownership. The distribution in 1982 was 32 percent Federal, 59 percent private, and the balance State, local government, or Indian.

Federal land, totaling 651 million acres in 1992, includes 591 million acres of the original public domain and 60 million acres acquired by purchase and other means. About 38 percent of all Federal land is in Alaska, 41 percent in the Mountain region, and nearly 14 percent is in the Pacific region. The remaining 9 percent is distributed among the other eight farm production regions and Hawaii, with the largest portion--about 2 percent--in the Lake States.

An estimated 145 million acres of Federal grassland and 20-25 percent of Federal forest land are used for grazing. Livestock can graze over 65 million additional acres, mainly forest land, which has little

value as pasture but is intermingled and managed with the productive Federal range. Federal land also includes forest land (excluding forest land grazed), land for various special uses, and miscellaneous other land, such as marshes, open swamps, bare rock areas, desert, and special uses not inventoried.

State and local governments have accumulated land by grants from the Federal Government, tax reversions, purchases, gifts, and escheats. These publicly administered areas are distributed more evenly than is Federal land but are still highly concentrated in the Western States. State and local governments hold land for forests, parks, wildlife refuges, highways and roads, institutional uses, and other specific purposes. Most Western States also own relatively large acreages for income-producing purposes. About 44 million acres, including an estimated 41 million acres of grassland or other nonforested range, are used for grazing.

The Bureau of Indian Affairs manages 53 million acres in trust for Indian tribes and individuals. Like Federal and State land, most Indian land is concentrated in the Western States and about 33 million acres is grazing land. A small acreage is used for crop production.

Private land, except that in Indian ownership, totaled nearly 1.4 billion acres, about 60 percent of the land in the United States. Included in the privately owned total is 99 percent of the Nation's cropland, 63 percent of the grassland pasture and range, 54 percent of the forest land, and 29 percent of the miscellaneous

Table 15--Ownership and use of land, by major categories, 1992

Ownership	Cropland	Grassland pasture and range	Forest land ¹	Special uses and miscellaneous land ²	Total land area
	<i>Million acres</i>				
Federal	--	145	249	260	651
State and other public	3	41	78	73	195
Indian ³	2	33	13	5	53
Private	455	372	397	137	1,364
Total	460	591	737	475	2,263

-- = Less than 500,000 acres.

¹ Includes reserved forest land in parks and other special uses.

² Excludes an estimated 89 million acres in special uses that have forest cover and, therefore, are included with forest land in this report.

³ Managed in trust by the Bureau of Indian Affairs.

Sources: Federal, State, and local government and Indian land acreages are approximations based on public records and reports. Private land is the remainder of the land in each use category.

land. These proportions reflect the selective transfer of the better agricultural lands from Federal ownership under historic Federal land-disposal practices.

Acreages in table 15 do not reflect multiple or alternative uses of land. In addition to the 591 million acres of grassland pasture and range, 67 million acres of cropland and approximately 145 million acres of forest land are used for grazing. Substantial acreages of forest land are also used for recreational, wildlife, and similar purposes.

References

1. Barnard, Charles H., and Roger Hexem. 1988. *Major Statistical Series of the U.S. Department of Agriculture: Land Values and Land Use. AH-671, Vol. 6. U.S. Dept. Agr., Econ. Res. Serv.*
2. Daugherty, Arthur B. 1991. *Major Uses of Land in the United States: 1987. AER-643. U.S. Dept. Agr., Econ. Res. Serv.*
3. _____. 1989. *U.S. Grazing Lands: 1950-82. SB-771. U.S. Dept. Agr., Econ. Res. Serv.*
4. Frey, H. Thomas. 1983. *Expansion of Urban Area in the United States: 1960. ERS Staff Report AGES830615. U.S. Dept. Agr., Econ. Res. Serv.*
5. _____. 1982. *Major Uses of Land in the United States: 1978. AER-487. U.S. Dept. Agr., Econ. Res. Serv.*
6. _____. 1979. *Major Uses of Land in the United States: 1974. AER-440. U.S. Dept. Agr., Econ. Stat. Coop. Serv.*
7. _____. 1973. *Major Uses of Land in the United States: Summary for 1969. AER-247. U.S. Dept. Agr., Econ. Res. Serv.*
8. Frey, H. Thomas, and Roger Hexem. 1985. *Major Uses of Land in the United States: 1982. AER-535. U.S. Dept. Agr., Econ. Res. Serv.*
9. Frey, H. Thomas, Orville E. Krause, and Clifford Dickason. 1968. *Major Uses of Land and Water in the United States, Summary for 1964. AER-149. U.S. Dept. Agr., Econ. Res. Serv.*
10. Powell, Douglas S., Joanne L. Faulkner, David R. Darr, Zhiliang Zhu, and Douglas W. MacCleery. 1993. *Forest Resources of the United States, 1992. General Technical Report RM-234. U.S. Dept. Agr., Forest Serv.*
11. U.S. Department of Agriculture, Bureau of Agricultural Economics. 1952. *Cropland Production: Revised Estimates, 1944-49. SB-108.*
12. U.S. Department of Agriculture, Economic Research Service. 1992. *Economic Indicators of the Farm Sector: Production and Efficiency Statistics, 1990. ECIFS 10-3.*
13. U.S. Department of Agriculture, Forest Service. 1982. *An Analysis of the Timber Situation in the United States, 1952-2030. FRR-23.*
14. U.S. Department of Agriculture, National Agricultural Statistics Service. 1995. *Crop Production: 1994 Summary. CrPr 2-1(95).*
15. _____. 1994. *Field Crops, Final Estimates, 1987-92. SB-896.*
16. U.S. Department of Agriculture, Soil Conservation Service. 1994. *1992 National Resources Inventory Database.*
17. U.S. Department of Agriculture, Statistical Reporting Service. 1966. *Field Crops by States, 1959-64, Acreage, Yield, Production, Revised Estimates. SB-384.*
18. _____. 1984. *Field Crops: Final Estimates by States, 1978-82, Preliminary, 1983. SB-708.*
19. U.S. Department of Commerce, Bureau of the Census. 1994. *1992 Census of Agriculture. Vol. 1, Geographic Area Series (State Reports).*
20. _____. 1992. *1990 Census of Population and Housing, Summary Population and Housing Characteristics, United States. CPH-1-1.*
21. _____. 1993. *1990 Census of Population and Housing, Population and Housing Unit Counts, United States. CPH-2-1.*
22. U.S. Department of the Interior, Bureau of Land Management. 1993. *Public Land Statistics, 1992. Vol. 177.*
23. Vesterby, Marlow, R. E. Heimlich, and K. S. Krupa. 1994. *Urbanization of Rural Land in the United States, AER-673. U.S. Dept. Agr., Econ. Res. Serv.*
24. Wooten, H.H. 1953. *Major Uses of Land in the United States. TB-1082. U.S. Dept. Agr., Bur. Agr. Econ.*
25. Wooten, H.H., and J.R. Anderson. 1957. *Major Uses of Land in the United States: Summary for 1954. AIB-168. U.S. Dept. Agr., Agr. Res. Serv.*
26. Wooten, H.H., Karl Gertel, and William C. Pendleton. 1962. *Major Uses of Land and Water in the United States: Summary of 1959. AER-13. U.S. Dept. Agr., Econ. Res. Serv.*

Appendix: Definitions and Explanation of the Data

The estimates of major land uses presented in this report are the latest from a series of land-use inventories, based on available land-use data from a wide variety of sources, conducted by the Economic Research Service and predecessor agencies. This series extends back more than 50 years and, since 1945, has been generally comparable in categories and area coverage. These periodic inventories are useful because numerous public agencies develop land-use data, but no single agency accounts for the use of all land in the country. The inventories provide a framework within which changes in the supply of and demand for land for agricultural and other purposes can be measured and analyzed.

The estimates, with few exceptions, were constructed from available data, rather than used exactly as developed by source agencies. This process is necessary because land-use data, regardless of origin or utility for specific purposes, have limitations for comprehensive inventory purposes. Data are typically obtained from surveys differing greatly in scope, methods, definitions, and other characteristics. Individual sources account for only one or a few uses and for only a limited part of the total land area. The available data contain conflicts and overlap that must be reconciled or removed.

Definitions and explanations of the various land-use categories are:

Cropland--Total cropland includes five components: cropland harvested, crop failure, cultivated summer fallow, cropland used only for pasture, and idle cropland. The estimate of total cropland in 1992 includes total cropland as reported by the 1992 Census of Agriculture (19) plus an upward adjustment (except for the cropland pasture component) to conform with data on principal crops harvested reported by the National Agricultural Statistics Service (NASS) for 1992 (15).

Cropland harvested includes row crops and closely sown crops; hay and silage crops; tree fruits, small fruits, berries, and tree nuts; vegetables and melons; and miscellaneous other minor crops. Farmers double-cropped nearly 4 percent of this acreage.

Crop failure consists mainly of the acreage on which crops failed because of weather, insects, and diseases, but includes some land not harvested due to lack of labor, low market prices, or other factors. The

acreage planted to cover and soil-improvement crops not intended for harvest is excluded from crop failure and is considered idle. In recent years, crops have failed on about 2-3 percent of the acreage planted for harvest.

Cultivated summer fallow refers to cropland in subhumid regions of the West cultivated for one or more seasons to control weeds and to accumulate moisture before small grains are planted. This practice is optional in some areas, but it is a requirement for crop production in the drier cropland areas of the West. Other types of fallow, such as cropland planted to soil-improvement crops but not harvested and cropland left idle all year, are not included in cultivated summer fallow but are included as idle cropland.

Cropland used only for pasture generally is considered to be in long-term crop rotation. However, some land classed as cropland pasture is marginal for crop uses and may remain in pasture indefinitely. This category also includes land that was used for pasture before crops reach maturity and some land used for pasture that could have been cropped without additional improvement. Cropland pasture and permanent grassland pasture have not always been clearly distinguished in agricultural surveys.

Land idled under annual Federal crop programs could have been pastured except during a consecutive 5-month period April 1-October 31 designated by the State Agricultural Stabilization and Conservation (ASC) Committee. If such acreage conservation reserve or conservation use acres were pastured at any time during the year, the Census requested that they be reported as cropland pasture. Land in the CRP could not be pastured.

Idle cropland includes land in cover, soil-improvement crops, and cropland on which no crops were planted. Some cropland is idle each year for various physical and economic reasons. Acreages diverted from crops to soil-conserving uses (if not eligible for and used as cropland pasture) under Federal farm programs are included in this component.

Cropland used for crops--Three of the cropland acreage components--cropland harvested, crop failure, and cultivated summer fallow--are collectively termed cropland used for crops, or the land input to crop production. Regional acreages in these components are developed annually and, in the past, were reported in separate but coordinated series. For example, *Economic Indicators of the Farm Sector: Production*

and Efficiency Statistics, 1990 shows cropland data by farm production region, annually for several decades (12). The annual estimates of cropland harvested are based on both census data and the series on principal crops harvested maintained by NASS. Annual estimates of crop failure are based on differences in planted and harvested acreages of principal crops from the NASS series. Annual estimates of cultivated summer fallow historically have been based on fragmentary data from a variety of sources. Since the late 1970's, they have been based on data from the Census of Agriculture and unpublished NASS data.

Grassland pasture and range--Grassland pasture and range comprise all open land used primarily for pasture and grazing, including shrub and brushland types of pasture, grazing land with sagebrush and scattered mesquite, and all tame and native grasses, legumes, and other forage used for pasture or grazing. Because of the diversity in vegetative composition, grassland pasture and range are not always clearly distinguishable from other types of pasture and range. At one extreme, permanent grassland may merge with cropland pasture, or grassland may often be found in transitional areas with forested grazing land. This category does not include any land currently in the Federal Conservation Reserve Program (CRP).

No single agency other than ERS attempts to account for all land used for pasture and range. The estimates in this report are composites of data from the Census of Agriculture, Bureau of Land Management, Forest Service, Soil Conservation Service, and several other Federal agencies. The 591 million acres classed as grassland pasture and range in 1992 included 411 million acres in farms (19), made up of about 395 million acres of non-Federal land and 16 million acres of Federal land, plus 180 million acres not in farms, comprised of 128 million acres of Federal and 52 million acres of non-Federal land. All except acres in farms are estimates or approximations.

Forest land grazed--Forested pasture and range consist mainly of forest, brushgrown pasture, arid woodlands, and other areas within forested areas that have grass or other forage growth. The total acreage of forested grazing land includes woodland pasture in farms plus rough estimates of forested grazing land not in farms. For many States, the estimates include significant areas grazed only lightly or sporadically.

The Census of Agriculture and the Forest Service are the principal sources of data. Historical data from these and other sources were useful in developing the approximations.

Forest land--As defined by the Forest Service, forest land is "land at least 10% stocked by trees of any size, including land that formerly had such tree cover and that will be naturally or artificially regenerated. Forest land includes transition zones, such as areas between heavily forested and nonforested lands that are at least 10% stocked with forest trees and forest areas adjacent to urban and built up lands. Also included are pinyon-juniper and chaparral areas in the West and afforested areas" (10, p. 117). There are a number of components to total forest land, a few of which are described below.

Forest-use land--A modified total used in this inventory of 648 million acres of forest land that excludes an estimated 89 million acres in parks, wildlife areas, and similar special-purpose uses. To eliminate all overlap with other uses that exist because of multiple use is not feasible, but this reduced area is a more realistic approximation of the land that may be expected to serve normal forest uses as opposed to having forest cover. Forest-use land includes forested grazing land in this report.

Timberland--Forest land that is producing or is capable of producing crops (in excess of 20 cubic feet per acre per year) of industrial wood and not withdrawn from timber utilization by statute or administrative regulation (10, p. 121).

Productive reserved forest land--Forest land that would otherwise be classified as timberland except that it is withdrawn from timber utilization by statute or administrative regulation (10, p. 120).

Other forest land--Forest land other than timberland and reserved timberland. It includes available and reserved unproductive forest land, which is incapable of producing annually 20 cubic feet per acre of industrial wood under natural conditions because of adverse site conditions such as sterile soils, dry climate, poor drainage, high elevation, steepness, or rockiness (10, p. 119).

The Forest Service conducts a continuous, rather than periodic, survey of forest resources. At any time, the forest area data for individual States may vary in age by several years. This characteristic hampers estimates of other areas, especially pasture and range. However, these forest area data provide a good overall measure of forest area and are very useful in explaining changes and trends in land use. Forest land is given less emphasis than cropland and pasture

in this report because the Forest Service periodically analyzes the Nation's forest resources in considerable detail.

Special-use areas--Special uses in this report include areas in highway, road, and railroad rights-of-way and airports; Federal and State parks, wilderness areas, and wildlife refuges; and national defense and industrial areas. Estimates of the area in special uses were made because some of these uses affect the supply of agricultural land and all help account for

changes in land use. The sources and procedures used in developing these estimates are outlined in footnotes to appendix table 4.

Miscellaneous other land--Includes urban areas; miscellaneous special uses such as industrial and commercial sites in rural areas, cemeteries, golf courses, mining areas, and quarry sites; and marshes, swamps, sand dunes, bare rocks, deserts, tundra, and other unclassified land.

Appendix table 1--Major uses of land, by region and State, 1992

Region and State	Crop-land 1/	Grassland pasture & range 2/	Forest- use land 3/	Special uses 4/	Other land 5/	Total land area 6/
1,000 acres						
Northeast	14,337	2,987	68,454	9,549	16,074	111,401
Maine	591	38	17,461	452	1,211	19,753
New Hampshire	143	48	4,785	266	498	5,740
Vermont	585	191	4,474	338	332	5,920
Massachusetts	230	35	2,778	559	1,414	5,016
Rhode Island	26	2	377	59	205	669
Connecticut	188	37	1,718	294	864	3,101
New York	4,568	1,292	16,291	3,749	4,323	30,223
New Jersey	609	33	1,764	715	1,627	4,748
Pennsylvania	5,161	1,088	15,946	2,356	4,134	28,685
Delaware	488	11	386	102	264	1,251
Maryland	1,748	212	2,474	659	1,163	6,256
District of Columbia	0	0	0	0	39	39
Lake States	42,519	5,278	48,331	9,024	16,921	122,073
Michigan	8,623	1,736	17,442	2,469	6,088	36,358
Wisconsin	10,385	1,869	15,257	2,242	5,008	34,761
Minnesota	23,511	1,673	15,632	4,313	5,825	50,954
Corn Belt	99,608	12,325	31,270	7,264	14,134	164,601
Ohio	11,885	1,478	7,623	1,161	4,062	26,209
Indiana	13,404	1,261	4,296	897	3,099	22,957
Illinois	25,585	1,590	4,030	1,919	2,456	35,580
Iowa	28,602	1,518	1,944	1,566	2,130	35,760
Missouri	20,132	6,478	13,377	1,721	2,387	44,095
Northern Plains	106,602	69,695	3,693	6,329	7,979	194,298
North Dakota	29,622	10,951	338	1,603	1,642	44,156
South Dakota	20,382	23,947	1,450	1,602	1,192	48,573
Nebraska	24,103	20,917	568	1,480	2,134	49,202
Kansas	32,495	13,880	1,337	1,644	3,011	52,367
Appalachian	29,136	5,962	71,614	7,622	9,413	123,747
Virginia	4,436	1,728	15,353	1,441	2,385	25,343
West Virginia	1,386	524	11,916	680	909	15,415
North Carolina	5,935	984	18,710	2,271	3,280	31,180
Kentucky	9,702	1,359	12,360	997	1,011	25,429
Tennessee	7,677	1,367	13,275	2,233	1,828	26,380
Southeast	18,053	9,780	73,434	9,245	12,865	123,377
South Carolina	3,059	477	12,179	1,059	2,497	19,271
Georgia	6,528	1,689	23,631	1,874	3,346	37,068
Florida	3,927	5,697	15,683	4,939	4,312	34,558
Alabama	4,539	1,917	21,941	1,373	2,710	32,480

See footnotes at end of table.

Continued--

Appendix table 1--Major uses of land, by region and State, 1992--Continued

Region and State	Crop-land 1/	Grassland pasture & range 2/	Forest-use land 3/	Special uses 4/	Other land 5/	Total land area 6/
1,000 acres						
Delta States	23,739	6,357	48,269	3,711	9,159	91,235
Mississippi	7,419	2,206	16,991	870	2,539	30,025
Arkansas	10,426	2,532	17,423	1,418	1,529	33,328
Louisiana	5,894	1,619	13,855	1,423	5,091	27,882
Southern Plains	55,073	118,665	21,670	6,425	9,746	211,579
Oklahoma	16,014	17,364	7,122	1,396	2,058	43,954
Texas	39,059	101,301	14,548	5,029	7,688	167,625
Mountain	46,659	303,515	112,662	53,936	31,145	547,917
Montana	18,520	47,364	18,592	6,091	2,589	93,156
Idaho	6,677	20,219	18,033	5,227	2,805	52,961
Wyoming	3,056	44,905	5,766	6,296	2,124	62,147
Colorado	11,682	28,087	18,837	4,957	2,823	66,386
New Mexico	2,482	52,478	14,164	5,927	2,622	77,673
Arizona	1,303	40,641	15,968	12,320	2,499	72,731
Utah	2,108	23,760	14,078	5,549	7,093	52,588
Nevada	831	46,061	7,224	7,569	8,590	70,275
Pacific	23,928	54,480	79,278	23,283	22,907	203,876
Washington	8,235	7,590	17,985	6,298	2,504	42,612
Oregon	5,281	22,456	26,614	3,612	3,478	61,441
California	10,412	24,434	34,679	13,373	16,925	99,823
48 States	459,654	589,044	558,675	136,388	150,343	1,894,104
Alaska	96	1,156	87,936	143,616	132,235	365,039
Hawaii	294	976	1,435	759	647	4,111
United States	460,044	591,176	648,046	280,763	283,225	2,263,254

1/ Total acreage in the crop rotation.

2/ Grassland and other nonforested pasture and range in farms excluding cropland used only for pasture, plus estimates of open or nonforested grazing land not in farms.

3/ Excludes an estimated 89 million acres in parks and other special uses of land

4/ Transportation, recreation, and other special uses of land specified in app. table 4.

5/ Miscellaneous areas such as marshes, open swamps, bare rock areas, deserts, and urban and other special uses not inventoried.

6/ Approximate land area as established by the Bureau of the Census in conjunction with the 1990 Census of Population (20).

Appendix table 2--Major uses of cropland, by region and State, 1992

Region and State	Crops 1/	Idle 2/	Pasture 3/	Total
1,000 acres				
Northeast	11,069	1,233	2,035	14,337
Maine	410	108	73	591
New Hampshire	109	8	26	143
Vermont	408	19	158	585
Massachusetts	171	14	45	230
Rhode Island	19	3	4	26
Connecticut	142	13	33	188
New York	3,377	481	710	4,568
New Jersey	485	55	69	609
Pennsylvania	4,004	419	738	5,161
Delaware	464	14	10	488
Maryland	1,480	99	169	1,748
Lake States	34,688	5,192	2,639	42,519
Michigan	7,068	1,038	517	8,623
Wisconsin	8,148	1,151	1,086	10,385
Minnesota	19,472	3,003	1,036	23,511
Corn Belt	80,733	8,780	10,095	99,608
Ohio	10,043	951	891	11,885
Indiana	11,735	964	705	13,404
Illinois	23,012	1,670	903	25,585
Iowa	23,414	2,994	2,194	28,602
Missouri	12,529	2,201	5,402	20,132
Northern Plains	84,543	11,458	10,601	106,602
North Dakota	24,444	3,463	1,715	29,622
South Dakota	15,458	2,439	2,485	20,382
Nebraska	19,428	2,089	2,586	24,103
Kansas	25,213	3,467	3,815	32,495
Appalachian	16,631	3,432	9,073	29,136
Virginia	2,562	350	1,524	4,436
West Virginia	644	80	662	1,386
North Carolina	4,315	785	835	5,935
Kentucky	4,977	1,271	3,454	9,702
Tennessee	4,133	946	2,598	7,677
Southeast	10,424	3,421	4,208	18,053
South Carolina	1,903	643	513	3,059
Georgia	3,918	1,423	1,187	6,528
Florida	2,451	503	973	3,927
Alabama	2,152	852	1,535	4,539

See footnotes at end of table.

Continued--

Appendix table 2--Major uses of cropland, by region and State, 1992--continued

Region and State	Crops 1/	Idle 2/	Pasture 3/	Total
1,000 acres				
Delta States	16,478	2,991	4,270	23,739
Mississippi	4,794	1,298	1,327	7,419
Arkansas	7,566	793	2,067	10,426
Louisiana	4,118	900	876	5,894
Southern Plains	31,570	7,988	15,515	55,073
Oklahoma	9,996	1,556	4,462	16,014
Texas	21,574	6,432	11,053	39,059
Mountain	33,016	7,913	5,730	46,659
Montana	13,941	3,028	1,551	18,520
Idaho	4,799	1,063	815	6,677
Wyoming	1,984	351	721	3,056
Colorado	8,348	2,157	1,177	11,682
New Mexico	1,303	649	530	2,482
Arizona	961	231	111	1,303
Utah	1,202	345	561	2,108
Nevada	478	89	264	831
Pacific	18,237	3,095	2,596	23,928
Washington	6,500	1,184	551	8,235
Oregon	3,720	743	818	5,281
California	8,017	1,168	1,227	10,412
48 States	337,389	55,503	66,762	459,654
Alaska	28	61	7	96
Hawaii	136	120	38	294
United States	337,553	55,684	66,807	460,044

1/ Includes cropland harvested, crop failure, and cultivated summer fallow.

Estimates are based on (15, 19).

2/ Estimates based on (15, 19).

3/ As reported in (19).

Appendix table 3--Total pasture and range, by region and State, 1992

Region and State	Grassland pasture and range			Forest land grazed 3/	Total pasture and range
	Cropland pasture 1/	Grassland and other pasture and range 2/	Total		

1,000 acres					
Northeast	2,035	2,987	5,022	1,409	6,431
Maine	73	38	111	83	194
New Hampshire	26	48	74	33	107
Vermont	158	191	349	193	542
Massachusetts	45	35	80	36	116
Rhode Island	4	2	6	5	11
Connecticut	33	37	70	29	99
New York	710	1,292	2,002	404	2,406
New Jersey	69	33	102	16	118
Pennsylvania	738	1,088	1,826	500	2,326
Delaware	10	11	21	10	31
Maryland	169	212	381	100	481
Lake States	2,639	5,278	7,917	3,088	11,005
Michigan	517	1,736	2,253	337	2,590
Wisconsin	1,086	1,869	2,955	1,464	4,419
Minnesota	1,036	1,673	2,709	1,287	3,996
Corn Belt	10,095	12,325	22,420	6,593	29,013
Ohio	891	1,478	2,369	626	2,995
Indiana	705	1,261	1,966	558	2,524
Illinois	903	1,590	2,493	1,038	3,531
Iowa	2,194	1,518	3,712	1,170	4,882
Missouri	5,402	6,478	11,880	3,201	15,081
Northern Plains	10,601	69,695	80,296	1,606	81,902
North Dakota	1,715	10,951	12,666	212	12,878
South Dakota	2,485	23,947	26,432	814	27,246
Nebraska	2,586	20,917	23,503	265	23,768
Kansas	3,815	13,880	17,695	315	18,010
Appalachian	9,073	5,962	15,035	5,181	20,216
Virginia	1,524	1,728	3,252	1,005	4,257
West Virginia	662	524	1,186	810	1,996
North Carolina	835	984	1,819	708	2,527
Kentucky	3,454	1,359	4,813	1,409	6,222
Tennessee	2,598	1,367	3,965	1,249	5,214
Southeast	4,208	9,780	13,988	7,297	21,285
South Carolina	513	477	990	486	1,476
Georgia	1,187	1,689	2,876	1,400	4,276
Florida	973	5,697	6,670	3,807	10,477
Alabama	1,535	1,917	3,452	1,604	5,056

See footnotes at end of table.

Continued--

Appendix table 3--Total pasture and range, by region and State, 1992--continued

Region and State	Grassland pasture and range			Forest land grazed 3/	Total pasture and range
	Cropland pasture 1/	Grassland and other pasture and range 2/	Total		
1,000 acres					
Delta States	4,270	6,357	10,627	15,908	26,535
Mississippi	1,327	2,206	3,533	4,964	8,497
Arkansas	2,067	2,532	4,599	4,927	9,526
Louisiana	876	1,619	2,495	6,017	8,512
Southern Plains	15,515	118,665	134,180	11,554	145,734
Oklahoma	4,462	17,364	21,826	4,601	26,427
Texas	11,053	101,301	112,354	6,953	119,307
Mountain	5,730	303,515	309,245	66,735	375,980
Montana	1,551	47,364	48,915	7,147	56,062
Idaho	815	20,219	21,034	4,875	25,909
Wyoming	721	44,905	45,626	3,709	49,335
Colorado	1,177	28,087	29,264	11,536	40,800
New Mexico	530	52,478	53,008	9,361	62,369
Arizona	111	40,641	40,752	13,224	53,976
Utah	561	23,760	24,321	10,618	34,939
Nevada	264	46,061	46,325	6,265	52,590
Pacific	2,596	54,480	57,076	25,641	82,717
Washington	551	7,590	8,141	3,113	11,254
Oregon	818	22,456	23,274	11,841	35,115
California	1,227	24,434	25,661	10,687	36,348
48 States	66,762	589,044	655,806	145,012	800,818
Alaska	7	1,156	1,163	59	1,222
Hawaii	38	976	1,014	423	1,437
United States	66,807	591,176	657,983	145,494	803,477

1/ As reported in (19).

2/ Grassland and other nonforested pasture and range in farms (19) plus estimates of open or nonforested grazing land not in farms.

3/ Woodland grazed in farms (19) plus an approximation of forested grazing land not in farms.

Appendix table 4--Land in special-use areas, by region and State, 1992

Region and State	Rural transportation areas 1/	Rural parks 2/	Wildlife areas 3/	Defense and industrial areas 4/	Farmsteads, farm roads, and lanes 5/	Total
1,000 acres						
Northeast	1,869	4,963	2,039	401	277	9,549
Maine	176	172	77	13	14	452
New Hampshire	90	144	20	7	5	266
Vermont	70	158	86	12	12	338
Massachusetts	131	329	68	19	12	559
Rhode Island	16	9	33	0	1	59
Connecticut	85	180	22	0	7	294
New York	465	2,904	143	156	81	3,749
New Jersey	90	356	190	60	19	715
Pennsylvania	630	395	1,211	25	95	2,356
Delaware	24	20	48	4	6	102
Maryland	92	296	141	105	25	659
Lake States	2,943	2,667	2,669	87	658	9,024
Michigan	873	1,072	352	17	155	2,469
Wisconsin	903	315	728	67	229	2,242
Minnesota	1,167	1,280	1,589	3	274	4,313
Corn Belt	3,606	1,105	925	287	1,341	7,264
Ohio	524	242	132	39	224	1,161
Indiana	443	85	56	112	201	897
Illinois	1,056	431	127	50	255	1,919
Iowa	884	84	242	19	337	1,566
Missouri	699	263	368	67	324	1,721
Northern Plains	3,503	654	1,148	208	816	6,329
North Dakota	813	92	516	14	168	1,603
South Dakota	734	375	321	9	163	1,602
Nebraska	858	156	222	22	222	1,480
Kansas	1,098	31	89	163	263	1,644
Appalachian	2,040	2,191	1,893	932	566	7,622
Virginia	322	483	278	259	99	1,441
West Virginia	192	363	79	0	46	680
North Carolina	611	624	591	323	122	2,271
Kentucky	455	152	61	164	165	997
Tennessee	460	569	884	186	134	2,233
Southeast	2,154	3,598	1,490	1,641	362	9,245
South Carolina	449	125	139	285	61	1,059
Georgia	510	235	503	534	92	1,874
Florida	622	3,147	413	653	104	4,939
Alabama	573	91	435	169	105	1,373
Delta States	1,178	483	1,425	242	383	3,711
Mississippi	382	146	195	8	139	870
Arkansas	411	268	509	93	137	1,418
Louisiana	385	69	721	141	107	1,423

See footnotes at end of table.

continued--

Appendix table 4--Land in special-use areas, by region and State, 1992--continued

Region and State	Rural transportation areas 1/	Rural parks 2/	Wildlife areas 3/	Defense and industrial areas 4/	Farmsteads, farm roads, and lanes 5/	Total
1,000 acres						
Southern Plains	2,308	1,856	808	656	797	6,425
Oklahoma	627	101	254	182	232	1,396
Texas	1,681	1,755	554	474	565	5,029
Mountain	3,205	30,246	7,417	12,567	501	53,936
Montana	557	4,683	731	7	113	6,091
Idaho	284	4,110	129	622	82	5,227
Wyoming	428	5,597	205	25	41	6,296
Colorado	580	3,498	301	469	109	4,957
New Mexico	376	2,029	467	3,003	52	5,927
Arizona	346	5,622	2,808	3,509	35	12,320
Utah	288	2,994	440	1,779	48	5,549
Nevada	346	1,713	2,336	3,153	21	7,569
Pacific	1,945	17,796	1,495	1,565	482	23,283
Washington	476	4,772	500	445	105	6,298
Oregon	450	2,383	650	23	106	3,612
California	1,019	10,641	345	1,097	271	13,373
48 States	24,751	65,559	21,309	18,586	6,183	136,388
Alaska	441	64,159	77,240	1,774	2	143,616
Hawaii	38	294	291	115	21	759
United States	25,230	130,012	98,840	20,475	6,206	280,763

1/ Includes rural highways and roads, railroads, and airports. Estimates for highways were derived by applying average right-of-way widths to the mileage in different highway systems reported by the Federal Highway Administration. Estimates of acreage in railroad rights-of-way are based on State-by-State changes in mileage reported by the Interstate Commerce Commission. Estimates of acreage in airports based on information of active airports supplied by the Federal Aviation Administration. Excludes airports used strictly for personal or military use.

2/ Areas in national and State park systems and national forest wilderness and primitive areas plus about 2.5 million acres in New York classified as State forest preserves. Generally excludes parks in urban places and large water bodies. Based on data from reports and records of the National Park Service, U.S. Forest Service, and State agencies.

3/ Areas administered by the U.S. Fish and Wildlife Service and State wildlife agencies. Does not include Federal areas under the primary jurisdiction of another agency or areas leased for wildlife purposes. Data on Federal areas are from reports and records of the U.S. Fish and Wildlife Service. State estimates mainly are acreages compiled by the Council on Environmental Quality updated through 1991 with acreages acquired through the Dingell-Johnson and Pittman-Robertson programs of Federal assistance.

4/ As reported by the U.S. General Services Administration, 1988. Includes land administered by the U.S. Department of Defense for defense purposes (18.8 million acres) and land administered by the U.S. Department of Energy (2.1 million acres).

5/ Estimates calculated on the basis of State-by-State number of farms and acreage of unclassified land in farms.

Appendix table 5--Total forest land by major class, by region and State, 1992

Region and State	Timberland			Reserved timber- land and other forest land 1/	Total forest land		
	Federal	Non-Federal	Total 2/		Federal	Non-Federal	Total 2/
1,000 acres							
Northeast	1,515	66,018	67,533	5,720	1,933	71,320	73,253
Maine	59	16,928	16,987	546	99	17,434	17,533
New Hampshire	535	4,225	4,760	221	737	4,244	4,981
Vermont	232	4,197	4,429	109	321	4,217	4,538
Massachusetts	17	2,943	2,960	243	17	3,186	3,203
Rhode Island	1	370	371	30	0	401	401
Connecticut	14	1,754	1,768	51	15	1,804	1,819
New York	96	15,648	15,744	2,969	97	18,616	18,713
New Jersey	19	1,845	1,864	143	28	1,979	2,007
Pennsylvania	517	15,333	15,850	1,119	567	16,402	16,969
Delaware	0	376	376	13	2	387	389
Maryland	25	2,399	2,424	276	50	2,650	2,700
Lake States	5,886	41,250	47,136	3,348	7,227	43,257	50,484
Michigan	2,438	15,004	17,442	811	2,640	15,613	18,253
Wisconsin	1,429	13,492	14,921	592	1,632	13,881	15,513
Minnesota	2,019	12,754	14,773	1,945	2,955	13,763	16,718
Corn Belt	2,427	28,787	31,214	1,411	2,724	29,901	32,625
Ohio	188	7,379	7,567	296	188	7,675	7,863
Indiana	329	3,967	4,296	143	357	4,082	4,439
Illinois	292	3,738	4,030	236	315	3,951	4,266
Iowa	44	1,900	1,944	106	74	1,976	2,050
Missouri	1,574	11,803	13,377	630	1,790	12,217	14,007
Northern Plains	993	2,536	3,529	701	1,104	3,129	4,233
North Dakota	12	326	338	124	22	440	462
South Dakota *	915	532	1,447	240	988	702	1,690
Nebraska	29	507	536	186	43	679	722
Kansas	37	1,171	1,208	151	51	1,308	1,359
Appalachian	6,104	65,449	71,553	2,037	7,738	65,852	73,590
Virginia	1,667	13,625	15,292	566	2,152	13,706	15,858
West Virginia	996	10,920	11,916	212	1,185	10,943	12,128
North Carolina	1,520	17,190	18,710	568	1,984	17,294	19,278
Kentucky	884	11,476	12,360	354	1,078	11,636	12,714
Tennessee	1,037	12,238	13,275	337	1,339	12,273	13,612
Southeast	4,710	68,024	72,734	2,183	5,942	68,975	74,917
South Carolina	913	11,266	12,179	78	956	11,301	12,257
Georgia	1,371	22,260	23,631	506	1,720	22,417	24,137
Florida *	1,561	13,422	14,983	1,566	2,369	14,180	16,549
Alabama	865	21,076	21,941	33	897	21,077	21,974

See footnote at end of table.

Continued--

Appendix table 5--Total forest land by major class, by region and State, 1992--Continued

Region and State	Timberland			Reserved timber- land and other forest land 1/	Total forest land		
	Federal	Non-Federal	Total 2/		Federal	Non-Federal	Total 2/
1,000 acres							
Delta States	5,021	43,248	48,269	459	5,261	43,467	48,728
Mississippi	1,492	15,499	16,991	9	1,501	15,499	17,000
Arkansas	2,727	14,696	17,423	441	2,949	14,915	17,864
Louisiana	802	13,053	13,855	9	811	13,053	13,864
Southern Plains	1,172	17,498	18,670	8,062	1,291	25,441	26,732
Oklahoma	468	5,654	6,122	1,417	467	7,072	7,539
Texas	704	11,844	12,548	6,645	824	18,369	19,193
Mountain	38,751	20,348	59,099	76,401	95,043	40,457	135,500
Montana	9,184	6,679	15,863	6,649	15,496	7,016	22,512
Idaho	10,256	4,218	14,474	7,147	17,089	4,532	21,621
Wyoming *	2,685	1,647	4,332	5,634	7,712	2,254	9,966
Colorado *	8,144	3,596	11,740	9,598	14,634	6,704	21,338
New Mexico	3,365	2,055	5,420	9,876	8,363	6,933	15,296
Arizona	2,694	1,274	3,968	15,627	10,727	8,868	19,595
Utah *	2,314	764	3,078	13,156	12,616	3,618	16,234
Nevada	109	115	224	8,714	8,406	532	8,938
Pacific	25,839	28,213	54,052	31,691	43,419	42,324	85,743
Washington	5,031	11,207	16,238	4,245	8,129	12,354	20,483
Oregon	12,129	9,485	21,614	6,383	16,060	11,937	27,997
California	8,679	7,521	16,200	21,063	19,230	18,033	37,263
48 States 2/	92,414	381,374	473,787	132,014	171,679	434,123	605,802
Alaska	4,241	10,827	15,068	114,063	77,401	51,730	129,131
Hawaii *	0	700	700	1,048	52	1,696	1,748
United States 2/	96,655	392,901	489,555	247,125	249,132	487,549	736,681

* indicates State data have not been updated since 1987.

1/ Includes 89 million acres of forest land in parks, wildlife areas, and other special land uses. 2/ Distribution may not add to totals due to rounding.

Sources: (10) and unpublished material furnished by the U.S. Forest Service.

Appendix table 6--Cropland used for crops, the 48 conterminous States, 1910-94

Year	Cropland harvested 1/	Crop failure	Cultivated summer fallow	Total	Index 2/
-----Million acres-----					--1977 = 100--
1910	317	9	4	330	87
1911	322	10	5	337	89
1912	320	12	5	337	89
1913	324	11	5	340	90
1914	326	11	5	342	90
1915	332	11	5	348	92
1916	332	11	5	348	92
1917	341	11	5	357	94
1918	353	12	5	370	98
1919	355	14	5	374	99
1920	351	12	5	368	97
1921	350	12	6	368	97
1922	346	13	6	365	97
1923	345	14	6	365	97
1924	346	13	6	365	97
1925	351	12	7	370	98
1926	350	14	8	372	98
1927	349	15	9	373	99
1928	352	14	10	376	99
1929	356	13	10	379	100
1930	360	11	11	382	101
1931	356	17	11	384	101
1932	361	11	12	384	102
1933	331	33	14	378	100
1934	296	64	15	375	99
1935	336	25	16	377	100
1936	314	43	18	375	99
1937	338	21	20	379	100
1938	340	13	19	372	98
1939	321	21	21	363	96
1940	331	16	21	368	97
1941	335	12	20	367	97
1942	339	11	20	370	98
1943	348	12	17	377	100
1944	353	10	16	379	100
1945	345	9	18	372	98
1946	343	8	18	369	98
1947	346	8	19	373	99
1948	348	9	21	378	100
1949	352	9	26	387	102
1950	336	12	29	377	100
1951	336	17	28	381	102
1952	341	11	28	380	100
1953	341	13	26	380	100
1954	339	13	28	380	100
1955	333	16	29	378	100
1956	317	22	30	369	98
1957	316	12	30	358	95
1958	316	9	30	355	94
1959	318	10	31	359	95
1960	317	6	32	355	94

See footnotes at end of table.

Continued--

Appendix table 6--Cropland used for crops, the 48 conterminous States, 1910-94--Continued

Year	Cropland harvested 1/	Crop failure	Cultivated summer fallow	Total	Index 2/
-----Million acres-----					--1977 = 100--
1961	296	11	33	340	90
1962	287	10	34	331	88
1963	291	10	36	337	89
1964	292	6	37	335	89
1965	292	6	38	336	89
1966	289	5	38	332	88
1967	301	7	32	340	90
1968	296	6	33	335	89
1969	286	6	41	333	88
1970	289	5	38	332	88
1971	300	6	34	340	90
1972	289	7	38	334	88
1973	316	5	31	352	93
1974	322	8	31	361	96
1975	330	6	31	367	97
1976	330	8	31	369	98
1977	338	9	31	378	100
1978	330	7	32	369	97
1979	340	6	32	378	100
1980	341	11	30	382	101
1981	351	6	30	387	102
1982	347	5	31	383	101
1983	294	5	34	333	88
1984	337	6	30	373	99
1985	334	7	31	372	98
1986	316	9	32	357	94
1987	293	6	32	331	88
1988	287	10	30	327	87
1989	306	8	27	341	90
1990	310	6	25	341	90
1991	306	7	24	337	89
1992	305	8	24	337	89
1993	297	11	22	330	87
1994 3/	310	7	22	339	90
1995 3/	304	7	22	333	88

1/ Land from which one or more crops were harvested.

2/ Computed from unrounded data.

3/ Preliminary.

Sources: Estimates for 1910-87 are from (2); those for 1987-90 are from (10); and from 1991-95 are unpublished revisions.

Appendix table 7--Urban area, by region and State, 1960-92

Region and State	1960 1/	1970 1/	1980 1/	1990 2/	1992 3/
	1,000 acres				
Northeast	6,573	7,445	9,438	10,085	10,473
Maine	556	471	581	463	476
New Hampshire	310	323	359	328	329
Vermont	51	41	78	91	103
Massachusetts	909	1,027	1,286	1,376	1,385
Rhode Island	123	172	182	191	202
Connecticut	574	578	745	802	813
New York	1,353	1,570	2,058	2,167	2,282
New Jersey	1,129	1,212	1,392	1,554	1,586
Pennsylvania	1,186	1,450	1,770	1,930	2,018
Delaware	53	79	111	134	146
Maryland	290	483	836	1,010	1,094
District of Columbia	39	39	40 4/	39	39
Lake States	2,340	2,957	3,741	3,892	4,010
Michigan	1,017	1,286	1,540	1,705	1,760
Wisconsin	616	766	902	1,010	1,053
Minnesota	707	905	1,299	1,177	1,197
Corn Belt	3,861	5,416	6,521	7,302	7,626
Ohio	1,415	1,816	2,093	2,309	2,415
Indiana	520	829	1,012	1,140	1,179
Illinois	992	1,400	1,730	1,941	2,022
Iowa	416	573	666	704	712
Missouri	518	798	1,020	1,208	1,298
Northern Plains	463	697	938	1,087	1,127
North Dakota	39	62	95	108	111
South Dakota	62	81	106	130	138
Nebraska	121	178	232	252	264
Kansas	241	376	505	597	614
Appalachian	1,851	2,850	4,395	5,276	5,552
Virginia	486	768	1,183	1,401	1,471
West Virginia	138	150	200	242	254
North Carolina	488	688	1,164	1,448	1,562
Kentucky	247	404	570	675	693
Tennessee	492	840	1,278	1,510	1,572
Southeast	2,463	3,953	6,311	7,708	8,042
South Carolina	267	408	757	912	982
Georgia	612	920	1,454	1,800	1,923
Florida	881	1,573	2,617	3,282	3,358
Alabama	703	1,052	1,483	1,714	1,779

See footnotes at end of table.

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Appendix table 7--Urban area, by region and State, 1960-92--continued

Region and State	1960 1/	1970 1/	1980 1/	1990 2/	1992 3/
	1,000 acres				
Delta States	918	1,273	1,981	2,528	2,717
Mississippi	228	366	580	723	748
Arkansas	222	384	605	783	860
Louisiana	468	523	796	1,022	1,109
Southern Plains	2,593	3,684	5,153	6,077	6,403
Oklahoma	480	814	1,136	1,167	1,293
Texas	2,113	2,870	4,017	4,910	5,110
Mountain	1,133	1,800	2,871	4,245	4,509
Montana	54	76	118	158	171
Idaho	74	105	154	206	223
Wyoming	36	49	91	149	166
Colorado	203	343	597	843	909
New Mexico	184	255	361	510	541
Arizona	320	463	892	1,313	1,371
Utah	190	254	420	464	497
Nevada	72	255	238	602	631
Pacific	3,013	4,268	5,503	6,899	7,377
Washington	422	607	845	1,136	1,240
Oregon	239	333	458	531	565
California	2,352	3,328	4,200	5,232	5,572
48 States	25,208	34,343	46,852	55,099	57,836
Alaska	14	68	285	410	433
Hawaii	278	146	177	412	517
United States	25,500	34,557	47,314	55,921	58,786

1/ Area in the urbanized areas and places of 2,500 or more population outside urbanized areas developed by the Geography Division, Bureau of the Census, and summarized in (4).

2/ Data from (21).

3/ Based on trends in urban population and land per capita in urban areas.

4/ Minor change here reported by the Bureau of the Census represents measurement and rounding error rather than any real change.

Appendix table 8--Irrigated land in farms, by region and State, 1949-92

Region and State	1949	1954	1959	1964	1969	1974	1978	1982	1987	1992
	1,000 acres									
Northeast	87	189	206	280	226	242	247	270	326	312
Maine	3	1	2	4	6	6	7	6	6	10
New Hampshire	1	1	1	3	2	2	2	1	3	2
Vermont	--	1	2	2	--	1	1	1	2	2
Massachusetts	18	23	20	24	19	19	17	17	20	20
Rhode Island	2	1	--	1	2	2	3	2	4	3
Connecticut	8	12	5	14	9	7	7	7	7	6
New York	19	59	58	79	55	55	56	52	51	47
New Jersey	28	59	74	96	72	89	77	83	91	80
Pennsylvania	7	18	17	23	19	18	15	18	30	23
Delaware	--	6	16	18	20	20	34	44	61	62
Maryland	1	8	11	16	22	23	28	39	51	57
Lake States	28	50	87	129	219	303	733	860	954	1,067
Michigan	14	23	40	49	77	97	226	286	315	366
Wisconsin	10	18	32	62	106	128	235	259	285	331
Minnesota	4	9	15	18	36	78	272	315	354	370
Corn Belt	16	69	87	129	284	298	651	820	1,037	1,423
Ohio	6	15	12	17	22	22	25	28	32	29
Indiana	5	12	17	17	34	33	75	132	170	241
Illinois	2	7	10	14	51	54	130	166	208	328
Iowa	1	2	18	22	21	39	101	91	92	116
Missouri	2	33	30	59	156	150	320	403	535	709
Northern Plains	1,128	1,631	3,004	3,354	4,590	6,200	8,845	9,253	8,675	9,550
North Dakota	35	38	48	51	63	71	141	163	168	187
South Dakota	78	90	116	130	148	152	335	376	362	371
Nebraska	876	1,171	2,078	2,169	2,857	3,967	5,683	6,039	5,682	6,312
Kansas	139	332	762	1,004	1,522	2,010	2,686	2,675	2,463	2,680
Appalachian	6	84	117	175	131	102	160	166	296	243
Virginia	3	22	31	51	37	28	42	43	79	62
West Virginia	--	1	1	2	3	2	1	1	3	3
North Carolina	2	25	66	97	59	51	90	81	138	113
Kentucky	--	13	8	14	20	11	14	23	38	28
Tennessee	1	23	11	11	12	10	13	18	38	37
Southeast	374	491	490	1,312	1,470	1,695	2,534	2,307	2,428	2,666
South Carolina	6	22	25	19	15	10	32	81	81	76
Georgia	3	24	34	64	79	112	463	575	640	725
Florida	365	428	414	1,217	1,365	1,559	1,980	1,585	1,623	1,783
Alabama	--	17	17	12	11	14	59	66	84	82

See footnotes at end of table.

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Appendix table 8--Irrigated land in farms, by region and State, 1949-92--continued

Region and State	1949	1954	1959	1964	1969	1974	1978	1982	1987	1992
1,000 acres										
Delta States	1,004	1,698	1,297	1,678	1,862	1,813	2,673	3,147	3,690	4,483
Mississippi	5	132	100	123	150	162	309	431	637	883
Arkansas	422	858	712	974	1,010	949	1,683	2,022	2,406	2,702
Louisiana	577	708	485	581	702	702	681	694	647	898
Southern Plains	3,166	4,815	5,854	6,687	7,412	7,109	7,549	6,068	4,749	5,424
Oklahoma	34	108	198	302	524	515	602	492	478	512
Texas	3,132	4,707	5,656	6,385	6,888	6,594	6,947	5,576	4,271	4,912
Mountain	11,642	11,209	12,095	12,811	12,799	12,720	14,775	14,056	13,320	13,266
Montana	1,717	1,891	1,875	1,893	1,841	1,759	2,070	2,023	1,997	1,978
Idaho	2,137	2,325	2,577	2,802	2,761	2,859	3,475	3,450	3,219	3,260
Wyoming	1,432	1,263	1,470	1,571	1,523	1,460	1,662	1,565	1,518	1,465
Colorado	2,872	2,263	2,685	2,690	2,895	2,874	3,431	3,201	3,014	3,170
New Mexico	655	650	731	813	823	867	891	807	718	738
Arizona	964	1,177	1,152	1,125	1,178	1,153	1,196	1,098	914	956
Utah	1,138	1,073	1,062	1,092	1,025	970	1,169	1,082	1,161	1,143
Nevada	727	567	543	825	753	778	881	830	779	556
Pacific	8,334	9,316	9,787	10,357	9,983	10,619	12,026	11,907	10,763	10,834
Washington	589	778	1,007	1,150	1,224	1,309	1,639	1,638	1,519	1,641
Oregon	1,307	1,490	1,384	1,608	1,519	1,561	1,881	1,808	1,648	1,622
California	6,438	7,048	7,396	7,599	7,240	7,749	8,506	8,461	7,596	7,571
48 States 1/	25,785	29,552	33,022	36,912	38,975	41,100	50,190	48,855	46,235	49,268
Alaska	--	--	--	--	1	1	1	1	2	2
Hawaii	117	--	141	144	146	142	159	146	149	134
United States 1/	25,902	29,552	33,163	37,056	39,122	41,243	50,350	49,002	46,386	49,404

-- = Fewer than 500 acres.

1/ Data by States and regions may not add to totals due to rounding.

Note: Because of changes in definition and procedures, data are not strictly comparable among census years. Data represent acres actually irrigated in the census year rather than acres that had irrigation potential.