

Forest land has a similar wide variation in productivity. Of the 648 million acres of forest land in continental United States reported in the recent Timber Resource Review of the United States Forest Service, only 484 million acres are classified as commercial forest land. Of the commercial forest land, only 179 million acres are in sawtimber stands and 42 million acres of the commercial forest land are presently nonstocked.

Factors affecting land use.—The question of how land resources are used and how much production comes from different major uses is determined largely by four groups of factors affecting land use: (1) Physical conditions—climate, soil, topography, and vegetative cover; (2) control or ownership of the land; (3) requirements for the different commodities produced on the land; and (4) the status of technology relevant to land use.

Land use changes.—The historical background of land use must also be studied as a significant part of each of the above factors. For the United States, recognition of two general periods of land-use development are especially significant in acquiring an understanding of the present land-use situation. Before World War I, while new settlement of the land was still taking place, changes in the major uses of land occurred rapidly. Forests were cleared

and the land was converted to cropland and pasture. Native grasslands were plowed and used for crop production for the first time. Mistakes were made in the selection of land suitable for cultivation, but often these appeared to be of little importance while new lands were still available.

During the last four decades, total acreages of cropland and pasture and grazing land have not increased or decreased greatly, but significant changes have nonetheless been taking place. Shifts in cropland and pastureland among regions have occurred. Cropland is becoming more concentrated on land with fertile soils and level topography. Land that is rough or otherwise physically ill-suited for crop production is reverting to pasture and forest. Gradual improvement of land being used for cropland and pasture is taking place through irrigation, drainage, clearing, and flood control. In some areas, urban, industrial, and related nonagricultural uses are encroaching on land formerly farmed.

The present lack of balance between crops grown and the types of products in strongest demand indicates that future basic adjustments in land use are likely to occur. Careful study of the present patterns and past shifts of land use as these are affected by different factors or conditions will facilitate future changes that are needed in the major uses of land.

LAND USE—1954

Distribution of the 1,904 million acres of land in the continental United States among the major uses is shown in the accompanying chart. The total land in farms reported by the 1954 Census of Agriculture was 1,158 million acres, which is nearly identical with that reported for 1950. However, the distribution of the land in farms among the major uses has changed considerably. The 746 million acres of land not in farms also break down into the various major uses differently in 1954 from the estimates made for 1950 by the former Bureau of Agricultural Economics. Some of these shifts in acreage among the major uses represent actual changes while others are related in part to difficulties in classification and definition.

If the division between land in farms and land not in farms is omitted, the total land in each of the five major uses would be allocated as follows:

	<i>Million acres</i>
Cropland (including that used only for pasture)-----	460
Pasture and grazing land (including woodland and forest land pastured or grazed)-----	934
Forest and woodland not pastured or grazed-----	314
Special-use areas (cities, parks, highways, railroads, airports, wildlife refuges, defense areas, farmsteads, farm lanes, and related uses)-----	110
Miscellaneous other land (deserts, swamps, sand dunes, bare-rock areas, beaches, etc.)-----	86
Total-----	1,904

Cropland is made up of cropland harvested (333 million acres), cropland used only for pasture (66 million acres), and cropland not harvested and not pastured (61 million acres). Cropland not harvested and not pastured includes cultivated summer fallow, land on which all crops failed, land in soil-improvement crops only, and land seeded to crops for harvest after 1954. Cultivated summer fallow totaled 29 million acres in 1954. This was 3 million acres more than was reported by the 1950 Census of Agriculture. This increase may be attributed principally to acreage allotments on wheat and cotton that were in effect for 1954 but were not applicable for these crops in 1949. Land on which crops failed in 1954 totaled about 13 million acres according to estimates prepared by the Production Economics Research Branch, Agricultural Research Service, United States Department of Agriculture.

In order to obtain the total acreage of all pasture and grazing land, the 66 million acres of cropland used only for pasture can be added to the 934 million acres of other pasture and grazing land. This makes a total of 1 billion acres used for pasture and grazing. Pasture in farms totals 647 million acres and grazing land not in farms accounts for the remaining 353 million acres.

Woodland and forest land total 615 million acres. This total is obtained by adding the 301 million acres of woodland and forest pastured or grazed to the 314 million acres not used for that purpose. Woodland and forest land in farms totals 197 million acres, while that not in farms accounts for 418 million acres. The 615 million acres of woodland and forest land does not include 26 million acres of reserved forest land that is set apart in parks, wildlife refuges, and other special uses.

Special-use areas in the aggregate occupy only about 5 percent of the total land area, but the competition between such uses and agricultural uses is an important problem in many areas. Frequently, good agricultural land may be diverted to these uses when land of lower agricultural value is available. Whether or not this is in the best interests of the Nation is a question that needs to be answered.

The 86 million acres of land classified under miscellaneous other uses is for the most part land that is not used for other purposes. Of this 86 million acres of miscellaneous other land, it is estimated that 20 million acres is wasteland in farms. It does not include all deserts, swamps, sand dunes, beaches, and bare-rock areas. Frequently, such areas are a part of national defense areas, parks, wildlife areas, and other related uses.

