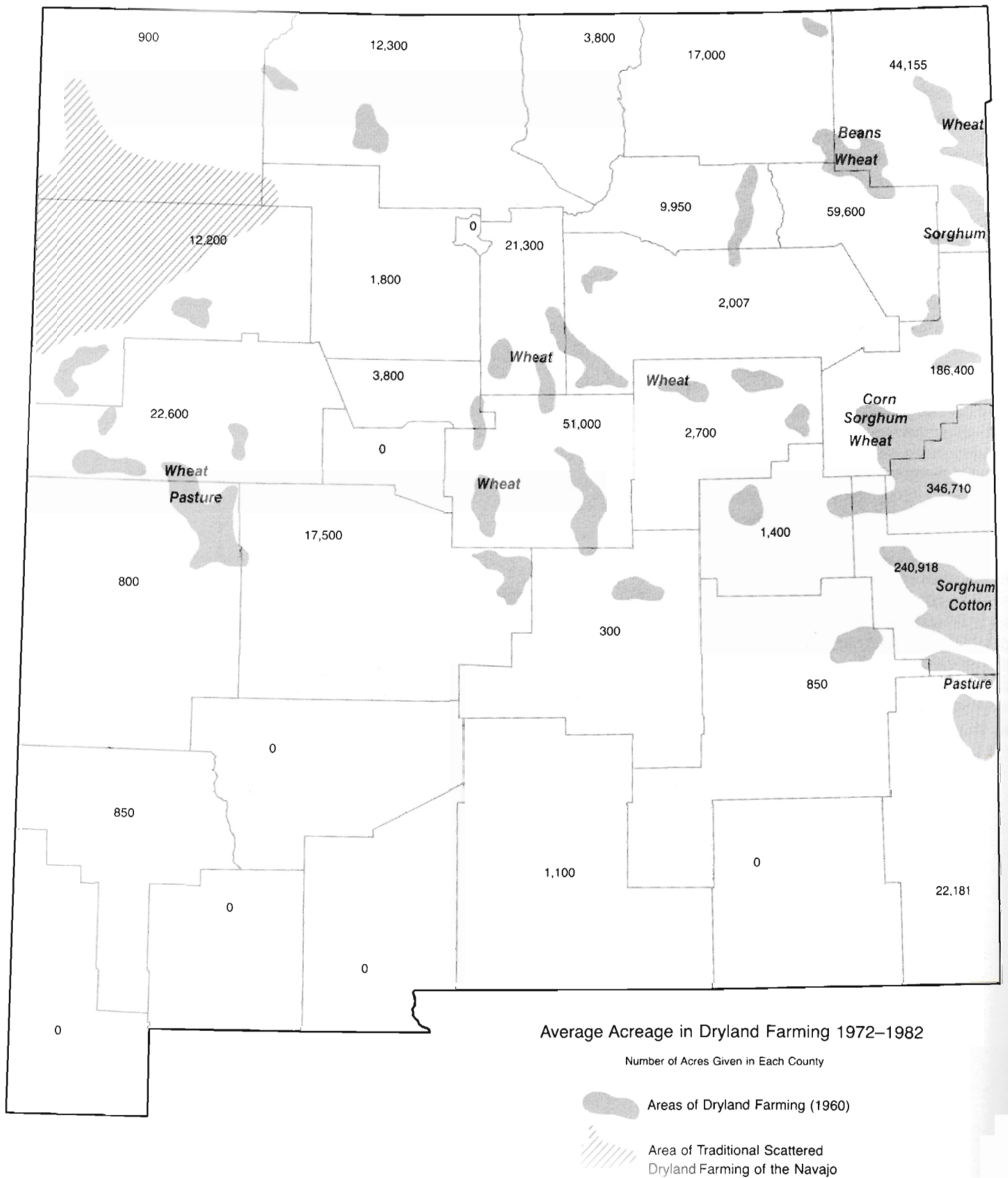


Dryland Farming



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Dryland Farming

In 1980 there were about 1.1 million acres of cropland in nonirrigated farming. From 1977 to 1982 dry cropland acreage decreased about 11,000 acres (from 1,106,550 to 1,095,230) as farmers shifted to the more reliable moisture source, irrigation. This represents only a minor reduction in acreage in that most of Union, Quay, Curry, Roosevelt, and Torrance counties had been subdivided into dryland farms between 1880 and 1920. These five counties alone represented nearly 4 million acres in dryland farming by 1920, a figure which would approach 6 million acres if the homestead acres of Colfax, Mora, San Miguel, Santa Fe, and McKinley counties were included. The Navajo of McKinley and San Juan counties traditionally practice dryland farming of both beans and grains, but because much of their production is for subsistence rather than for cash sale, this acreage is not reflected in dryland farming figures for each county.

As New Mexico is such a distance from both the Gulf of Mexico and the Pacific Ocean (the sources of most moisture in the air over this state), the

climate is frequently erratic, and dryland farming is a gamble. Drought is too frequent in the state to allow most crops to survive. The early homesteaders saw photographs of vegetables and corn raised on the New Mexico prairie. When they arrived, they frequently found rainfall conditions and fertile soils similar to the farmlands of the Mississippi and Ohio basins. But the following year (or years) were often characterized by no rain, and uncovered prairies without soil moisture were swept up in dust storms. Several cycles of severe droughts in the 1910s, 1930s, and 1950s helped reduce the dry-farming cropland to nearly one million acres. Even some crops that survive mild periods of drought became largely unknown in the state by the mid-1950s. New Mexico was the leading pinto bean producer in the nation at the beginning of World War II; since 1960 only the remnants of abandoned bean pickers or gleaners and factories attest to this.

Historically, the dryland crop acreage (including idle, fallow, and diverted acreage) in New Mexico has been overestimated. This occurred because reliable estimates of dryland crop

acres were not available for eastern New Mexico. The 1970 estimate was based upon data obtained during the 1966-67 Conservation Needs Inventory (CNI). The CNI depended upon statistical methods for estimating acreages (cropland, rangeland, woodland) and was conducted with little field checking.

Between 1970 and 1975 the irrigated acreage increased in Curry, Lea, Quay, Roosevelt, and Union counties. Most of the irrigation expansion in Curry and Union counties occurred on lands that had been dry-farmed. Dryland crop acreage in 1975 in these counties was estimated by reducing 1970 estimates by the increase in irrigation that had taken place. During this period there is evidence that dryland crop acreages for Curry, Quay, and Roosevelt counties were still overestimated. There is no evidence that large dryland crop acreages in the counties have gone out of production in the past ten years.

Prime Farmland Inventories have been completed by the Soil Conservation Service in Luna, Doña Ana, Bernalillo, Curry, Lea, Quay, and Roosevelt counties. Both irrigated and dryland crop acreages were inventoried, tabulated, and locations were shown on county maps. These data were field checked and are considered to be the best data available. The 1970-82 dry cropland acreage in New Mexico has been revised based on the Prime Farmland Inventories and other sources. The decrease between 1977 and 1982 was due primarily to general economic conditions and expansion in irrigated acreage. In some counties, wells are being drilled on dry farmland and, if successful, are used to irrigate the acreage. However, in Roosevelt County some grazing lands were plowed and seeded for dry-crop production in the 1977 to 1982 period (primarily for sorghum and wheat).

Sorghum (grain and other) and wheat accounted for about 94 percent (821,120 acres) of the crops produced on dryland in 1982. These same crops accounted for about 93 percent of the dryland crops in 1977. Hay crops, pasture, and other small grains accounted for an additional 6 percent in 1977 but have decreased in importance to about 5 percent. Corn, barley, other small grains, dry beans, other field crops, and all hay and pasture decreased by 12,360 acres between 1977 and 1982. Grain sorghum, other sorghum, wheat, and cotton increased by 169,290 acres between 1977 and 1982.

Joe Noriega
Jerry L. Williams

Total Gross Value of Selected Dryland Crops, 1982

	Production	Price	Value
Wheat	595,100 acres (25 bu/acre)	\$3.55/bu	\$ 54,302,875
Barley	2,600 acres (66 bu/acre)	\$2.40/bu	\$ 411,840
Upland Cotton	3,000 acres (551 lb/acre)	\$0.60/lb	\$ 991,800
Corn	490 acres	\$184/acre*	\$ 90,160
Sorghum	214,080 acres	\$89/acre*	\$ 19,053,120

*Price per acre computed by estimating the cash receipts per acre planted for the crop in both irrigated and nonirrigated production.

For corn and sorghum, the New Mexico Agricultural Statistics (1982) indicates that part of each crop was harvested for grain and part for silage. Prices per bushel are given for each crop in 1982, but no price per ton of silage was available.

Estimated Dryland Crop Acreage, 1977-1982

	1977	1978	1979	1980	1981	1982
Corn	2,400	1,900	1,400	1,500	400	490
Sorghum-grain	187,100	214,400	200,400	238,700	210,450	214,080
Sorghum-all other	25,700	26,800	31,780	12,880	16,040	11,940
Broomcorn	—	—	100	—	—	—
Wheat	432,800	432,700	431,800	476,020	535,200	595,100
Barley	3,400	2,980	2,940	2,100	1,900	2,600
Other small grains	13,360	10,520	10,870	4,080	7,920	13,270
Upland cotton	9,230	14,800	21,800	29,100	21,600	3,000
Dry beans	1,000	1,070	4,650	740	650	690
All other field	7,780	1,150	1,550	10	—	600
All hay	7,170	7,000	5,260	5,510	5,700	3,860
Planted pasture	23,820	23,120	23,110	25,960	23,190	25,060
Subtotal, all crops	713,760	736,440	735,660	796,600	823,050	870,690
Multiple-cropped	20,400	63,000	36,900	117,940	153,974	107,174
Total acres dry-cropped	693,360	673,440	678,760	678,660	669,076	—
Diverted, set aside (idle and fallow)	—	48,661	5,954	—	—	45,190
Idle and fallow	413,190	381,949	388,036	414,290	426,074	286,524
Total dry cropland	1,106,550	1,104,050	1,092,750	1,092,950	1,095,150	1,095,230