Pa. farms decline in number & size

WASHINGTON, D.C. — Pennsylvania farms declined in numbers and decreased in size between 1978 and 1982, according to the Commerce Department's Census Bureau.

Preliminary reports just released for the 1982 Census of Agriculture show 55,539 farms, compared with 56,202 in 1978. Land in farms totaled 8.3 million acres, an average per farm of 149 acres, compared with 152 in 1978. Total sales of agricultural products amounted to $2.8 billion in 1982.

The average value of land and buildings per farm was $225,834 with a per acre value of $1,520.

Land from which crops were harvested increased to 4.4 million from 4.3 million acres and acres irrigated rose from 14,662 to 18,154 in 1982.

The Bureau defines a farm as any place from which $1,000 or more of agricultural products were, or normally would have been, sold in the census year.

The preliminary data indicate expenditures for livestock and poultry feed were $603.2 million; total costs for farm energy, $210.1 million; for fertilizer, $127.8 million; and for hired labor, $223.9 million.

The sales of livestock, poultry and their products were $2.1 billion, 74 percent of total agricultural sales. Dairy products amounting to $1.1 billion were sold from 15,146 farms. The number of milk cows were up from 656,363 in the previous census to 690,779 in 1982.

The total cattle and calves inventory of 1.8 million head on 38,686 farms was up from 1.7 million in 1978. The 877,889 sold were down from 928,932 four years earlier.

An inventory of 871,098 hogs and pigs including 93,344 for breeding purposes was reported on 9,232 farms of which 413 farms had inventories of 500 or more and accounted for 51 percent of the State's total inventory. A total of 1.7 million hogs and pigs was reported sold, of which 504,502 were feeder pigs.

Some 3,530 farms reported 113,608 head of sheep and lambs, with 87,889 shorn yielding 594,016 pounds of wool; 80,151 head were sold.

Sales of poultry and their products were $456.4 million. Some 8,424 farms reported an inventory of 24.5 million chickens three months old or older; 8,287 farms reported 21 million hens and pullets; and 1,262 farms, 103.8 million broilers sold. In addition, 437 farms sold 5.5 million turkeys compared with 4 million sold in 1978.

The sale of crops amounted to $751.3 million. By harvested acreage, among the leading crops were corn, with 119.9 million bushels from 1.3 million acres; oats, with 18.1 million bushels from 307,455 acres; and wheat, with 7.8 million bushels from 221,454 acres. Other crops were alfalfa hay, 755,082 acres, soybeans, 131,241 acres; barley, 58,644; and apples, 39,150 acres.

Agriculture census data for Pennsylvania also revealed these facts:

Of the total farms in the State, 7,221 had gross sales of $100,000 or more; 28,341 reported sales of less than $10,000.

The average age of farm operators was 50 years; 8,876 were under 35, and 22,116 were 55 or older.

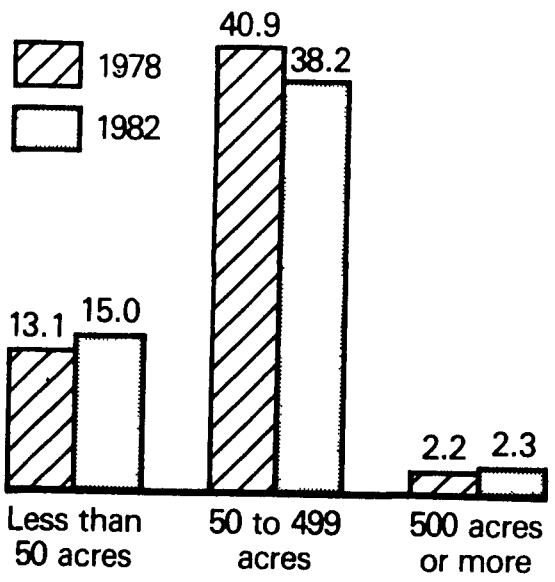
Women operated 2,787 farms or 5 percent of the State total.

Fifty-six percent of the operators reported farming as their principal occupation, but 43 percent of all operators worked 100 days or more off the farm.

Eighty-nine percent of the farms were operated by individuals or families as sole proprietorships; 4,844 by partnerships; and 899 by corporations, of which 84 percent were family held.

PENNSYLVANIA

Farms by Size



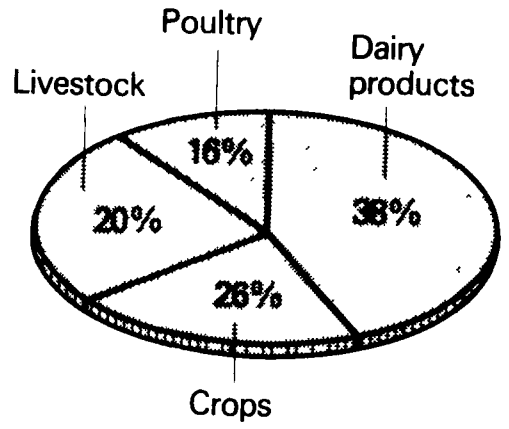
1978 — 56,202 Farms
1982 — 55,539 Farms

Ninety-one percent of the farmers owned all or part of the farms they operated; 34,416 were fully owned; 16,027 partly owned; and 5,096 were operated by tenants.

Data in the report for 1978 and 1982 are directly comparable for acreages and inventories. Dollar values have not been adjusted for changes in price levels.

Single copies of preliminary state and county reports may be obtained for $1.75 and $1.50 each, respectively, prepaid from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. Price for entire set is available upon request.

1982 Market Value of Agricultural Products



Total Value $2.8 Billion

Nitrogen release studied

NEWARK, DEL. — A major goal of current soil fertility research at the University of Delaware Agricultural Experiment Station is to show farmers how they can refine management practices so as to take advantage of organic sources of nitrogen such as poultry manure and legumes. To do this, researchers must find out how quickly nitrogen from these sources is released into the soil in a form plants can use.

Last summer, soil scientist J. Thomas Sims conducted field studies designed to predict N release from poultry manure in conventional and no-till irrigated corn. He found that it was possible to estimate available N from this source fairly accurately based on the assumption that 80 percent of the inorganic N was available the first year after application, and 60 percent of the organic N became available during crop growth. Yield and measurements of plant N uptake and soil N all supported his findings.

Yield responses to poultry manure applied in no-tillage systems were approximately 90 percent of those in conventional tillage, indicating that it is possible to use poultry manure successfully as an N source for no-till.

In related laboratory and greenhouses studies Sims found that temperature and moisture both affect nitrogen release from the manure. Mineralization of readily decomposable organic N was essentially complete within three months, the scientist said. Plant N uptake was markedly increased by incubating the poultry manure in the soil at 25 degrees C, but raising the temperature to 40 degrees C resulted in little increased availability.

Sims conducted this work with the help of a Delmarva Poultry Industry, Inc. grant. Next summer, he plans to look more closely at the rate at which nitrogen in poultry manure and leguminous cover crops like hairy vetch is released over the growing season. Knowing when nitrogen from organic sources is most available to crops will help producers tailor supplemental fertility programs to meet plant needs. Under irrigation, this information might eventually tell farmers the proper time to fertigate, for example