The 2012 Census of Agriculture:
Demographics and Farm Ownership Type in Maryland

Introduction

The operators of Maryland's farms in 2012 were generally white, male, and over 55, according to data from the USDA's Agricultural Census of 2012, released in May 2014 (See **Table 1**). While the average age of principal farm operators has increased from 57.3 years in 2007 to 59.0 in 2012, the average age in other parts of the nation has increased at a faster rate, making Maryland the 16st oldest state in 2012, down from the 21st oldest in 2007. The vast majority (97.4%) of principal operators were white in 2012, a slight increase (97.1%) from 2007. Also, majority of the operators were male (81.3%) in 2012, a marginal decline (82.3%) from 2002 (see **Table 2A & 2B**).

Most principal farm operators lived on their farms in 2012 (80.8%), this percentage decreased slightly from 2007 (82.5%). Only 48.9 percent of all principal operators reported their primary occupation to be farming, which was about the same in 2007 (48.8%). Related to this, the percentage of principal operators who earned their living entirely from work on the farm increased to 48.9 percent in 2012 from 35.4% in 2007.

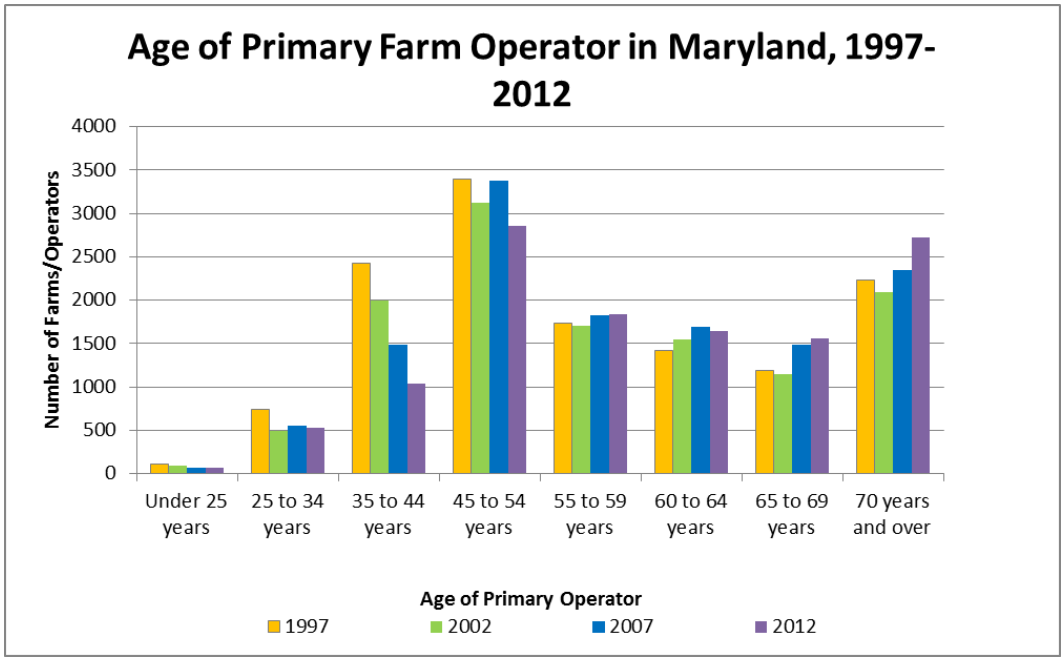
The vast majority of the farms (70.0%) were operated by full-owners (owned all of the farmland that they worked on), another 21.8 percent of all farmland was controlled by part-owners and the remaining 8.2 percent by renters. Most farms in Maryland in 2012 were what would be considered "family farms," as 82.7 percent were owned by families or individuals and an additional 6.9 percent were controlled by family-held corporations. Only 1,128 farms (9.2%) had reported sales of over $250,000 per year, the USDA's threshold for a large farm operation, whereas, 2,563 farms (20.9%) had reported sales less than $1,000 per year.

Overall, farms in Maryland earned $477.0 million in income in 2012, a 5.8 percent increase from 2007 when adjusted for inflation. The majority of farm operations in Maryland lost money in 2012 (56.3%), an increase from the 55.4 percent of losing farm operations in 2007.

Age of Principal Operator

In 1997, the average age of a principal farm operator in Maryland was 54.9 years, just above the average age nationally of 54.0 years, and ranked 15th oldest for all states. The average for principal operators in Maryland rose to 55.9 in 2002 (ranked 17th), 57.3 years in 2007 (ranked 21st) and 59.0 in 2012 (ranked 17th). The average age of principal farm operators also rose nationally, reaching 58.3 years by 2012. The rise in average age for the since 2007 (4.3 years) is slightly higher than what occurred in Maryland (4.1 years), although Maryland farmers are on average still older.

The majority of principal farm operators in Maryland are over the age of 55, and there are many fewer principal operators under the age of 45 in the state. In 1997, 24.8 percent of all principal operators were under age 45 and 49.7 percent were over age 55, the operators under age 45 declined and operators over age 55 increased every census period. In 2012 only 13.4 percent were under age 45 and 63.3 percent over age 55. In fact, 22.2 percent of all principal operators in 2012 were over the age of 70, an age when most workers have already retired.



Of the 23 jurisdictions with farms in Maryland, the only decrease in the average age of principal operators from 2007 to 2012 was in Saint Mary's County (-3.8 years, from 58.3 to 54.5 years), also the county with the lowest average age. Kent County had the highest average age at 62.3 years followed by Talbot County at 62.0 years (See **Table 1**).

Race, Ethnicity and Gender of Principal Operator

In 2012 the vast majority of Maryland's principal farm operators were non-Hispanic white males. Over 97.4 percent (11,932) of principal farm operators were white, while 1.2 percent were black or African-American and 1.4 percent were of any other race. White principal operators worked 99.0 percent of all farm acreage in Maryland in 2012 (See **Table 2B**). The Lower Eastern Shore region had the largest number of farms operated by minority principal operators (106, or 7.1% of farms in the region), followed by the Washington Suburban region (96, or 4.6%). The Lower Eastern Shore also had the majority of all farms operated by Asian principal operators (72, or 72.7% of all farms operated by Asian farmers) in Maryland.

Only a small amount of principal operators were of Hispanic ethnicity in Maryland in 2012, with 118 out of 12,256 farms (1.0%) and 5,483 out of two million acres (0.3%). The average farm size for farms run by Hispanic principal operators in 2012 was 46.5 acres, about one-fourth of the average size of a non-Hispanic operated farm. (166.9 acres) The Baltimore Region had the largest number of farms run by Hispanic operators (32) but the Washington Suburban region had the largest percentage (1.3%) (See **Tables 2A and 2B**).

Race of Principal Farm Operators in Maryland, 2012

Race of Principal Operator	Farms		Acres		Average Size
	Number	Percent	Number	Percent	
White	11,932	97.4%	2,010,388	99.0%	168.5
Black or African-American	143	1.2%	10,065	0.5%	70.4
Asian	99	0.8%	4,071	0.2%	41.1
American Indian or Alaska Native	29	0.2%	1,224	0.1%	42.2
Native Hawaiian or Other Pacific Islander	7	0.1%	206	0.0%	29.4
More than one race	46	0.4%	4,791	0.2%	104.2
Total	12,256	100.0%	2,051,756	100.0%	165.7

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

The number of female principal operators increased from 2,216 to 2,2296 between 2007 and 2012, a gain of 80 or 3.6 percent In 2012, female principal operators made up 18.7 percent of all principal operators but worked only 7.1 percent of all farmland in Maryland. However, the number of acres worked by women principal operators increased 7.3 percent (9,831 acres) from 2007 to 2012, while the number of acres worked by male principal operators decreased 1.6 percent (-30,842 acres). On average, farms run by female principal operators were 63.1 acres in size, while those run by male principal operators averaged 189.3 acres in size (See Table 2A). The Baltimore Region had the largest number and percentage of woman operators (733 operators running 24.5% of the Region's farms) while Southern Maryland had the lowest number (218 operators running 17.0% of farms) (See **Tables 2A and 2B**).

Gender of Principal Farm Operators in Maryland, 2012 and 2007

Year	Data	Female	Male	Total	Female	Male
2012	Farms	2,296	9,960	12,198	18.7%	81.3%
	Acres	144,829	1,885,916	2,030,745	7.1%	92.9%
	Average Size	63.1	189.3	165.7		
2007	Farms	2,216	10,618	12,834	17.3%	82.7%
	Acres	134,998	1,916,758	2,051,756	6.6%	93.4%
	Average Size	61	181	160		
Change	Farms	80	-658	-578		
	Acres	9,831	-30,842	-21,011		
	Average Size	2.1	-8.3	5.7		

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

Residence on Farms

Most farmland in Maryland is fully owned by the farm operators that work them, and most farmers live on the farms that they operate. However, most principal operators of farms spend time working in jobs that are not farm-related and claim that their primary occupation is not farming.

In 2012, 9,898 or 80.8 percent of principal operators lived on their farm, a decline of 691 (6.5%) from 2007. In addition, the number of farms whose principal operators earn their livings primarily from farming has

decreased over that time period, from 6,269 in 2007 to 5,996 in 2012 (a 4.2% decrease). In 2012, only 48.9 percent of all farms were run by principal operators whose primary occupation was farming. The number of principal operators who worked off the farm to supplement their incomes increased by 113 (5.0%) from 2007 to 2012 (See **Tables 3A and 3B**).

Residences and Work Places of Principal Farm Operators in Maryland, 2012 and 2007

Principal Operator Characteristics	2012		2007		Change	
	Number	Percent	Number	Percent	Number	Percent
Place of residence: On farm	9,898	80.8%	10,589	82.5%	691	6.5%
Place of residence: Not on farm	2,358	19.2%	2,245	17.5%	113	5.0%
Primary occupation: Farming	5,996	48.9%	6,269	48.8%	-273	-4.4%
Primary occupation: Other	6,260	51.1%	6,565	51.2%	-305	-4.6%
Days worked off farm: Any	7,396	60.3%	8,286	64.6%	-890	-10.7%
Days worked off farm: None	4,860	39.7%	4,548	35.4%	312	6.9%
Total	12,256	100.0%	12,834	100.0%	578	-4.5%

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

The Baltimore Region had the highest percentage of principal operators residing on their farms (84.9%), while the Upper Eastern Shore had the lowest (74.9%). For principal operators who reported farming as their principal occupation, the Lower Eastern Shore had the largest percentage (55.3%), while the Baltimore region had the lowest (44.5%). The Baltimore region also had the largest number of principal operators who made their sole living from farming with 1,330 operators, while Southern Maryland had the lowest, 661 operators.

Tenure of Farmers

Farms and Farmland by Tenure of Farm Operator in Maryland, 2012 and 2007

Tenure	Farms		Acres		Average Acreage	
	2012	2007	2012	2007	2012	2007
Full owners	8,576	9,035	741,300	760,358	86.4	84.2
Part owners	2,671	2,763	1,073,003	1,053,640	401.7	381.3
Owned land in farms			*438,933*	*425,706*		
Rented land in farms			*634,070*	*627,934*		
Tenants	1,009	1,036	216,442	237,758	214.5	229.5
Total	12,256	12,834	2,030,745	2,051,756	165.7	159.9

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

Both the number of farms of all ownership types and acreage decreased from 2007 to 2012. The majority of the farms were operated by full owners in 2012 (8,576f or 70.0% of all farms) with the amount of farmland they worked decreasing by 19,058 acres (2.5%) from 2007. These farms accounted for only 36.5 percent of all farmland in Maryland and had the smallest average acreage (86.4 acres). In 2012, farms operated by part owners (operators who both own and rent land) ran only 21.8 percent of farms but

controlled 52.8 percent of all farmland in the state and had the largest average farm size (401.7 acres). Interestingly, the number of farms rented by part owners decreased from 2007 to 2012, while the number of acres owned increased. The number of farms and the acreage operated by tenant farmers (those who rent all the farmland they farm) decreased in 2012 compared to 2007. Also, they operated the smallest number of farms and worked the fewest acres of farmland (See **Tables 3A and 3B**).

The Lower Eastern Shore Region had the highest percentage of farms controlled by full owners (75.6%) while the Southern Maryland Region had the lowest (65.8%). Somerset County had the highest percentage of farms operated by full owners (81.1%), whereas, St. Mary's County had the lowest (62.2%). Southern Maryland region had the highest percentage of tenant farmers (11.5%) and the Lower Eastern Shore had the least (5.1%).

Type of Farm Organization

Most farms in Maryland (82.7%) were owned by families or individuals in 2012. While these farms controlled the largest amount of acreage (an estimated 1.317 million acres), they had the least average acreage (130 acres per farm). While the number and acreage of family/individually owned farms decreased by 477 farms (4.5%) and 58,484 (4.3%) acres, the number of farms and acreage worked by corporations that were family-held decreased by two farms (0.2%) and 26,307 (8.8%) acres. (See Table below).

Ownership Type of Farms in Maryland, 2012 and 2007

Type of Organization	2012			2007		
	Farms	Acres	Average	Farms	Acres[1]	Average
Family or Individual	10,132	1,317,433	130.0	10,609	1,375,917	129.7
Partnership	931	312,372	335.5	1,038	314,514	303.0
Corporation: Family-Held	848	324,202	382.3	846	297,895	352.1
Corporation: Other than Family-Held	127	27,539	216.8	131	21,960	167.6
Other - Cooperative, Estate or Trust, Institutional, Etc.	218	49,199	335.5	210	41,470	197.5
Total	12,256	2,030,745	165.7	12,834	2,051,756	159.9

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

There was a little growth in the number (8 farms, 3.8%) and acreage (7,729 acres, 18.6%) of farms controlled by other types of organizations in Maryland in 2012. The number of farms in partnerships declined by 10.3 percent (107 farms), and the acreages for these farms declined by 0.7 percent (2,142 acres). Non-family corporations declined by 3.1 percent (4 farms), but the acreage increase by 25.4 percent (5,579 acres).

[1] Most acreage totals for 2007 for type of organization were suppressed to protect confidentiality, the exception being for partnership farms. All other acreage totals for 2007 were estimated using unsuppressed state total data from 2002 and whatever unsuppressed county data was available for 2007.

Farm Income

Data on overall profits and losses of farms show that the majority of farms (6,902 or 56.3%) posted net losses in 2012. Although, the farms with loses declined from 2007 by 207 farms (2.9%), the share of farms with loses in 2007 (55.4%) was less. However, the net income increased in 2012 by $26.163 million (5.8%) from 2007 when measured in constant dollars (See **Table 4**).

Farms with net gains in income saw the average net gain increase from $107,684 in 2007 to $121,750 in 2012 in constant dollars, an average increase of $14,066 or 13.1 percent. The farms with net gains in income decreased by 371 farms or 6.5 percent lower from 2007 to 2012. Overall, the average income per farm increased by $3,791 or 10.8 percent from 2007 to 2012

Net Gain and Loss for Farm Operations in Maryland, 2012 and 2007
(In Constant 2012 Dollars)

Net cash farm income of the operations	2012	2007	Change	Percentage Change
Net Cash Farm Income	$477,002,000	$450,839,000	$26,163,000	5.8%
Average Income Per Farm	$38,920	$35,128	$3,792	10.8%
Number of Farms with Net Gains	5,354	5,725	(371)	(2.9%)
Farms with Net Gains: Average Per Farm	$121,750	$122,125	$14,066	13.1%
Number of Farms with Net Losses	6,902	7,109	(207)	(2.9%)
Farms with Net Losses: Average Per Farm	($25,333)	($26,426)	($2,032)	(8.7%)

Source: Census of Agriculture, National Agricultural Statistics Service, USDA, 2012

On average, the most profitable farms are located in the Lower Eastern Shore Region, earning an average of $210,127 per farm in 2012, $88,377 (72.6%) more than the state average per farm. Farms on the Eastern Shore had the highest average earnings and also the majority of the net gains. Net income for farms in this Region was almost $359.8 million in 2012, accounting for 75.3 percent of all net income for farms in Maryland even though they were only 32.4 percent of all farms in the rest of the state. Majority of the farms in this Region were profitable (60.2%), versus 35.8 percent of all farms statewide. Farm profitability varied somewhat on the Eastern Shore, with 67.5 percent of farms in both Caroline and Somerset counties reported net profits, the highest among the Region and the state, while only 43.1 percent of the farms in Cecil County generated net profits.

Overall, farms in the Southern Maryland Region were the least profitable, as only 34.5 percent (443 of the 1,283 farms) reported net gains. Farms in Charles County on aggregate lost over $2.9 million, the lowest among all the counties and also had the lowest net average farm income a loss of $7,665 per farm (See **Table 4**).

About the Census of Agriculture

The Census of Agriculture is conducted every five years by the National Agricultural Statistics Service (NASS), a branch of the United States Department of Agriculture (USDA). NASS has conducted the Census since 1997. Previously, the Census was conducted by the U.S. Bureau of the Census. In one form or another, there has been an agricultural census conducted periodically in the U.S. since 1840.

According to NASS, the Census of Agriculture "is a complete count of U.S. farms and ranches and the people who operate them. The Census looks at land use and ownership, operator characteristics, production practices, income and expenditures and many other areas."[2] Data is published for the nation, states, certain territories, and all U.S. counties.

About Principal Operators

According to the 2012 Census of Agriculture, a principal operator is "the person primarily responsible for the on-site, day-to-day operation of the farm or ranch business. This person may be a hired manager or business manager." More generally, an operator is "a person who operates a farm, either doing the work or making day-to-day decisions about such things as planting, harvesting, feeding, and marketing. The operator may be the owner, a member of the owner's household, a hired manager, a tenant, a renter, or a sharecropper. If a person rents land to others or has land worked on shares by others, he/she is considered the operator only of the land which is retained for his/her own operation."

Farm Definitions

The USDA defines a farm as any place from which $1,000 or more of agricultural products were produced and sold, or normally would have been sold, during the relevant census year.[3] This definition has changed nine times since 1840. From 1959 to 1974, the definition included farm size, with different sales volumes based on size. The current definition was adopted after 1974 and has no farm size requirement. Inflation has changed the definition over time, as the table below shows.

	Current Dollars			Constant Dollars ($2012) *		
Year	10 Acres+	Less than 10 Acres	All Acres	10 Acres+	Less than 10 Acres	All Acres
2012			$1,000			$1,000
2007			$1,000			$1,092
2002			$1,000			$1,235
1997			$1,000			$1,337
1992			$1,000			$1,484
1987			$1,000			$1,778
1982			$1,000			$2,098
1978			$1,000			$2,907
1974	$50	$250		$189	$947	
1969	$50	$250		$249	$1,243	
1964	$50	$250		$288	$1,440	
1959	$50	$250		$307	$1,536	

* Dollar values adjusted using the Personal Consumption Expenditure (PCE) index from the Bureau of Economic Analysis' National Income and Products Accounts System (NIPA)

Source: 2002 Census of Agriculture: History, Appendix B

[2] http://www.agcensus.usda.gov/Help/FAQs/General_FAQs/

[3] http://www.agcensus.usda.gov/Publications/2012/