

Ag 101 Handbook

AGRICULTURE EDUCATION FOR AGRICULTURAL SERVICE PROVIDERS

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AGNR | UNIVERSITY OF MARYLAND EXTENSION

Program Summary

This program was developed by the University of Maryland Extension (UME) in collaboration and with funding from the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS). This program is intended to give government ag service providers a better understanding of the size, scope, and distribution of Maryland agriculture. This program will also familiarize its students with the basics of crop and livestock production in Maryland so that ag service providers will be better versed and equipped to work with their agricultural clients and stakeholders.

Program Goal

This program will educate agricultural service providers on several key aspects of the agriculture industry so they may have a better understanding of Maryland agriculture. This working knowledge of farming in Maryland will allow agricultural service providers to better assist and communicate with their clients, ultimately improving the relationships these professionals have with producers and enhancing the services they provide.

Program Development, Application, and Course Format

This curriculum was developed as a program within the UME via grant money and partnership through the USDA-NRCS as a means to meet the goal of educating Maryland agriculture service providers on Maryland agriculture. The intended audience of this program is new/relatively new hires to state and local agencies, such as USDA-NRCS, Maryland Department of Agriculture (MDA), Soil Conservation Districts (SCDs), Farm Service Agency (FSA), and the Maryland Department of Environment (MDE).

This curriculum is to be offered as a two-day online program. Each lesson is intended to be taught by university faculty with specialization in each respective area to create a diverse and complete learning experience from unbiased and neutral experts to ensure the information delivered is data-driven and research based. This setting also presents a neutral and friendly platform for participants to ask questions.

This handbook is intended to provide a short introduction to each lesson and lists relevant resources. The Appendix also contains the handouts that are used in each lesson. Also included is a glossary with definitions of commonly used terms in agriculture.

Lesson 1: Introduction to Maryland Agriculture



Summary

In this lesson, agricultural service providers will be introduced to Maryland Agriculture. Through vocabulary, reviewing different aspects of agriculture, and beginning to converse about agriculture and food systems, service providers will become comfortable with the basics of Maryland Agriculture.

Lesson Outcomes

Service Providers will be able to:

1. Understand the size and scope of Maryland agriculture, economics, number of farms, and acreage in farms.
2. Understand the diversity of Maryland agriculture and geographic distribution of different agricultural sectors throughout the state.

Lesson Supplies, Handouts, and Materials

1. Maryland Agricultural Statistics Bulletin, pp. 3-4
2. Handout 1-1: Overview of Maryland Agriculture, USDA NASS.
https://www.nass.usda.gov/Quick_Stats/Ag_Overview/stateOverview.php?state=MARYLAND

Additional Resources & Information

1. USDA National Agricultural Statistics Service (NASS): <https://www.nass.usda.gov/>
2. Census of Agriculture: Maryland County Profiles:
https://www.nass.usda.gov/Publications/AgCensus/2017/Online_Resources/County_Profiles/Maryland/
3. Maryland Department of Agriculture: <https://mda.maryland.gov/Pages/default.aspx>

4. The Impact of Resource Based Industries on the Maryland Economy:
https://www.marbidco.org/_pdf/2018/Full_Report_All_Maryland_Resource_Based_Industries_Beacon_2018.pdf

Lesson 2: Grain Production



Summary

Representing over 65% of Maryland's farmland, grain production is the largest land use sector of Maryland Agriculture and is second in the state for on-farm income behind the poultry sector. The grain industry is vast and is a major sector in every county in the state. The grain industry plays an important role in providing feed for the region's livestock, including one the largest broiler chicken industries in the nation located on the Delmarva Peninsula.

Statewide, the grain sector includes about half a million acres of corn and soybeans each, about 350,000 acres of soft red winter wheat, grown primarily as a cover crop and harvested for local flour mills, and about 35,000 acres of feed barley.

In this lesson, agricultural service providers will become familiar with statistics of the Maryland grain industry, vocabulary as it relates to grain production, and learn how grain is produced on Maryland farms.

Lesson Outcomes

Service Providers will be able to:

1. Understand the size, scale, and importance of the grain industry in Maryland and the Mid-Atlantic Region
2. Understand the major grain crops grown in Maryland and their end-uses
3. Understand how grain crops are grown in Maryland, including equipment and production practices

4. Utilize resources to look up local grain commodity prices to gauge the grain farm economy
5. Define common grain vocabulary

Lesson Supplies, Handouts, and Materials

1. Maryland Agricultural Statistics Bulletin, pp. 5-6, 14, 16-18

Additional Resources & Information

1. Maryland Grain Producers Utilization Board: <https://marylandgrain.org/>
2. Maryland Soybean Board: <https://www.mdsoy.com/>

Lesson 3: Horticulture



Summary

Maryland's horticulture industry represents only 18% of farms, but is third in farm sales behind poultry and grain. This industry comprises many high-value, labor-intensive crops such as fruit, vegetable, orchard, greenhouse, and nursery production. Maryland's close proximity to major urban centers, such as the Washington DC metro area, Baltimore, Philadelphia, and New York offer access to high-dollar markets. Nurseries and greenhouses retail to the booming landscape industry. Fruit and vegetable farms market their products primarily direct-to-consumer through Farmers Markets, on-farm markets and stands, CSAs, and local retailers; although some commercial re-wholesaling and contract growing for processors still exists on the Eastern Shore with processing of lima beans, green beans, peas, sweet corn, pickling cucumbers, and melons.

In this lesson, students will learn about the size, scope, and distribution of the horticulture industry. In doing so, they will understand the different production practices common in Maryland and how farms bring product from the field to market.

Lesson Outcomes

Service Providers will be able to:

1. Understand the size, scale, and importance of the horticulture industry in Maryland and the Mid-Atlantic Region
2. Understand the major horticulture crops grown in Maryland and their end-uses
3. Understand the major production practices and equipment involved in horticulture production
4. Understand the difference between retail/direct market and wholesale operations
5. Define common horticulture vocabulary

Lesson Supplies, Handouts, and Materials

1. Maryland Agricultural Statistics Bulletin, pp. 6, 8-9

Additional Resources & Information

Lesson 4: Forage Production



Summary

Maryland grows over half a million acres of various forages. Major forages include grass and legume hay, haylage, corn silage, and pasture. These forages are grown to feed livestock such as dairy and beef cattle, equines, sheep, goats, and to a lesser extent, pasture-raised hogs and poultry. Much of the acreage is concentrated in cattle and horse-rich counties, such as those in Northern, Central, and Southern Maryland.

In this lesson, agricultural service providers will become familiar with statistics of the Maryland forage industry, vocabulary as it relates to forage production, and learn how forage is produced on Maryland farms. Students will also learn about key factors in forage production related to forage quality.

Lesson Outcomes

Service Providers will be able to:

1. Understand the size and scope of forage production in Maryland and its importance to the livestock industry
2. Understand the forage crops grown in Maryland and their end-uses
3. Understand how forages are grown in Maryland, including equipment and production practices
4. Understand the different methods of forage production and forage storage
5. Understand the importance of forage quality
6. Define common forage vocabulary

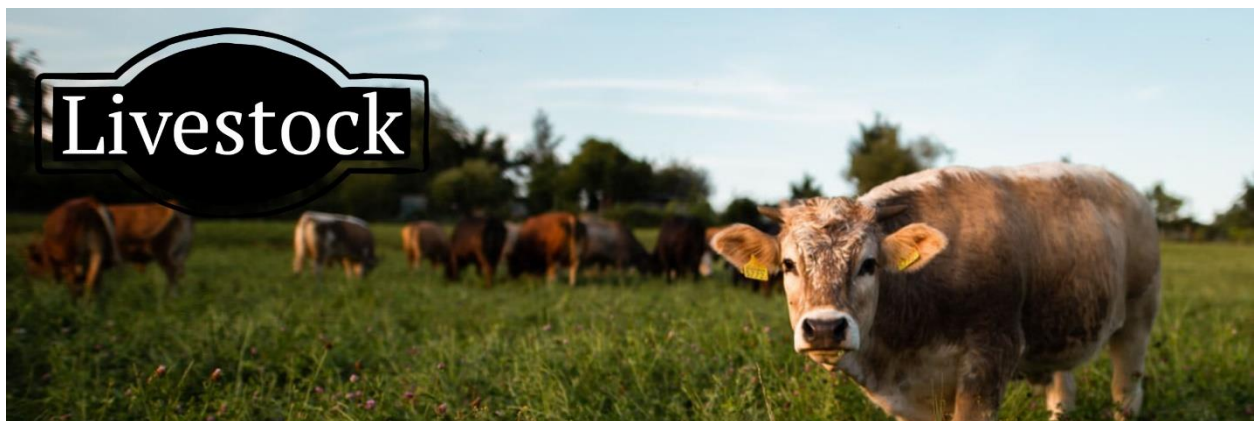
Lesson Supplies, Handouts, and Materials

1. Maryland Agricultural Statistics Bulletin, pp. 7

Additional Resources & Information

1. National Forage and Grassland Curriculum: <https://forages.oregonstate.edu/nfgc>

Lesson 5: Livestock Production & Animal Husbandry



Summary

In terms of cash receipts, the livestock sector represents over 60% of Maryland farm sales. The majority of this is dominated by the commercial broiler poultry industry located on Maryland's Eastern Shore. Second behind poultry are cattle, including dairy and beef. Maryland also has a predominant equine industry and the most horses per square mile of any state in the country.

Livestock production is often one of the most misunderstood sectors of agriculture, especially when it comes to animal confinement and animal husbandry. This lesson will familiarize students with the types of animal agriculture common in the state, as well as with how they are raised and why they are raised in such ways. Service providers will become familiar with terminology in livestock production so they will feel more comfortable conversing with farmers and have a better understanding of animal production on the farm.

Lesson Outcomes

Service Providers will be able to:

1. Understand the size and scope of livestock production in Maryland and its economic impact
2. Understand the types of livestock and their associated production methods
3. Understand and identify farm equipment and facilities involved in animal production
4. Define common animal agriculture vocabulary

Lesson Supplies, Handouts, and Materials

1. Maryland Agricultural Statistics Bulletin, pp. 10-13, 19
2. Handout 5-1: Maryland Horse Industry Statistics
3. Handout 5-2: Poultry Biosecurity for Allied Businesses & Government Employees:
https://extension.umd.edu/sites/extension.umd.edu/files/docs/programs/poultry/BIOSECURITY%20FOR%20ALLIED%20BUSINESSES%20GOVTEMPLOYEES_NT_edit.pdf
4. Handout 5-3: Delmarva Chicken Production Facts:
<https://www.dpichicken.org/facts/docs/Delmarva-Chicken-Production-Facts-1957-2019.pdf>

Additional Resources & Information

1. 2010 Maryland Equine Census:
https://www.nass.usda.gov/Statistics_by_State/Maryland/Publications/Miscellaneous/Maryland%20Equine.pdf
2. Delmarva Poultry Industry: <https://www.dpichicken.org/>
3. Avian Influenza Biosecurity video: <https://www.youtube.com/watch?v=vFgGya5-pEQ&feature=youtu.be>

4. Maryland Nutrient Management:

https://mda.maryland.gov/resource_conservation/Pages/farmer_information.aspx

Acknowledgements

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Glossary

Anhydrous. Gaseous form of nitrogen fertilizer compressed under pressure into a liquid and injected into the ground using an anhydrous toolbar. Typically used as a nitrogen fertilizer for corn.

Artificial Insemination (A.I.). Veterinary procedure of injecting semen into the uterus.

Bale (round, square, big square). A compact round or square unit of forage or straw accumulated and tied by a baler.

Bale Wrap. Plastic material that can be applied to cover a hay or silage bale. Used to preserve high-moisture bales.

Baler (round, square). Machine pulled by a tractor that picks up windrows of hay or straw and compresses into a round or square shape easy for transport, storage, and handling.

Band. The process of applying a crop production product in or near the soil seed furrow. Typically common for starter fertilizer or crop protection products.

Barren Mare. A mare that has been bred before, but is not pregnant in the current year.

Barrow. A male pig that has been castrated before he reaches sexual maturity.

Bedded pen pack barn. Livestock housing where you add bedding daily to the barn over a 4-6 week timeframe.

Boar. An uncastrated pig.

Broiler. A chicken specifically bred and raised for meat production.

Broodmare. A mare used for breeding

Browse. Parts of woody plants, including twigs, shoots, and leaves.

Buck (Billy). A sexually mature, intact male goat used for breeding.

Buckling. A sexually immature young male goat.

Bull. An uncastrated male bovine.

Bunker Silo. Above-ground silo used to store silage, typically built with concrete walls.

Calf. A young bovine under 1 year of age.

Castrate. A veterinary procedure to remove the testicles of a male animal.

Chisel/Chisel Plow. A tillage implement that works the top 4-12" of soil and leaves 50-70% of plant residue on the soil surface.

Chopper. Machine used to cut and/or chop forage into small pieces to process into feed for livestock. Can be fermented to make silage or fed straight from the field as green chop forage.

Chute. A narrow alley that is used when moving animals into a different space.

Cockeral. A young male chicken under 1 year of age.

Colt. An uncastrated male horse less than four years of age.

Combine. Machine designed to harvest a variety of grain crops.

Commodity. Crops that are traded on the bases of global markets.

Corn Head. Equipment attachment to the front of a combine that is used to snap the corn ear from the stalk (and in some cases sunflower heads) and feeds them into the combine for threshing.

Cover Crop. A crop grown during gaps of time between cash crops with the purpose of holding topsoil and retaining nutrients for subsequent cash crops. Typically grown over winter months in between full-season crops or in periods of the summer in between short, cool season crops.

Cow. A female bovine that has had a calf and able to be milked.

Cultipacker. A heavy, iron roller, usually with iron cleats, that you roll over soil after it has been disked to firm and smooth the seedbed.

Disk. A tillage implement that works the top 2-6" of soil used to chop and bury residue, leaving 40-70% of plant residue on the surface.

Doe (Nanny). A sexually-mature female goat.

Doeling. A young female that is not yet sexually mature.

Double Crop. The practice of planting and harvesting two crops off of the same field in one growing season.

Drip Irrigation. Irrigation method where water is pumped through long hoses on the

soil surface running the length of a planted row that emit water along the length of the hose.

Drip Tape. Long, hose-like equipment that emits water in a drip irrigation system.

Ensilage. The process of creating fermented feed, known as silage.

Ewe. Female sheep.

Filly. A young female horse less than four years of age.

Flock. A group of birds living together.

Forb. Any non-woody broad-leaf plant that is not a grass.

Freestall Barn. Permanent dairy housing in which stalls are provided for bedding areas and may be open air or enclosed buildings.

Fungicide. A specific type of pesticide designed to manage fungal plant pathogens.

Furrow. Seed trench where seeds will be placed.

Gelding. A castrated male horse.

Gilt. A female pig under 1 year of age and has not produced a litter of pigs.

Grain Bin. An upright vented structure used to store dry grain (such as corn, soybeans, or small grains).

Grain Cart. A pull-behind wagon used to transport grain from the combine hopper to grain trucks.

Grain Drill. Machine pulled by a tractor that is used to sow seeds in narrow rows (4-15") and can cut through residue to plant the seed. Commonly used to seed small grains, soybeans, and pasture/hay.

Grain Dryer. A structure that uses heat to dry grain to the necessary moisture content required for safe storage in a grain bin.

Grain head/table/platform. Equipment attachment to the front of a combine that is used to cut small grains or soybeans and feeds them into the combine for threshing.

Grain Leg. An elevator used to lift grain up and into grain bins from the underground pit near the grain bin. Grain legs can also be used to mix and move grain from one bin to others in the leg.

Grain. Cultivated cereal used as food for animals and/or humans.

Green Chop. Freshly cut forage fed immediately to livestock.

Green Manure Crop. Any crop grown solely to improve the soil by turning the crop under while it is green or soon after it matures.

Greenhouse. A glass building, typically heated and cooled, used to produce plants in soilless media.

Hay. Grass or legume forage that has been cut and dried quickly to 14-20% moisture before baled. The rapid drydown of the plants cures and stabilizes the forage for long-term storage.

Haybine. Machine with a reel and sickle bar used to cut grass or legume hay for baling.

Haylage. Fermented grass or legume forage, typically harvested between 40-60% moisture. Fermentation stabilizes the feed for long-term storage.

Head gate. A restraining device located at the front of a chute used to hold an animal's head in place.

Heifer. A young female bovine that has not yet had a calf.

Hen. A female chicken over 1 year of age.

Herbicide. A specific type of pesticide designed to manage weeds.

High tunnel. Typically a long, framed structure covered in clear plastic used to grow plants in the field. Solar radiation heats the tunnel and can be ventilated using curtains and/or fans.

Holding Pond. An earthen structure used to temporarily store runoff water, wastewater, semi-solid slurry, or liquid manure for a period of time.

Hydraulic. Using fluids under pressure from a pump to operate and control equipment or parts of equipment.

Inoculant. A seed additive (especially for legumes) that contains nitrogen fixing bacteria that facilitate nitrogen fixation in the subsequent crop.

Insecticide. A specific type of pesticide designed to manage insect pests.

Intact. Refers to a male animal that still has testicles.

Irrigation. Supplying water to a crop, typically pumped from a well, pond, or stream.

Kid. A goat less than one year old.

Lagoon. A man-made outdoor earthen basin filled with animal waste that undergoes either aerobic or anaerobic digestion.

Lamb. A young sheep.

Layer. Specific breed of hens that are used for egg production.

Legume. A family of specialized plants that establish a symbiotic relationship with specialized bacteria in the soil that enable the plant to access nitrogen from the atmosphere. Legumes are high in protein and bear their seeds in a pod (i.e. beans and peas).

Lime. Material used to neutralize acidity and raise soil pH.

Litter. Material scattered on the floor of a poultry house to absorb moisture and manure.

Maiden Mare. A mare who has not yet had a foal.

Manure pit. A structure for collecting and storing manure from livestock, typically concrete

Mare. An adult female horse older than four years of age.

Maturity. The relative number of days from planting until the crop reaches physiological maturity.

Merger. Machine used to combine multiple windrows into one large windrow. Allows for more efficient baling or chopping of the forage.

Milking Parlor. An area in which cows kept in loose housing are taken for milking.

Moldboard Plow. A tillage implement that provides complete inversion of the top 7" of soil and burial of plant residue. Traditionally used on heavy ground to help with drying or for non-chemical weed control.

Mower. Machine used to cut and condition grass or legume hay for baling. Can be self-propelled or pull-type.

No-Till. The practice of completely eliminating tillage and cultivation practices from a crop production system.

Paddock. Subset division of a pasture used to control livestock grazing.

Pasture. Land covered in grass or legume forage which is used for grazing livestock.

Pesticide. A natural or synthetic chemical applied to a crop or field to kill a pest.

Planter. Machine pulled by a tractor that is used to precisely plant seeds in set rows, typically between 15 and 38 inches wide. Commonly used to plant larger-seeded crops, such as corn, soybeans, sunflowers, pumpkins.

Plastic Mulch. Plastic material that covers the soil in the planted row. Used to suppress weeds and warm the soil for planting.

Plasticulture. Method of crop production using rows covered in plastic mulch.

PTO (Power Take Off). A mechanically-driven device on a tractor that is used to transfer mechanical power from the tractor engine to an accessory equipment attachment.

Pullet. Young hen under one year of age that has not started to produce eggs.

Raised Bed. Soil that has been tilled and prepared for planting and raised into a mounded row and typically covered with plastic mulch. Common for many field-grown vegetables.

Rake. Machine used to move tilled cut forage into windrows in preparation for baling or chopping.

Ram. Uncastrated male sheep.

Ration. The total amount of feed allotted to one animal for a 24-hour period.

Reduced/minimum tillage. The practice of using fewer tillage passes and/or less aggressive tillage practices in a cropping system and leaving crop residue on the soil surface.

Rooster. A male chicken over one year of age.

Rotational Grazing. A system by which livestock are allotted to a certain grazing or browsing area for a certain period of time before they are moved to another area.

Rototill. Tillage equipment used to mix and stir the soil in preparation for planting.

Roughage. A high fiber, low total digestible nutrient feed consisting of coarse bulky plants or plant parts.

Row covers. Plastic or cloth covers that cover plants within a row. Used for frost protection and pest management.

Sidedress. The process of applying crop production materials in the soil or on top of the soil to plants grown in rows. Product is applied to a small area next to plants within a row, parallel to the row. Typically in reference to in-season application of fertilizer to a crop.

Silage Bag. Air tight bag used to store silage.

Silage. Fermented grass or legume forage, typically harvested at greater than 40% moisture. Fermentation stabilizes the feed for long-term storage.

Silage wagon. Trailer used to transport chopped silage from the field to the silo.

Silo. Structure used to store fermented feed, known as silage.

Slurry Pit. A pit or circular concrete storage bin which stores animal waste along with any unusable organic materials, such as hay or waste water.

Sow. A adult female pig.

Sprayer. Equipment used to spray liquid products, such as crop performance materials, liquid fertilizer, and pest maintenance materials.

Spreader. A machine that is used to spread dry formulations of fertilizers, liming materials, seed, and manure over the crop fields and/or pastures.

Squeeze Chute/Standing Stock. A restraining device used for examination, marking or veterinary treatments for livestock.

Stag. A male pig that has been castrated after he reaches sexual maturity.

Stallion. An uncastrated adult male horse.

Stanchion. A device for restraining livestock by the neck for the purpose of feeding, milking, hoof trimming or artificial insemination.

Steer. A male castrated bovine.

Straw. Dried plant material, typically mature stalks and stems, that have very little-to-no feed value. Primarily used for bedding.

Strip Till. Tilling a small strip of soil only where the seeds/transplants will be placed within a row and leaving the rest of the field undisturbed. Typically accomplished with a tractor-mounted or pull-type strip till bar that tills 6-12" wide rows where seeds or plants will be placed.

Subsoiler/Ripper. A tillage implement with deep shanks that rip 12-18" into the subsoil in order to break up compaction layers. Leaves the soil surface almost completely undisturbed.

Tedder. Equipment used to fluff and spread cut hay to allow for air movement and sun to quickly dry the forage for preparation to hay bale.

Tie Stall Barn. Housing where cows are tied in comfortable stalls next to each other. They are milked in their stalls and have constant access to water and feed.

Topdress. The process of spreading crop production materials over the top of a crop. Typically in reference to in-season broadcast application of fertilizer to a crop.

Total Mixed Ration (TMR). A daily feed ration mixed with forages, grains, protein

supplements, byproducts, vitamins, and minerals.

Tower Silo. An upright, tall, and relatively skinny storage structure used to store silage.

Transplant. A plant that is typically started in a greenhouse or high tunnel several days to months prior to planting in the field. Common for many fruit and vegetables or plants that are not easily started from seed.

Transplanter. A machine used to mechanically plant transplants into the field.

Trench Silo. In-ground silo used to store silage, typically dug into the side of a hill.

Vertical Tillage. Mixing of soil and plant residue without creating horizontal compaction layers. True vertical tillage lifts soil in a desired seedbed zone leaving the majority of the soil and crop residue undisturbed.

Windrow. Long line of hay or forage. Windrows will be picked up by forage harvesters and processed into silage or balers to make bales.

Yearling. An animal between one and two years of age.

Appendix

Contents

1. Maryland Agricultural Statistics Bulletin
2. Handout 1-1: Overview of Maryland Agriculture, USDA NASS
3. Handout 5-1: Maryland Horse Industry Statistics
4. Handout 5-2: Poultry Biosecurity for Allied Businesses & Government Employees
5. Handout 5-3: Delmarva Chicken Production Facts
6. 2010 Maryland Equine Census

2018 - 2019

AGRICULTURAL STATISTICS
ANNUAL BULLETIN

MARYLAND





Maryland Department of Agriculture

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As a fellow farmer and Maryland Secretary of Agriculture, I know just how important the data provided by the U.S. Department of Agriculture's National Agricultural Statistics Service (NASS) is to our state's farmers and agriculture industry.

The 12,429 farms and 21,279 producers across the state rely heavily on the credible and accurate information that NASS provides. They use this information when making decisions on the future of their operations. Local, state, and federal legislators also use this data when shaping farm policy, evaluating programs, and allocating funding. Quality statistics help to analyze agricultural trends so that we can better serve our farmers and rural communities.

Last year, the 2017 Census of Agriculture was published and provided a comprehensive view of agriculture around the country and right here in Maryland, down to the county-level. Census results showed that Maryland continues to be a leader in poultry, grains, and nursery, among others. Economically speaking, since the last census in 2012, Maryland agriculture has increased the value of production by 9% and increased per farm net income by nearly 36%. We continue to add producers and farmers, and the number of female producers increased to 8,148 – up nearly 33%.

I want to take a moment to thank all of the farmers and producers that responded to the 2017 Census of Agriculture. Between planting season, harvest, and everything in between, filling out these surveys is not always on the top of our to-do lists, but thanks to your responses the agriculture community in Maryland, and around the country, are stronger and better represented.

Sincerely,

Joseph Bartenfelder
Maryland Secretary of Agriculture



I would like to formally introduce myself to the Maryland Agricultural community. My name is Shareefah Williams, and I am the State Statistician for the state of Maryland. As State Statistician I'm responsible for community outreach working with the State Departments of Agriculture, the Maryland academic community, serving farmers, data users, and the agriculture community. I eagerly await to work with new people, learn new skills, forge new relationships and serves this resilient community that feeds the world.

We are pleased to present the 2018 edition of the Agriculture in Maryland Summary. This publication represents the collaborative efforts of Maryland farmers that voluntarily completed our surveys throughout the past year, and the Maryland Department of Agriculture (MDA). The content in this publication covers a wide range of agricultural statistics related to crop production, livestock, poultry, and economic information within the state of Maryland.



The National Agricultural Statistics Service (NASS) mission is to provide timely, accurate, useful statistics in service to U.S. agriculture. The statistics in this publication will be used to administer and help support USDA farm programs, to determine the feasibility of new ventures, to aid research and development projects throughout the state.

A special thanks to our partners at the University of Maryland Extension, our federal partners at the local Farm Service Agency and Natural Resources Conservation Service, and all the dedicated employees at the MDA. Finally, I would like to thank the Maryland farmers and our field and office enumerators, for their perseverance and skill in collecting survey data throughout the year.

Please visit our website to view this publication and other reports. If you would like additional assistance, please do not hesitate to contact us by email, telephone or personal visit. Your comments regarding our programs and publications are welcomed. I look forward to serving the agricultural community in the coming years.



NASDA is a nonprofit, nonpolitical organization comprised of the 50 State Departments of Agriculture. NASDA and USDA-NASS have a cooperative agreement for NASDA to employ enumerators in the collection of agricultural statistics.

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Table of Contents

General

Rank, Production, and Percent of United States Total – Maryland: 2018	3
Number of Farms, Land in Farms, and Average Farm Size – Maryland and United States: 2014-2018	4
Number of Farms and Land in Farms, by Sales Class – Maryland: 2014-2018	4

Crops

Field Crops

Barley Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018.....	5
Corn for Grain Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018	5
Corn for Silage Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018.....	5
Potatoes Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018.....	6
Soybeans for Beans Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018.....	6
Winter Wheat Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018.....	6
Alfalfa Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018	7
Other Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018	7
All Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018	7

Vegetables

Principal Vegetable Crops Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2017	8
Principal Vegetable Crops Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2018	8

Fruit

Apple Acreage, Yield, Production, Price, and Value – Maryland: 2014-2018.....	9
Apple Production, Price, and Value, by Utilization – Maryland: 2014-2018.....	9
Peach Acreage, Yield, Production, Price, and Value – Maryland: 2014-2018	9

Livestock

Dairy

Milk Cows and Production, by Quarter – Maryland: 2017-2018	10
Milk Production, Disposition, and Income – Maryland: 2014-2018	10

Cattle and Calves

Cattle and Calves Number on Farms, January 1, Inventory Value and Value per Head – Maryland: 2015-2019	11
Cattle and Calves Inventory, Supply, and Disposition – Maryland: 2014-2018.....	11
All Cattle and Calves Production and Income – Maryland: 2014-2018	11

Hogs and Pigs

Hogs and Pigs Inventory by Class, December 1 – Maryland: 2014-2018	12
Hogs and Pigs Inventory, Supply, and Disposition – Maryland: 2014-2018.....	12
Hogs and Pigs Production, Marketings, and Income – Maryland: 2014-2018	12

Poultry

Commercial Broiler Production, Eggs Set, and Placements – Maryland: 2014-2018	13
Chickens Number on Farms, Inventory Value, and Value per Head, December 1 – Maryland: 2014-2018.....	13
Chickens Sold and Value of Sales – Maryland: 2014-2018	13
Egg Production and Value of Sales – Maryland: 2014-2018.....	13

Other Agricultural Statistics

Prices Received

Selected Commodities Prices Received by Farmers, Marketing Year Average – Maryland: 2014-2018 14

Farm Real Estate Values

Farm Real Estate Average Value per Acre, by Region and State, January 1 – Northeast 2014-2018 14

County Estimates

Field Crops

Corn for Grain Acreage, Yield, and Production, by County and District – Maryland: 2017-2018 16

Soybean Acreage, Yield, and Production, by County and District – Maryland: 2017-2018 17

Winter Wheat Acreage, Yield, and Production, by County and District – Maryland: 2017-2018..... 18

Livestock

Cattle Number on Farms, January 1, by County – Maryland: 2017-2018 19

Rank, Production, and Percent of United States Total – Maryland: 2018

Item (units)	Maryland's Rank	Maryland Production ¹	United States Production ¹	Percent of U.S. Total
		<i>1,000 units</i>	<i>1,000 units</i>	
Farms				
Number of Farms(farms)	38	12	2,029	0.6
Land in Farms(acres)	40	2,000	899,500	0.2
Field Crops				
Barley(bu)	10	1,680	153,527	1.1
Corn for Grain(bu)	23	55,480	14,340,369	0.4
Corn for Silage(tons)	26	855	121,564	0.7
Hay, Alfalfa(tons)	29	180	52,634	0.3
Hay, Other(tons)	36	372	70,966	0.5
Hay, All(tons)	40	552	123,600	0.4
Potatoes, Summer(cwt)	8	510	17,764	2.9
Soybeans(bu)	21	24,463	4,428,150	0.6
Winter Wheat(bu)	20	12,600	1,183,939	1.1
Vegetables				
Lima Beans(cwt)	4	66	682	9.7
Snap Beans(cwt)	16	180	17,074	1.1
Sweet Corn(cwt)	11	972	73,460	1.3
Watermelons(cwt)	7	1,050	39,345	2.7
Livestock Production				
Milk Production(lbs)	29	925,000	217,568,000	0.4
Cattle and Calves(lbs)	40	67,213	46,318,583	0.1
Egg Production(eggs)	26	780,600	110,073,700	0.7
Commercial Broilers(birds)	9	289,400	9,037,100	3.2
Commercial Broilers(lbs)	10	1,736,400	56,791,100	3.1
Hogs and Pigs ²(lbs)	32	11,376	38,829,022	(NA)
Livestock Slaughter				
Cattle(head)	20	39	33,005	0.1
Hogs(head)	27	19	124,435	(NA)
Sheep and Lambs(head)	12	46	2,265	2.0
Livestock Inventory				
All Cattle and Calves ³(head)	41	197	94,805	0.2
Milk Cows ³(head)	28	44	9,353	0.5
Beef Cows ³(head)	41	50	31,691	0.2
Hogs and Pigs ⁴(head)	(NA)	19	75,070	(NA)
All Other Crops				
Christmas Trees ⁶(acres)	20	2	295	0.7

(NA) Not available.

¹ Rankings of published States based on production or inventory, except as noted.

² Pounds sold or marketings.

³ January 1, 2019 inventory.

⁴ December 1, 2018 inventory.

⁵ 2018 sales.

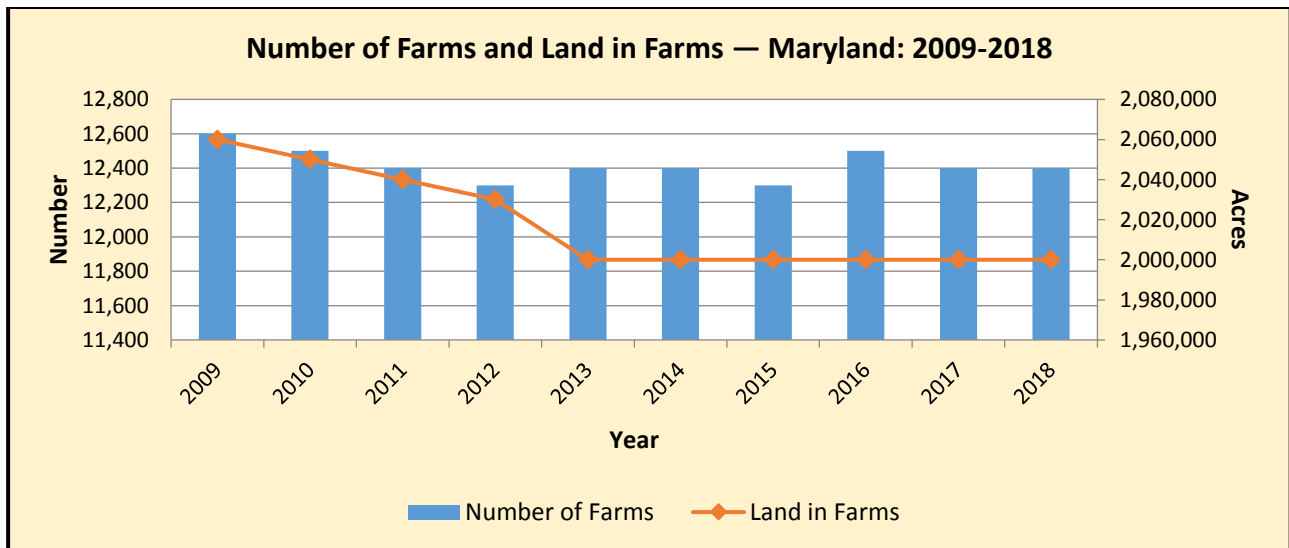
⁶ Acres in production from the 2017 Census of Agriculture.

Number of Farms, Land in Farms, and Average Farm Size – Maryland and United States: 2014-2018
(Places with annual sales of agricultural products of \$1,000 or more.)

Year	Maryland			United States		
	Number of farms	Land in farms	Average farm size	Number of farms	Land in farms	Average farm size
	<i>number</i>	<i>1,000 acres</i>	<i>acres</i>	<i>number</i>	<i>1,000 acres</i>	<i>acres</i>
2014	12,400	2,000	161	2,082,440	908,920	436
2015	12,300	2,000	163	2,063,890	905,790	439
2016	12,500	2,000	160	2,055,340	902,680	439
2017	12,400	2,000	161	2,042,000	900,370	441
2018	12,400	2,000	161	2,029,200	899,500	443

Number of Farms and Land in Farms, by Sales Class – Maryland: 2014-2018

Economic Sales Class	2014	2015	2016	2017	2018
	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>	<i>number</i>
Number of Farms					
\$1,000 - \$9,999	6,700	6,600	6,700	6,700	6,700
\$10,000 - \$99,999	3,450	3,400	3,450	3,300	3,300
\$100,000 - \$249,999	640	670	700	720	720
\$250,000 - \$499,999	570	540	520	490	490
\$500,000 - \$999,999	440	470	490	520	520
\$1,000,000 and over	600	620	640	670	670
Total	12,400	12,300	12,500	12,400	12,400
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>
Land in Farms					
\$1,000 - \$9,999	280	270	270	260	260
\$10,000 - \$99,999	390	390	390	390	390
\$100,000 - \$249,999	220	220	220	210	210
\$250,000 - \$499,999	240	240	230	230	230
\$500,000 - \$999,999	290	290	310	330	330
\$1,000,000 and over	580	590	580	580	580
Total	2,000	2,000	2,000	2,000	2,000



Barley Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area planted	Area harvested	Yield per acre	Production	Price per bushel ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	70	45	77.0	3,465	3.60	12,474
2015.....	50	35	69.0	2,415	2.75	6,641
2016.....	50	34	72.0	2,448	2.69	6,585
2017.....	50	27	76.0	2,052	2.90	5,951
2018.....	45	24	70.0	1,680	2.60	4,368

¹ Marketing year average price.

Corn for Grain Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area planted ¹	Area harvested	Yield per acre	Production	Price per bushel ²	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	500	430	175.0	75,250	3.79	285,198
2015.....	440	380	164.0	62,320	3.88	241,802
2016.....	460	400	152.0	60,800	4.05	246,240
2017.....	480	420	172.0	72,240	4.02	290,405
2018.....	440	380	146.0	55,480	4.11	228,023

¹ Area planted includes corn planted for both grain and silage.

² Marketing year average price.

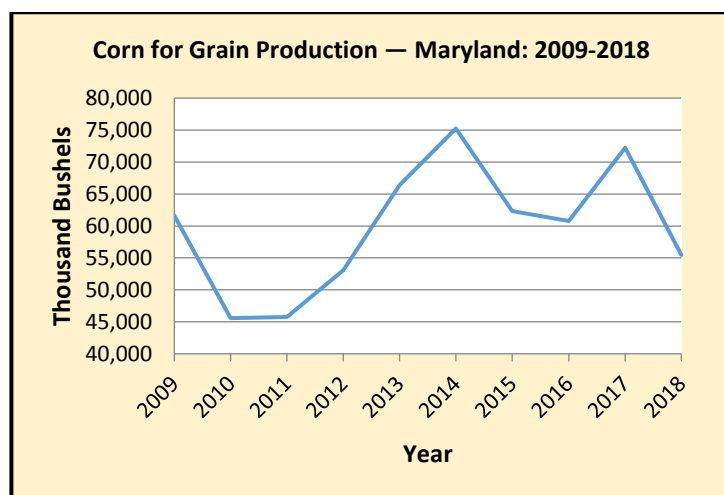
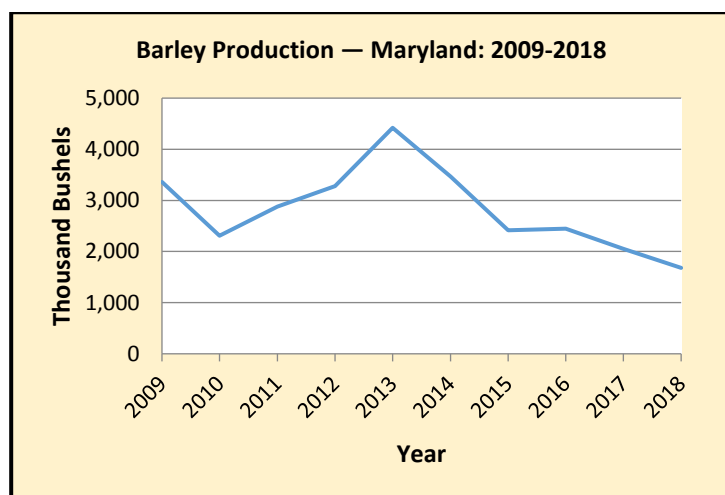
Corn for Silage Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area planted ¹	Area harvested	Yield per acre	Production	Price per ton ²	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>tons</i>	<i>1,000 tons</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	(NA)	60	22.0	1,320	(NA)	(NA)
2015.....	(NA)	45	22.0	990	(NA)	(NA)
2016.....	(NA)	50	18.0	900	(NA)	(NA)
2017.....	(NA)	50	20.5	1,025	(NA)	(NA)
2018.....	(NA)	45	19.0	855	(NA)	(NA)

(NA) Not available.

¹ For area planted, see corn for grain table.

² Marketing year average price.



Potatoes Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area planted	Area harvested	Yield per acre	Production	Price per cwt ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>cwt</i>	<i>1,000 cwt</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014	2.3	2.3	380	874	11.70	10,226
2015	2.4	2.4	330	792	10.50	8,316
2016	(D)	(D)	(D)	(D)	(D)	(D)
2017	2.6	2.5	365	913	(D)	(D)
2018	2.2	2.0	255	510	11.70	5,967

(D) Withheld to avoid disclosing data for individual operations.

¹ Marketing year average price.

Soybeans for Beans Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

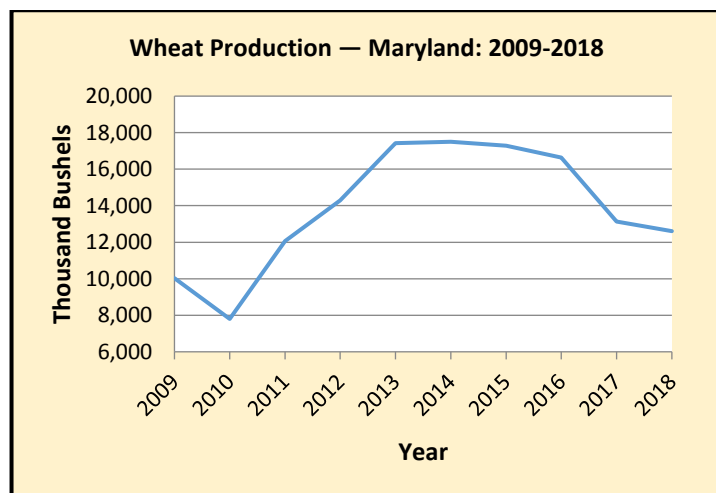
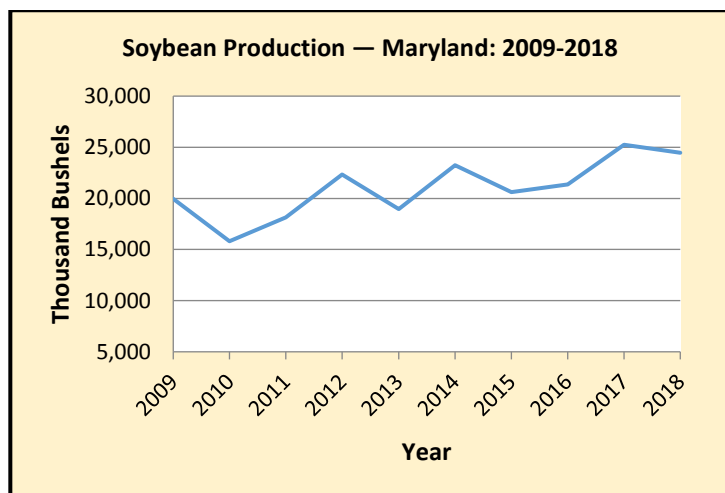
Year	Area planted	Area harvested	Yield per acre	Production	Price per bushel ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014	510	505	46.0	23,230	9.82	228,119
2015	520	515	40.0	20,600	9.11	187,666
2016	520	515	41.5	21,373	9.33	199,410
2017	500	495	51.0	25,245	9.20	232,254
2018	530	515	47.5	24,463	8.12	198,640

¹ Marketing year average price.

Winter Wheat Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area planted	Area harvested	Yield per acre	Production	Price per bushel ¹	Value of production
	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014	340	250	70.0	17,500	4.90	85,750
2015	355	270	64.0	17,280	4.60	79,488
2016	360	260	64.0	16,640	4.04	67,226
2017	410	185	71.0	13,135	4.63	60,815
2018	360	200	63.0	12,600	4.90	61,740

¹ Marketing year average price.



Alfalfa Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area harvested	Yield per acre	Production	Price per ton ¹	Value of production
	<i>1,000 acres</i>	<i>tons</i>	<i>1,000 tons</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	35	3.80	133	194.00	25,802
2015.....	35	4.40	154	220.00	33,880
2016.....	35	4.10	144	219.00	31,536
2017.....	35	3.90	137	191.00	26,167
2018.....	40	4.50	180	194.00	34,920

¹ Marketing year average price.

Other Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

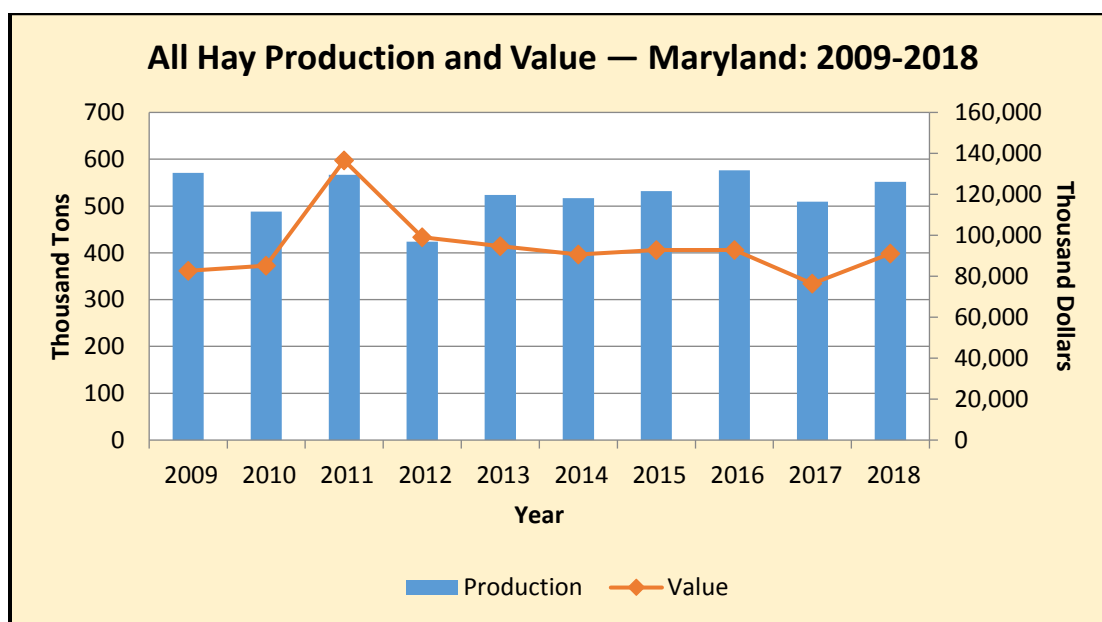
Year	Area harvested	Yield per acre	Production	Price per ton ¹	Value of production
	<i>1,000 acres</i>	<i>tons</i>	<i>1,000 tons</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	160	2.40	384	169.00	64,896
2015.....	180	2.10	378	156.00	58,968
2016.....	180	2.40	432	142.00	61,344
2017.....	155	2.40	372	135.00	50,220
2018.....	155	2.40	372	151.00	56,172

¹ Marketing year average price.

All Hay Area Harvested, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Area harvested	Yield per acre	Production	Price per ton ¹	Value of production
	<i>1,000 acres</i>	<i>tons</i>	<i>1,000 tons</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	195	2.65	517	175.00	90,698
2015.....	215	2.47	532	175.00	92,848
2016.....	215	2.68	576	179.00	92,880
2017.....	190	2.68	509	150.00	76,387
2018.....	195	2.83	552	163.00	91,092

¹ Marketing year average price. All hay price is based on weighted sales, not production.



Principal Vegetable Crops Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2017 ¹

Crop	Area planted	Area harvested	Yield per acre	Total production ²	Harvested not sold ³	Utilized production ²	Price per cwt ⁴	Value of utilized production
	<i>acres</i>	<i>acres</i>	<i>cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>dollars</i>	<i>1,000 dollars</i>
Lima Beans	2,200	2,200	35.0	77.0	-	77.0	27.70	2,132
Snap Beans	3,000	3,000	74.0	222.0	-	222.0	19.20	4,264
Sweet Corn	7,200	7,100	125.0	887.5	4.4	883.1	13.20	11,647
Watermelon	4,100	3,700	300.0	1,110.0	-	1,110.0	11.10	12,321
Total.....	(D)	(D)	(NA)	(D)	>0	(D)	(NA)	(D)

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

¹ Many significant changes were made to the vegetable estimating program beginning in 2016. For additional details, including data for fresh and processing production and previous years data, please reference the Vegetables Annual Summary at www.nass.usda.gov

² Beginning in 2016, Total Production and Utilized Production were estimated for each crop. In previous years, estimates were made for Production, which represented the portion of the crop that was harvested and sold. This most closely represents the Utilized Production in the current report and can be used for comparison.

³ Beginning in 2016, Harvested Not Sold estimates were added to the estimating program. This represents the difference between Total Production (the amount of the crop harvested from the field) and Utilized Production (the amount of the crop that was sold).

⁴ Marketing year average price.

Principal Vegetable Crops Area Planted and Harvested, Yield, Production, Price, and Value – Maryland: 2018 ¹

Crop	Area planted	Area harvested	Yield per acre	Total production ²	Harvested not sold ³	Utilized production ²	Price per cwt ⁴	Value of utilized production
	<i>acres</i>	<i>acres</i>	<i>cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>1,000 cwt</i>	<i>dollars</i>	<i>1,000 dollars</i>
Lima Beans	2,400	2,200	30.0	66.0	-	66.0	28.00	1,851
Snap Beans	3,000	3,000	60.0	180.0	-	180.0	19.20	3,456
Sweet Corn	8,300	8,100	120.0	972.0	-	972.0	14.40	13,994
Watermelon	3,700	3,500	300.0	1,050.0	10.5	1,039.5	10.00	10,395
Total.....	(D)	(D)	(NA)	(D)	>0	(D)	(NA)	(D)

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

¹ Many significant changes were made to the vegetable estimating program beginning in 2016. For additional details, including data for fresh and processing production and previous years data, please reference the Vegetables Annual Summary at www.nass.usda.gov

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³ Beginning in 2016, Harvested Not Sold estimates were added to the estimating program. This represents the difference between Total Production (the amount of the crop harvested from the field) and Utilized Production (the amount of the crop that was sold).

⁴ Marketing year average price.

Apple Acreage, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Bearing acreage	Yield per acre ¹	Production		Price per pound ²	Value of utilized production
			Total	Utilized		
	<i>acres</i>	<i>pounds</i>	<i>million pounds</i>	<i>million pounds</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	1,900	25,200	47.9	47.7	0.247	11,773
2015.....	1,900	22,800	43.4	43.3	0.203	8,810
2016.....	1,800	22,600	40.6	40.5	0.262	10,615
2017.....	1,800	26,900	48.4	48.0	0.193	9,278
2018.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.

¹ Yield is based on total production, which includes unharvested production and fruit harvested but not sold due to market conditions.

² Marketing year average price.

Apple Production, Price, and Value, by Utilization – Maryland: 2014-2018

Year	Fresh			Processed		
	Quantity	Price per pound ¹	Value of production	Quantity	Price per ton ¹	Value of production
	<i>million pounds</i>	<i>dollars</i>	<i>1,000 dollars</i>	<i>million pounds</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	16.2	0.553	8,959	31.5	179.00	2,814
2015.....	(D)	(D)	(D)	(D)	(D)	(D)
2016.....	17.0	0.500	8,500	23.5	180.00	2,115
2017.....	16.4	0.340	5,576	31.6	234.00	3,702
2018.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(D) Withheld to avoid disclosing data for individual operations.

(NA) Not available.

¹ Marketing year average price.

Peach Acreage, Yield, Production, Price, and Value – Maryland: 2014-2018

Year	Bearing acreage	Yield per acre ¹	Production		Price per ton ³	Value of utilized production
			Total	Utilized ²		
	<i>acres</i>	<i>tons</i>	<i>tons</i>	<i>tons</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	800	4.76	3,810	3,070	1,040.00	3,191
2015.....	800	4.83	3,860	3,800	1,030.00	3,930
2016.....	800	3.19	2,550	2,430	1,280.00	3,109
2017.....	900	4.51	4,060	4,000	1,320.00	5,264
2018.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

(NA) Not available.

¹ Yield is based on total production.

² Excludes mature fruit not harvested.

³ Marketing year average price.

Milk Cows and Production, by Quarter – Maryland: 2017-2018

Quarter	Milk cows ¹		Milk per cow ²		Milk production ²	
	2017	2018	2017	2018	2017	2018
	<i>1,000 head</i>	<i>1,000 head</i>	<i>pounds</i>	<i>pounds</i>	<i>million pounds</i>	<i>million pounds</i>
Jan - Mar	47.0	46.0	5,277	5,348	248.0	246.0
Apr - Jun	48.0	46.0	5,167	5,326	248.0	245.0
Jul - Sep	48.0	45.0	4,729	4,867	227.0	219.0
Oct - Dec	47.0	44.0	4,957	4,886	233.0	215.0
Annual Total	48.0	45.0	19,917	20,556	956.0	925.0

¹ Includes dry cows. Excludes heifers not yet fresh.

² Excludes milk sucked by calves.

Milk Production, Disposition, and Income – Maryland: 2014-2018

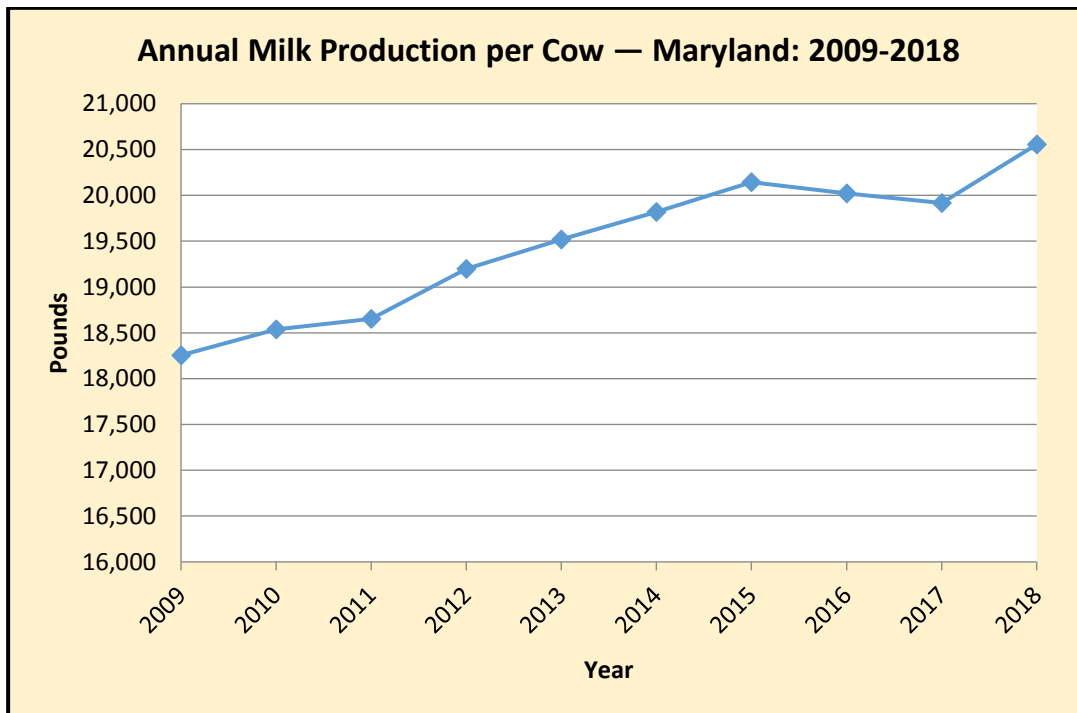
Year	Milk Cows ¹	Milk per Cow	Total Milk Production	Disposition of Milk Produced			Prices Received ²	Gross Income ³	Value of Milk Produced ⁴
				Fed to Calves	Used for Milk, Cream and Butter	Sold			
	<i>1,000 head</i>	<i>pounds</i>	<i>million pounds</i>	<i>million pounds</i>	<i>million pounds</i>	<i>million pounds</i>	<i>dollars</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>
2014	50.0	19,820	991.0	6.0	1.0	984.0	25.00	246,250	247,750
2015	49.0	20,143	987.0	6.0	1.0	980.0	17.60	172,656	173,712
2016	48.0	20,021	961.0	7.0	1.0	953.0	16.40	156,456	157,604
2017	48.0	19,917	956.0	7.0	1.0	948.0	17.80	168,922	170,168
2018	45.0	20,556	925.0	7.0	1.0	917.0	16.20	148,716	149,850

¹ Average number on farms during the year.

² Prices received for all milk sold wholesale per cwt.

³ Includes value of milk used for home consumption.

⁴ Includes value of milk fed to calves.



Cattle and Calves Number on Farms, January 1, Inventory Value and Value per Head – Maryland: 2015-2019

Year	Cows and Heifers that have calved		Heifers 500 lbs. and over			Bulls	Steers	Calves	Cattle and calves on feed	All Cattle and Calves		
	Kept for milk	Kept for beef	For milk replacement	For beef replacement	Other heifers	500 lbs. and over	500 lbs. and over	500 lbs. and less		Number	Value per head	Total value
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>dollars</i>	<i>1,000 dollars</i>
2015.....	49.0	42.0	25.0	9.0	9.0	4.0	15.0	32.0	10.0	185.0	1,460	270,100
2016.....	49.0	43.0	28.0	11.0	5.0	5.0	14.0	35.0	9.0	190.0	1,280	243,200
2017.....	47.0	43.0	29.0	11.0	6.0	4.0	14.0	32.0	9.0	186.0	1,060	197,160
2018.....	47.0	46.0	28.0	12.0	10.0	4.0	17.0	29.0	9.0	193.0	1,070	206,510
2019.....	44.0	50.0	30.0	13.0	8.0	5.0	14.0	33.0	9.0	197.0	930	183,210

Cattle and Calves Inventory, Supply, and Disposition – Maryland: 2014-2018

Year	Beginning inventory January 1	Calf crop	Inshipments	Marketings ¹		Farm slaughter ²	Deaths		Ending inventory following January 1
				Cattle	Calves		Cattle	Calves	
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>
2014.....	179.0	70.0	7.0	44.6	18.1	0.6	3.2	4.5	185.0
2015.....	185.0	75.0	7.0	45.9	22.1	0.2	4.0	4.8	190.0
2016.....	190.0	68.0	5.0	50.1	19.0	0.5	3.4	4.0	186.0
2017.....	186.0	70.0	5.5	38.5	21.3	0.2	3.5	5.0	193.0
2018.....	193.0	75.0	4.1	45.8	21.1	0.2	3.0	5.0	197.0

¹ Includes custom slaughter for use on farms where produced and State outshipments, but excludes interfarm sales within the State.

² Excludes custom slaughter for farmers at commercial establishments.

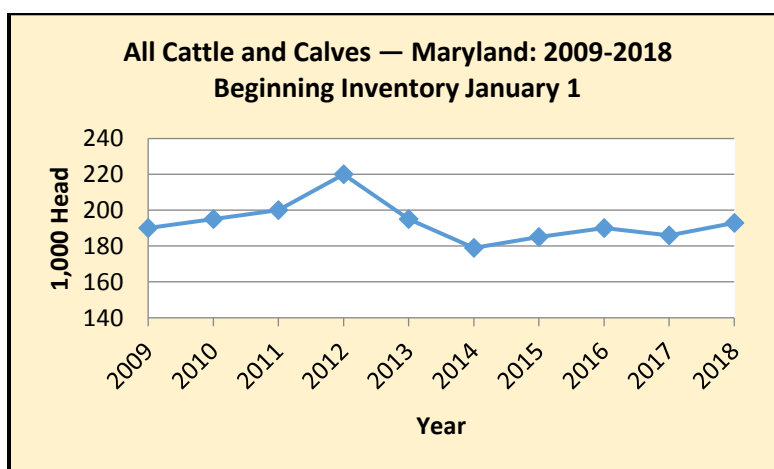
All Cattle and Calves Production and Income – Maryland: 2014-2018

Year	Production ¹	Marketings ²	Value of Production	Cash Receipts ³	Value of Home Consumption	Gross Income
	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>
2014.....	62,928	62,060	94,588	94,713	3,958	98,671
2015.....	69,725	65,790	103,094	97,146	2,085	99,231
2016.....	67,834	70,550	75,386	79,532	2,869	82,401
2017.....	59,915	55,279	65,699	61,856	2,028	63,884
2018.....	67,213	64,935	71,252	68,955	2,937	71,892

¹ Adjustments made for changes in inventory and inshipments.

² Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

³ Receipts from marketings and sale of farm slaughter.



Hogs and Pigs Inventory by Class, December 1 – Maryland: 2014-2018

Year	Breeding	Market	Weight Group				Sows farrowing ¹	Pigs per litter ¹	Pig crop ¹
			Under 50 pounds	50-119 pounds	120-179 pounds	180 pounds and over			
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>number</i>	<i>1,000 head</i>
2014	3.0	18.0	7.0	4.0	3.0	4.0	5.0	9.40	47.0
2015	5.0	16.0	5.0	4.0	4.0	3.0	5.2	8.65	45.0
2016	3.5	17.5	4.0	6.5	5.0	2.0	4.7	8.94	42.0
2017	4.0	17.0	4.0	5.0	5.0	3.0	4.3	9.77	42.0
2018	3.5	15.5	4.0	4.0	3.5	4.0	4.0	10.00	40.0

¹ Marketing year.

Hogs and Pigs Inventory, Supply, and Disposition – Maryland: 2014-2018

Year	Beginning inventory Dec. 1 preceding	Pig crop	Inshipments	Marketings ¹	Farm slaughter ²	Deaths	Ending inventory Dec. 1
	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>	<i>1,000 head</i>
2014	22.0	47.0	15.0	60.4	0.1	2.5	21.0
2015	21.0	45.0	11.0	55.0	0.2	0.8	21.0
2016	21.0	42.0	12.3	53.2	0.1	1.0	21.0
2017	21.0	42.0	11.7	52.5	0.1	1.1	21.0
2018	21.0	40.0	13.7	54.3	0.1	1.3	19.0

¹ Includes custom slaughter for use on farms where produced and State outshipments, but excludes interfarm sales within the State.

² Excludes custom slaughter for farmers at commercial establishments.

Hogs and Pigs Production, Marketings, and Income – Maryland: 2014-2018

(Dollar values based on data received from United States Department of Agriculture's Agricultural Marketing Service.)

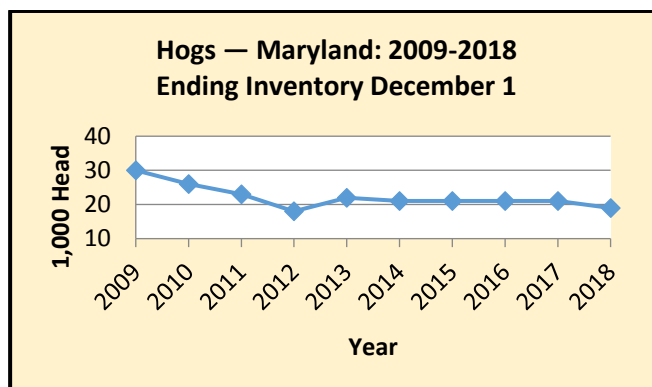
Year	Production ¹	Marketings ²	Value of production ³	Cash receipts ^{3 4}	Value of home consumption	Gross income
	<i>1,000 pounds</i>	<i>1,000 pounds</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>	<i>1,000 dollars</i>
2014	11,519	12,498	8,644	10,219	205	10,424
2015	11,679	11,547	6,510	6,875	153	7,028
2016	9,882	10,784	5,012	6,058	114	6,172
2017	11,464	11,728	6,080	6,800	95	6,895
2018	11,376	12,372	5,554	6,809	38	6,847

¹ Adjustments made for changes in inventory and for inshipments.

² Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

³ Includes allowance for higher average price of State inshipments and outshipments of feeder pigs.

⁴ Receipts from marketings and sale of farm slaughter.



Commercial Broiler Production, Eggs Set, and Placements – Maryland: 2014-2018

Year ¹	Number Produced	Production	Value of Production ²	Chicks Hatched	Eggs Set	Placements
	<i>1,000 birds</i>	<i>1,000 pounds</i>	<i>1,000 dollars</i>	<i>1,000 chicks</i>	<i>1,000 eggs</i>	<i>1,000 chicks</i>
2014.....	287,900	1,554,700	990,344	327,674	404,728	316,050
2015.....	303,500	1,730,000	930,740	338,955	402,684	318,591
2016.....	303,500	1,851,400	884,969	346,803	411,972	323,958
2017.....	306,700	1,840,200	1,001,069	353,928	425,921	317,604
2018.....	289,400	1,736,400	970,648	349,579	417,633	300,967

¹ Twelve month period beginning with December of the previous year.

² Gross income received by the agricultural sector for the production of broilers.

Chickens Number on Farms, Inventory Value, and Value per Head, December 1 – Maryland: 2014-2018

Year	Hens and Pullets of Laying Age	All Chickens (<i>excl. meat chickens</i>)		
		Number	Value per Head	Total Value
	<i>1,000 birds</i>	<i>1,000 birds</i>	<i>dollars</i>	<i>1,000 dollars</i>
2014.....	2,869	3,565	3.30	11,765
2015.....	2,830	3,800	3.30	12,540
2016.....	2,720	3,897	3.60	14,029
2017.....	2,858	4,267	4.00	17,068
2018.....	2,831	4,099	3.90	15,986

Chickens Sold and Value of Sales – Maryland: 2014-2018 ¹

Year	Number	Pounds sold (<i>Live</i>)	Value of Sales
	<i>1,000 birds</i>	<i>1,000 pounds</i>	<i>1,000 dollars</i>
2014.....	913.6	3,389.5	125.4
2015.....	1,330.7	4,857.1	155.4
2016.....	1,598.1	5,785.1	115.7
2017.....	1,525.3	5,613.1	67.4
2018.....	508.1	2,118.8	50.9

¹ Excludes commercial broilers.

Egg Production and Value of Sales – Maryland: 2014-2018

Year	Total Layers ¹	Average Layers on Hand During Year ²	Eggs per Layer ³	Eggs Produced ²	Value of Production ²
	<i>1,000 birds</i>	<i>1,000 birds</i>	<i>number</i>	<i>million eggs</i>	<i>1,000 dollars</i>
2014.....	2,869	2,807	280	786.7	71,377
2015.....	2,830	2,681	291	779.0	100,409
2016.....	2,720	2,738	293	803.0	33,199
2017.....	2,858	2,852	295	840.1	45,389
2018.....	2,831	2,689	290	780.6	60,686

¹ Inventory on December 1 of year shown.

² Marketing year is from December 1 of the previous year to November 30 of the year shown.

³ Eggs produced divided by the average number of layers on hand.

Selected Commodities Prices Received by Farmers, Marketing Year Average – Maryland: 2014-2018

Commodity	Marketing Year Average Price				
	2014	2015	2016	2017	2018
	<i>dollars per bushel</i>	<i>dollars per bushel</i>	<i>dollars per bushel</i>	<i>dollars per bushel</i>	<i>dollars per bushel</i>
Wheat ¹	4.90	4.60	4.04	4.63	4.90
Corn ²	3.79	3.88	4.05	4.02	4.11
Barley ¹	3.60	2.75	2.69	2.90	2.60
Soybeans ³	9.82	9.11	9.33	9.20	8.12

¹ Marketing year is from July 1 of the previous year to June 30 of the year shown.

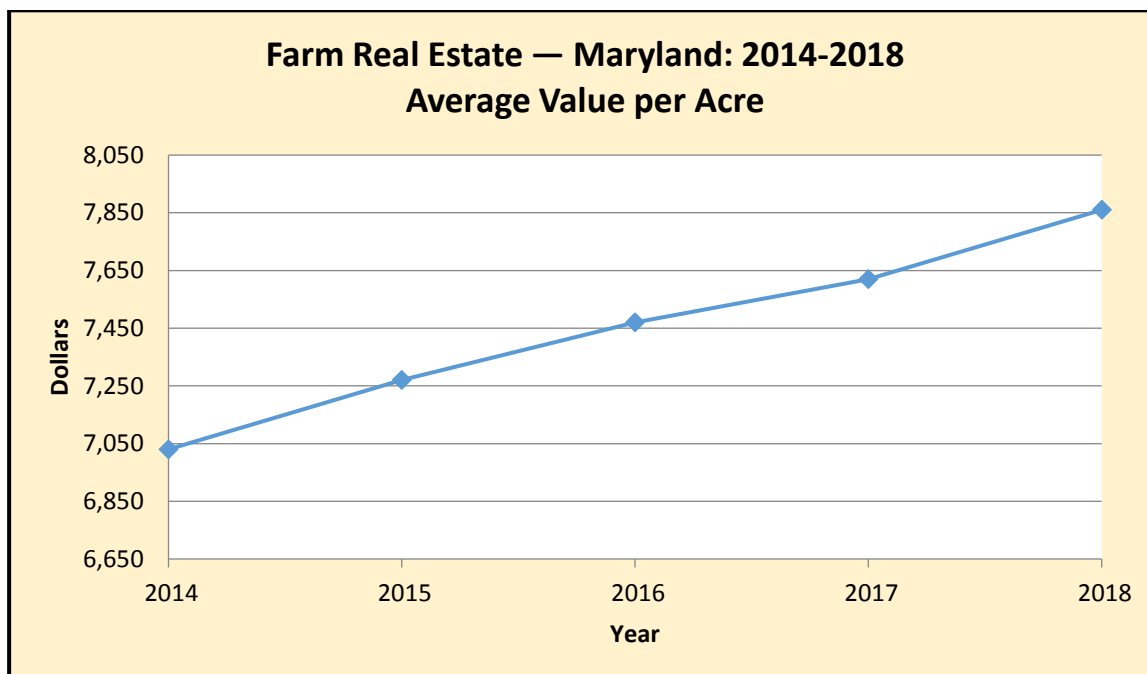
² Marketing year is from October 1 of the previous year to September 30 of the year shown.

³ Marketing year is from September 1 of the previous year to August 31 of the year shown.

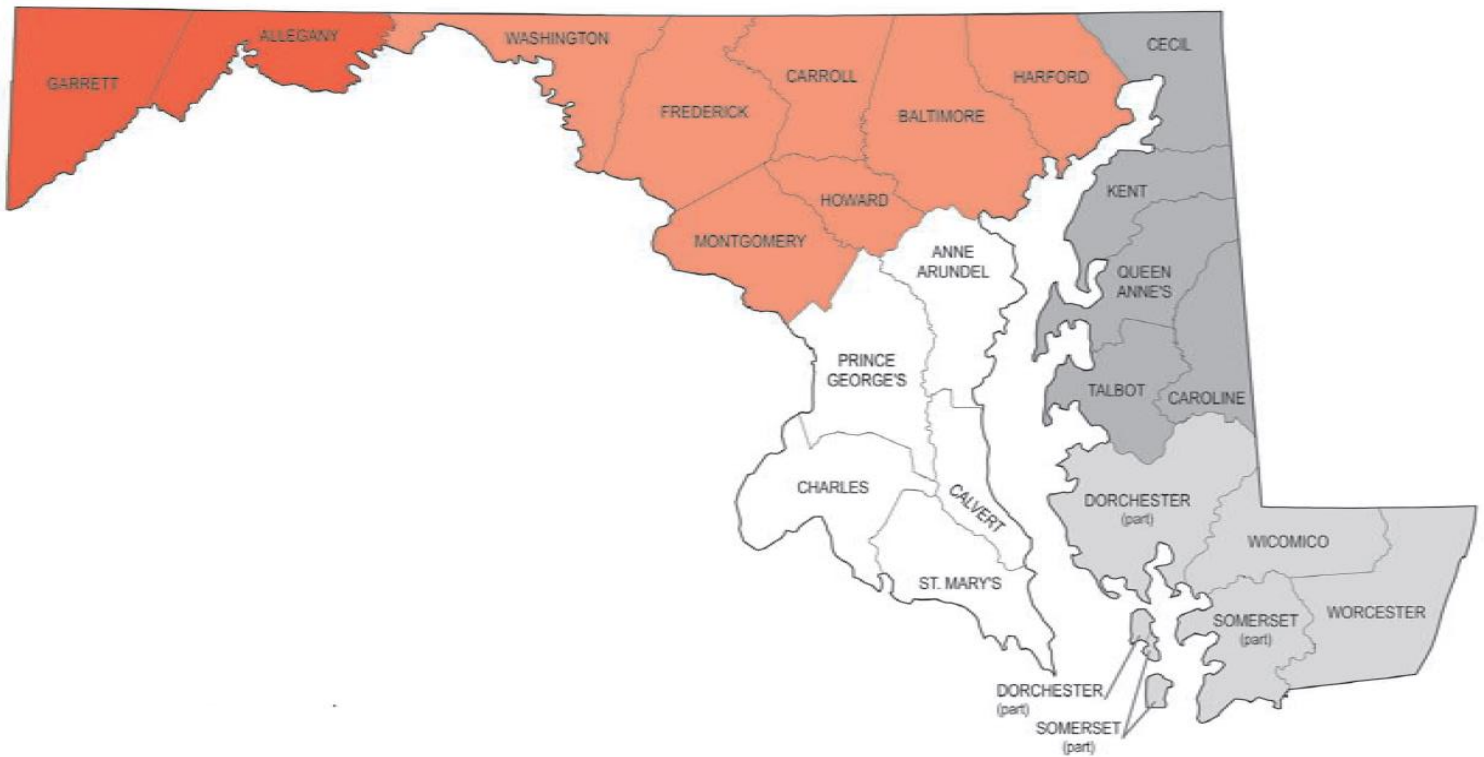
Farm Real Estate Average Value per Acre, by Region and State, January 1 – Northeast 2014-2018

State	2014	2015	2016	2017	2018	Change 2017 - 2018
	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>dollars</i>	<i>percent</i>
Northeast						
Connecticut	11,400	11,700	11,900	12,100	12,300	1.7
Delaware	8,140	8,110	8,290	8,250	8,410	1.9
Maine	2,120	2,170	2,210	2,370	2,370	0.0
Maryland	7,030	7,270	7,470	7,620	7,860	3.1
Massachusetts	10,500	10,600	10,700	10,800	10,900	0.9
New Hampshire	4,360	4,450	4,610	4,860	4,900	0.8
New Jersey	13,000	13,300	13,300	13,400	13,500	0.7
New York	2,740	3,090	3,110	3,160	3,230	2.2
Pennsylvania	5,710	5,710	5,820	6,030	6,250	3.6
Rhode Island	14,000	14,300	14,600	14,900	15,200	2.0
Vermont	3,290	3,350	3,400	3,470	3,540	2.0
U.S. Total ¹	2,940	3,000	2,990	3,030	3,100	2.3

¹ Excludes Alaska and Hawaii.



Maryland State – Counties by District



WESTERN: Allegany, Garrett

NORTH CENTRAL: Baltimore, Carroll, Frederick, Harford, Howard, Montgomery, Washington

SOUTHERN: Anne Arundel, Calvert, Charles, Prince George's, St. Mary's

UPPER EASTERN SHORE: Caroline, Cecil, Kent, Queen Anne's, Talbot

LOWER EASTERN SHORE: Dorchester, Somerset, Wicomico, Worcester

Corn for Grain Acreage, Yield, and Production, by County and District – Maryland: 2017-2018

County and District	Planted		Harvested		Yield		Production	
	2017	2018	2017	2018	2017	2018	2017	2018
	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>bushels</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
Allegany.....	800	600	400	300	117.5	100.0	47	30
Garrett.....	4,700	5,700	2,800	4,000	149.3	119.5	418	478
Other counties.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Western, Total.....	5,500	6,300	3,200	4,300	145.3	118.1	465	508
Baltimore	21,000	17,000	18,900	15,100	171.7	151.1	3,245	2,282
Carroll.....	34,000	31,500	28,000	26,400	173.2	148.7	4,849	3,925
Frederick.....	39,500	39,100	28,800	31,400	163.4	157.0	4,707	4,930
Harford.....	20,800	19,300	17,000	16,000	180.5	146.1	3,068	2,337
Howard	(¹)	4,400	(¹)	4,000	(¹)	171.8	(¹)	687
Montgomery	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Washington.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	31,700	25,700	23,300	17,100	170.2	159.5	3,965	2,727
North Central, Total.....	147,000	137,000	116,000	110,000	171.0	153.5	19,834	16,888
Caroline	39,500	36,700	37,000	33,200	180.4	155.0	6,676	5,146
Cecil.....	22,500	19,600	20,000	16,600	187.6	138.3	3,752	2,295
Kent	45,000	40,100	39,000	37,100	173.8	147.2	6,780	5,462
Queen Anne's.....	59,500	50,800	54,000	46,800	173.7	154.6	9,380	7,233
Talbot.....	35,500	31,800	32,000	28,300	163.4	150.8	5,230	4,269
Other counties.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Upper Eastern Shore, Total	202,000	179,000	182,000	162,000	174.8	150.6	31,818	24,405
Anne Arundel.....	(¹)	3,700	(¹)	3,400	(¹)	126.2	(¹)	429
Calvert	(¹)	2,900	(¹)	2,600	(¹)	106.5	(¹)	277
Charles.....	(¹)	4,300	(¹)	3,700	(¹)	116.5	(¹)	431
Prince George's.....	2,000	2,300	1,600	2,000	145.0	80.5	232	161
St. Mary's.....	8,900	8,700	8,700	7,200	148.5	129.4	1,292	932
Other counties.....	11,600	(²)	11,000	(²)	136.5	(²)	1,501	(²)
Southern, Total	22,500	21,900	21,300	18,900	142.0	118.0	3,025	2,230
Dorchester.....	27,000	25,900	25,800	21,100	201.0	159.2	5,185	3,360
Somerset	14,500	13,500	13,800	12,200	168.7	147.2	2,328	1,796
Wicomico.....	26,500	22,200	24,500	19,500	165.9	98.5	4,065	1,921
Worcester.....	35,000	34,200	33,400	32,000	165.3	136.6	5,520	4,372
Other counties.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Lower Eastern Shore, Total.....	103,000	95,800	97,500	84,800	175.4	135.0	17,098	11,449
Other districts	-	-	-	-	-	-	-	-
Maryland Total	480,000	440,000	420,000	380,000	172.0	146.0	72,240	55,480

- Represents zero.

¹ Represents zero or is included in Other counties.

² Represents zero or is included in Other districts.

Soybean Acreage, Yield, and Production, by County and District – Maryland: 2017-2018

County and District	Planted		Harvested		Yield		Production	
	2017	2018	2017	2018	2017	2018	2017	2018
	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>bushels</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
Allegany	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Garrett.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	3,100	2,800	3,000	2,500	40.0	46.0	120	115
Western, Total	3,100	2,800	3,000	2,500	40.0	46.0	120	115
Baltimore	14,200	(¹)	14,000	(¹)	50.0	(¹)	700	(¹)
Carroll.....	28,000	29,100	27,800	28,600	51.4	48.4	1,430	1,385
Frederick.....	41,800	41,900	41,500	40,900	58.8	53.4	2,440	2,185
Harford	13,800	15,000	13,600	14,600	51.5	47.3	700	690
Howard	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Montgomery	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Washington.....	(¹)	14,900	(¹)	14,500	(¹)	51.0	(¹)	740
Other counties.....	33,200	35,600	32,800	34,400	53.5	44.2	1,755	1,520
North Central, Total.....	131,000	136,500	129,700	133,000	54.2	49.0	7,025	6,520
Caroline	49,000	53,000	48,700	51,700	47.7	48.4	2,325	2,500
Cecil	20,000	(¹)	19,800	(¹)	52.8	(¹)	1,045	(¹)
Kent	45,500	47,400	45,200	46,300	57.5	51.8	2,600	2,400
Queen Anne's.....	52,500	60,000	51,600	58,200	54.8	48.4	2,830	2,815
Talbot	40,000	(¹)	39,700	(¹)	48.5	(¹)	1,925	(¹)
Other counties.....	(²)	63,600	(²)	61,800	(²)	51.2	(²)	3,167
Upper Eastern Shore, Total.....	207,000	224,000	205,000	218,000	52.3	49.9	10,725	10,882
Anne Arundel	(¹)	4,700	(¹)	4,600	(¹)	39.1	(¹)	180
Calvert	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Charles.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Prince George's.....	2,700	2,100	2,600	1,700	55.0	37.1	143	63
St. Mary's.....	15,200	15,500	15,100	15,300	44.4	37.9	670	580
Other counties.....	18,000	14,400	17,700	13,400	41.9	30.1	742	403
Southern, Total	35,900	36,700	35,400	35,000	43.9	35.0	1,555	1,226
Dorchester	46,500	49,600	46,300	48,500	49.7	49.4	2,300	2,395
Somerset	18,000	18,200	17,900	17,800	52.8	40.7	945	725
Wicomico	22,000	25,100	21,500	24,100	40.7	41.9	875	1,010
Worcester.....	36,500	37,100	36,200	36,100	47.0	44.0	1,700	1,590
Other counties.....	(²)	(²)	(²)	(²)	(²)	(²)	(²)	(²)
Lower Eastern Shore, Total.....	123,000	130,000	121,900	126,500	47.7	45.2	5,820	5,720
Other districts	-	-	-	-	-	-	-	-
Maryland Total.....	500,000	530,000	495,000	515,000	51.0	47.5	25,245	24,463

- Represents zero.

¹ Represents zero or is included in Other counties.

² Represents zero or is included in Other districts.

Winter Wheat Acreage, Yield, and Production, by County and District – Maryland: 2017-2018

County and District	Planted		Harvested		Yield		Production	
	2017	2018	2017	2018	2017	2018	2017	2018
	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>acres</i>	<i>bushels</i>	<i>bushels</i>	<i>1,000 bushels</i>	<i>1,000 bushels</i>
Allegany.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Garrett.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	800	800	400	500	55.0	60.0	22	30
Western, Total.....	800	800	400	500	55.0	60.0	22	30
Baltimore	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Carroll.....	22,000	15,000	12,700	6,300	82.0	65.9	1,042	415
Frederick.....	19,800	26,600	13,800	15,900	68.8	49.6	950	788
Harford.....	8,000	7,600	2,000	1,800	71.0	62.8	142	113
Howard	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Montgomery	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Washington.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	29,200	34,800	19,500	23,000	73.1	58.7	1,426	1,349
North Central, Total.....	79,000	84,000	48,000	47,000	74.2	56.7	3,560	2,665
Caroline	34,000	42,000	16,700	17,300	64.8	67.3	1,082	1,165
Cecil.....	14,500	(¹)	6,700	(¹)	78.7	(¹)	527	(¹)
Kent	47,500	(¹)	14,000	(¹)	83.9	(¹)	1,174	(¹)
Queen Anne's.....	56,500	49,000	14,600	24,200	70.2	65.5	1,025	1,585
Talbot.....	51,500	35,000	18,000	18,000	63.0	63.9	1,134	1,150
Other counties.....	(²)	52,000	(²)	38,400	(²)	71.0	(²)	2,725
Upper Eastern Shore, Total	204,000	178,000	70,000	97,900	70.6	67.7	4,942	6,625
Anne Arundel.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Calvert	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Charles.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Prince George's.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
St. Mary's.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	28,200	28,200	13,600	19,300	62.6	50.3	851	970
Southern, Total	28,200	28,200	13,600	19,300	62.6	50.3	851	970
Dorchester.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Somerset	15,600	9,000	9,100	6,600	76.9	72.0	700	475
Wicomico.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Worcester.....	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)	(¹)
Other counties.....	82,400	60,000	43,900	28,700	69.7	63.9	3,060	1,835
Lower Eastern Shore, Total.....	98,000	69,000	53,000	35,300	70.9	65.4	3,760	2,310
Other districts	-	-	-	-	-	-	-	-
Maryland Total.....	410,000	360,000	185,000	200,000	71.0	63.0	13,135	12,600

- Represents zero.

¹ Represents zero or is included in Other counties.

² Represents zero or is included in Other districts.

Cattle Number on Farms, January 1, by County – Maryland: 2017-2018

County and District	All Cattle and Calves		Milk Cows	
	2017	2018	2017	2018
	<i>head</i>	<i>head</i>	<i>head</i>	<i>head</i>
Western Counties				
Allegany	3,600	3,800	(D)	(D)
Garrett.....	16,100	16,500	2,500	2,500
North Central Counties				
Baltimore	5,500	5,800	900	900
Carroll.....	22,000	23,000	6,600	6,600
Frederick.....	40,000	41,000	12,500	12,500
Harford	9,100	9,400	1,600	1,600
Howard	2,600	2,800	500	500
Montgomery	4,700	5,000	500	500
Washington.....	44,000	45,000	12,700	12,700
Upper Eastern Shore Counties				
Caroline	3,700	3,900	1,000	1,000
Cecil	6,000	6,300	1,500	1,500
Kent	10,000	10,300	4,400	4,400
Queen Anne's.....	4,600	4,900	1,500	1,500
Talbot	1,400	1,600	200	200
Southern Counties				
Anne Arundel	1,500	1,700	(D)	(D)
Calvert	1,200	1,400	(D)	(D)
Charles.....	1,800	2,000	100	100
Prince George's.....	3,400	3,600	(D)	(D)
St. Mary's.....	2,600	2,800	200	200
Lower Eastern Shore Counties				
Dorchester	300	300	(¹)	(¹)
Somerset	500	500	(D)	(D)
Wicomico	900	900	(D)	(D)
Worcester.....	500	500	(D)	(D)
All Other Counties.....	-	-	300	300
Maryland Total.....	186,000	193,000	47,000	47,000

- Represents zero.

(D) Withheld to avoid disclosing data for individual operations.

¹ Represents zero or is included in All Other Counties.



LEARN MORE

- **www.nass.usda.gov** – Browse the NASS website for information on surveys, the census, and more.
- **Quick Stats** – Use this easy online tool to find data by agricultural product, geography, and date.
- **CropScape** – Use this Web portal to get crop-specific geospatial land cover information.
- Sign up for free customized **national reports, state reports, or news releases** via email.
- Follow NASS on **Twitter** – @usda_nass.
- Customer Service – For assistance finding data online or to request hard copies, including CDs and DVDs, call toll free: (800) 727-9540 (7:30 a.m. to 4 p.m. ET Mon-Fri) or write to **nass@nass.usda.gov**.
- View our pledge to keep data **confidential** and **secure**.

2019 STATE AGRICULTURE OVERVIEW

Maryland

† Survey Data from [Quick Stats](#) as of: Aug/25/2020

Farms Operations[†]

Farm Operations - Area Operated, Measured in Acres / Operation
 Farm Operations - Number of Operations
 Farm Operations - Acres Operated

161
 12,400
 2,000,000



Livestock Inventory[†]

Cattle, Cows, Beef - Inventory (First of Jan. 2020)
 Cattle, Cows, Milk - Inventory (First of Jan. 2020)
 Cattle, Incl Calves - Inventory (First of Jan. 2020)
 Cattle, On Feed - Inventory (First of Jan. 2020)
 Hogs - Inventory (First of Dec. 2019)
 Chickens, Broilers - Production, Measured in Head

47,000
 42,000
 179,000
 6,000
 20,000
 295,600,000

Milk Production[†]

Milk - Production, Measured in Lb / Head
 Milk - Production, Measured in \$
 Milk - Production, Measured in Lb

19,535
 154,560,000
 840,000,000

Crops - Planted, Harvested, Yield, Production, Price (MYA), Value of Production[†] Sorted by Value of Production in Dollars

Commodity	Planted All Purpose Acres	Harvested Acres	Yield	Production	Price per Unit	Value of Production in Dollars
CORN						
CORN, GRAIN		460,000	161 BU / ACRE	74,060,000 BU	4.3 \$ / BU	318,458,000
CORN	510,000					
CORN, SILAGE		40,000	22 TONS / ACRE	880,000 TONS		
SOYBEANS						
SOYBEANS	480,000	475,000	44 BU / ACRE	20,900,000 BU	8.3 \$ / BU	173,470,000
WHEAT						
WHEAT, WINTER	345,000	165,000	75 BU / ACRE	12,375,000 BU	4.95 \$ / BU	105,806,000
WHEAT	345,000	165,000	75 BU / ACRE	12,375,000 BU	4.95 \$ / BU	105,806,000
HAY & HAYLAGE						
HAY & HAYLAGE						85,911,000
HAY & HAYLAGE, (EXCL ALFALFA)						62,468,000
HAY & HAYLAGE, ALFALFA	3,000					23,443,000
HAY						
HAY		189,000	2.68 TONS / ACRE	507,000 TONS	169 \$ / TON	85,911,000
HAY, (EXCL ALFALFA)		155,000	2.5 TONS / ACRE	388,000 TONS	161 \$ / TON	62,468,000
HAY, ALFALFA		34,000	3.5 TONS / ACRE	119,000 TONS	197 \$ / TON	23,443,000
BARLEY						
BARLEY	32,000	17,000	85 BU / ACRE	1,445,000 BU	3.1 \$ / BU	4,480,000

(NA) Not Available

(D) Withheld to avoid disclosing data for individual operations

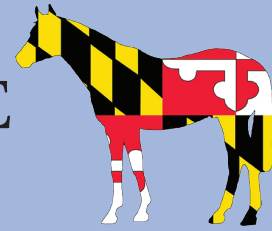
(S) Insufficient number of reports to establish an estimate

(X) Not Applicable

(Z) Less than half the rounding unit



THE MARYLAND HORSE INDUSTRY



Thoroughbred & Standardbred horse racing & breeding ♦ trail riding ♦ steeplechase ♦ sport horse competitions ♦ rodeo ♦ carriage driving ♦ therapy programs ♦ recreation ♦ rescue and more

A Dynamic Agricultural Entity

705,000 ACRES



25% of the State's agricultural land

Pastures are among the best filtering devices to protect the Chesapeake Bay from harmful runoff

10% of Maryland land



\$80,000,000 on feed, hay and straw

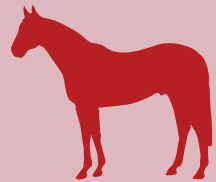
88,000 equine acres preserved forever as farmland



Number of Horses in Maryland

101,457

Horses in Maryland - making MD the number one state in terms of the number of horses per square mile!



10.5 horses per square mile!

200

Equine Orgs. Statewide

16,000

Horse Farms & Stables

35

different equine disciplines

40

 breeds

Integral to the State's Economy



\$2.1 Billion

Economic Impact



\$78m

 in tax revenue

28,000

 industry jobs

\$1B

 spent by participants

A Global Equine Identity



51.8% of households in MD contain horse enthusiasts



10,000 Youths served by MD's Educational Programs

1,500 4H Horse Projects

765 Licensed Riding & Boarding Stables

55 High School Interscholastic Teams

22 Pony Clubs

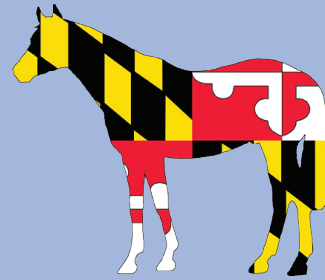
12 College Equine Teams & Clubs



MD is home to International gems:

Triple Crown Race - the Preakness since 1875
International 5-Star at Fair Hill in 2020

THE MARYLAND HORSE INDUSTRY ECONOMIC IMPACT



The Racing Sector



Adds **\$365 million** in value to the state economy



Racing Sector Total
Economic Impact of:
\$572 million



Supports
5,214 jobs

The Competition Sector

Competition Sector Total
Economic Impact of:

**\$270
million**



Supports **3,346 jobs**



Adds **\$162 million**
in value to the state economy



The Recreation Sector



Supports
4,971 jobs



Adds **\$234 million** in
value to the state economy

Recreation
Sector
Total Economic
Impact of:
\$382 million

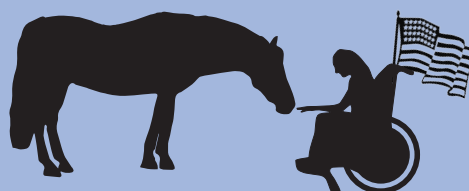


The Equine Therapy Sector



Adds
\$8.4 million
in value to the state
economy

40



Therapeutic Riding Centers
Including over a dozen
Veterans groups

Information provided by

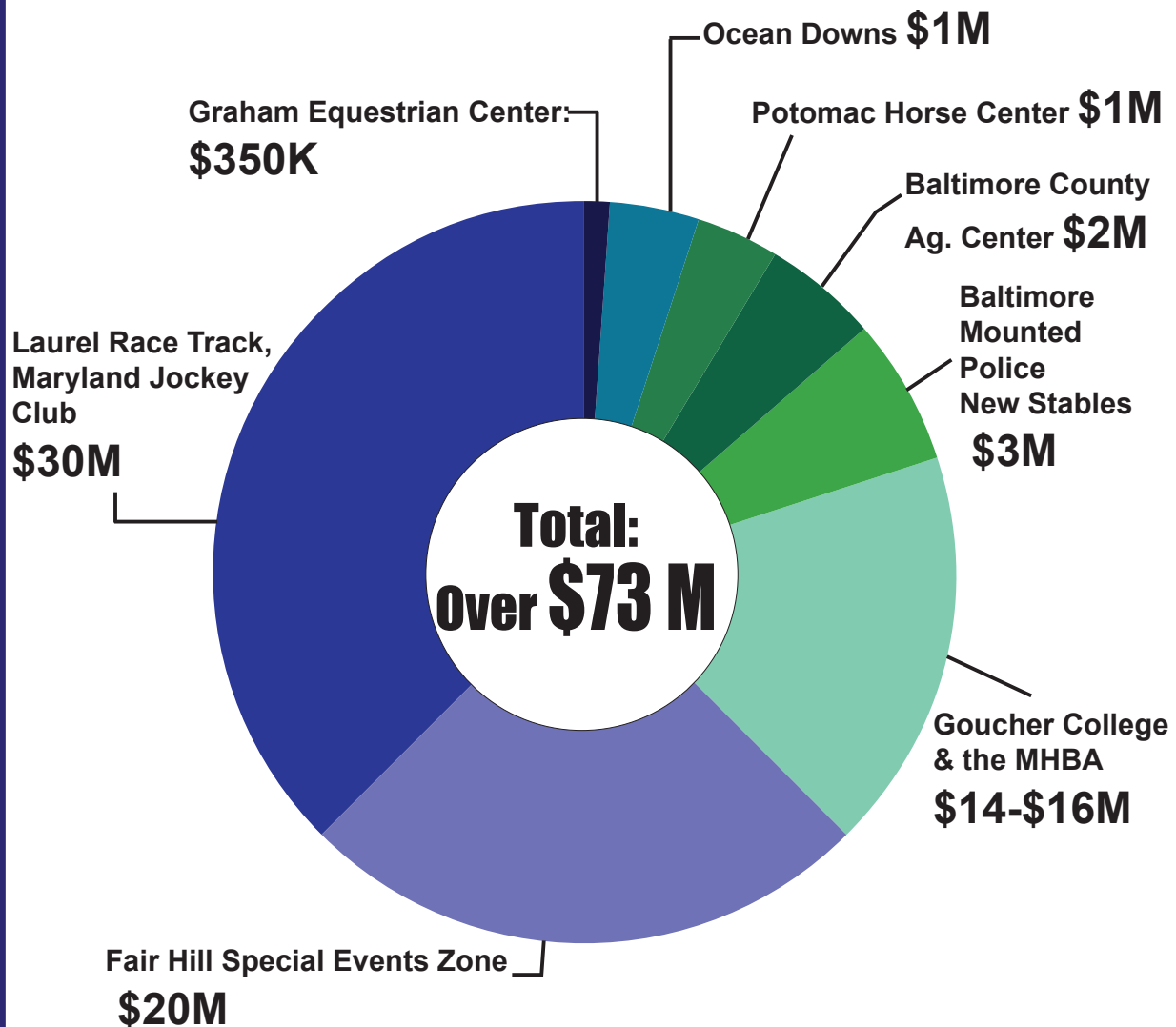
The American Horse Council
Foundation 2017

Institute for Governmental
Service and Research
University of Maryland 2017

Maryland Equine Census,
USDA 2010

Investing in Maryland Horse Industry Infrastructure:

Improvements currently planned or in the pipeline



- \$30M Laurel Race Track, Maryland Jockey Club has spent over \$30M
- \$20M Fair Hill Special Events Zone Phase I, construction starts Fall 2019
- \$14M Goucher College & Maryland Horse Breeders Assoc. Equestrian Center
- \$3M Baltimore Mounted Police New Stables, B&O Railroad Museum
- \$2M Baltimore County Ag. Center Show Ring, under construction
- \$1M Potomac Horse Center
- \$1M Ocean Downs Racing Admin. Building & Testing Barn
- \$350K Graham Equestrian Center



BIOSECURITY FOR ALLIED BUSINESSES/GOVERNMENT EMPLOYEES

As most of you are aware, Delmarva's chicken industry is preparing for the likely introduction of the Highly Pathogenic Avian Influenza virus from migratory waterfowl as they migrate through our region to their wintering sites this autumn. WE SEEK YOUR HELP TO KEEP THE VIRUS OUT OF THE NEARLY 4,600 DELMARVA CHICKEN HOUSES.

There have been countless planning meetings, conference calls, webinars, practice exercises, educational meetings, and much more to prevent introduction of the virus into chicken houses and to respond if the virus is found. One such effort is a university-sponsored chicken grower/farmer training workshop "Keeping Poultry Disease off the Farm" the YouTube videos will be posted on the following website <http://extension.umd.edu/poultry/avian-influenza-ai-updatesinformation>. Please visit this website for up to date information.

As an allied partner in our chicken industry, you rely upon the economic health of our chicken farms. Many of you have employees that routinely visit farms to read meters; replace or repair poultry equipment; perform electrical or plumbing repairs; deliver litter, propane or supplies; contract the reconditioning of litter; or apply ammonia control products, insecticides, or rodenticides.

We recognize that it may not be possible for you to send employees to formal training, so below we outline some practical and necessary suggestions so that you can do your part.

Note that these are typical basic requirements in our industry. Individual chicken companies and grower/farmers might have different or stricter requirements for farm and chicken house visits. Any required biosecurity measures such as using on-farm disinfectant foot pans should be followed. When possible, check with the grower/farmer before making a farm visit. These precautions could be the difference between our chicken houses being virus free or dealing with an industry facing unprecedented avian influenza devastation.

General Visitation : entering chicken houses when birds are present (Most risky)

- Use common sense. When in doubt, stay out of the farm until the farmer/grower gives you permission to proceed with your visit.
- After checking with the grower/farmer, visit flocks from youngest to oldest if possible.
- Ask what the current mortality rate is. If mortality is greater than 3 birds per 1000, do not visit another farm without first washing your vehicle and changing your clothes.
- Make an effort to contact the grower/farmer at least 20-30 minutes before your arrival.
- Sign a visitor log upon your arrival.
- Park vehicle away from exhaust fans in well grassed or graveled areas. Vehicle doors and windows should be kept closed to prevent the introduction of flies into vehicle; flies that might be carrying virus. Walk into the production site in disposable footwear than can be left on the farm.
- When entering a chicken house, use just the designated entrances. Use basic personal protective equipment to protect the chickens, not necessarily your personnel. This includes coveralls, hairnet, and disposable foot wear. These materials should be bagged and disposed of on the farm.
- All equipment used in the chicken house should be cleaned and disinfected including cell phones, keys, pen knives, or lights. Alcohol wipes are very effective and convenient when cleaning these types of items.

- Keep vehicle floor boards clean and frequently spray them with a disinfectant like Lysol. Wash your hands with soap and water after each visit.

General Visitation: entering chicken houses when birds are not present

- If no other farms are to be visited that day, disposable footwear is the minimal personal protective equipment. Leave the disposal footwear on the farm as close to your vehicle as possible.
- Park as far away from the chicken houses as possible.

General Visitation when not entering chicken houses

- Wear disposable footwear and leave them on the farm after your visit.



Look What the Chicken Industry Is Doing for Delmarva

2019 Facts about Delmarva's Meat Chicken Industry

Number of Delmarva grown birds.....	608.6 million
Pounds of Delmarva grown chickens processed.....	4.3 billion
Number of broiler/roaster/Cornish houses.....	5,114
<i>Delaware...2,482 Maryland...2,267 Accomack County, Virginia...365</i>	
Broiler/roaster/Cornish house capacity	145 million birds
<i>Delaware...60.3 million Maryland...70.3 million Accomack County, Virginia...14.4 million</i>	
Broiler/roaster/Cornish growers	1,325
<i>Delaware...648 Maryland...614 Accomack County, Virginia...63</i>	
Poultry company employees	20,391
Value of chicks started	\$216 million
Annual feed bill.....	\$1.0 billion
Bushels of corn used for feed	89 million
Bushels of soybeans used for feed	38 million
Bushels of wheat used for feed	427,004
Packaging and other processing supplies	\$262 million
Poultry company capital improvements	\$159 million
Grower contract payments.....	\$280 million
Poultry companies payroll, excluding benefits.....	\$779 million
Wholesale value of broilers/roasters/Cornish	\$3.5 billion

Prepared by:

Delmarva Poultry Industry, Inc.

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February 2020





MARYLAND EQUINE

Results of the 2010 Maryland Equine Census

Special report made possible by the cooperative efforts of the Maryland Department of Agriculture, the Maryland Horse Industry Board and the Maryland Field Office of the USDA National Agricultural Statistics Service

EQ-01-11

March 03, 2011

According to the **2010 Maryland Equine Census**, there were **79,100 horses, ponies, mules, donkeys and burros** in the state of Maryland on May 1, 2010, down 9 percent from the 87,100 on hand in 2002. **Light Horse Breeds** accounted for 50 percent of the total followed by Race Horse Breeds with 37 percent of the total. Ponies accounted for 7 percent of the total and Draft Horse Breeds and Donkeys, Mules and Burros each accounted for 3 percent of the total. The two largest equine counties in terms of inventory were Baltimore and Montgomery at 8,950 and 7,900 head, respectively.

The **value of the equine inventory** on May 1, 2010 was **\$714 million**, up 5 percent from 2002. There were a total of 16,040 equine places throughout Maryland, down 21 percent from 2002. This includes boarding facilities, commercial and private breeding places, farms, commercial race related places as well as private residences where equine are being kept for recreational purposes. These equine operations accounted for a total of 587,000 acres of which 188,000 acres were devoted to equine.

The **value of all equine related assets** totaled **\$5.6 billion** including the value of the inventory, up 8 percent from 2002. The value of land, fencing and buildings made up 74 percent of the total assets and the value of inventory accounted for 13 percent of the total assets. Total equine related expenditures spent in Maryland in calendar year 2009 amounted to just under \$513 million of which 71 percent were operating expenditures and 29 percent were capital expenditures. Total equine expenditures are down 33 percent from 2002.

INVENTORY BY CATEGORY

	<i>Number</i>	<i>EQUINE RELATED ASSETS</i>	<i>Dollars</i>
Light Horse Breeds	39,600	Value of land, fencing and buildings	4,177,978,000
Race Horse Breeds	29,400	Value of equipment	536,423,000
Draft Horse Breeds	2,600	Value of supplies	16,100,000
Ponies All Breeds	5,300	Value of tack	166,486,000
Donkeys, Mules and Burros	2,200	Value of Equine Inventory	714,680,000
Total Equine Inventory	79,100	Value of all Assets	5,611,667,000

EQUINE PLACES, ACRES AND PEOPLE

		<i>2009 EQUINE RELATED EXPENDITURES</i>	
Number of Equine Places	16,040	Total Operating Expenditures	363,295,000
Number of People Involved	28,340	Total Capital Expenditures	149,690,000
Total Acreage	587,000		
Equine Acreage	188,000	Total Expenditures	512,985,000
Acreage in Land Preservation	88,000		

**EQUINE INVENTORY, VALUE, PLACES, ACREAGE, NUMBER OF PEOPLE INVOLVED, ASSETS AND CAPITAL EXPENDITURES
BY COUNTY**

COUNTY	TOTAL EQUINE INVENTORY (number)	TOTAL EQUINE INVENTORY OWNED (number)	TOTAL EQUINE INVENTORY BOARDED FOR OTHERS (number)	TOTAL VALUE OF EQUINE INVENTORY (dollars)	NUMBER OF EQUINE PLACES (number)	TOTAL EQUINE RELATED ACRES (number)	TOTAL NUMBER OF PEOPLE INVOLVED (number)	TOTAL ASSETS <i>not</i> including equine inventory value (dollars)	TOTAL CAPITAL EXPENDITURES (dollars)*
Allegany	350	310	40	1,842,000	200	4,300	340	19,118,000	420,000
Baltimore	8,950	6,330	2,620	100,389,000	1,540	20,500	3,030	828,953,000	13,145,000
Carroll	6,050	4,870	1,180	30,690,000	1,710	18,400	2,850	577,482,000	9,856,000
Frederick	7,850	6,000	1,850	43,965,000	1,600	21,400	2,790	441,729,000	6,716,000
Garrett	1,500	1,430	70	3,304,000	470	7,500	760	34,768,000	381,000
Harford	6,200	4,310	1,890	42,213,000	1,140	15,900	1,830	491,099,000	7,119,000
Howard	4,350	3,220	1,130	35,881,000	1,020	8,900	1,950	413,754,000	5,838,000
Montgomery	7,900	5,910	1,990	52,650,000	1,490	15,100	3,290	509,698,000	22,875,000
Washington	3,750	2,930	820	7,929,000	580	7,900	790	91,880,000	1,666,000
Anne Arundel	4,500	2,810	1,690	39,773,000	950	10,200	2,050	252,207,000	39,994,000
Calvert	1,350	1,030	320	5,429,000	380	3,800	650	73,087,000	2,273,000
Charles	1,750	1,460	290	13,482,000	570	5,900	840	162,445,000	4,191,000
Prince George's	7,100	1,940	5,160	196,715,000	770	5,700	1,730	154,857,000	9,789,000
Saint Mary's	2,300	2,030	270	5,740,000	540	5,300	870	135,308,000	1,004,000
Caroline	1,300	1,220	80	7,914,000	440	3,300	600	62,675,000	8,212,000
Cecil	6,200	3,200	3,000	94,912,000	740	13,900	1,150	358,830,000	5,823,000
Kent	1,200	1,010	190	3,885,000	230	2,300	380	43,660,000	629,000
Queen Anne's	1,700	1,370	330	11,046,000	380	3,400	530	74,165,000	1,409,000
Talbot	1,500	1,060	440	5,256,000	260	5,000	450	59,166,000	6,198,000
Dorchester	350	300	50	833,000	130	1,000	250	16,859,000	123,000
Somerset	270	240	30	642,000	120	900	170	7,931,000	127,000
Wicomico	1,800	1,640	160	6,471,000	470	4,500	610	45,554,000	1,225,000
Worcester	880	780	100	3,719,000	310	2,900	430	41,762,000	677,000
Maryland	79,100	55,400	23,700	714,680,000	16,040	188,000	28,340	4,896,987,000	149,690,000

**Capital Expenditures include purchases of equine, real estate purchases and improvements and equipment purchases.*

EQUINE INVENTORY AND VALUE BY BREED

<i>Equine Breeds</i>	<i>Total Inventory number</i>	<i>Total Inventory Owned number</i>	<i>Total Inventory Boarded for Others number</i>	<i>Total Inventory Value dollars</i>	<i>Average Inventory Value dollars</i>
American Saddlebreds	500	400	100	1,200,000	2,400
Appaloosas	2,000	1,600	400	7,600,000	3,800
Arabians/Anglo Arabians	3,500	2,800	700	14,700,000	4,200
Miniature Horses	1,600	1,500	100	1,760,000	1,100
Morgans	1,600	1,300	300	5,440,000	3,400
Paints/Pintos	3,400	2,800	600	9,180,000	2,700
Quarter Horses	10,600	8,300	2,300	34,980,000	3,300
Tennessee Walkers	1,600	1,400	200	4,480,000	2,800
Other Crossbreds	4,100	3,100	1,000	15,170,000	3,700
Other Warmbloods	4,800	3,500	1,300	89,280,000	18,600
Other Light Breeds	2,000	1,500	500	9,000,000	4,500
Unknown	3,900	3,000	900	9,360,000	2,400
Total Light Breeds	39,600	31,200	8,400	202,150,000	
Standardbreds	4,700	3,100	1,600	66,740,000	14,200
Thoroughbreds	24,500	12,200	12,300	416,500,000	17,000
Other Race Breeds	200	100	100	1,600,000	8,000
Total Race Breeds	29,400	15,400	14,000	484,840,000	
Belgians	700	600	100	1,960,000	2,800
Percherons	700	600	100	3,150,000	4,500
Clydesdales	200	150	50	980,000	4,900
Other Draft Breeds	1,000	800	200	5,000,000	5,000
Total Draft Breeds	2,600	2,150	450	11,090,000	
Ponies, All Breeds	5,300	4,500	800	14,840,000	2,800
Donkeys, Mules and Burros	2,200	2,150	50	1,760,000	800
TOTAL ALL EQUINE	79,100	55,400	23,700	714,680,000	

NUMBER OF EQUINE BY BREED AND PRIMARY FUNCTION OF THE OPERATION

<i>TYPE OF EQUINE OPERATION</i>	<i>NUMBER OF EQUINE BY BREED CATEGORY</i>					
	<i>LIGHT BREEDS</i>	<i>RACE BREEDS</i>	<i>DRAFT BREEDS</i>	<i>PONIES</i>	<i>DONKEYS</i>	<i>TOTAL</i>
Boarding, training, riding or show/event facility	10,940	5,200	570	1,600	180	18,490
Commercial or private breeding service place	2,210	3,850	20	160	170	6,410
Crop/livestock operation	2,890	1,340	500	310	290	5,330
A place to keep horses, ponies or other equine for personal use	20,840	5,890	1,360	2,920	1,380	32,390
Commercial racing or race related place	540	12,190	20	50	50	12,850
Other	2,180	930	130	260	130	3,630
Total	39,600	29,400	2,600	5,300	2,200	79,100

2009 OPERATING EXPENDITURES	dollars	EQUINE SALES (May 1, 2009 - May 1, 2010)	numbers
Boarding of Equine	52,833,000	Horses and Ponies Sold	4,300
Feed	48,379,000	Mules, Donkeys and Burros Sold	120
Bedding	15,933,000	All Equine Sold	4,420
Veterinarian and Health	36,075,000		
Grooming Supplies and Tack	17,492,000		dollars
Farrier	23,918,000	Value of horses and ponies sold	48,100,000
Breeding Fees	10,727,000	Value of mules, donkeys and burros sold	100,000
Maintenance and Repair	26,775,000	Value of all equine sold	48,200,000
Insurance Premiums	11,006,000		
Utilities and Fuel	9,718,000		number
Land Taxes	24,050,000	Horses and Ponies given away	3,450
Rent and Lease	6,783,000	Mules, Donkeys and Burros given away	40
Fees and Payments	10,981,000	All Equine given away	3,490
Shipping and Travel	14,239,000		
Miscellaneous	6,687,000		number
Training Fees	47,699,000	Horses and Ponies received without purchase	2,660
Total Operating Expenditures	363,295,000	Mules, Donkeys and Burros received without purchase	80
		All Equine received without purchase	2,740
2009 CAPITAL EXPENDITURES	dollars	2009 EQUINE LABOR*	number
Purchases of Equine	68,493,000	Full time employees	2,720
Real Estate Purchases	44,305,000	Part time employees	3,590
Equipment Purchases	36,892,000	Total employees	6,310
Total Capital Expenditures	149,690,000		
			dollars
		Cash labor expenditures	60,267,000
		Non cash labor expenditures	13,791,000
		Total labor expenditures	74,058,000
		2009 INCOME	dollars
		Income received for equine services	235,117,000

** Paid workers directly employed by equine owners and boarders. Does not include racetrack workers and workers employed in various support industries such as farriers, veterinarians, feed and hay suppliers, etc.*

Ag 101 – Grain Production Resources

- Maryland Department of Agriculture Nutrient Management Program
 - https://mda.maryland.gov/resource_conservation/Pages/nutrient_management.aspx
- University of Maryland Extension – Agricultural Nutrient Management Program
 - <https://extension.umd.edu/anmp>
- United States Department of Agriculture – National Agricultural Statistics Service
 - <https://www.nass.usda.gov/>
- Example grain mill on Eastern Shore – Nagel Grain
 - <https://www.nagelgrain.com/>
- Commodity Market Pricing - CME Group, corn futures
 - <https://www.cmegroup.com/trading/agricultural/grain-and-oilseed/corn.html>
- University of Maryland Extension Crop Budgets
 - <https://extension.umd.edu/grainmarketing/crop-budgets>
- National Education Center for Agricultural Safety – Grain Bin Safety Training
 - <https://www.necasag.org/>
- Maryland Department of Agriculture Cover Crop Program
 - https://mda.maryland.gov/resource_conservation/counties/Cover%20Crop%20Program%20Overview.pdf
- Maryland Helicopter Aerial Application for Agriculture
 - <https://www.fairlifts.com/environmental-helicopter-services/aerial-agriculture/maryland/>