

Agricultural Literacy is Knowledge An agriculturally literate person understands the relationship between agriculture and the environment, food, fiber and energy, animals, lifestyle, the economy and technology.

Introduction

A healthy and prosperous economy depends on sustainable, profitable agriculture. Maryland's farmers and foresters have an enormous impact on the economy. Agriculture - which includes both farming and forestry - is the state's largest commercial industry, supporting 84,000 jobs and contributing \$19.4 billion annually.

The continued health and sustainability of farms and forests depends on an informed and "agriculturally literate" citizenry. Marylanders have a strong environmental ethos but are less aware how their buying choices and beliefs influence environmental policy and practices. Thriving, sustainable environments and agricultural industries are codependent.

From educating the public on the value of locally-produced food and fiber, to the importance of managing working lands, agricultural literacy is key to successfully developing sustainable consumer behavior and sound public policies.

The Hughes Center for Agro-Ecology, a nonprofit organization affiliated with the University of Maryland College of Agriculture & Natural Resources, spearheaded this research to measure the public's understanding of farming and forestry. We call this "agricultural literacy." Under the direction of Executive Director Suzanne E. Dorsey, the Center developed a baseline measurement of the public's awareness and engagement with agriculture.

The resulting report, "Growing for Good: Farming & Forestry in Maryland" assesses the public's perceptions of, and connections to, agriculture. It is the first study of its kind in Maryland to measure consumer behavior and attitudes toward agriculture.

Understanding what consumers know about these industries is key to successfully promoting economically viable and environmentally sound public policies. Through research, outreach and collaboration, we can raise agricultural literacy levels to fully support and stimulate vibrant farms and forests.



Executive Summary

In summer 2018, the Harry R. Hughes Center for Agro-Ecology commissioned OpinionWorks, an Annapolis research firm, to conduct a representative statewide survey measuring Marylanders' agricultural literacy. Additional insight was gained through a series of focus groups.

This survey crystallizes the views of Maryland consumers toward farming and forestry. It found that Marylanders have many connections to agriculture and highly favorable views toward farming in the state. However, consumers are less aware and knowledgeable about forestry.

Many Marylanders feel connected to agriculture's farm industries: Almost half have visited a farm in the past year; one in four knows a farmer personally; and more than half have shopped at a farm stand or market.

Most believe agriculture is vital to Maryland's economy and that farmers are hard-working, innovative, and smart businesspeople who are rooted in their communities. More than half believe that farmers are good land stewards who are working conscientiously to protect the Chesapeake Bay.

However, Marylanders are uninformed about the forestry industry and woodland management. There is little understanding that wood is a renewable resource and forests are planted to be harvested and milled for products used every day.

In the populous central Maryland region, consumers are surprised to learn the state has a large forestry industry that reaps significant environmental and economic benefits. They are apt to associate forestry with clear-cutting and development of commercial and residential areas.





Many Marylanders Feel Connected to Agriculture

Whether living in metropolitan areas, growing exurbs, or the rural reaches of the state, Marylanders value farming and fresh food. Farm stands, pick-your-own fields, vineyards and farmers markets create consumer experiences positively associated with good, fresh food.

- An impressive 45% of citizens visited a farm in Maryland that produces food within the past year.
- Consumers with above-average income are more likely to have recently visited a farm.
- For the most part, residents of the state's rural areas are no more likely than others to have visited a farm.
- One-quarter of Marylanders (24%) visited a farm "within the past few months."
- Almost one-quarter (22%) said they have spoken with a Maryland farmer recently.
- Rural residents and men are slightly more likely to say this.
- More than one-quarter (27%) said they know a farmer personally.
- More than half of consumers shop at a farmers' market or farm stand, with 12% saying they frequently do so, and 43% saying occasionally.



Marylanders Appreciate Our Farmers

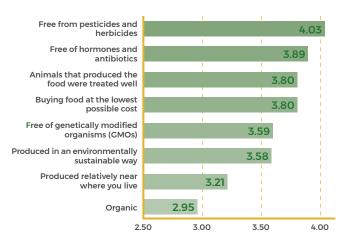
Maryland consumers have widespread favorable impressions of agriculture and agricultural producers. They understand that farming is a business that requires sophistication, planning, and constant innovation. They admire characteristics such as "hard-working" and "dedicated" yet worry that the tough and unpredictable economics of agriculture could drive farmers out of business.

- Most Marylanders (78%) agree that "agriculture is vital to Maryland's economy," with a 51% majority agreeing strongly. Only 3% disagree.
- Asked to rate the favorability of producers on a 1 to 5 scale, where 5 is very favorable, 3 is neutral, and 1 is very unfavorable, consumers gave Maryland's agricultural producers a very high rating of 3.89.
- Family farmers in Maryland rated even higher, scoring 4.16, the highest rating among 11 organizations and industries tested.
- Two-thirds (66%) agree that "farmers are smart businesspeople," while a very small number (4%) disagree.
- A similar two-thirds (65%) agree that "farmers in Maryland" take good care of the land. Only 4% disagree.
- Large majorities (66%) agree that if farmers do better economically, the environment does better.
- Consumers also expressed high confidence in the state's food supply, with 70% agreeing and only 3% disagreeing that food produced in Maryland is generally safe to eat.

Marylanders Value Fresh, Local Food

When analyzing the decision factors around food purchasing, Marylanders put thought into the types of food and sources. When asked about the importance of food they buy and consume, they ranked high priorities related to health such as knowing food is free of pesticides, herbicides, hormones and antibiotics.

- It is important to know that animal welfare and cost were equally ranked
- It is also noteworthy that "organic" ranked at the bottom of decision factors



Forestry is Undefined and Unknown Industry in Maryland

Forestry is much less defined in people's minds than farming. The public has a very hard time picturing forestry professionals and do not know what wood products are grown in Maryland.

- Marylanders are typically at a loss to describe or picture the forestry industry, or to imagine the type of people who work in it.
- If they did have a picture in mind, interviewees immediately described park rangers, rather than commercial or state foresters.
- Consumers' favorability ratings for Maryland's forestry industry, which includes forest growers, loggers, and mills, was lower than farming,
- The difference was not due to increased negativity towards forestry, but to more people who said they were "neutral" or not sure about what defines or comprises the industry.
- The lack of definition and awareness around forestry was also evident in the analysis of consumer decision-making.





Forestry is Associated with Sprawl and Loss of Woodland

For consumers in the populous communities of Central Maryland, where most residents live, harvesting trees creates the specter that animals and birds are losing habitat or that woodlands are being replaced for development. In fact, trees are a renewable resource, requiring management for pests and invasive species. The vast majority of forestry in Maryland is not linked to development.

 Forests cover 38 percent of Maryland, over 2 million acres, remarkable in a small state with six million residents

The number of forested acres in Maryland is increasing

New forest growth has offset developed land

- 66% of Maryland consumers agreed with the idea that "responsible harvesting of our forests is vital to Maryland's economy."
- But only 41% agree that forests would be healthier if they were more actively thinned and managed for pests.
- Nearly four in ten Marylanders (38%) agreed with the statement, "I would prefer that there be no logging in Maryland's forests," while only 12% disagreed.

The other half reserved judgment, saying they were neutral or not sure.



Marylanders are Surprised by the Economic Impact of Agriculture and Forestry

The research shows that most Marylanders are unfamiliar with the economic and employment impact of the state's agriculture and forestry industries. Knowing its contributions positively influences their opinion of agriculture.

- Three-quarters of all Marylanders (74%) are surprised to learn that agriculture is the state's largest commercial industry, supporting 350,000 jobs.
- Most (62%) said the statement made them feel more positive toward Maryland agriculture.
- Hearing that "Maryland forestry contributes \$4
 billion to the state's economy, employs 10,000
 people, and pays \$26 million in taxes annually"
 surprises the large majority of consumers (86%).
 Knowing this makes 55% feel more positive
 about Maryland forestry.
- Marylanders are readily willing to believe that farmers are good environmental stewards.
- The economic impact of these two industries surprises Marylanders. The size and economic impact makes them feel much more positive.





Farmers & Foresters are Environmental Stewards

When presented with provable facts about the environmental and economic benefits of farming and forestry, Marylanders respond positively. These facts include:

- Maryland farmers are good environmental stewards. They planted over half a million acres of cover crops after the 2017 harvest for nutrient management.
- Maryland farmers implement "nutrient management plans" to fertilize crops and manage animal waste to keep excess nutrients from contaminating nearby waterways.
- By planting forest and grass buffers along streams and managing fertilizer use, Maryland farmers practice erosion control to clean up and protect the Chesapeake Bay.
- Maryland farmers lead the nation in practicing conservation farming with the highest portion of no-till fields and cover crops.
- Maryland foresters manage woodlands for clean air, clean water and healthy wildlife habitat.
- Forestry in Maryland produces wood for furniture, paper, biofuels and home building.
- Forestry is the largest employer in Allegany and Garrett counties.



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Harry R. Hughes Center for Agro-Ecology

Founded in 1999, the Hughes Center provides leadership to promote environmentally sound and economically viable agriculture and forestry as Maryland's preferred land use through research, outreach and collaboration. The Center is a nonprofit organization affiliated with the University of Maryland's College of Agriculture and Natural Resources. Under the leadership of Dr. Suzanne Dorsey, the Center focuses on retaining Maryland's working landscapes and agricultural industries, while protecting and improving the health of the Chesapeake Bay.

OpinionWorks

Annapolis-based OpinionWorks is an independent research firm specializing in studying consumer perceptions and behavior. The firm works with state and local government agencies, foundations, and universities to identify public needs and preferences. They also assess donor and customer relationships for various nonprofit, private and academic organizations across the U.S. and in Latin America.

How this Research was Conducted

OpinionWorks conducted a statewide, online survey of 813 adults May 29 to June 3, 2018, followed by a series of focus groups held in Central Maryland. Survey participants were drawn randomly from two online consumer panels maintained by commercial providers. A cross-section of household consumer decision-makers was invited to participate in the survey, which caused the sample to skew somewhat more female than the general population, as is often typical of a consumer survey. In most other demographic and socio-economic respects, the sample was reflective of Maryland's population.





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https://www.marbidco.org/pdf/2018/Full Report All Maryland Resource Based Industries Beacon 2018.pdf

² https://www.agfoundation.org/what-is-ag-literacy