



MARYLAND DEPARTMENT OF AGRICULTURE

LEGISLATIVE COMMENT

DATE: 2/15/2018

BILL NO.: H.B. 870

SUBJECT: Agriculture Education Programs in High Schools

COMITTEE: Ways and Means

MDA POSITION: Letter of Information

EXPLANATION:

This bill encourages each county board of education to implement an agricultural education program that prepares students for successful careers and informed choices relating to certain systems and for opportunities in agriculture-related employment and higher education by providing instruction and developing skills in certain areas through certain integrated classroom and laboratory instruction, supervised agricultural experiences, and leadership experiences and involvement in student organizations.

COMMENT:

Maryland's agricultural production is as diverse as the state and important to the state's economy, environment, food supply and quality of life. Outdated perceptions of agriculture education need to change - the focus needs to be on agriculture literacy and STEM (science, technology, engineering, and math) curriculum which are aligned with the Maryland State Department of Education science and health learning standards.

Agriculture is a science and thus offers many related opportunities, apprenticeships and careers. By expanding the perception of agricultural education to include veterinary science, turf management, food development/research, food science, nutrition, food preservation, web developer, supply chain, food safety, equine, and the environment, students will have a broader spectrum of agriculture related careers.

A recent study by BEACON at Salisbury University and Maryland Agricultural and Resource-Based Industry Development Corporation (MARBIDCO) states that the economic impact of resource based industries (RBI) in 2015 equaled \$23.3 billion, supported over 94,500 jobs, and generated nearly \$902 million in state and local tax revenue for Maryland. Of the RBI industries, the Food, Feed, and Fiber production industries (which include agriculture, forestry, seafood, and aquaculture) accounts for \$19.66 billion in economic activity (84.4% of the RBI total), 83,619 supported jobs (88.5% of the RBI total), and \$753 million in state and local tax revenue (83.5% of the RBI total).

According to Maryland CTE Data website, there were 4,433 students enrolled in the [Maryland Public Schools CTE Enrollment for Environmental, Agricultural and Natural Resources - EANR in 2016](#). With an estimated 83, 619 jobs in agriculture and other resource-based industries and only 4,433 students enrolled in EANR, the employment opportunities for those with expertise in food, agriculture, renewable natural resources, and environmental industries will increase in this sector.

There's a strong need to bring agriculture literacy to everyday instructional experiences, not only at the high school level, but to create a career pipeline for the elementary and middle school level.

At the high school level, the *Curriculum for Agriculture Sciences Education (CASE)* is a national program of study that offers students a rigorous curriculum and incorporates the National Academic Standards and Agriculture Food and Natural Resources (AFNR) Content Standards. Students learn about all aspects of agricultural sciences. The *Certified Professional Horticulturalist (CPH)* program of study is based on requirements for the Certified Professional Horticulturalist (CPH) certification used by the Maryland "Green Industry." Students complete a sequence of courses which include: Introduction to Environmental/Plant/Animal Science, Foundations of Horticulture, Plant Production, and Landscape Design and Management. Students have the opportunity to earn the Student-Level CPH certification by taking and passing the industry exam.

Other opportunities to include agriculture literacy into the MSDE education standards at the high school level include: establishing an agricultural course that meets high school science graduation requirements; aligning the biotechnology course to Advanced Placement (AP) biology; and developing agricultural standards of practice.