



Jones, Stephanie

From: Fitzsimmons, Sara Fern <sff3@psu.edu>
Sent: Thursday, June 24, 2021 6:03 AM
To: ED, State Board of Ed
Subject: [External] PA Education Standards Must Include Environment, Ecology, and Agriculture Performance Expectations

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Dear Karen Molchanow,

I work at Penn State University on a research project geared toward restoring the American chestnut tree. Once a staple of the economy and ecology of Appalachian Forests, the tree is now considered functionally extinct due to the importation of a fatal fungal disease in the mid-1800s.

Pennsylvania is named after its forestlands. This is "Penn's Woods", and the name encompasses how important these ecosystems are to the cultural, economic, and ecological well-being of the state. Unfortunately, these woods are under-threat from a number of exotic and invasive pests and pathogens. These issues will take decades, if not centuries to rectify, and we will need the long-term and continued dedication of trained and passionate citizens and professionals for that job.

I am appreciative of you and your staff in revising the Pennsylvania Science, Technology, and Environment and Ecology standards. Unfortunately, I understand that the proposed Integrated Standards for Science, Environment and Ecology at the secondary level (grades 6-12) are omitting Environment, Ecology and Agriculture as performance expectations. These were previously independent state standards that teachers were required to cover. The proposed integrated standards for grades 6-12 must include Environment, Ecology, and Agriculture as a separate, fifth domain. Furthermore, watershed and wetlands, agriculture and society, and integrated pest management should be addressed through individual performance expectations.

These three topics are critical to ensure that Pennsylvania students are informed citizens and are prepared for the challenges and opportunities of the 21st century economy and protection of their Penn's Woods. The new standards may be in place for several years, leaving these critical topics out of student's education will result in a deficit of valuable learning.

Please ensure Environment, Ecology, and Agriculture standards are not lost. I implore you to create a fifth, separate domain for these three content topics, ensuring these vital subject areas are not neglected and that Pennsylvania students turn into engaged citizens who will protect and restore the well-being of the state's natural resources.

Thank you for supporting meaningful learning for students across the Commonwealth.

Best,
Sara Fern Fitzsimmons

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<http://www.acf.org>

<http://ecosystems.psu.edu/research/chestnut>