FOREST HEALTH IN THE FORESTRY CURRICULUM
A Resolution of the Southern Forest Insect Work Conference
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The curriculum in forestry programs throughout the country is intense and a challenge to complete in a 4-year program. The need for change is paramount to ensure that students receive an education consistent with current professional needs and standards. Assuming we are constrained by 4 years and a ceiling on credit hours, what changes will still result in a quality education? The option of offering various tracks for students interested in forest biology, ecology, management, business, wildlife, or urban forestry appears viable and deserves close consideration.

The current trend of combining forest entomology, pathology and fire into one forest protection course, which may be appropriate for certain tracks, is undesirable for students pursuing careers in ecological and management-oriented disciplines. Because most forestry students have little or no knowledge of entomology or pathology, the Southern Forest Insect Work Conference strongly recommends that the curriculum include rigorous courses in both entomology and pathology for students in forest biology, ecology, management and urban forestry. Students in other tracks or subdisciplines, such as economics, policy or business, should at least be introduced to these subjects.

Educating students to fill a variety of forest management roles requires that they be introduced to representative forest insects and diseases and their biology, ecology, and management. Exotic pest introductions are a global threat occurring at an unprecedented rate. Our forest resources are at the forefront of invasive species’ introductions, and often bear the brunt of their establishment. Educating future forest resource managers to deal with the constant threat of invasive species introductions is critical. In addition, new hosts of endemic pests are also evolving as our forests change and are subjected to various disturbances. Examples of the forest health crisis that we currently face include the Asian longhorned beetle, the emerald ash borer, the hemlock woolly adelgid, the balsam woolly adelgid, gypsy moth, and sudden oak death. The red oak borer, a previously innocuous native insect, has suddenly become a tree killer in the Ozarks. Southern pine beetles and mountain pine beetles are attacking host species not normally considered hosts. And we continue to breed for trees resistant to the introduced chestnut blight fungus. Traditional forest pests such as bark beetles, seed, cone and regeneration insects still pose a challenge. A thorough foundation in forest entomology and pathology is essential to a forestland manager’s education, particularly as forestry encompasses a variety of management goals, and emphasizes forest health, ecosystem management, biodiversity, and sustainable production of various values.