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Testimony of
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On
Fiscal Year 2019 Appropriations for the U.S. Forest Service, the U.S. Environmental Protection Agency, the U.S. Department of Interior, and the Institute of Museum and Library Services
Submitted to the
Appropriations Subcommittee on Interior, Environment, and Related Agencies
United States Senate

April 27, 2018

The Entomological Society of America (ESA) respectfully submits this statement for the official record in support of funding for entomology-related activities at the U.S. Environmental Protection Agency (EPA), the U.S. Department of Agriculture (USDA) Forest Service, the U.S. Department of Interior (DOI), and the Institute of Museum and Library Services (IMLS). **For fiscal year (FY) 2019, ESA recommends \$8.267 billion for EPA, including support for Pesticides Licensing Program Area activities within its Science & Technology and Environmental Program & Management budgets, and continued support for State & Tribal Assistance Grants for Pesticide Program Implementation. ESA strongly supports EPA's commitment to work with other federal agencies to monitor and improve pollinator health, including involvement by EPA to examine the potential impact of pesticides on pollinator health. In addition, ESA requests the Forest Service be funded at least at the FY 2018 enacted level of \$5.93 billion in discretionary funds. Within the Forest Service, ESA requests the Forest and Rangeland Research budget be supported at \$297 million to preserve valuable invasive species research and development. The Society also supports continued investment in Forest Health Management programs across the Forest Service in FY 2019. ESA also recommends that DOI continue to support the important work of the National Invasive Species Council (NISC), which coordinates efforts across agencies to respond to the threats posed by invasive species, to be funded at no less than the FY 2018 level of \$1.202 million. Finally, ESA requests funding support for IMLS at no less than the FY 2018 enacted level of \$240 million, which supports research, collections, and training capabilities for U.S. libraries and museums.**

Advances in forestry and environmental sciences, including the field of entomology, help to protect our ecosystems and communities from threats impacting our nation's economy, public health, and agricultural productivity and safety. Through improved understanding of invasive insect pests and the development of biological approaches to pest management, entomology plays a critical role in reducing and preventing the spread of infestation and diseases harmful to national forests and grasslands. The study of entomology also contributes to the development of Integrated Pest Management (IPM) techniques, which use science-based, environmentally conscious, comprehensive methods to take preventative action against pests, often resulting in

lower costs and a more targeted use of pesticides. In addition, entomology improves our knowledge of pollinator biology and the factors affecting pollinator health and populations, helping to ensure safe, reliable crop production that meets the needs of a growing world population.

EPA carries out its mission of protecting human health and the environment by developing and enforcing regulations, awarding grants for research and other projects, conducting studies on environmental issues, facilitating partnerships, and providing information through public outreach. Through these efforts, EPA strives to ensure that our nation enjoys clean water, clean air, a safe food supply, and communities free from pollution and harmful chemicals.

EPA's Pesticides Licensing Program Area, supported by EPA's Science & Technology and Environmental Program & Management budgets, serves to evaluate and regulate new pesticides to ensure safe and proper usage by consumers. Through the mandate of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA utilizes scientific expertise and data, including knowledge gained from entomological sciences, to set maximum tolerated residue levels and to register pesticide products as effective and safe. By controlling insects that act as vectors of diseases of humans and domesticated animals, and invasive insect species that endanger our environment, pesticides registered by EPA help protect public health and the nation's food supply. EPA's activities in this area also include the development of educational information and outreach to encourage the use of IPM and other reduced-risk methods of controlling pests. For example, EPA continues to support work protecting children from pesticide exposure used in and around schools, helping to promote cost-effective strategies that reduce student exposure to pesticides and pests. IPM strategies used in schools reduce student exposure to pesticides as well as allergens from pests themselves. **Therefore, ESA supports continuing the activities in the Pesticides Licensing Program Area as well as the modest funding that EPA has invested in school IPM.**

Among EPA's State & Tribal Assistance Grants, categorical grants in the area of Pesticides Program Implementation help to facilitate the translation of national pesticide regulatory information into real-world approaches that work for local communities. For example, these grants fund efforts to reduce health and environmental risks associated with pesticide use by promoting, facilitating, and evaluating IPM techniques and other potentially safer alternatives to conventional pest control methods. **ESA requests that the subcommittee support a modest increase for Pesticides Program Implementation grants in FY 2019.**

ESA is in favor of increased funding for scientifically-based studies of pollinator populations and health. Pollinators play a vital role in our nation's agriculture industry; for example, bees pollinate more than 90 crops in the United States and are essential for the production of an estimated 70 percent of all the food we eat or export, contributing over \$17 billion in annual crop and seed production in the U.S. alone. To ensure a healthy bee population, more research is needed to fully understand the complexities of Colony Collapse Disorder (CCD) and to examine the diverse factors that endanger bee health. Pesticides represent just one potential risk to bees, but both the risks and benefits must be balanced, and those risks and benefits will vary among different crops and different crop-producing regions of the United States. EPA is well-positioned to help identify methods for protecting bee health; the agency has

previously awarded agricultural grants to three universities to aid in the development of IPM practices that lower pesticide risks to bees while protecting valuable crops from pests. **For this reason, ESA supports EPA’s participation in multi-agency efforts to investigate pollinator health and implementing plans to prevent pollinator population decline.**

The U.S. Forest Service sustains the health, diversity, and productivity of 193 million acres of public lands in national forests and grasslands across 44 states and territories. Serving as the largest supporter of forestry research in the world, the agency employs approximately 30,000 scientists, administrators, and land managers. In addition to activities at the federal level, the Forest Service provides technical expertise and financial assistance to state and private forestry agency partners.

The Forest Service’s Forest and Rangeland Research budget supports the development and delivery of scientific data and innovative technological tools to improve the health, use, and management of the nation’s forests and rangelands. Within Forest and Rangeland Research, the Invasive Species Strategic Program Area provides scientifically based approaches to reduce and prevent the introduction, spread, and impact of non-native invasive species, including destructive insects, plants, and diseases that can have serious economic and environmental consequences for our nation. For example, Forest Service scientists are working to prevent the devastation of ash trees across North America by the emerald ash borer, an invasive beetle that was accidentally introduced from Asia. Emerald ash borer was first detected in 2002 and, since then, has killed millions of ash trees. This biological invasion threatens to eliminate all ash trees from North America and is the costliest invasion from a forest insect to date. Emerald ash borer is just one of the exponentially growing list of invasive insects and diseases that harm our nation's forests and our nation's economy. Forest health is also affected by invasive weeds, and those weeds are often best controlled by beneficial insects used as biological control agents, resulting in permanent and often spectacular control. **ESA respectfully requests that Forest and Rangeland Research be fully funded at \$297 million for FY 2019.**

Also under the purview of the Forest Service is the Forest Health Management program, which conducts mapping and surveys on public and private lands to monitor and assess risks from potentially harmful insects, diseases, and invasive plants. The program also provides assistance to state and local partners to help prevent and control outbreaks that threaten forest health. According to a 2011 study, invasive forest insects cost local governments alone an average of over \$2 billion per year; direct costs to homeowners from property loss, tree removal, and treatment averages \$1.5 billion per year.¹ Initiatives within the Forest Health Management program can help control these costly pests. The program’s “Slow the Spread” activities, for example, have led to a 60 percent reduction in the rate of the spread of an invasive species known as gypsy moth, resulting in an estimated benefit-to-cost ratio of 3:1. Without the program, it is estimated that 50 million additional acres would have been infested by the moth.²

¹ Aukema, J.E.; Leung, B.; Kovacs, K.; [et al.]. 2011. Economic impacts of non-native forest insects in the continental United States. PLoS ONE 6(9): e24587.

² Forest Service FY 2017 Budget Overview: <http://www.fs.fed.us/sites/default/files/FY-2017-FS%20-budget-overview.pdf>.

To support these important functions, ESA requests that the subcommittee oppose any proposed cuts to Forest Health Management program in FY 2019.

Central to these efforts to address the threat posed by invasive species, NISC plays a critical role in coordinating activities across federal agencies to safeguard national forests and agricultural products through the prevention, eradication, and control of invasive species. NISC provides planning and policy recommendations to the leadership of 13 federal agencies as well as federal inter-agency bodies and non-federal stakeholders working on invasive species issues, playing an integral part in the protection of federal lands. **ESA respectfully requests that NISC, within the Interior Office of the Secretary, be funded at least at the FY 2018 levels of \$1.202 million.**

The services provided by IMLS are critical not only for the expansion of collections capabilities at American museums, which are key for the identification and classification of entomological species, but for the training and education of students, museum professionals, and the general public. The 21st Century Museum Professionals Program provides opportunities for diverse and underrepresented populations to become museum professionals, expanding participation in an industry with an annual economic contribution of approximately \$21 billion. Museums are an integral part of the nation's academic infrastructure and make significant long-term contributions to economic development in local communities, which is why **the Society requests no less than \$240 million for IMLS in FY 2019.**

ESA, headquartered in Annapolis, Maryland, is the largest organization in the world serving the professional and scientific needs of entomologists and individuals in related disciplines. Founded in 1889, ESA has over 7,000 members affiliated with educational institutions, health agencies, private industry, and government. Members are researchers, teachers, extension service personnel, administrators, marketing representatives, research technicians, consultants, students, pest management professionals, and hobbyists.

Thank you for the opportunity to offer the Entomological Society of America's support for Forest Service and EPA programs. For more information about the Entomological Society of America, please see <http://www.entsoc.org/>.