

Ecological Society of America

1990 M St, NW, Suite 700 Washington, DC 20036

March 21, 2020

The Honorable Nita M. Lowey Chair Committee on Appropriations U.S. House of Representatives D.C. 20515

The Honorable Richard Shelby Chair Committee on Appropriations U.S. Senate Washington, D.C. 20510 The Honorable Kay Granger Ranking Member Committee on Appropriations U.S. House of Representatives Washington, Washington, D.C. 20515

The Honorable Patrick Leahy Vice Chair Committee on Appropriations U.S. Senate Washington, D.C. 20510

Dear Chair Lowey, Ranking Member Granger, Chair Shelby, and Vice Chair Leahy:

The Ecological Society of America (ESA) urges Congress to include up to \$500 million in funding in the coronavirus (COVID-19) response funding bills for illegal wildlife trade prevention, trade monitoring, zoonotic disease monitoring, and wildlife disease prevention and response; of which at least \$150 million is provided to the National Science Foundation for biological and ecological research to prevent further outbreaks and pandemics. The Centers for Disease Control and Prevention has found that six out of ten infectious diseases were seen in animals before humans.

Generally, coronaviruses are rather species-adapted, and transmission from one species to another is rare. Only a few described species of coronaviruses have shown a broad host species range. Still, those species include severe acute respiratory syndrome (SARS-COV) and Middle East respiratory syndrome (MERS-COV). Other notable examples of wildlife to human disease transmission include the Ebola virus, HIV.

It is not yet clear how exactly COVID-19 emerged, but the virus closely matches with viruses detected in the intermediate horseshoe bat (*Rhinolophus affinis*) from southwest China's Yunnan Province and the Pangolin coronavirus.

ESA urges Congress to include language in the funding bills to form a Unites States government Zoonotic Taskforce composed of all relevant federal agencies such as, but not limited to, the National Science Foundation; the U.S. Department of Interior: Fish and Wildlife Service, the U.S. Geological Survey, and the National Park Service; the U.S. Department of Agriculture: Animal and Plant Inspection Service, Agricultural Research Service, Food Safety and Inspection Service, Forest Service; the U.S. Department of Health and Human Services: Centers for Disease Control and Prevention and its

National Center for Emerging and Zoonotic Infectious Diseases, National Institutes of Health and the National Institute of Allergy and Infectious Disease; the U.S. Department of State; the Department of Energy Office of Science; the National Ocean and Atmospheric Agency; the U.S. Agency for International Development, the Environmental Protection Agency; the Smithsonian Institution: National Zoo, Conservation and Research Center, Tropical Research Center, Environmental Research Center; and the U.S. Army Medical Research Institute of Infectious Diseases to develop and implement a comprehensive plan to stop the transmission of zoonotic diseases to protect human health.

Important programs to prevent and understand the spread of zoonotic disease and emerging wildlife-to-human disease transmission include:

- The National Science Foundation's Biological Science Directorate (BIO). BIO funds 67% of non-medical, basic biological research, including the Ecology and Evolution of Infectious Diseases program. ESA requests at least \$150 million in additional FY2020 funding for research related to the COVID-19 pandemic to support near real-time research at molecular, cellular, physiological and ecological levels to better understand coronavirus characteristics such as genetics, modes of action, transmission, virulence and population dynamics.
- The U.S. Geological Survey's National Wildlife Health Center, which leads research on emerging wildlife diseases. This center works to safeguard our nation's wildlife from diseases by studying the causes and drivers of these threats and by developing strategies to prevent and manage them.
- The USDA Animal Plant and Health Inspection Service's National Wildlife Research Center, which participates in wildlife disease monitoring and surveillance in all regions of the U.S. The National Wildlife Research Center collaborates with non-governmental organizations and officials from other countries to promote and assist in the development of wildlife disease monitoring programs worldwide.
- The U.S. Fish and Wildlife Service's International Affairs program, which controls the import and export of wildlife and wildlife products in the U.S. and leads American efforts to combat illegal wildlife trafficking.

Founded in 1915, ESA is the world's largest community of professional ecologists and a trusted source of ecological knowledge, committed to advancing the understanding of life on Earth. The 9,000-member Society publishes five journals and a membership bulletin and broadly shares ecological information through policy, media outreach, and education initiatives.

Thank you for your consideration of this \$500 million funding request to understand and combat future pandemics and protect human health. Please contact ESA if we can be of further assistance on this important matter (Alison Mize, director of public affairs, alison@esa.org, 202-431-9114).

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