The even darker side of the Eastern gray squirrel (*Sciurus carolinensis*): A review of global introductions, invasion biology, and pest management strategies

H. M. HUYNH^{1,2}, S.BERTOLINO³, P. W. W. LURZ⁴, J. L. KOPROWSKI⁵, G. R.WILLIAMS⁶, C. W. THOMPSON¹, and D. F. McALPINE²

¹Department of Biological Sciences, Texas Tech University, Lubbock, TX, USA 79409 (howard.huynh@ttu.edu) ²Department of Natural Science, New Brunswick Museum, Saint John, NB, Canada E2K 1E5 (donald.mcalpine@nbm-mnb.ca) ³University of Turin, DIVAPRA Entomology & Zoology Via L. da Vinci 44, 10095 Grugliasco (TO), Italy (sandro.bertolino@unito.it) ⁴Lurzengasse 3, D-97236 Randersacker, Germany (lurzpww@gmail.com) ⁵Wildlife Conservation and Management School of Natural Resources and the Environment, 306 Biological Sciences East, University of Arizona Tucson, AZ, USA 85721 (squirrel@ag.arizona.edu) ⁶Department of Biology, Dalhousie University, Halifax, NS, Canada B3H 4J1 (geoffrey.r.williams@gmail.com)

The eastern gray squirrel, *Sciurus carolinensis*, is one of the world's most recognized sciurids and a highly successful human commensal. Historically restricted to eastern North America, eastern gray squirrels have expanded their geographic range in North America with several introduced populations in western regions. Human-sponsored introductions of eastern gray squirrels have also occurred in Australia, South Africa, Italy, and the U.K., with the latter two countries experiencing multiple incursions; though eradicated in Australia, the

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species is well established in Italy and the U.K. and is predicted to continue expanding its geographic range into other neighboring countries in Europe. Successful introduction and establishment of S. carolinensis often result in significant negative impacts (e.g., competitive exclusion, disease transmission) on the integrity of native As a result, countries have devised and ecosystems. implemented several pest management strategies to reduce or eradicate introduced S. carolinensis populations. However, such strategies have had differing levels of success. Here, we review historical accounts of global introductions of S. carolinensis, discuss the species' invasive biology and impacts on non-native ecosystems, and recommend specific management strategies that should successfully curtail establishment of this species in non-native habitats.