

Hog Cholera Surveillance on California's Channel Islands

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On January 31, 1978 the United States was officially declared free of hog cholera. This declaration symbolized a great victory in a 16-year battle to eradicate the most destructive and costly swine disease ever to exist in this nation. During the eradication program, wild swine were under suspicion as a possible reservoir of the virus. This suspicion has proved unfounded, for surveillance by APHIS/SCWDS from 1979 to the present has disclosed no evidence of the disease in more than 750 wild swine from 25 states. Recently, USDA learned that during the 1940s and 1950s hog cholera was intentionally introduced onto two of California's Channel Islands, Santa Cruz and Santa Rosa, in an attempt to control the wild swine populations. Initially, large numbers of swine died but enough survived to repopulate each island. As part of current wildlife disease surveillance, APHIS, USDA, requested that APHIS/SCWDS conduct a study on these islands. During February 1987, APHIS/SCWDS biologists, in collaboration with Dr. David Jessup of the California Department of Fish and Game, collected and necropsied 61 wild swine on Santa Rosa Island and 31 wild swine on Santa Cruz Island. All serologic and virologic evaluations by the National Veterinary Services Laboratories at Ames, Iowa, were negative, which clearly demonstrates that hog cholera virus did not persist among wild swine even with repeated deliberate introductions. This investigation provided a unique opportunity to retrieve information that would not have been feasible to generate by experimental methods. In addition, these data provide support for the epidemiologic concept that many infectious agents affecting confined animals cannot successfully maintain themselves in more dispersed, wild populations.