

Forensic Palynology in the United States: The Search for Geolocation

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First used over 50 years ago, forensic palynology is an underutilized but important tool for law enforcement agencies around the world. Despite its continued use in other countries, limited funding and awareness among law enforcement agencies prevented the widespread use of forensic palynology in the United States. Following 9/11, however, federal agencies began experimenting with “nonconventional” tools in the war against terrorism, including forensic palynology. Successful cases in the early 2000’s ultimately led U. S. Customs and Border Protection (CBP) to hire a full-time palynologist, becoming the first U. S. law enforcement agency to have a forensic palynologist on staff.

From tracking illegal drugs, helping to identify unidentified children, to issues of national security, the United States uses forensic palynology to determine the region of origin, or geolocation of samples. Recently, forensic palynology has gained national attention due to its use in high-profile cases across the country, including the Baby Doe, Woodlawn Jane Doe, and Troy Jane Doe cases discussed here. Because of these highly publicized unidentified children cases, there is currently a significant demand for forensic palynology by local, state, and federal agencies. There are still obstacles preventing forensic palynology from becoming more widespread, but the high demand and high-profile success stories are placing the future of forensic palynology on solid ground.

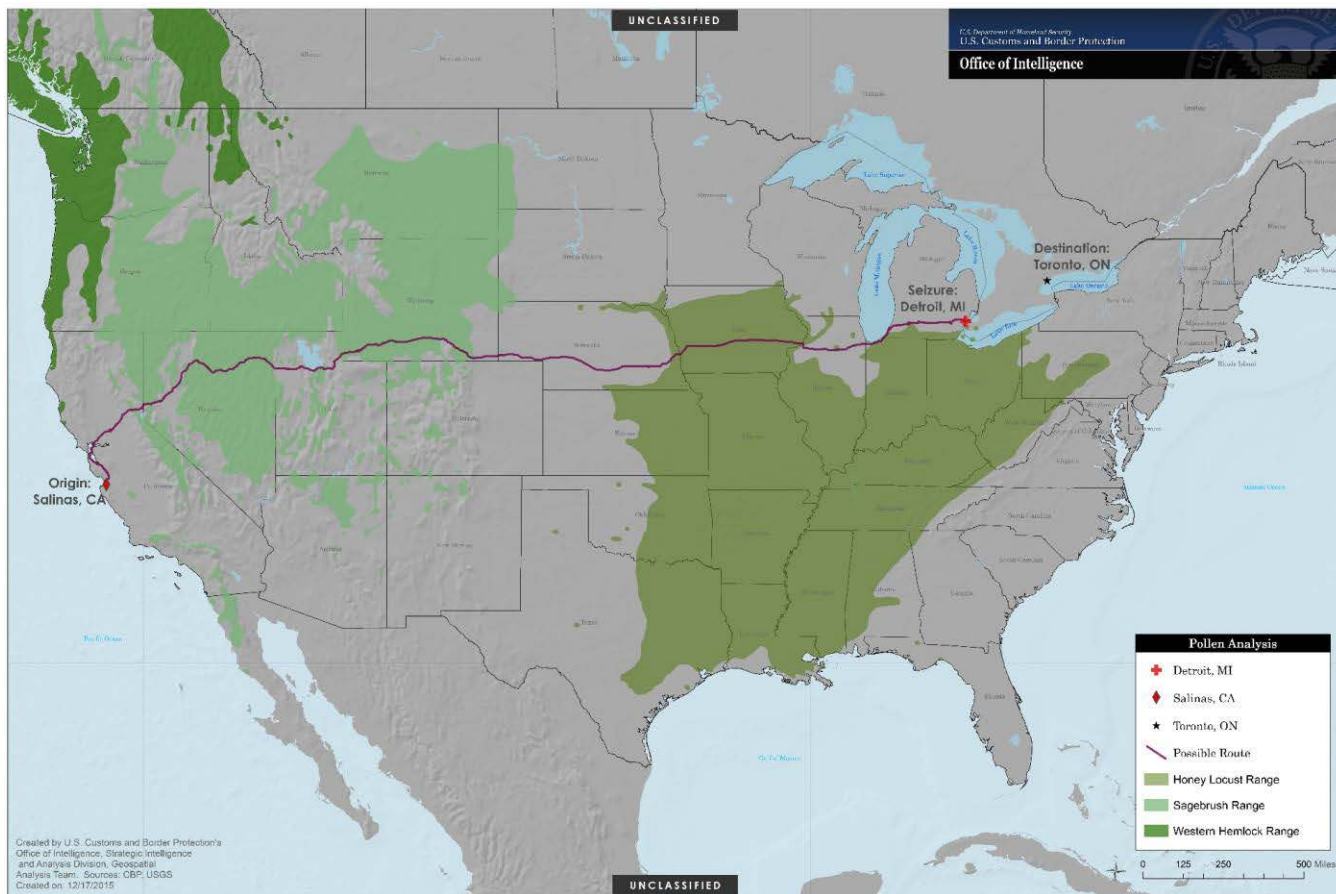


Figure 1. Vehicle travel route reconstructed by pollen analysis.