## **PUERTO RICO** ~20,000 years before present Onset of large-scale migration within North America brings monarchs into ~40 years before present contact with temperate North American hosts. Puerto Rican population becomes (putatively) isolated as part of monarch's southward range Brown tree snake leads to expansion into Central America, the Caribbean, functional extirpation of and South America. birds from Guam ~180 years before present Human introduction of milkweed hosts on Pacific **AUSTRALIA** Islands enables monarch range expansion **GUAM** periodical gene flow from North America HAWAII **NORTH AMERICA**