

Losing Ground

Humans are pushing the San Joaquin kit fox closer to extinction

During the 1930s, the San Joaquin (SJ) kit fox was a thriving species, inhabiting the native grasslands of the Central Valley of California specifically in the San Joaquin Valley. However, the development of grasslands into farms, orchards, houses, and roads has caused a steep decline in the population. In 1967 the federal government listed them as endangered under the Endangered Species Preservation Act. Currently, there are around 7,000 (SJ) kit foxes left in the wild.

Currently the (SJ) kit fox has lost a majority of their norther territory. The largest population of foxes are found in the south-western corner of their current distribution. Due to human influences, their habitat has become fragmented, with multiple isolated

populations. While some individuals can survive in urban areas, the population can only be sustainable through maintaining wilderness areas. Furthermore, major roads not only break up habitat, but vehicle collisions are a major cause of mortality. The other possible man altered habitats are farms, orchards, and oil fields. All of these habitats are sink locations (where local extinctions are high and the population is not self-sustaining) because of low prey items, poisoning, and habitat destruction respectively.

While efforts are being made to preserve habitat and help this population recover, there is also concern of an extinction vortex occurring. The process of an extinction vortex is shown in Figure 1. To help prevent this, the Federal and Californian governments are working on preserving remaining habitat, enforce laws protecting the foxes, and educate the public on the importance of the foxes for the ecosystem. Despite these concerns for the survival of the San Joaquin kit fox, there is hope that through continued efforts, the foxes will someday be able to recover.

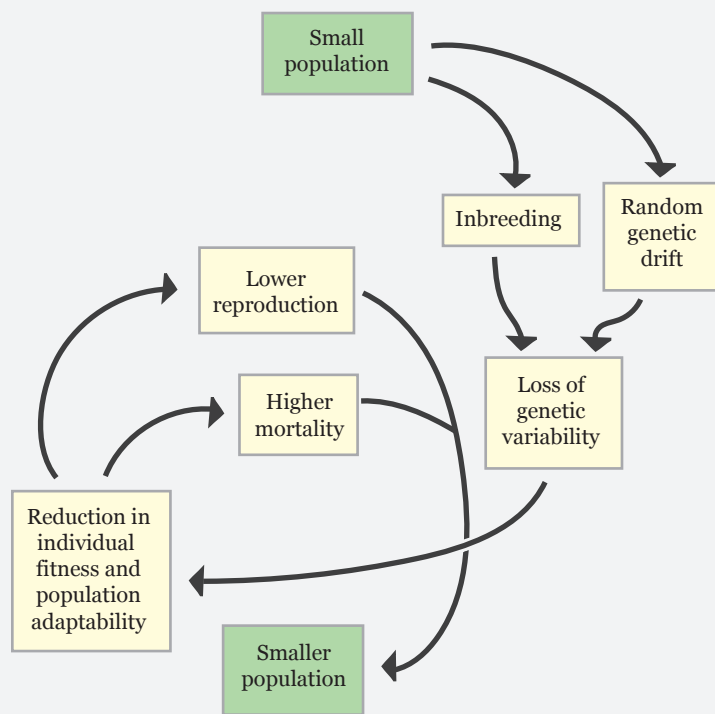


Figure 1. The extinction vortex model.

Gabriella Struger
 NAD 1983 NSRS 2007 State Plane California VI FIPS 0406 (US Feet)
 Central Meridian: -116.25
 Standard Parallel 1: 32.783
 Standard Parallel 2: 23.883
 Latitude of Origin: 32.16
 Scale: 1:2,143,798
 Sources: http://www.rigzone.com/images/news/Veneco_areas_operation_2.jpg
https://en.wikipedia.org/wiki/Lost_Hills_Oil_Field#/media/File:LostHills.jpg
http://www.eoearth.org/files/188001_188100/188018/extinction_vortex_diagram.jpg
http://www.biologicaldiversity.org/species/mammals/San_Joaquin_kit_fox/pdfs/San_Joaquin_kit_fox_5-year_review.pdf
<http://esrp.esu.stan.edu/gis/rp/gif160/figure72.gif>

