Map

Description automatically generatedFigure 1 - Map of the East Bay study area and coyote sampling locations along I-580 and I-680. I-580 runs West-East, I-680 runs North-South. Annual Average Daily Traffic (AADT) volumes are indicated along highways. Coyote sampling locations are indicated by triangles, color denotes genetic cluster assignment.

Map

Description automatically generated

Figure 2 - Map of the Sierra Nevada Foothill study area and coyote sampling locations along US-50, I-80, and SR 49. SR 50 runs West-East, I-80 runs Southwest-Northeast, SR 49 runs North and then East. Annual Average Daily Traffic (AADT) volumes are indicated along highways. Coyote sampling locations are indicated by triangles, color denotes genetic cluster assignment.

Map

Description automatically generated

Figure 3 - Map of the Sierra Nevada Foothill study area and gray fox sampling locations SR 49. SR 49 runs North and then East before connecting back to I-80. Annual Average Daily Traffic (AADT) volumes are indicated along highways. Gray fox sampling locations are indicated by triangles, color denotes genetic cluster assignment.

Chart, histogram

Description automatically generated

Figure 4. Genetic relationships between coyotes sampled within the East Bay region. A) Pairwise relatedness matrix of individuals within the each of the sampling locations. Individuals are arranged along the axis according to their population assignment. Order on the y axis is the reverse order. Warmer colors indicate higher relatedness between individuals, with red boxes identifying pairs that have relationships near or at 1st order levels (r ~ 0.5). B) Bar plot depicting individual assignments for coyotes sampled in the East Bay. Each color corresponds to a genetic cluster identified by STRUCTURE, each bar corresponds to an individual sample, and the proportion of color in each bar depicts an individual’s proportional ancestry in each genetic cluster. Cluster assignment is largely driven by a group of closely related individuals in West I-680.

A picture containing shape

Description automatically generatedFigure 5. Genetic relationships between gray foxes sampled along SR 49. A) Pairwise relatedness matrix of individuals within the each of the sampling locations. Individuals are arranged along the axis according to their population assignment. Order on the y axis is the reverse order. Warmer colors indicate higher relatedness between individuals, with red boxes identifying pairs that have relationships near or at 1st order levels (r ~ 0.5). B) Bar plot depicting individual assignments for gray foxes sampled along SR 49. Each color corresponds to a genetic cluster identified by STRUCTURE, each bar corresponds to an individual sample, and the proportion of color in each bar depicts an individual’s proportional ancestry in each genetic cluster.

Chart, bar chart, treemap chart

Description automatically generatedFigure 6. Bar plots depicting individual assignments for coyotes sampled in the Sierra Nevada foothill study region. Each color corresponds to a genetic cluster identified by STRUCTURE, each bar corresponds to an individual sample, and the proportion of color in each bar depicts an individual’s proportional ancestry in each genetic cluster. Relationships between related pairs are indicate above the bar plots (red = first order, orange = second order)