Results

![Image: Distribution of Relationships](image)

Conclusions

- Based on the ubiquitous presence of suitable den sites in the Suizo Mountains and results of our DNA-based analysis, selection of dens appears to be kin-based or by social choice. Accordingly, we propose that the function of communal-type dens in C. atrox, and perhaps in other rattlesnakes of southern latitudes, is fundamentally different from those of higher latitudes, where survival appears to be the principal function of aggregation. Mating at dens in C. atrox only occurs in spring.

Methods

- Using 27 of 30 microsatellite markers that amplified in C. atrox in Pozarowski et al. (2012) and the same genotyping methodology (Pozarowski et al., 2012; Clark et al., 2014), we genotyped 46 adults (14% with no radio-telemetry). Of these, 50 were known to occupy one of 7 different dens. A test for mean genetic relatedness (R) across all dens was significant (mean R = 0.0291720, P < 0.001); however, 4 dens had several to many relatives (half-sibs) and the remaining 3 had no detectable relatives.