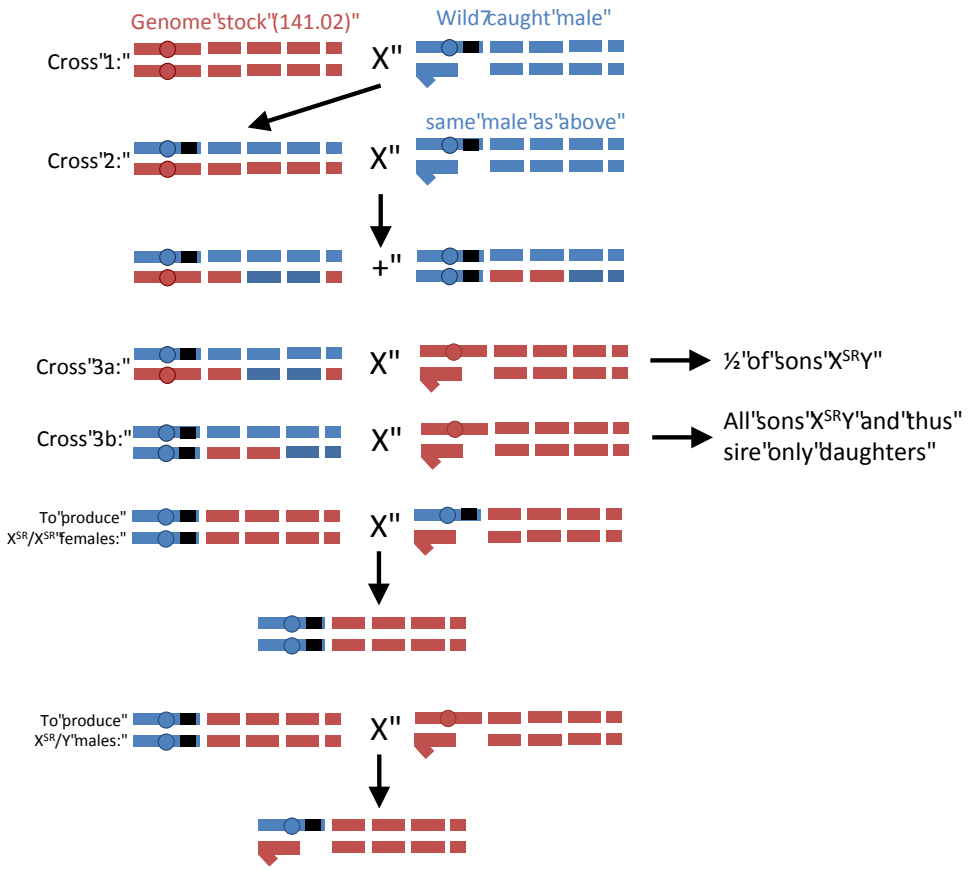

Figure S1 Crossing scheme to generate X^{SR} replacement lines. Cross 1: Wild-caught males crossed to lab stock (141.02) and sex-ratio of offspring noted. All lines with skewed sex-ratio were retained. Cross 2: Same wild-caught male as in Cross 1 mated to his daughters. Most offspring from Cross 2 were be female and assuming equal viability, 50% were homozygous for X^{SR} and 50% were heterozygous (X^{SR}/X^{ST}). Cross 3: Virgin females from Cross 2 were mated to standard males (141.02). If these Cross 3 females were heterozygous for the driver, half of sons sired female-biased sex-ratios (3a). If they were heterozygous, all sons sired female-biased sex-ratios (3b). Males from Cross 3b were mated to virgin females from Cross 2 (their aunts) assuring that the male was $X^{SR}Y$ and the female was $X^{SR}X^{SR}$. To generate new $X^{SR}X^{SR}$ females, virgin $X^{SR}X^{SR}$ females were mated to $X^{SR}Y$ males. To generate new $X^{SR}Y$ males, virgin $X^{SR}X^{SR}$ females were mated to $X^{ST}Y$ males (141.02). This crossing scheme replaces 50% of the genome each generation with 141.02 genetic material and therefore over several generations, the wild autosomes and Y chromosome are replaced with the lab stock (141.02).