

Type of Drive	Technical Limitations and Evolutionary Stability
Reversal	Cannot reverse changes to sequences that are not currently important for fitness
Immunization	Cannot block gene drives aiming to disrupt genes currently unimportant for fitness Drives immunizing organisms against viruses are stable if viral infection is costly
Precision	Can only generate unique sequences using genes important for fitness
Sensitizing	Most genes in which mutations confer resistance will be important for fitness If not, NHEJ events leading to drive-resistant alleles will disrupt the gene and block resistance The drive will not spread in the presence of strong selection by the relevant compound Will require local untreated areas to use as reservoirs from which to spread sensitivity Newly sensitizing genes carried as cargo will not be stable unless they replace important genes
Interacting	Individual drives are evolutionarily stable, but the combined effect is not
Genetic Load	Evolutionarily stable but dispersal, mating patterns and ecological factors will be important
Y-drive	Evolutionarily stable but dispersal, mating patterns and ecological factors will be important