Gene drives reach their next frontier: Mammals

Tiny snippets of <u>engineered DNA</u>, gene drives are nuclear-grade powerhouses that utterly destroy the rules of inheritance. Rather than the classic 50/50 coin toss, a gene drive can rapidly push inheritance rates to over 95 percent, pummeling a trait down entire generations and irreversibly changing an entire species.

So far, scientists have only dabbled in this "God mode" of inheritance in insects, with the hope of eventually wiping out mosquitoes that carry malaria and other transmittable diseases. Part of this handcuffing stems from bioethical and ecological concerns. The other part is purely technological: it's really hard to get gene drives to work in mammals.

That's about to change. In <u>a paper</u> published [January 23] in Nature, a team from the University of California, San Diego described the first rudimentary gene drive that works in mice, with a large caveat—only females are susceptible, and even then, inheritance rates are only pushed to the high 80s.

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While [researcher Kimberly] Cooper's results potentially throw a wrench into [invasive mammal control] plans, they do offer a large spark of hope: we now have conclusive evidence that gene drives work in mammals.

Read full, original post: Controversial 'Gene Drives' Just Worked in Mammals for the First Time