

Should we use gene drives to eradicate rats and other pests?

The CRISPR gene editing tool enables very precise changes to the genetic composition of its host. While the technology is still very new, it has the potential to be a very powerful tool for the eradication of stoats, rats and possums in New Zealand, with significant benefits to endangered wildlife such as the kakapo.

Inserting a gene for infertility into a rat would normally result in only a 50% chance that the trait would be handed on to the next generation – as the DNA of both parents would be passed on. However, a very new technology called the gene drive would enforce the replication of that desired gene. The result might be the complete eradication of the species, not only in New Zealand, but all round the world.

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Kevin Esvelt, the scientist from MIT Media Lab who has been working on developing the [safer] daisy drive for tick-borne diseases in Nantucket and Martha's Vineyard [...] said "I'm highly sceptical that these global drive systems can be reliably contained and strongly recommend against the use for conservation. Local CRISPR-based systems such as the daisy drive – which my lab are developing – are still early in development."

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [Editing Our Genes: Pest Control](#)