Will self-limiting gene drive alleviate concerns over technology's use?

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

It's a Catch-22. We have to field-test gene drives to determine if they are safe to use to stop the spread of malaria, for example. But these bits of self-copying DNA could spread to every member of a species, making field tests risky. "A release anywhere is likely a release everywhere," says Kevin Esvelt at the Massachusetts Institute of Technology.

But his team may have the answer. It has come up with a way to make gene drives self-limiting, so they spread rapidly through a population at first but gradually vanish after, say, 50 or a hundred generations.

Not only could this make it possible to safely test gene drives in the wild, it could also allow cities and countries to use them locally without have to worry about the risk of worldwide spread.

To create gene drives that don't spread indefinitely, the team split them up into three or more parts – which Esvelt calls elements – to create a "daisy chain".

Read full, original post: "Daisy-chain" gene drive vanishes after only a few generations