

Predator-prey reversal: Rock lobsters vs whelks on Malgas Island and Marcus Island

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Malgas Island is dominated by rock lobsters, who happily feast upon whelks. Just 4km away, Marcus Island is dominated by whelks, not a rock lobster to be found. Researcher Amos Barkai couldn't figure out what kept rock lobsters out of Marcus Island. The water conditions are the same, the weather is the same, the geography is the same. When a cage is used to exclude lobsters from a region of Malgas Island, whelks thrive. When they put a few lobsters in a cage and introduced them to Marcus Island, the lobsters survived just fine.

Barkai undertook what he admitted was “a very naive and not really well thought out idea”: He introduced 1000 lobsters into Marcus Island to see what happened.

The result was “like a horror movie”, but perhaps not in the way you expect.

The lobsters did not feast upon the whelks. *The whelks feasted upon the lobsters.*

[When Snails Attack: The Epic Discovery Of An Ecological Phenomenon](#). Includes pictures and video of the carnage, as well as a discussion of how the two islands evolved towards different equilibria.

Barkai's resulting paper was the first documented case of *predator-prey reversal*, evidence of a then-controversial theory that an ecosystem could have multiple stable configurations.

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