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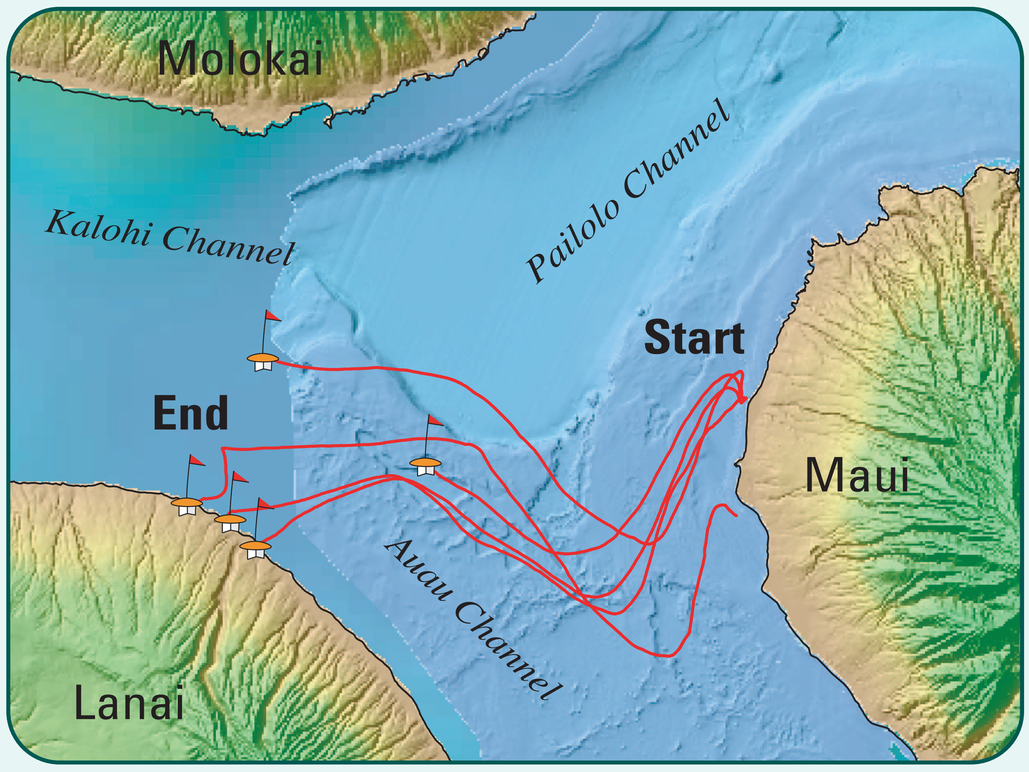
Island-hopping Coral Larvae in Hawaii

2003

Scientists from the USGS, the University of Hawaii (UH), and Maui tracked the movements of reef-building coral larvae near Maui, Hawaii. We built and used "drifters"—floating instruments with radios and GPS receivers that drift in the currents with the coral larvae. We released the drifters when the corals released their larvae on four summer evenings in 2003, and tracked the drifters for 24 hours after each release.

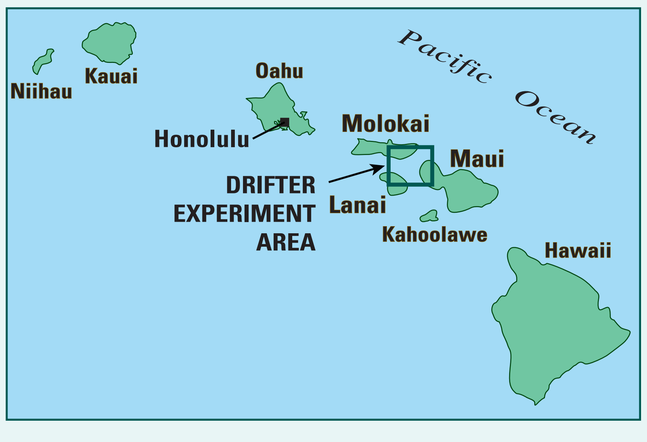


Tracks of drifters released near Maui, Hawaii

Coral releasing larvae during the experiment

The drifters floated from Maui to Lanai in less than 20 hours—farther and faster than anyone expected. Prior to this experiment, most scientists thought that coral larvae stayed close to each island.

Coral larvae drifting from island to island could start new reefs, and might revive dying reefs. However, pollution, mud, and other problems might drift from island to island, too. Using this knowledge, resource managers can help protect the health of coral reefs.



Hawaiian Islands

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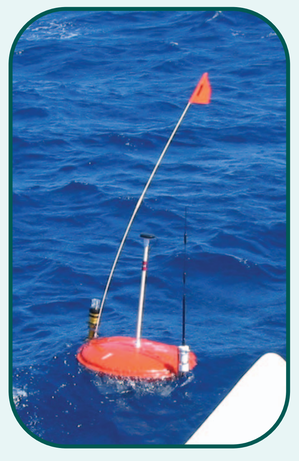

Drifter floating near Maui

More information on the web: http://walrus.wr.usgs.gov/posters