

Coral Reef Fish Find Their Way Home

Clownfish and butterflyfish tracked using a new tagless process.

Posted: May 11, 2007, 2 a.m. EST

New research, published in the journal *Science*, has shown that 60 percent of baby coral-reef fish swept into ocean currents are able to find their way back to their home reef to spawn. After as much as 40 days, the young fish managed to find their way back to their home reef.

The fish were able to be tracked using a new process that involves injecting small quantities of barium isotopes into breeding females. The isotopes are then passed to the offspring. The research team, led by Geoff Jones and Glenn Almay of James Cook University, captured the settled reef fish to determine how many of them had returned to their home reef and how many had migrated to other nearby reefs.

The study was performed on two fish species, the clownfish (*Amphiprion percula*) and the butterflyfish (*Chaetodon vagabundus*). The two species were chosen because of their different forms of reproduction. Clownfish spawn eggs into the reef, which then hatch and are released into the strong ocean currents. Butterflyfish release eggs directly into the ocean. The ocean currents carry both species away from the home reef.

The study, which took place on protected reefs near Papua New Guinea, shows that the majority of both species find their way home after the larval phase.