

**REGULATORY MECHANISMS IN CORAL
REEF FISH COMMUNITIES**

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and
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Purpose: Determine whether habitat selection is a function primarily of size or of species-specific advantages.

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Accomplishments: After preliminary censusing of five separate reef patches, selected individuals representing six species of fish (four gobies, two blennies) were removed from their habitats. Subsequent observations revealed that none of the spinyhead blennies—which have a very specialized habitat in abandoned worm tubes—were replaced. Areas from which less specialized fishes were removed, however, were filled within 3 days. The rate of colonization is apparently influenced by the availability of recruits that have recently transformed from the pelagic larval stage. Therefore, there should be a strong seasonal effect on recolonization patterns.