

# 2018, 24th - 29th June

## 5th International Marine Conservation Congress



Conference Programme

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## Periodically harvested closures provide short-term fisheries benefits

### Abstract

Periodically harvested closures (PHCs) are one of the most common forms of fisheries management in the Western Pacific and vary from being mostly closed to mostly open to fishing. We provide the first comprehensive assessment of PHCs to provide short-term fisheries benefits and a framework to assess long term fisheries and conservation benefits. PHCs in Fiji consistently decreased the wariness of large targeted fish species, but were less likely to increase abundance or biomass. PHCs in the Western Pacific had a 48% greater abundance and 92% greater biomass of targeted species when compared with areas open to fishing, suggesting they are capable of providing short-term protection benefits. Harvesting PHCs results in a rapid increase in wary behaviour and a significant decrease in the abundance and biomass of targeted fishes. Factors affecting the ability of PHCs to provide short-term protection and harvest benefits include size, duration of closure and compliance. Strict controls are needed during openings to optimize future benefits and one year of protection is insufficient for the recovery from a harvest. Highly vulnerable species should be avoided altogether when harvesting. Despite the ability of PHCs to provide some short-term fisheries benefits, a broader range of fisheries management and conservation strategies are needed for the long term sustainability of small-scale fisheries in the Western Pacific.

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### Topic Areas

Topics: Fisheries, aquaculture, and the oceans , Topics: Marine food security , Topics: Conservation and management of tropical marine ecosystems

### Session

S-162 » [Increasing effective partial protection approaches for tropical marine conservation](#) (13:30 - Wednesday, 27th June, Tubau 1)