IOTC-2023-WGFAD04-10

# Strategies for reducing the negative environmental impacts of dFADs

David M. Kaplan, Antoine Duparc et al. IRD, MARBEC Sète, France

Provide a "big picture" overview of management strategies for dFAD impacts.

• Spatial management impacts based on Kaplan et al. 2014 & Pons et al. 2022

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### Pons et al. collaboration

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# Trade-offs between bycatch and target catches in static versus dynamic fishery closures

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**Title:** Benefits, concerns, and solutions of fishing for tunas with drifting fish aggregation devices

Authors: Maite Pons<sup>1,2</sup>, David Kaplan<sup>3</sup>, Gala Moreno<sup>4</sup>, Lauriane Escalle<sup>5</sup>, Francisco Abascal<sup>6</sup>, Martin Hall<sup>7</sup>, Victor Restrepo<sup>4</sup> and Ray Hilborn<sup>2</sup>

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- Ban likely to reduce total PS tuna catch
- Increase pressure on other protein sources that are less desirable





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- But we can make some pretty reasonable hypotheses about what their impacts would be

Reasonable to assume that these will be ineffective at reducing catch, bycatch, dFAD deployments & strandings, etc.

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- Longer temporal closures may reduce fishing effort, but at price of race to fish and increased dFAD loss...