Electronic Supplementary Material – Study Site Overview

The table contains the summary data for each site included in the study. Each row represents different sites and/or lionfish data (abundance or body length).

Columns contain:

region – whether the survey site was located in the invaded Western Atlantic/Caribbean range (C) or the native Red Sea, Indian or Pacific Ocean range (IP)

country – the country containing the survey site

site – the survey site name, and where appropriate region within the country that it is located. In some cases the shallow reef and adjacent deep reef are known by different names.

data.type – the type of survey data contained in that row of the spreadsheet, either lionfish abundance (ABU) or lionfish length (LEN)

survey.date – the year that the survey was conducted

method – a brief description of the methods used to conduct the survey. For transects, the survey area (length and width) of the transect are given, e.g. '50x4m transects' represents a 50m long by 4m wide transect on which all lionfish observed were recorded

survey – the survey depths making up the shallow and deep survey data. If surveys were conducted at multiple depths within either of our broad shallow (<30m) and deep (30-150m) categories, where available we provide the breakdown of number of replicates at each depth.

For example:
'Shallow- 10m Deep - 3x30m 3x46m 3x61m' indicates that all shallow transects were conducted at 10m depth, while deep transects were conducted at three depths (30m, 46m, and 61m) with 3 replicates at each depth.

'Shallow - 10-30m surveys Deep - 40-60m surveys' indicates that all shallow surveys were conducted between 10 and 30m and all deep surveys were conducted between 40 and 60m, but no further information was available on the exact depths of each individual survey within these two depth categories.

shal.mean / deep.mean – mean value for the shallow or deep lionfish data

shal.se / deep.se – standard error of the mean for the shallow or deep lionfish data

shal.n / deep.n – number of replicates for the shallow or deep lionfish data. For lionfish abundance, this represents the number of replicate surveys (e.g. transects)

conducted, while for lionfish lengths this represents the total number of lionfish measured in the depth zone.

shal.mean.depth / deep.mean.depth – the mean depth of the shallow or deep data collection. In some cases surveys were conducted at multiple depths within a depth band and so this value represents a weighted mean depth. For lionfish abundance, the mean depth was weighted by the number of surveys conducted within the depth band. For lionfish lengths, the mean depth was weighted by the number of lionfish lengths recorded at each depth. See the 'survey' column for a breakdown of the actual depths that each survey was conducted at.

deep.max.depth – the maximum depth of the surveys conducted within the deep depth band (30-150m) at the site.

lionfish.invasion.year – the year that lionfish were first recorded at the site

shal.hard.substrate / deep.hard.substrate – the percentage hard substrate cover of the benthos at the shallow or deep depth band. Hard substrate is defined as all benthic substrates except gravel, rubble, sand and silt.

lionfish.culling – whether lionfish culling is conducted at the site (Y) or if there has been no regular culling documented (N)

coauthor.data.source – the coauthor (initials) on this paper responsible for the gathering the data for inclusion in this analysis