Table S1. Details of the GPS, QFP and Argos data collected from the Telonics tracking devices (Telonics Gen4 GPS User's Manual available at https://www.telonics.com).

Class	**Accuracy (% of locations, if known)**	**Specifics**
3D GPS	< 10 m	Position GPS 3D (latitude, longitude, altitude) requires detection of four passing satellites during 30 to 90 seconds
2D GPS	< 10 m	Position GPS 2D (latitude, longitude) requires detection of three passing satellites during 30 to 90 seconds
QFP Resolved	< 10 m (79.5 %)	Equivalent to a GPS 3D position (latitude, longitude, altitude) requires detection of at least four passing satellites 3 to 5 seconds
QFP Resolved (uncertain)	< 10 m	Equivalent to a GPS 2D position (latitude, longitude) number of passing satellites required not provided in the manufacturer's manual

Table S2. Tracked dugongs' use of areas not detected during large-scale aerial surveys conducted in New Caledonia (areas of low dugong density; Cleguer et al. 2015a).

Study site	Total 95% UD (km^2)	Total 50% UD (km^2)	Size of 95% UD located over low dugong density areas (km^2)		Size of 50% UD located over low dugong density areas (km^2)	
			Size (km2)	Proportion (%)	Size (km2)	Proportion (%)
Ouano	146.33	21.53	39.09	26.71	5.41	25.11
Nouméa	624.32	59.12	145.37	23.28	15.60	26.39
Cap Goulvain	293.91	62.30	128.53	43.73	18.03	28.93