

## Local abundance, apparent survival and site fidelity of Bryde's whales in the Hauraki Gulf (New Zealand) inferred from long-term photo-identification




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Photo-quality and nick distinctiveness criteria used to evaluate the Bryde's whale photo-identification catalogue and associated sighting databases

Table S1. Photo quality

Scale	Rank	Attributes	Examples
1	<i>Excellent photographs</i>	All attributes complied Focus: excellent Light exposure: excellent Angle to camera: 90 Dorsal fin very well framed Definition : animal close to camera	
2	<i>Good photographs</i>	One attribute failed to comply. Information content is retained Focus: very good Light exposure: OK Angle to camera: slight angle Dorsal fin well framed Definition: animal close to camera or zooming does not distort pixels	
3	<i>Fair photographs</i>	Two attributes failed to comply. Information content is not compromised by photographic quality. Focus: good. Light exposure: high contrast, fin darkened. Angle to camera: slight angle. Dorsal fin well framed Definition: animal close to camera or zooming does not distort pixels	







Scale	Rank	Attributes	Examples
4	<i>Average to poor photographs</i>	Three or more attributes failed to comply (brightness and contrast, focus, angle and/or size), or one (or more) attribute was significantly affecting nick visualization. Information content is compromised by poor photographic quality. Focus: average. Light exposure: high contrast. Angle to camera: fin on angle. Animal distant to camera (pixilation evident)	
5	<i>Poor photographs</i>	All attributes failed to comply (brightness and contrast, focus, angle and/or size). Focus: Poor or very poor. Light exposure: too high contrast. Angle to camera: considerable. Dorsal fin incomplete and/or not well framed, poor definition (pixilation considerable)	

Table S2. Nick distinctiveness

Scale	Rank	Nick distinctiveness	Example
1	<i>Very distinctive dorsal fin</i>	Very distinctive dorsal fin based on a collection of nicks and notches on the trailing edge of the fin (3 or more notches).	
2	<i>Distinctive dorsal fin</i>	More than one nick or notch of good size on the trailing edge of the dorsal fin (1–2 notches).	
3	<i>Distinctive dorsal fin</i>	One nick or notch of relatively good size on the trailing edge of the dorsal fin.	
4	<i>Odd shape dorsal fin</i>	No nicks or notches but the fin has an 'odd shape'. It can also have scars to aid identification.	
5	<i>Non-distinctive dorsal fin</i>	No odd shape and without nicks or notches.	