

## Marine Beaufort Scale

The Beaufort Scale was originally developed in 1805 by Sir Francis Beaufort as a system for estimating wind strengths without the use of instruments. It is currently still in use for this same purpose as well as to tie together various components of weather (wind strength, sea state, observable effects) into a unified picture.

Force	Speed		Marine Conditions
	knots	mph	
0	<1	<1	Calm, sea like a mirror.
1	1-3	1-3	Light air, ripples only.
2	4-6	4-7	Light breeze, small wavelets (0.2m). Crests have a glassy appearance.
3	7-10	8-12	Gentle breeze, large wavelets (0.6m), crests begin to break.
4	11-16	13-18	Moderate breeze, small waves (1m), some white horses.
5	17-21	19-24	Fresh breeze, moderate waves (1.8m), many white horses.
6	22-27	25-31	Strong breeze, large waves (3m), probably some spray.
7	28-33	32-38	Near gale, mounting sea (4m) with foam blown in streaks downwind.
8	34-40	39-46	Gale, moderately high waves (5.5m), crests break into spindrift.
9	41-47	47-54	Strong gale, high waves (7m), dense foam, visibility affected.
10	48-55	55-63	Storm, very high waves (9m), heavy sea roll, visibility impaired. Surface generally white.
11	56-63	64-73	Violent storm, exceptionally high waves (11m), visibility poor.
12	64+	74+	Hurricane, 14m waves, air filled with foam and spray, visibility bad.

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