

The Beaufort Scale



Created in 1805 by Britain's Admiral Sir Francis Beaufort, the "Beaufort Scale," which classifies wind and sea states according to a dozen different "force" levels, is widely used in the UK, but much neglected in the United States, which is too bad. Associating, say, a 15-knot "Moderate" breeze with such tangible effects as "numerous whitecaps," gives a much better idea what 15 knots of breeze really means. It's also a lot of fun. Take a few minutes to memorize the characteristics and wind speeds of a few different forces and then try figuring out how things stand next time you go sailing. There's no better way of getting in touch with the wind and waves. Here is a list of the 12 different force classifications and their associated appearance on open water.

Force Wind speed Appearance of Wind/Effects (**knots**)

Beaufort #/Wind Speed in kts/Description of sea state

- 0** Calm 0-1 Sea surface smooth and mirror-like
- 1** Light Air 1-3 Scaly ripples, no foam crests
- 2** Light Breeze 4-6 Small wavelets, crests glassy, not yet breaking
- 3** Gentle Breeze 7-10 Large wavelets, crests begin to break, scattered whitecaps
- 4** Moderate Breeze 11-16 Small waves becoming longer, numerous whitecaps
- 5** Fresh Breeze 17-21 Moderate waves of 4-8ft taking longer form, many whitecaps, some spray
- 6** Strong Breeze 22-27 Larger waves, whitecaps common, more spray
- 7** Near Gale 28-33 Sea heaps up, waves 13-19ft, white foam streaks coming off breaking waves
- 8** Gale 34-40 Moderately high (18-25 ft) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks
- 9** Severe Gale 41-47 High waves (23-32ft) begin to topple and roll over, dense streaks of foam, spray may reduce visibility
- 10** Storm 48-55 Very high waves with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility
- 11** Violent Storm 56-63 Exceptionally high waves, foam patches cover sea, visibility even more reduced
- 12** Hurricane 64-plus Air filled with foam, sea white with driving spray, visibility greatly reduced