

Wind is Weather

To the experienced boater, the morning's weather forecast is as important as breakfast. The key factor in the forecast is the predicted wind, since *wind is weather* as far as most boats are concerned. Because it is so important, let's consider what the numbers mean:

10 mph or less: Pleasant breezes, fine boating. Small waves in open bays, but crests not breaking.

10 to 15 mph: Breezy, choppy in the open bays, with some whitecaps and streaks of foam. Rough for little boats.

15 to 20 mph: Rough in open bays for small boats under 20 feet. Frequent whitecaps and foam streaks.

20 to 25 mph: The limit of safe boating for most small boats.

25 to 30 mph: Seaworthy boat and skilled handling needed; dangerous for many small boats. Travel at your own risk.

Over 30 mph: These are powerful winds: stay ashore.

If these figures sound low, they are. But like wave height, wind speed is overestimated by most of us (except at a launch site, where it's apt to be badly underestimated or simply ignored in the rush to get on the water). Another good guide is the "small-craft advisory" (or "lake boating advisory") issued by the U.S. Weather Service. This is a cautionary warning to boat owners that the day's wind will be strong enough to make all open waters rough. The small-craft advisory does not necessarily mean that all waters are unsafe for small boats, but that caution is needed and big waters should most likely be avoided.

In summer, winds on the Maine coast are reasonably predictable as to strength, direction and duration. Easterlies and northerlies are normally mild to fresh in summer (the exceptions being large storms offshore). These same winds are stronger and of longer duration in fall, winter, and spring. Southeasterly winds can be counted on for light breezes and perhaps fog. A stationary high pressure area often will be accompanied by cool, gentle westerly winds.

If the forecast is for a hot day ashore, one can be pretty certain that a strong sea breeze will develop by early afternoon and will hold until the land cools down in the evening and the temperature differential evens out. During the day, the land may be heated many degrees higher than the surface waters (which remain in the upper 60s and low 70s). The warm air rises, cools as it moves seaward to replace the cool air below moving landward, and a coastal circulation is established. If the night remains warm, the sea breeze may continue well after dark before dying. When the sea surface is warm and the night on land is cool, the process may be reversed—with light breezes off the land for a few hours in the early morning.

Understanding these dynamics, small boaters may want to plan to head west or south in the morning and return in the afternoon with a following wind. While the "onshore sea breeze" may sound benign, it can kick up waves that make for rough going in small craft. If you want to avoid larger seas, get an early start and be off the water by early afternoon.

Adapted from *The Outboard Boaters Handbook*, edited by David R. Getchell, Sr., published by International Marine Publishing Co., Camden, ME.

Navigating in Fog

The most common type of fog is advection sea fog. This occurs when moist, warm air is cooled in its passage over cold seawater. Unfortunately, these conditions are most common in July and August—during peak boating season. Dense fog banks often form where the warm Gulf Stream meets the cold Labrador Current far off of Maine's coast, and winds from the south or southeast can move this fog in toward shore.

Foggy conditions can arise without warning and last for days, until a cold front passes through and the wind shifts northwest. Normally, winds accompanying fog are light, as strong winds tend to disperse it. Morning fog often burns off as the day gets warmer, but don't count on that happening.

Even if you never deliberately set out in a fog, fog may envelope you while you're on the water. When it reduces visibility, your other senses will take over. Listen for gongs, bells and whistle buoys to locate your position, but do not

rely solely on these audible aids (as fog can distort the apparent direction of sounds) Listen for other clues signaling land nearby, such as the sound of surf breaking on the shore or the chirping of crickets and songbirds.

Adapted from *Cruising Guide to Maine—Volume II*, by Don Johnson, with permission from Wescott Cove Publishing Company, www.wescottcovepublishing.com.