Finding and Interpreting Your Surf Forecast

By Kelly Marie Henry

This tip is a special request from a student. Although, I hear the same two questions every time I teach kayak surfing:

“How do I know when conditions are appropriate for my skill level?”

“How should I go to practice?”

“How do I know when conditions are appropriate for my skill level?”

I equate interpreting a surf forecast to reading tea leaves. It is more of an art, less of a science – and it takes practice. Here I outline the approach that I use. My hope is that the following information will help you begin to determine when conditions are appropriate for YOUR skill level.

Most marine forecasts and surf forecasts contain the same general information:

- Surf height – the predicted wave height for a specific break. Surf height is provided in feet or meters.
- Swell height – the height of the swell before it reaches the beach from crest to trough. Swell height is also provided in feet or meters.
- Swell period – the time it takes for successive waves to pass the same point. Period is measured in seconds.
- Swell direction – the direction the swell is coming from.
- Wind direction – the direction the wind is coming from.
- Wind strength – the strength of the wind measured in knots (nautical miles per hour).
- Tide – the depth of the water relative to mean lower low water (MLLW). MLLW is the long-term average of the lower of each day’s two low tides.
When trying to pick a day and a location to surf, I start by looking at the big picture and then I work my way down to a more specific area. First, I check the Marine Zone Forecast from the National Oceanic and Atmospheric Administration (NOAA):

http://www.nws.noaa.gov/om/marine/zone/west/westmz.htm

The Zone Forecast provides an overview of conditions for the region. I also look at the Marine Point Forecast:

http://www.nws.noaa.gov/om/marine/point.htm

By clicking on the point forecast map, I get a more specific forecast of the location I am interested in surfing.

Next, I pull up one or two of the following surf forecasting websites:

Surfline: http://www.surfline.com/
Magicseaweed: http://magicseaweed.com/
Stormsurf: http://www.stormsurf.com/

These sites provide a wealth of information that can be a bit overwhelming. I typically focus in on the spot forecast for breaks I am considering. Now, we have all the pieces to make an informed decision about what day and location to surf!
Trends in surf height help to identify potential days to surf. As a beginner, 2 to 3 foot waves are ideal conditions for learning. Be sure to remember surf height is a prediction and can vary widely from what you read online and what you see at the beach. Because surf height is a prediction and often inaccurate, you also want to pay attention to the swell height, period, and direction.

**Swell** is measured by NOAA and thus more accurate. The larger the swell height, the bigger the waves generated at the beach. Also, the longer the period the bigger the waves and more importantly the more powerful the waves will be when breaking. For example,

- “2 feet at 4 seconds” is an insignificant wave.
- “4 feet at 10 seconds” may be surf-able and could create beginner friendly conditions depending on the break.
- “5 feet at 16 seconds” is surf-able and could be tons fun depending on the
break and your skill level.

- Add a large swell to a large period (16 feet at 20 seconds) and you can anticipate massive surf – think Mavericks!

If large, long period northwest or west swell is predicted for the coast of California. A good beginner break will be one facing south. By the time the swell wraps in from the northwest or west, much of the energy will have dissipated and the size of the waves will be smaller. Alternatively, if the swell is coming from the southwest a good beginner break may be one that faces northwest.

**Wind direction and strength** impact conditions. Two quick definitions:

- Onshore wind – wind blowing from the ocean toward the shore
- Offshore wind – wind blowing from land toward the ocean

An onshore wind often creates chop and small wind waves degrading conditions. An onshore wind can also make waves break earlier. Alternatively, a gentle offshore breeze (less than 10 knots) can remove surface chop and slow a breaking wave making it easier to surf. Be aware that a strong offshore wind can make it difficult to catch waves. I prefer to surf in winds less than 10 knots and stay home if the forecast is for winds stronger than 15 knots.

Conditions vary with the change in **tide**. When you are starting out, mid-tide is a safe bet for decent conditions. Low tide can be shallow and rocky, while high tide often flattens out the surf. The ideal tide height for optimal waves depends on the break.
Learning a new break takes some trial and error. Write down the forecast before you go and then make notes of your observations while out. And remember, just because you drove 2+ hours to surf, does not mean you must launch. If conditions are outside your comfort zone, it is okay to get a cup of coffee and watch the waves from shore for the morning.

“Where should I go to practice?”

Below are a few beginner friendly breaks. For more information on these and other local breaks, check out the US West Surf Kayak website: http://uswestsurfkayak.org/
- Dillon Beach, Dillon Beach CA
- Bolinas Beach, Bolinas CA
- Mushroom Rock, Half Moon Bay CA
- Rio del Mar State Beach, Santa Cruz CA