

Great Lakes Cruising Club Weather Savvy Mariner



A Webinar-Based Marine Weather Forecasting Seminar Designed For Both Power Boaters & Sailors

Learn a little weather forecasting and reduce the uncertainty of boating on the Great Lakes. While it isn't possible to predict the weather with total precision, it doesn't mean that the weather must be entirely unpredictable. The Weather Savvy Mariner series is designed to provide Great Lakes power boaters and sailors with an understanding of basic marine weather forecasting.

What you can expect to learn from the webinars:

- How to decode the confusing symbols and meteorological shorthand on forecast graphics.
- How to predict the development and movement of low pressure systems and their accompanying frontal boundaries.
- Why the wind behaves the way it does and how to prepare a detailed wind forecast.
- How to prepare a detailed wave height forecast.
- How to forecast the potential and nature of severe weather.
- The terminology used by the National Weather Service during hazardous and severe weather events.
- How to use Doppler weather radar to help you avoid a hair-raising encounter with a thunderstorm.
- Where to find forecast graphics and a strategy for preparing a multi-day marine forecast.

Registration Details

When: February 26, March 5, March 12, and March 19, 2019

Time: 8:00 pm to 9:30 pm (Eastern)

Where: Online at <https://www.glccschool.com/home>

Cost: \$60.00 for non-GLCC members / \$55.00 for GLCC members for all four webinars. Individual webinars are \$20.00 each.

February 26, 2019: Marine Weather Basics

A Solid Foundation – Becoming a weather savvy mariner requires a familiarity with a few basic physical and meteorological principles. This section will build a foundation for the remainder of the webinar series.

Translating Surface Weather Maps -- Weather maps contain a confusing array of labels, timekeeping systems, symbols, and other meteorological shorthand. This section will improve your map interpretation skills using historical weather charts.

March 5, 2019: Forces Controlling The Wind / Using Doppler Weather Radar

The Invisible Forces Controlling the Wind – This section will investigate the forces that control the wind, including large-scale dynamics and small-scale features such as lake and land breezes. The wide range of wind forecasting resources on the Internet will also be reviewed.

Doppler Weather Radar -- Doppler weather radar has a lot to offer the weather-savvy mariner. This section will introduce the common types of radar imagery and provide instruction in their interpretation and use. You'll learn how weather radar works (along with a few of its quirks) and how it can be used to monitor the development, intensity and speed of approaching thunderstorms.

March 12, 2019: Weather Makers: Forecasting High & Low Pressure Systems

High & Low Pressure Systems -- The wind and weather conditions that you encounter during your outings on the Great Lakes are governed by the passage of low and high pressure systems. We'll examine the life-cycle and structure of a low pressure system, including cold fronts, warm fronts and stationary boundaries. You will also learn what type of weather to expect with the passage of a low pressure system.

March 19, 2019: Thunderstorm Primer / Creating Your Own Marine Forecast

Thunderstorms -- Thunderstorms can quickly ruin an outing. This section will cover the types of thunderstorms and the dynamics that lead to their formation. Learn to use readily available Internet forecasting resources to dramatically reduce your chances of a hair-raising encounter. Thunderstorms should not be a surprise.

A Daily Forecast Routine – This section will introduce a daily forecast routing using a variety of readily available on-line forecasting resources.

Instructor Biography



Mark Thornton has been sailing on Lake Erie for more than 20 years and currently owns *Osprey*, a C&C 35. His interest in weather forecasting grew from his experiences cruising and racing on the lake. Mark is a 2006 graduate of the Penn State University *Certificate of Achievement in Weather Forecasting*, a two-year program that develops skills in general, tropical, and severe weather forecasting.

He is the president of LakeErieWX LLC, a company dedicated to providing marine weather education and forecasting resources for recreational boaters (www.lakeeriewx.com). He has served as the race meteorologist for the Bell's Beer Bayview Race to Mackinac since 2014, and is the past president of the Cleveland chapter of the American Meteorological Society. Mark is also employed as a Teaching Assistant in the *Certificate of Achievement in Weather Forecasting Program* at Penn State University. He can be reached by email at Mark@LakeErieWX.com.