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Innovative SC Weather Station Forecasts From Lake Surface

Ron Jones grew tired of packing his sailboat based on wind speed readings of at least 10 mph and then finding calm air on his favorite South Carolina lake. So he decided to do something about it. The result is a new National Weather Service station at Columbia's Lake Murray that aims to give boaters more accurate wind-speed and temperature readings -- right from the lake.

Ron blended work and play to address boaters' longstanding frustrations about lack of accurate weather information from the lake. Sailing enthusiasts, in particular, had sought better readings. In the past, readings at Columbia's airport were not always representative of lake conditions. But applying seasoned skills as data acquisition manager at NOAA's National Weather Service, Ron rallied local support and came up with plans for an innovative weather station that's now in place on Lake Murray's shore. The National Weather Service provided and installed weather sensors. The local Coast Guard Auxiliary provides communications services.



Ron Jones, of National Weather Service's Columbia, SC office, makes final adjustments to rain gauge on Lake Murray.

With more accurate readings online and broadcast on NOAA Weather Radio, boaters can learn about wind speed and direction, recent wind speed peak, current air temperature, 24-hour highs and lows, current wind-chill temperature, and 24-hour rainfall. The information is slightly off real time. But as Ron told The State, his local newspaper, "compared to what we've been able to provide in the past, I can live with 10-minute updates."

A second lake now has a vital new weather station as well. At the J. Strom Thurmond Reservoir along the Georgia/South Carolina state line, the National Weather Service has mounted sensors on top of the dam. A local windsurfing club provides communications services and a country government provides radio modems. Everyone is benefiting at minimal cost.

The more accurate weather information boosts both recreation and safety. In fact, the new stations grew out of Ron's involvement with a local boating safety program. Boaters now know more about rough conditions, and archived information will help with search-and-rescue efforts.

Wind, temperature and rainfall sensors mounted atop the J. Strom Thurmond Reservoir along the Georgia/South Carolina state line.

Search patterns will be easier to plot because the equipment is already out there. Near real-time weather information is also used by weather service forecasters to improve lake wind forecasts, monitor thunderstorm wind gusts and heavy rainfall that might cause flooding downstream.

Several local television stations have now provided lake wind report links to their Web sites, and there's strong interest from a community fishing club in installing a pressure sensor to provide raw data for a study of the effects of weather on fishing.

Photos by Ron Jones and Melody Groh



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