# Software for Aquaculture

PondView™

Campbell Scientific's PondView™ software, coupled with our rugged, reliable monitoring and control systems, offer powerful tools for aquacultural farm managers. Benefits of the system include increased yield, reduced mortality, reduced energy use, and automated 24-hour monitoring.

Monitoring Your Ponds

Our rugged, field-based monitoring stations are located near each pond, or set of ponds, and can monitor several ponds simultaneously. The battery operated, ac-charged stations measure DO, temperature, aerator motor amps every 30 seconds, and can control the operation of paddle-wheel aerators automatically. The monitoring stations do not require a PC to operate, yet the farm manager can view real-time data from each Campbell Scientific monitoring station using PondView. The monitoring stations use a proven, reliable wireless communication protocol to communicate with the base station PC, which is typically located at the farm manager's home or office.
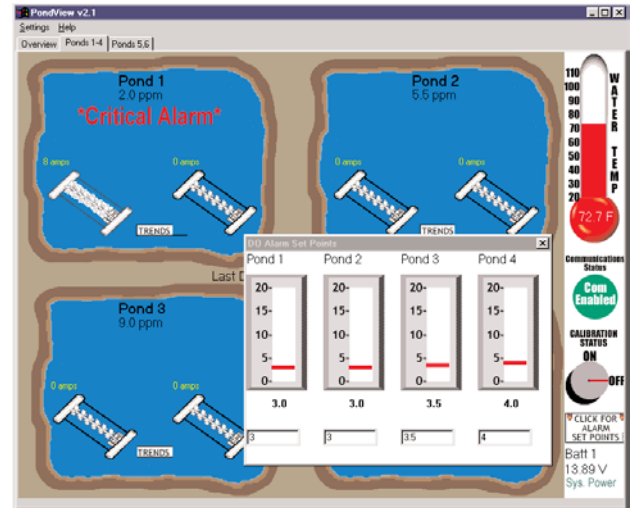
To quickly check dissolved oxygen levels and alarm conditions in all ponds, PondView provides an overview page. Up to six groups of six ponds can be displayed — allowing you to easily monitor what is happening in each of 36 ponds.

For more detail, scroll through screens that display four ponds at a time (see graphic). As shown above, the electrical current supplied to the aerators and the dissolved oxygen is displayed for each pond. The water temperature, measured by the temperature sensor submerged in a pond, can also be displayed in either degrees Fahrenheit or Celsius by a simple click of the computer's mouse.

PondView also allows you to look at historical data. A quick seven-day summary of dissolved oxygen can be displayed on the PondView Trends graph.

Calibrating DO Probes

PondView supports the calibration of dissolved oxygen probes. This is easily accomplished by selecting the calibration button after pulling the probes out of the water (they are calibrated in air).

Controlling your Ponds

In addition to monitoring the current dissolved oxygen, paddle wheel amps, and water temperature of each pond, PondView also provides total control of each paddle wheel, alarm, and set-point.

From PondView, paddle wheel aeration can be controlled in three ways. Operation can be:

- totally automated based on measured levels of dissolved oxygen

- totally automated based on time of day, or

- manually controlled

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Having PondView Sound Alarms

You can specify that PondView sound visual and audio alarms, based on dissolved oxygen levels, amp levels, and communications status. You select alarms and set points in the software – a feature that customizes the software for your operation.

Storing and Printing Historical Data

PondView stores the data in your computer for easy access by a spreadsheet program such as Excel. The resulting Excel graph can also be quickly sent to the printer.

For More Information

For aquaculture information, descriptions of other customers' aquaculture operations, and informative aquaculture links, visit our Aquaculture Application InfoCenter at: www.campbellsci.com/aqua.html

PondView is supported by Tim Jeppsen, aquacultural specialist, Campbell Scientific, Logan, UT, USA. Please direct questions to his attention. Email: tjeppsen@campbellsci.com; Phone: (435) 750-1733

Requirements

- LoggerNet 2.0 or higher running on the PC

- Minimum recommended hardware—200 MHz Pentium II processor with 64 MHz of RAM and screen resolution of 800 x 600

- Recommended computer operating systems—Windows® NT, 2000, or XP