

Got Water?



Source: www.TurfMagazine.com

New on-the-go irrigation technology



The irrigation information program works with every type of smartphone or tablet; any device with Internet access and a camera to scan the QR code. PHOTO COURTESY OF LEE SCHEER.

Need an update on your client's irrigation system? Not sure of the zone coverage? Concerned about head type? Want the lowdown on the last three service calls? With IrriTracker, this information is all instantly available. Open the controller box, scan the QR code with your smartphone, and you have access to all this data – and more.

IrriTracker is a practical, paperless, continually upgradeable system applying technology to improve efficiency and profitability. Born out of the need to better address real-world irrigation system situations, it was developed through the partnership of irrigation professional Lee Scheer and technological entrepreneur Mike Nacke.

Blending of expertise

Lee Scheer has 10 years hands-on experience in the green industry. After starting with the Brickman Group, in 2010 he launched his own company, LN Scheer & Sons LLC, in Nashville, Tenn. This full-service design, installation and maintenance business covers softscapes and hardscapes, including irrigation systems. He's a CIC (certified irrigation contractor) and CLIA (certified landscape irrigation auditor) through the Irrigation Association, and an EPA WaterSense Partner.

He says that his LN Scheer & Sons is growing rapidly. "Our 2011 sales increased 200 percent over our first year. We're projecting 250 to 300 percent growth in 2012, and are on target to hit that."

After earning a Bachelor of Science degree in organizational communication from Murray State University and gaining hands-on technical experience, Nacke started Mike Nacke Communications to concentrate on Web development, design and programming. He showcased his SEO (search engine optimization) savvy achieving number one ranking from Google in only four days as the “Coolest Guy in Nashville.”

Scheer initially connected with Nacke to apply SEO and website management services to LN Scheer & Sons. The interactive website now features links to Facebook, Twitter and Lee’s Blog, along with company details and easy-access educational information. Their collaborative efforts launched Scheer’s YouTube demonstration on cost saving with the soil moisture sensor (Baseline’s WaterTec S100) that drew nationwide hits. (See it on his website: www.nashvillelandscapingservice.com.)

That led to further collaboration. Scheer says, “I was frustrated with all the steps required to keep that laminated piece of paper inside the irrigation controller up-to-date. I could see the time lag between a technician writing a report onsite to the entry of that data into the main computer, then reprinting and laminating the update to replace the previous posting. When needed, details not recorded on that laminated paper had to be retrieved via phone call or email from office personnel, tying up two people on one problem.”



Scheer knew what he wanted to do and knew he wanted it to be an easy process that anyone could quickly master with a few basic instructions. Brainstorming with Nacke led to a prototype they tested for nearly a year before officially introducing the IrriTracker with a free trial offer in November of 2011.

The overview

The irrigation information program is a hosted Web application with a shareable database and optimum security. It works with every type of smartphone or tablet; any device that has Internet connection and a camera to scan the QR code. Nacke says, “The application detects what kind of device you’re using and formats the screen and the inputs according to that device.”

A tour of the system is posted on the website (www.IrriTracker.com), including YouTube demonstrations on how to set up and test the free trial, along with support and information on using the administrative part of the program.

It requires initial data entry, including the name, address and contact information for each irrigation client, along with creating a map of their system: water source, controller location, number of zones and details for each zone. This is shown in print format. You also can upload as-builts, hand-drawn maps or color-coded maps into the form as a file (pdf, jpg, etc.). All of that client’s information is assigned an individual QR code. You’ll need a label printer to print that code for posting in their controller box. (Printers are available through IrriTracker as well as office supply stores.)

In the field, an authorized employee retrieves the information by scanning the QR code with their smartphone or tablet.

Each company is a separate entity, with access only to its own clients' information. Each system user within that company is assigned a user name, individual password and access level. There are three levels of access: field rep, editor and administrator. The field rep has the ability to view the information on the "front end," edit maps and add field notes. The editor can view the information, edit maps, create new maps, and add or edit field notes. The administrator has unrestricted access to the "back end," the "dashboard" that is the heart of the system. The administrator can edit and update all data, add or delete users and/or accounts, and assign or change passwords. If there are personnel or account changes, the administrator can immediately remove access with just a few clicks.

Another security risk is removed by eliminating that laminated sheet of information posted at the controller box. Nacke says, "Any competitor bidding a contract can view that sheet. No one can access the IrriTracker QR code information without an authorized user name and password."

Reps can use the field notes section onsite to document all pertinent details: problems detected, parts used, time spent, adjustments made, future needs and client requests. It's as easy as texting.

Nacke says, "When a new field note is uploaded, an email is sent to the company administrator. That can trigger follow up, such as invoicing, client notification of service completed, or alerting another employee of specific actions needed. Results of the follow up also can be recorded via field notes."

IrriTracker is not meant to compete with or duplicate anything connected to the controller or overall irrigation system itself, notes Scheer. "It's a complement to them. Details on any upgrades in irrigation technology are simply added to the database via field notes or entries at the main computer and instantly available to approved users."

Preservation of information was addressed early on. Nacke says, "We created a lot of redundancy to protect the data. We're using a cloud network structure, with all data backed up on our servers and by a third-party server offsite. So, even if the smartphone or tablet used to enter data is lost or destroyed, the data is safe."

Free trial

Scheer says, "The trial offer is still available. I've taken my knowledge and put what I wanted in there. See what you think. Sign up for the tour. Watch the YouTube videos. Test it. Give us your feedback."

Nacke notes they anticipate on-going improvements in response to trial user input. Due to the flexibility built-in during development, all upgrades can easily be extended to current users.

The initial YouTube demonstration drew some trial users and sparked a “pretty long stream” on this spring. Scheer says, “There were different opinions on that string and we anticipated that. All feedback is feedback we can use.”

The major challenge is not ease of operation or improved efficiency. It’s getting the industry to embrace the new technology.

While long-term costs are still to be determined, Scheer notes minutes saved at each stop plus the elimination of duplication in data entry alone will easily make it cost-effective.

Nacke says, “At this point, we haven’t determined whether the site will be a marketing tool, or simply a means to educate and encourage potential users to tap into the technology with specific, additional services offered for a fee.”

His irrigation clients are enthusiastic about the system, notes Scheer. “Most people see the controller as a fancy clock and don’t understand what it does. Once they see us using the smartphone app and how quickly we can tap into their data, they want to know what other kinds of technology we can give them. If we already know their system, we’ll have a list of what we could do. If not, we can do an audit to determine that. Whatever we suggest, we always show the ROI (return on investment) for making the change.”

Scheer and Nacke see other advantages that can be developed utilizing similar technology for smartphones and tablets, such as enabling sales reps to get an estimate to a client within 15 minutes of their meeting. Scheer says, “If there’s a better way to accomplish something, we want to find it, and use it. Technology that saves time and money stimulates sales.”

Suz Trusty is a partner with her husband, Steve, in Trusty & Associates, Council Bluffs, Iowa. She has been involved in the green industry for over 40 years. Contact her at suz@trusty.bz.