

A WAKE-UP CALL FOR YOUR IRRIGATION SYSTEM

Matt O'Neal, CID, CIC*

As we all know the spring season will soon be upon us. With that come many of the chores that go along with it. Those of you lucky enough to have an irrigation system know that along with the luxury comes a certain amount of maintenance. To keep the life blood of your fields running in tip-top condition requires starting up your system properly.

Before we even begin to talk about spring start-up, we first need to look at the fall winterization of the system. It doesn't matter how careful you are starting your irrigation in the spring, you can't make up for a poor winterization. What constitutes a poor winterization? Not completely blowing the system out or doing it too late after freezing has occurred is common scenarios. Particular attention must be paid to the point of connection. Backflow preventers can be very expensive to replace or repair especially large ones. Therefore it is imperative that they be winterized properly.

The first step to starting an irrigation system is to inspect the entire point of connection for any visual problems. You should check the meter, valves, service line and backflow preventer. If the backflow preventer was not fully winterized, there may be cracks or damage evident. Once a visual check has been performed, the water can be turned on to the system. When opening a valve, you should always open the valve slowly so to meter the amount of water entering the irrigation pipes. Opening a valve all the way immediately can cause water surge and can ultimately shorten the life of your irrigation system if not causing a sudden break in the pipe. After the water has filled the irrigation lines you will notice that the sound of the water will diminish. The valve can now be turned to its fully open position.

Once you are confident that the system is fully charged and does not leak, the attention can be directed towards the sprinklers and electric valves. As a rule of thumb, you should always start at the controller and go through the zones one by one walking the site observing any unusual conditions. This works especially well with a remote control where you can walk around without having to return to the controller to change zones each time. Things that should be noted are: sprinklers not popping up, sprinklers not rotating, whole zones not operating, and any water appearing where it should not. You should also identify all irrigation control boxes, exposing them if they are covered and opening them to inspect the valves for leaks or weeping.

An electrical inspection should also be performed now to help ensure that the control system is ready for operation. Each zone should be checked for resistance with a multimeter to indicate any problems with electric valves that may show up during the season. Especially low or high readings point to a short in the zone's electrical circuit. The short may be found in the wiring or in the solenoid by checking the resistance of the solenoid at the valve you can isolate the problem. You can obtain proper resistance readings for each valve from the manufacturer. Other checks for the electrical system would be incoming voltage into the controller and voltage out to the zone valves through the terminals.

A good practice throughout the season should be to perform inspections periodically to catch minor problems before they become major ones. Typically, the irrigation would run at night when no one is around to see the sprinklers operate. Running through all of the zones while you are on-site would be a great way to see if sprinklers are not turning or even operating. Valves boxes should be kept clean so that maintenance can be performed readily and to avoid having valves become buried over time. Extra time spent now analyzing potential problems is only going to help prevent downtime during the season.

*Matt O'Neal is a Certified Irrigation Contractor and Certified Irrigation Designer; and Technical Support Specialist, Storr Tractor Company

DID YOU REMEMBER?

YOU MUST FILE YOUR INCOME TAX
RETURNS THIS YEAR NO LATER THAN
MONDAY, APRIL 17, 2006

DID YOU KNOW?

Records reveal that the Egyptians employed drainage principles to improve agricultural production in the Nile Valley as early as 400 B.C.