E OFTEN HEAR from turf managers who don't ever seem to get the life out of their turf spray equipment that they would like. Common concerns: equipment wears out too soon, employees invent new and ever more creative ways to destroy equipment, equipment is down waiting for repairs, etc.

We have found that turf departments with well-designed fertilizer and weed control spray rigs can reduce problems significantly with a few easy steps. Here are our "Top 10 Spray Equipment Productivity Tips":

10. Good filtration

Design good filtration to prevent debris from getting into your system. Debris will clog or damage pump, plumbing, fittings, hose and spray guns. It will cost you money, reduce productivity by bringing your system to its knees and create expensive repair bills. Design your filtration based on your water source, type of application, sensitivity of your pump, technician skill. For example, impure water in may require more than one strainer. Place filtration so it is easily accessible for technicians to check and clean. If it isn't easy, they won't check it and it will cost you.

9. Clean your filter

The biggest secret in spray equipment is "check your filter." There is nothing you can do with your spray equipment that will save you more money than this simple activity. We repair and replace more fertilizer and weed control spray equipment because of clogged filters than for any other reason. Conduct spot checks to ensure spray techs are cleaning filters.

8. Release the pressure

Take the pressure off. When you are done spraying, release the pressure. Squeeze the handle of your spray equipment so that the system is not under pressure. If you don't want to waste the material, spray it back into the tank. Your equipment will have fewer breakdowns and will last longer if you remove the stress of constant pressure from the spray components. Never store equipment overnight under pressure.

7. Don't run it too fast

Don't push your equipment to its limits. Our

experience is that techs run power spray rigs at high speeds to get their jobs done quickly. This will reduce sprayer life. Your power spray rig can run at extremes for short periods but it is not designed to be run full out all the time. Running "in the red" for extended periods will shorten engine and pump life. Make sure your techs know proper operating ranges.



turf spray equipment productivity tips

By Andrew Greess

6. Clean it out

Rinse your system with clean water periodically to remove old chemical buildup, debris, etc. Chemical buildup and debris can clog your filter, starve your pump, damage spray tips, and play havoc with other components as well. All of these items fall into the category of "not good." When in doubt, rinse it out. Be sure to follow herbicide labels and laws when cleaning out spray tanks.

5. Don't wait for failure

Preventive maintenance will save you time, money, equipment breakdowns, etc. You are running your equipment hard and pumping strong chemicals through it. It will need service. This service will be much cheaper and less painful if you do it before you need it. Read manufacturer's recommendations then customize for your use and application. Develop a good relationship with your spray equipment provider and ask for

their help. A good preventative maintenance program is your best friend for reducing equipment down time and improving productivity.

4. Train employees to report problems

We are constantly amazed at the equipment problems employees will tolerate. They will continue to use leaking pumps, hose, backpacks, etc. Ignoring these problems inevitably leads to higher repair expenses and increased down time. Encourage your employees to report problems so that you can take the appropriate action before a small problem becomes an expensive problem.

3. Emergency repair kit

Many simple repairs can be performed by technicians in the field. Field repairs can allow the technician to finish their work before heading to the service site for more thorough repairs. You'll want to assess technicians' skill and training to determine which parts you are comfortable with technicians changing in the field. An easy example is to provide the technician with an extra o-ring for the filter.

2. Don't over-pressurize manual sprayers

If your backpack isn't spraying, don't pump it up more. You will break it. It is easy to turn a \$3 o-ring replacement into a \$50 repair. I like this analogy: I was dining at a restaurant in France. The waiter didn't understand English. So I yelled louder. Don't overpressure your manual sprayers! It doesn't work.

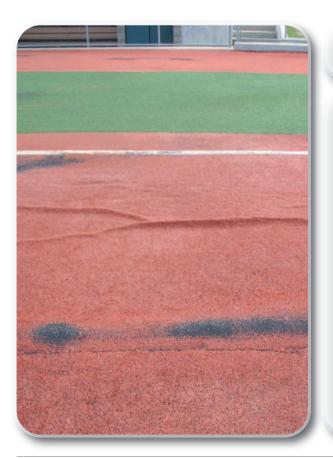
1. "Preflight" checklist

Spray techs should check equipment at the start of the day to save time and money. If you are going to have an equipment problem, find it early, at your shop, where it is easier and cheaper to fix. Spray equipment problems get worse and more expensive. Find them sooner rather than later. Technicians should report any problems or exceptions to their supervisor.

Andrew Greess is president of Quality Equipment & Spray, www.qspray.com, which builds custom landscape, fertilizer & weed spray equipment. Please share questions and equipment nightmares with Greess at Andrew@qspray.com.

Top 10 illustration courtesy of istockphoto.com

www.stma.org SportsTurf 35



John Mascaro's Photo Quiz

The huge wrinkles in this artificial turf infield and displaced infill material were a result of Hurricane Ike. The hurricane made landfall as a strong Category 2 in Galveston County, TX during the early morning hours September 13, 2008. The eye came within 5 miles of the Big League Dreams Sports Park. Between the hurricane and the passing front the next day, more than 15 inches of rain fell on the complex. The drainage system for the artificial turf infields as well as the natural grass outfields are entirely dependent on electric pumps that move the water from the six baseball/softball fields to a retention pond. Due to the fact that there was no electricity during the storm the water had no where to go so it backed up through the drainage

system, which caused the artificial turf to float up in several spots. When the pumps were working again and pumped the water out, the artificial turf settled back down but the stretching caused wrinkles.

The sports turf manager came up with an ingenious plan to make a giant carpet stretcher by taking a 4 x 4-foot sheet of three-quarter inch plywood and screwing twelve lag bolts through it. The wrinkles were then pulled out with a front-end loader. Overall, the complex fared quite well with only superficial damage and was opened back up for play just 7 days later.

Photo submitted by Mike Estlinbaum, Director of Maintenance at the Big League Dreams Sports Park in League City, TX.

If you would like to submit a photograph for John Mascaro's Photo Quiz please send it to John Mascaro, 1471 Capital Circle NW, Ste # 13, Tallahassee, FL 32303 or email to john@turf-tec.com. If your photograph is selected, you will receive full credit. All photos submitted will become property of *SportsTurf* magazine and the Sports Turf Managers Association.



Synthetic turf logo cutter

From Turf Sewing Machines, Newark, NJ, this portable, 2.5pound hand-held cutter is set up with a steel plate on the bottom so you can slide it easily under the synthetic turf you're cutting. Design prevents it from dragging on stones, etc. was originally built for Pirelli Tire. Cuts all turfs, carpets, rubbers, straight and curved. Features gear-driven muffler to eliminate air flow noise.

www.turfsewingmachines.com



Sports Star, new from Smithco

This new design from Smithco provides finishing, scarifying and plowing implements for ball field grooming includes safe and versatile 4-wheel design. Features dust suppression system, hydraulic dump box for carrying tools and hauling dirt, sand, etc., and 16 hp twin-cylinder engine, with gear drive and automatic torque converter for simpler operation.

Dry line marker & field paint lining systems available. Make your field more smooth and consistent.

www.smithco.com



Triple-play groomer

TurfTime's Triple-Play model 60P is a 60-in. wide pull-type infield groomer with flip-over rippers, three levelers, rear finishing brush, and flipover transport wheels. Also available in 78-in. Designed to replace nail drags, chain drags, cocoa mats, scarifiers, levelers, etc. The adjustable hitch accommodates different hitch heights.

www.turftimeeq.com