

# Top 10 turf spray equipment productivity tips

**WE OFTEN HEAR FROM SPORTS TURF PROFESSIONALS** that they 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 using fertilizer and weed control spray rigs can reduce problems significantly with a few easy steps. We have assembled our list of the Top 10 Spray Equipment Productivity Tips.

## 1 CHECK & CLEAN YOUR FILTER

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 through downtime 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 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 dearly.

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.

## 2 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.

## 3 DON'T USE HIGHER PRESSURE THAN NEEDED FOR THE JOB

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. This same holds true for backpacks. Technicians often overpressure backpacks, causing damage and downtime.

## 4 CLEAN IT OUT

Rinse your system with clean water periodically to remove old chemical buildup, debris, etc. Chemical buildup & 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 – PERFORM PREVENTATIVE MAINTENANCE (PM)

PM will save you time, money, equipment breakdowns, unhappy customers, 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. A perfect example of this is the diaphragm pumps used by many turf professionals. Many departments wait for the diaphragms to fail before replacing them. Don't wait. Replace diaphragms at the end of your busy season so you won't have problems the following year.

## 6 DON'T IGNORE 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. Employees know the equipment better than you. Be sure they know to look, listen and report things that don't seem right. Encourage your employees to report problems so that you can take the appropriate action before a small problem becomes a big (i.e., expensive) problem.

## 7 EMERGENCY REPAIR KIT

A \$2 o-ring can cause hours of downtime. 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.

## 8 PREFLIGHT CHECKLIST

Every pilot has a checklist and goes through a pre-flight routine BEFORE taking his or her plane into the air. Spray techs should do the same thing. A few minutes spent checking equipment at the start of the day can save time and money, as well as preventing downtime that hinders your ability to provide timely service. Here's the key point. 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.

## 9 TRAINING & RETRAINING

Ensure any technician using a sprayer, power or manual, thoroughly understands how to use it. Supervisors should observe the technician's operating procedures and check equipment operating pressures, filters, etc. Provide periodic retraining. Train operators to listen and observe sprayers so they can identify problems. Remember, just because you showed him (or her) how to do it on day one, doesn't mean they are still doing it the way you want.

## 10 AVOID FREEZE DAMAGE

Never expose sprayers to freezing temperatures. Water freezing in sprayers will burst pumps, filters, valves, fittings, spray guns, etc. Take appropriate action BEFORE the freeze. Never run frozen equipment. Let it thaw out. Often times no other repairs are required. ■

*Andrew Greess is President of Quality Equipment & Spray, [www.qspray.com](http://www.qspray.com), which builds custom landscape, fertilizer & weed spray equipment, designed for safety, reliability, ease of maintenance and productivity. Please share questions and equipment nightmares with Greess at [Andrew@qspray.com](mailto:Andrew@qspray.com). If you have comments or more suggestions, please visit our blog, [www.SprayEquipmentBlog.com](http://www.SprayEquipmentBlog.com).*

## PK Products has newly designed sprayer line

PK Products has introduced a line of newly designed sprayers featuring aluminum-framed, trailer, zero-turn and ATV/UTV mounted units. Each sprayer comes standard with a premium coiled hose, deluxe handgun with adjustable tip, and self priming pumps. Tanks come standard with an easy to read liter/gallon fluid gauge and a 5-inch lid with screen and tether. Aluminum frames feature an industry leading 3-year limited warranty. PK Products offers three different sizes of aluminum trailer mounted sprayers, 25-, 40-, and 60-gallon. UTV and ATV mounted sprayers feature fast and easy spray height adjustment, without the need for additional tools.

**PK Products**

## Grading plane for small compact tractors

Earth & Turf has introduced a grading plane to fit compact tractors.

- Sixty-inch grading width
- 280 Lbs. weight for compatibility with small compacts, 35 HP and under
- Dual, angled blade design for smooth leveling
- Bolt-on, reversible cutting edges for long service life
- Category I three-point hitch

Earth & Turf manufactures simple, well-built products.

**Earth & Turf Products, LLC**



## Cub Cadet string trimmers

Cub Cadet offers a selection of exceptional string trimmers that make easy work of trimming around fences, trees and flowerbeds. Here are some of their features:

- 4-cycle string trimmers have engines that are fuel-efficient, have low emissions and run quietly
- Advanced Starting Technology (AST) dramatically starts with slow, steady pulls and reduces starting effort
- Optional power start available on select models
- Bump feed head allows for continuous operation

**Cub Cadet**



## Gravelly Stadium 80 sprayer

The versatile Gravelly Stadium 80 Sprayer includes an 80-gallon, low-profile tank that fits in the back of a utility vehicle to provide 360-degree visibility.

Equipped with a spray gun, 25-foot hose and a low-maintenance, 10-foot, three-way folding boom with electric on and off controls, the Stadium 80 sprayer is simple to operate. The lockable tank lid and anti-siphon fill prevents chemical spills, while the compact design and low center of gravity gives added stability. Operators can enjoy hours of spraying before refilling with the large 80-gallon tank.

Additional options include a 4-hp Honda GX engine with a pull start and a Hydro 12-volt engine with electric start. The Stadium 80 Sprayer is covered by Gravelly's one-year limited commercial warranty.

**Ariens Company**



## John Deere Sprayers

The HD200 and HD300 offer a choice of centrifugal or diaphragm pumps, manual or automatic rate controls, and boom width options that come standard with electro-hydraulic lift. More versatile than a dedicated sprayer, optional storage stands allow for the sprayer to be removed in minutes without tools, freeing up the ProGator to be used for other tasks. The optional CleanLoad chemical eductor makes it easy to load chemicals by ensuring that every last drop is used, and a powerful jet agitator makes sure the tank solution is mixed thoroughly. An efficient valve bank design simplifies operation and plumbing, while standard triple nozzle bodies make nozzle changes effortless. Controls are mounted at the operator's fingertips and can be removed without tools for storage.

**John Deere**



## 6000 Series Hose Reel ideal for Grounds Maintenance

Hannay Reels' 6000 Series power or manual rewind reel is constructed with materials and finish that can stand up to the abuse from corrosive fertilizers, pesticides and other hazardous materials. Equipped with a manual gear-driven crank rewind or a chain and sprocket drive with a hydraulic, electric, or compressed air motor, this heavy-duty reel efficiently handles long lengths of hose payed out over extensive areas.

**Hannay Reels**



## Portable soil moisture probe

The new SM150-Kit portable soil moisture probe offers accuracy with cost savings, and can be used in all types of soils and artificial medias. Engineered for reliability and high performance, the SM150-Kit is well suited for research, greenhouse irrigation scheduling, golf or sports turf, or agricultural applications. The SM150-Kit includes the SM150 sensor and the HH150 readout, with calibrations for organic and mineral type soils. The SM150 sensor (sold separately) can also be used with data loggers or added to other soil moisture logging systems, for continuous soil moisture monitoring.

**Dynamax, Inc.**



## BioSafe Systems announces new ZeroTol 2.0

BioSafe Systems introduces ZeroTol 2.0 Algaecide/Fungicide. The new labeling provides an updated active ingredient statement, an increased number of controlled pathogens, and new labeling instructions for the treatment of artificial turf. ZeroTol 2.0 is used to treat and control plant pathogens on ornamental plants and turf. ZeroTol 2.0's active ingredients include 27% hydrogen peroxide and 2% peroxyacetic Acid. Due to its fast acting oxidation process, mutational resistance of harmful organisms is not possible. ZeroTol 2.0 is available in 2.5, 30, 55, and 275 gallon sizes.

**BioSafe Systems, LLC**

