Don’t think that old toothbrush can no longer help prevent cavities. While it may no longer work to clean your teeth, it’s a perfect tool for cleaning the tips of your sprayers. That’s one of several tips Peter DeHaan offers to help greenkeepers maintain this heavily-used piece of equipment. As the technical support representative from TeeJet Technologies, DeHaan is duly qualified to speak on this subject.

The most important thing, according to DeHaan, when you use a sprayer on a daily basis is to rinse it out after each use. Allowing the residue to dry and harden will only make cleaning more difficult. “That can definitely help as far as the tip clogging,” he says. “It can also help prevent later damage to its internal parts. By letting some of the chemicals you use sit in the lines and in the tank, you will cause mineral and chemical build up in the lines that will eventually cause clogging of your tips, so always rinse your sprayers out after each use.”

GET TO THE TIP OF THE MATTER. DeHaan says equally as important is to not neglect the tips. This is where clogging can occur and he always recommends superintendents use tip strainers, not just line strainers. If you get clogging in the tips, it will cause an uneven application.

“An awful lot of people think they are a pain and they don’t use them, but if you use them, you will see the benefit,” he says. “Most
“Tips are essential to get an even spray pattern, so if you use something to clean them that is too coarse, you can damage them. And, a damaged tip can actually have worse distribution than a worn tip.”

— Peter DeHaan, TeeJet Technologies

**Top sprayer maintenance tips**

- Always rinse your sprayer thoroughly and immediately following each application.
- Soak the nozzles in hot water before cleaning.
- Use a toothbrush to clean the tips, followed by a blowout from some compressed air; never use a piece of wire or other sharp object to scrape residue from the nozzle as damage to the nozzle will negatively affect its spray pattern and performance.
- Always wear personal protective equipment.
- Do a collection/calibration test to check for wear and tear of your tips; this ensures you have good, even distribution.

sprayers come with inline strainers that filter the sprayer right at the tip. Even if you are just spraying water, the minerals in the water will build up in the line at the tip, so it’s good to perform this routine maintenance as the last check right before the nozzle.”

As mentioned, one of the best ways to clean the nozzle is to use a toothbrush since you want something softer than the tip that is non-abrasive. DeHaan says TeeJet sell tip cleaning brushes, but they basically perform the same function as a toothbrush.

“The reason you want to use something like a toothbrush is because the tips are pretty delicate,” he says. “Tips are essential to get an even spray pattern, so if you use something to clean them that is too coarse, you can damage them. And, a damaged tip can actually have worse distribution than a worn tip.”

At the same time you clean your tips, check them for wear and tear. Don’t use them for multiple years without changing. The best way DeHaan recommends to check your tips for wear is to keep a new tip on the side and then once or twice per year, put that on and compare a spray with it to the old tip for a minute at a certain pressure.

“Compare the difference in the flow you get out of each tip,” he explains. “If there is more than a 10 percent difference, it’s time to change the tips. Don’t base your decision to change the tips on how many hours you’ve used them or how much acreage you have because that’s vague… tips are going to wear differently at different pressures and different materials used.”

Always clean your sprayer and tips immediately following each spray application. Allowing the residue to dry and harden will only make cleaning more difficult, says Warren Wybenga, turf equipment manager at Donalda Club, Toronto, Ontario. Never use a piece of wire or any sharp object such as a piece of wire or dental pick to scrape residue from the nozzle as scratches or other damage to the nozzle will negatively affect its spray pattern and performance characteristics.

“If one nozzle is performing poorly while the others seem to be working properly and cleaning doesn’t seem to make an improvement, consider replacing all nozzles instead of just the suspect one,” he says. “As a set of tips gets more hours of use and depending on the product used, they will tend to wear out. Replacing one at a time will give an equally unacceptable, non-uniform appearance to the spray pattern.”

And finally, thoroughly clean the sprayer and always use the recommended PPE’s (personal protective equipment), even when cleaning the nozzle tips.

**GET READY FOR WINTER’S LONG EMBRACE.**

Just like putting away any of your equipment in the fall, when it’s time to put the sprayer away for the winter, DeHaan says to make sure the valves are cleaned out. “You don’t want any fluids sitting in your lines for the winter because they will expand, freeze and eventually crack,” he says. He adds that the end of the season is also a good time to replace any seals if you’ve had any leaks.

While most of these tips are common sense, DeHaan says just like the homeowner with his lawn mower, when superintendents and equipment managers are time-pressed, these simple maintenance practices are sometimes skipped. GCI

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