

# We don't want no stinking weeds!

**We hear you.**

**We've got a solution for all your problems.**

**CHASER  
ULTRA**  
THREE-WAY HERBICIDE

**CHASER ULTRA** is three way combination of MCPA, Clopyralid and 2,4-DP, which is aimed at providing effective control in both cool and warm seasons. It is an excellent choice for broadleaf weed control and has demonstrated exceptional control on white clover, dandelion and plantain.

**CHASER**  
HERBICIDE

**CHASER** is the original ester formulation of 2,4-D and triclopyr that controls most broadleaf weeds, including hard-to-kill weeds that other comparable chemistries do not control. It has shown excellent turf safety and mixes well with most pesticides and fertilizers.

**CHASER 2**  
AMINE HERBICIDE

**CHASER 2** has all the power of Chaser with the safety of a warm weather amine formulation. It can be used on ornamental turf such as lawns, golf courses (fairways, aprons, tees and roughs), parks, highways, cemeteries and similar non-crop areas; and sod farms.

**KLEENUP PRO**  
GRASS AND WEED KILLER

**KLEENUP PRO** is the easy-to-use and proven 41% glyphosate solution for keeping landscaped areas clear of weeds and unwanted grasses and for spot controlling weeds in hard to reach places. The long-lasting systemic control prevents regrowth and has virtually no residual activity.

For more information, contact your local UHS representative

[www.uhsonline.com](http://www.uhsonline.com)

Circle No. 119



**United**  
Horticultural Supply



# Get In. Hang On.



**No matter what you're spraying, these adjuvants will get you where you need to be.**

The basic role of an adjuvant is one of two tracks, to either help chemicals penetrate into the plant or to adhere to the leaf surface.

If your goal is systemic action, no other non-ionic surfactant or penetrant product is superior to **LI-700** and **Liberate**.

If you desire to enhance the effectiveness of contact products, look no further than **Tactic**.

All of these high-performance, premium adjuvants have been tested to ensure plant safety and used effectively around the world.

#### **LI-700**

- Maximizes penetration through waxy layer of foliage while maintaining integrity of the plant's protective system
- Acidifying feature reduces pH of spray solutions
- Unique chemistry provides excellent drift control
- Allows more uniform coverage and even spreading

#### **LIBERATE**

- Same penetrating and low-phytotoxicity benefits of LI-700
- pH neutral with a "CAUTION" label for maximum safety
- Low-odor formulation also provides superior drift control

#### **TACTIC**

- High quality sticking agent maximizes residual activity
- Organosilicone super-wetter gives total coverage
- Resists wash-off by dew, rain or irrigation

For more information, contact your local UHS representative  
[www.uhsonline.com](http://www.uhsonline.com)

Circle No. 120



**United**  
Horticultural Supply

# Perfecting a park



BY CURT HARLER / CONTRIBUTING EDITOR

## The City of Portland has its own set of unique challenges in keeping Tom McCall Park shining

renovations, one in spring and one in fall, scheduled annually.

### Out with the old

The old system of re-seeding into the existing soil was unsatisfactory since Portland is rainy. "Naturally, with wear and tear, the turf would deteriorate. With the rain and decay would come a manure or sewage smell that people found objectionable," says Bill Walker, facilities and maintenance supervisor for the downtown district.

To solve the problem, Portland decided to install a sand base under the 21 acres of riverfront park and re-seed as often as required. When the artificial base went in seven seasons ago, the city installed irrigation as well as electric and phone lines, natural gas pipes and water

lines to support the vendors who set up stalls at the festivals.

Today, the busiest 17 acres of the 21-acre site rest on a 18- to 24-in. bed of straight sand. "The sand bed gives us great drainage and it's easy to do repairs," Walker says. "As long as you have a lot of fertilizer and water, it's great for the grass."

### Keeping it green

Keeping the lawn fed, watered and green is the responsibility of senior facilities and maintenance manager Jim Carr.

The high-traffic area of the park is like a 17-acre putting green. All nutrients and water must be provided even while the public uses the facility. Wear and tear is heavy, and the traffic requires frequent renovation of this greenbelt to keep it beautiful.

**A**s many as six times a summer the City of Portland completely re-establishes the turf at the Tom McCall Waterfront Park. The park, Portland's green-carpet welcome mat to the city, is a beautiful greenbelt

that hosts festivals ranging from Cinco de Mayo to the internationally acclaimed Rose Festival as well as tens of thousands of casual visitors each month.

About 600,000 visitors visit the Rose Festival, and every one of them takes a toll on the grass. The city must re-establish the turf regularly throughout the summer with at least two major

"Our first step in renovation is to remove any contaminated soil," Carr says. Next, they re-grade ruts and other uneven areas.

If there's still a reasonable amount of viable turf on the site, they'll aerate and pull plugs. They use their AerVator to break up crust that builds up as a result of the organic matter being left on the ground. The AerVator also provides a final grading for the site.

"We slice-seed with a straight perennial rye, which we've had good success with," Carr says. "We're getting root depths of 10 to 14 inches."

As a public agency from Oregon — the turfgrass seed capital of the country — Carr has many providers. "Being a public agency, we lean to the cheapest good seed available," he says. "We always call for blue-tag (certified) seed with zero 'other crop,' zero weed seed, and low inert matter."

From there, the strategy is to slice-seed into the ground in at least two directions. "I look at every seeding as a new seeding. So we'll apply six to seven pounds of seed per 1,000 square feet, putting half on in each direction," Carr explains. Even slit-seeding can result in some degree of unevenness, so he'll typically broadcast another pound or two of seed over the top.

**Blended to order**

With help from Oregon State's Tom Cook and former Washington State professor Roy

Goss, Carr put together a custom fertilizer blend to use in the parks.

"We felt it was important to get a uniform blend that wouldn't leach out of the soil right away but would still be available to the germinating grass at once," Carr explains.

The result was a 22-5-10 custom blend with micronutrients, including 2% iron. Half of the N is sulfur-coated urea.

"It gives us very predictable results," Carr says. "If I fertilize during renovation, I know I'll have good fertilizer levels available to kick the seed in through the germination process. Six weeks later, the rest of the fertilizer is available to the growing grass."

They fertilize four times per year. Since the medium is simply sand, the plants need regular feeding. The standard application is a pound of the

*continued on page 48*

**In addition to providing water, Walker says Portland requires a sprinkler that is able to combat vandalism.**



## A plan for the future

While good portions of Portland's park system are moving ahead smoothly, the city wants to be sure things continue apace. Some areas of the city lack neighborhood parks within walking distance of residents, and there's a feeling that more community gardens are needed and that too many natural areas are being lost to development. There's a call for more sports fields, and there are conflicts over appropriate use of park land.

Portland Parks and Recreation is working with its "2020 Plan," a comprehensive master plan. The citizen-driven directive presents the vision, guiding principles, issues, opportunities, and recommendations for Portland Parks and Recreation for the next 20 years. The plan covers everything from parks, open space and natural areas to community centers and swimming pools. It discusses programs, partnerships and funding.

The plan addresses important emerging trends and issues such as extreme sports. In the face of lost open space, new and conflicting recreation demands, and an aging population, the 2020 Plan looks at the current system to determine how to best meet the needs of the future.

One opportunity for improvement described by the 2020 Plan is working with public agencies and private developers to enhance the beauty of the city with parks and urban plazas, and to realize historic dreams of connecting parks to each other with trails, paths and boulevards. Another is creating recreation corridors along the rivers and streams that define and bring life to the city, which would be an expansion of areas like the Tom McCall Waterfront Park (named for the former governor who welcomed visi-

tors but actively encouraged them to go back home rather than migrate into Oregon). Ross Island and Willamette Cove may be added to that category.

Eventually, 2020 sees recreation opportunities and neighborhood parks within a 15- to 20-minute walk of every resident.

BASF  
PROFESSIONAL  
TURF



**WE'RE FLATTERED THAT COMPETITORS**

**KEEP ATTACKING PENDULUM®.**

**THAT'S WHAT HAPPENS WHEN YOU SET**

**THE INDUSTRY STANDARD**

**FOR EXCELLENCE.**

**BASF**

Circle No. 121

# OTHER PREEMERGENTS TALK WITH PENDULUM®, IT



© 2002 BASF Corporation. All rights reserved. Pendulum is a registered trademark of BASF.  
\*Based on field trials conducted during 2001 at Clemson University, Texas A&M University, University of Arkansas, N.C. State University,  
Penn State University and University of Maryland. Visit [www.turfacts.com](http://www.turfacts.com) for details.

**BASF**  
**PROFESSIONAL**  
**TURF**



**Pendulum® herbicide** consistently controls crabgrass better than other preemergent herbicides.\* What more can we say? How about **Pendulum** controls costs better, too, to offer you far greater value. It also controls a broader spectrum of weeds than any other preemergent—more than 40 grassy and broadleaf weeds, such as oxalis and spurge, in all. Plus, **Pendulum** comes in granular and liquid formulations, and BASF pendimethalin is available on fertilizer from Scotts and Helena, for maximum application flexibility. With **Pendulum**, there's just so much more to talk about than crabgrass.

**A LOT ABOUT CRABGRASS.  
NEVER COMES UP.**



To learn more about why everyone's talking about **Pendulum**, call  
1-800-545-9525 or visit [www.turffacts.com](http://www.turffacts.com).  
Always read and follow label directions.

**PENDulum**<sup>®</sup>  
Herbicide

**WE DON'T MAKE THE TURF. WE MAKE IT BETTER.**

**BASF**

Circle No. 122

continued from page 44  
 22-5-10 per 1,000 square feet, but it varies. "The nature of the park makes it difficult to say that we always need only a pound per 1,000," Carr notes. In some in-

stances, the grass goes dormant and needs less feeding. Other times it continues to grow even though it's experiencing heavy traffic. Overall, though, the pound rate seems to work out.

To maintain a good "look" in the park, the ground is rolled as part of a big-time, heavy-duty process. The parks developed its own roller, a custom-built nine-footer that's 20 inches in diameter and filled with water. It puts plenty of pressure on the underlying soil.

"Aerating and slicing opens up the turf," Carr explains. "Rolling gives it back the finished look."

**Water woes**

Watering is a key element of the project. Carr wants to maintain moisture levels through the top three inches of the sand profile.

Delivering that irrigation water presents challenges of its own. Naturally, a city park draws its share of homeless people sleeping outside and a substantial number of drug dealers and other undesirables who take umbrage when a water sprinkler goes on and disturbs their activities. "The drug dealers get upset and pound on the sprinklers," Walker says.

Portland citizens felt the park was wasting water but it wasn't.

They've had success with Hunter equipment where irrigation was the main concern. But Walker says nothing beats Toro 640 pop-ups when it comes to resisting vandalism.

Willful destruction is not the only problem faced in Portland in summer. Difficult as it might be for an outsider to believe, Oregon was in the midst of a drought last summer after a low winter snowfall and slight spring rains. Despite official pleas to save water, the citizens of Portland saw park areas being irrigated as wasteful.

"At first, we were surprised at the negative reaction," Walker says. "We were catching it from the public." Yet he was

Still using old-fashioned stake & wire to plant your new trees & shrubs?



Finally, there's a better way! Introducing...



US PATENT NOS. 6,141,903 & 6,065,243

**TREE STAPLE**  
 BELOW-GRADE STABILIZING SYSTEM  
 FOR NEW TREE & SHRUB PLANTINGS

The revolutionary new stabilizing system that's

**SAFER**  
 because it's completely below-grade

**CHEAPER**  
 because it never needs to be adjusted or removed

**EASIER**  
 because one worker, a sledgehammer, and a few minutes is all it takes to install

"Don't kill a tree to stake a tree"

**CALL (877) TREES-49**  
 WWW.TREESTAPLEINC.COM  
 Tree Staple, Inc. • 310 Springfield Ave, Suite 8  
 Berkeley Heights, NJ 07922



open with the media and the public about how the park's situation differs from the general public's, and the explanation turned frowns into smiles.

While most of the water for Portland's parks is from Bull Run, Waterfront Park has its own well. "We have a good storage system, so we don't have the same problems the public system does," Walker says. Additional water could be drawn from the Willamette River. Eventually, all the irrigation water makes its way back into the river via the storm water system.

Because the entire system is sand-based, they must adhere to a consistent irrigation schedule to keep the turf green. In effect, the 21-acre strip is one long artificial green. Pumping is done from a central spot, although each set of sprinklers is in its own zone. "It does get windy here along the river and the sand will dry out," Carr adds. "We need to maintain moisture on the surface."

Watering is done three times a day, perhaps at 10 a.m., 2 p.m. and 4 p.m. "Each time we run for 15 or 20 minutes," Walker says.

Catchy signs featuring a cartoon character with an umbrella and the warning "Don't Get Wet!" are posted around the park. Some list the times of the sprinklings, others just say "Sprinkling System to Come on at Various Times." Is that just a crafty way to chase away those who would tramp on the new seedings? Not so, says Walker. The signs are intended as serious warnings to the office workers and tourists who might be upset should they suddenly find themselves in the midst of an irrigation cycle.

#### Pesky problems

Birds are constant guests at the park, too. While Carr compensates a bit in seeding for what they might eat, the area is so large that pigeons and other city birds have only a negligible effect on the seedings.



The parks developed its own roller, a custom-built nine-foot roller that's 20 inches in diameter and filled with water, putting plenty of pressure on the underlying soil.

Canada geese in the bowl area at the south end of Waterfront Park are another story which has yet to be addressed. The parks know the geese are part of the environment, even an attraction to visitors, but they can be a pain.

Another challenge is poa, which rears its ugly head from time to time. Carr used to apply ProGrass, but he no longer does since the annual bluegrass tends to come in early and he finds they can live with it until the next renovation.

"We have no need to spray for broadleaf weeds either," he says. Thanks to the aggressive seeding, fertilizer and irrigation programs, "Broadleaves are all but non-existent," he says.

A final restoration is done after all of the summer events are concluded, usually mid-to-late September. "We're in a cool-season grass area, but with the mild climate, sometimes the grasses don't go completely into dormancy," Carr says. "Things often stay green all through the winter."

As a result, the City of Portland is able to roll out its green carpet for guests and residents year-round, making the Portland waterfront area one of the most attractive cityscapes in the country. **LM**

**IN ONE**  
**easy**  
**STEP**

**MYCORRHIZA**

✓ Water Holding Gels  
✓ Organic Fertilizer

60 packets  
in 1 bucket

Roots inc. Call toll free: 866-427-6687. www.gardenroots.com

Circle 124

# Audit now, save later

BY RON HALL/ EDITOR-IN-CHIEF

**N**obody can predict this growing season's weather but it's a good bet that some areas of the country will get too little rain. Given that reality you should prepare for dry weather and the stress that it brings. The stress isn't restricted to the ornamentals and turfgrass that you maintain but it affects you, too, in the form of landscape watering bans and restrictions. This can harm the way you do business and how you serve your customers.

## Don't wait until it's too late

Now's the time to check irrigation systems to see that they function efficiently. Crucial to this process is an "irrigation audit" (in fact, mandated in many areas) that will point the way to making sure that your landscapes are getting the amount of water they need to remain healthy, and not wasting water and money.

Dr. James McAfee, as extension turfgrass specialist with Texas A&M University, educates professionals and consumers alike on how to use irrigation more efficiently and still have good turfgrass. He estimates that irrigation issues now demand about 40% of his professional time.

As part of this process McAfee and colleagues have conducted audits on dozens of irrigation systems. In auditing a system (we'll explain the steps to do an audit in May's *Landscape Management*), McAfee places catch cans in various locations within a landscape or athletic field, allows the sprinkler system to run, then measures how much water is being delivered to the different areas that are being irrigated.

## Too much is too much

Too often the results aren't encouraging.

"The biggest problem that I see is the way the irrigation systems are set up," says McAfee. "The system is on a clock and set to run three or four times a week. Some commercial properties and apartment buildings and places like that may have systems that come on four, five, maybe six times a week.

"That's way too much water. They don't do a good job of matching the precipitation rate to the soil type so they end up getting runoff in 10 to 15 minutes," says McAfee. "It's real easy to overwater because if the grass is green and you keep it wet, it stays green.

Lack of coverage uniformity is another common problem, even on professionally maintained turfgrass. The reasons are var-

## IRRIGATION HARDWARE PROBLEMS FOR 23 SYSTEMS

PROBLEM	OCCURRENCE
Sunken heads	4 sites
Misaligned heads	14 sites
Broken piping	5 sites
High pressure	2 sites
Mixed spray arcs	5 sites

## OCCURRENCE OF MEAN DISTRIBUTION UNIFORMITY

DU RANGE	OCCURRENCE
31-40%	1 site
41-50%	13 sites
51-60%	7 sites
61-70%	2 sites

RESULTS OF WATER AUDITS CONDUCTED BY DR. JIM MCAFFEE, TURFGRASS EXTENSION TEXAS A&M

ied but they are most often caused by improper placement of sprinkler heads.

"Sometimes people try to save money and space heads too far apart," says McAfee.

Why is irrigation efficiency suddenly so important?

Look at your growing water bills or witness the number of communities suffering severe water shortages. Local governments are implementing stricter and stricter water conservation plans. Almost all of these plans focus on the Green Industry's use of irrigation water.

The people that make the water decisions can see for themselves when water is being wasted by inefficient systems.

"The only true way to figure how long to run your system is to do an audit," advises McAfee. "With auditing, I'm convinced that a majority of property owners could save 50% on their water bills." **LM**