## sportsTURF

# Haines Guards Soccer Legacy at Portland

#### By Matt Trulio

s a junior at the University of Portland, a small, nonprofit teaching university in Portland, OR, Jim Haines faced the same, time-honored problem confronted by juniors since the dawn of higher education: He had to declare a major. Haines, by nature laidback, hadn't given in much thought.

I've settled on teaching and decided English would be a good avenue for that," recalls Haines, 46, now the head groundskeeper at the university. "I earned my B.A. in English in 1971, but I didn't become a teacher. It wasn't for me — I thought I probably didn't have the patience, which is funny because I now teach landscape maintenance to the work-study students who work for me."

To say Haines, originally from Hawaii, loves his job would do a serious injustice to his passion for the work. He lives it he breathes it. Haines is in charge of maintaining the 64 acres of campus grounds, 46 of which are turf. That includes a full-size baseball field, a large practice field that can be striped into two soccer fields, an intramural field and the first-rate soccer field in Merlo Stadium. "Working



Merlo Stadium supports both men's and women's NCAA Div. 1 soccer teams.

here is like working in one big, beautiful garden," he says enthusiastically.

#### **Turning Points**

Situated on a bluff overlooking the Willamette River and built on what once was a dairy farm and orchard, the school's property is the envy of local real estate developers. In 1901, the Holy Cross fathers, the same order of Catholic priests that runs Notre Dame, were given control of the campus, then known as Portland University. Today, it is a teaching university with an enrollment of approximately 2,800 students of mixed denominations and ethnic backgrounds.

Like so many Hawaiian high school graduates with a touch of "island fever," Haines ended up on the mainland for college. The small, intimate university, with its idyllic setting, suited him perfectly. After graduation, Haines headed for Europe. He traveled extensively for a couple of years, soaked up as much culture as he could and eventually found himself back in the Portland area in the restaurant business. "This wasn't exactly my cup of tea," he says with a laugh.

When an opportunity to work for a landscaper in Portland's well-heeled

West Hills area arose, Haines jumped at it. To augment his hands-on education, he also earned an associate degree in landscape technology from Rock Creek Community College.

"Experience is probably the best teacher," he emphasizes. "For anyone who wants to get into this business, I recommend working for someone else first to see if you like it, then go to school. I've had kids work for me who did it the other way, and they discovered they just didn't like the work. Sure, we plant, prune and mow, but we also pick up litter and empty garbage cans."

Haines later worked in plant sales for Teufel Nursery, one of the largest nursery operations in the Pacific Northwest. He had to learn fast, he recalls, because he was selling plant materials to contractors who wanted their materials immediately. It was there that he learned his plants during his two-year tenure and, more importantly, where he met Lowell Cordas, then the head of plant sales. Cordas became his mentor.

"Lowell taught me everything I know about plants," says Haines. "He left the

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nursery for a job as head groundskeeper for the University of Portland and followed him — I just bugged him until he game me a job. He left five years ago to work for the Saratoga Horticultural Foundation in Gilroy, California, as director of nursery operations, and I was promoted to his position."

"The school asked me, and I jumped at it," he continues. "It's an enviable position."

#### **Growth Moves**

For a school its size, the university's soccer legacy is nothing short of remarkable. The athletes there play in tough NCAA Division I competition. This past season, the women's soccer team finished third in the nation, and both the men and women have been winners or cowinners in the West Coast Conference for the past six years. The men have made the regionals six times, the women three times and both have been ranked in the nation's top 20 - and often the top 10 -NCAA Division I schools for the past six years. Take nothing away from the athletes — their achievements stand for themselves, but perhaps not so coincidentally Merlo Stadium and its soccer field were also constructed five years ago.

Named for Harry A. Merlo, CEO of Louisiana Pacific, who along with Earl A. Chiles (for whom the school's basketball arena, the Chiles Center, is named) is responsible for funding the school's athletics, the sand-based soccer field was built on what was once an open pasture with clay soil. Physical Plant Director Paul Luty, a former construction superintendent with an

Sand rootzones drain so well they have a hard time holding nutrients during frequent heavy rainfall. To solve this problem, Dr. Roy Goss, retired Washington State University turf expert, designed multi-nutrient fertilizer formulations\*. Haines supplements the products with additional potassium. His fertilizer program and schedule follows:

#### **Every Four Weeks**,

#### April to November

1.0 pound N per 1,000 square feet per application

• Nitrogen (N) - 19% (2.7% ammonium sulfate, 1.8% urea, 2.4% methylene



Jim Haines (above) and his crew networked to achieve great results with Merlo Stadium.



idea for detail and quality, gathered a number of big names in the Northwest sports-turf brain trust to work on the project, while Haines served as the day-today "point man."

"When the school decided it was going to make soccer a premier sport here, the best were brought in," says Haines.

The best included sports-field archi-

tect Don A. Hogan, who designed the Seattle Seahawks' practice fields in Mercer, WA. Dr. Tom Cook of Oregon State University helped Haines to create his maintenance program.

When Luty handled the contractors, Haines oversaw the daily construction and progress. "I had to make sure the specs were followed to the letter," he recalls. "And

### SPOON FEEDING MERLO FIELD

ureas and Ureaform, 9.0% sulfur-coated urea, 3.1% water insoluble organic)

• Phosphorus (P) - 3% (monoammonium phosphate, rock phosphate)

• Potassium (K) - 16% (muriate of potash, sulfate of potash, potassium nitrate)

- Calcium (Ca) 0.8%
- Sulfur (S) 9%
- •Iron (Fe) 2% (iron sulfate)
- As Needed, November to April

1.0 pound N per 1,000 square feet as needed

• Nitrogen (N) - 12% (4% ammonium sulphate, 0.5% urea, 7.5% sulfur-coated urea)

• Potassium (K) - 28% (muriate and sulphate of potash)

- Calcium (Ca) 0.5% (calcium borate)
- Sulfur (S) 11.5%
- Boron (B) 0.06% (sodium borate)

• Copper (Cu) - 0.06% (copper oxide and sulfate)

- Iron (Fe) 1.1% (iron sulfate)
- Manganese (Mn) 0.15% (manganese oxide and sulfate)

 Zinc (Zn) - 0.14% (zinc oxide and sulfate) small footnote type at bottom

\* Fertilizers above are produced by Lily Miller in Portland. I had to swear to Don Hogan that I would make sure no corners would be cut."

Construction began with 12 inches of excavation. The native soil was removed from the site, and then rain trenches were dug every 15 feet on center. The crew used perforated ADS drain lines without fabrics that could potentially "silt up," followed by a pea-gravel fill in the trenches, according to Haines. Rather than using plastic sheeting to "seal" the field, they compacted the soil to 90 percent and then installed the irrigation system, which is operated via a Toro hydraulic controller and features Hunter 1-40s with their unique sod cups to cover the heads.

Six inches of coarse sand, with a particle size measuring between 16 and 60 on the Tyler Screen, followed. The coarse medium was then topped with a finer washed and screened sand. They bought all of the sand from nearby Island Sand Sales, which still supplies Haines with the sand used in topdressing operations.

The perennial ryegrass Champion Blend from Seed Research of Oregon was hydraulically seeded onto the field, an establishment method that Haines saw as a necessary evil. "I don't recommend it because we introduced several tons of straw mulch to the field," he admits. "But we were on a tight schedule - we played on the field eight weeks after seeding - and sand-grown turf wasn't available.

"We went with perennial rye because of its nonthatching, quick-growing characteristics and, of course, its durability under heavy traffic," he continues. "Plus the blend had plenty of endophytes and is really disease-resistant. Of course, you're constantly fighting Poa annua, but that's always a battle here."

#### **Maintaining Excellence**

About the only thing predictable about Portland's weather is its volatility. Expect it to be unusual, and you'll never be disappointed, or so the saying goes. No doubt, heavy rain is the norm in winter, but that's where any semi-reliable weather forecasting ends. The month of June, for example, can be downright wet and miserable one year, and blistering hot the next. December temperatures can be near or below freezing or in the 60s, as they were for several days in 1994.

Given the likelihood of substantial

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rain in Portland, a sand-based field was a natural choice for Merlo Stadium. The expected percolation rate was 5 inches per hour; however, Haines believes it's much faster than that and for this reason he uses a special 19-3-16 fertilizer called Royal Green developed by Dr. Roy Goss of Washington State University for Lily Miller. The product was specifically designed to address the nutrient-leaching problems inherent with sand-based

fields. The crew fertilizes every four weeks from spring through the summer and into the late fall, with a final application sometime in November.

The fickle Portland weather also necessitated the installation of the irrigation system, which was overseen by Haines' "right-hand man," irrigation foreman Carvel Cook. "You never want to let a sand-based field go completely dry,"

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Haines explains. "Go to the beach and walk on dry sand. It has no stability. That's the nature of the beast with sand-based fields. The roots are holding it all in place, so you have to maintain them at all costs. Our roots go down to 12 inches. In the summer, I physically monitor the field every day for any sign of dryness or stress."

The crew tries to core-aerate four times a year, but with the field's heavy use, aeration is difficult to schedule. In a perfect world, Haines would like to have no play on the field for four to six weeks following aeration. Usually, he's lucky to get two weeks of downtime. Working within the tight time frame, the crew aerates, overseeds with perennial ryegrass applied by an Olathe slit-seeder (which Haines says helps break up the cores) and topdresses the field, using a Turfco Mete-R-Matic, with the same fine sand it used in its construction. The field is dragged and watered, then vacuumed completely, just as it is after weekly mowings in the growing season. To level swales that develop in front of the goals during the playing season, they use the same sand.

"The soccer coach, Clive Charles, wants a flat and fast surface, and the topdressing takes care of that," Haines explains. "People ask why we don't sod these areas in midseason, but there's just no way you can get a chunk of sod to stay in place there with players running and tackling it on. That would be dangerous to even try."

Come spring, Haines and his crew plan to renovate the center of the field. They will peel off the top three inches of turf, bring in more sand and then reseed with Champion Blend perennial ryegrass. Once the seed is down, they'll cover it with special breathable fabrics from Covermaster, which should speed germination and establishment.

While Haines is rightfully proud of his own work at the university, he is also quick to acknowledge that success translates into a team effort, from Athletic Director Joe Etzel's willingness to get the crew the equipment it needs to get the job done, to the efforts of the individual crew members themselves. Each member of Haines' team has a specialty, but together they function as a single, cohesive unit. Cook handles irrigation primarily, but pitches it wherever he's needed. Bob Shepherd, who will retire soon, has been on the university's grounds crew for 20 years and handles most of the mowing chores. Bob Reischman is currently training to take over for Shepherd when he retires. Michelle Zimmerman is the chief horticulturist. Assisted by the horticulturist-in-training, Ann Lang, Zimmerman handles all the "showcase" planting beds, and specializes in using native plants and ornamental grasses.

Arborist Jim Wells joined the team after working for a tree company in Portland for many years, and handles all the arboricultural chores. "All the trees on campus look absolutely beautiful," says Haines. "People always notice them.

"Most schools with our size and budget average one maintenance person for every five acres," he continues. "We have one for every 10 and our grounds are still beautiful. The key is teamwork — we all do what it takes, like picking up litter."

For his part, Haines goes to where he is most needed each day. One day that might mean pruning, the next he might ride a mower. He thinks his mission, and that of his entire crew, is to maintain a safe, pleasant campus, as well as safe, playable athletic fields, and to this end he tries to continually educate himself. "I learn from magazine articles about using pieces of equipment," he says. "But I learn most from stories about how people did things, or how they solved problems."

Without a doubt, Haines thinks he has found his calling in sports turf and grounds management. He lives near the campus, one he describes as a close-knit community where "you know everybody," with wife Pam, also from Hawaii, and their 8-year-old daughter, Kealani, herself a budding soccer player. Renovation, he reveals, is his hands-down favorite part of the job.

"There is tremendous job satisfaction in knowing what something used to look like, and what it looks like now," he concludes. "When you do a good job, people notice. They tell us about it all the time. And I love to hear about it."

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