

Arlington Cemetery

Maintaining a national landmark takes a combination of horticultural expertise and a respect for the ritual and prestige of the nation's most renowned cemetery.

by Maureen Hrehocik, managing editor

The rain continued to fall at Arlington National Cemetery on a chilly February morning.

In the distance, the sharp crack of guns saluted a deceased Air Force officer. A bugle droned a dreary "Taps." The rain-drenched caisson that brought the casket to the gravesite stood idly on the side of the road.

Another Arlington funeral with "full honors."

Just one more of the 15 that will take place that day; just one of the 4,000 interments that will take place in Arlington this year. Another white marble headstone among the 190,000 already there.

Behind all the pomp and ritual of every Arlington burial is a 25-person landscape staff, headed by horticulturist Erik Dihle, that understands the needs and requirements of landscaping the 500 acres in the country's most well-known cemetery and landmark. It doesn't matter that many burials disturb roots of trees hundreds of years old among the cemetery's 9,000 causing severe damage to some. Or that compaction is a problem with all the vehicle traffic around the grounds. Or



Dihle used to use a high boom sprayer but found wind carried away fertilizer to non-selected areas and the vehicle sometimes hit the top of tombstones. He has since gone to a short boom sprayer with off-center nozzles which shoots the chemical into the next row of headstones.

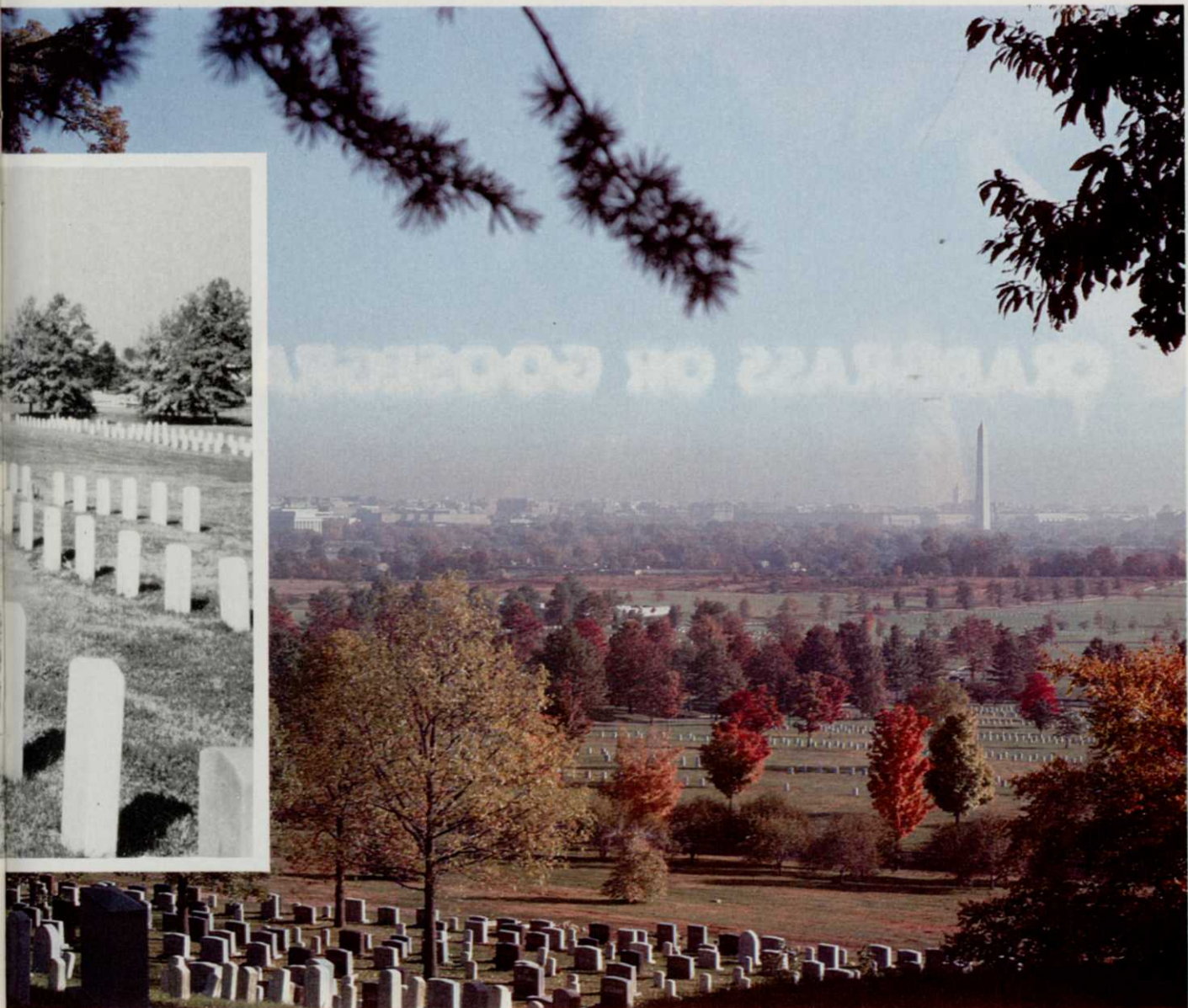
that maintenance must be scheduled around frequent burials or visits ranging from heads of state to Boy Scout troops.

It doesn't stop at knowing just what tree to plant where or just what height the grass should be mowed or what herbicide will take care of certain weed problems. It's an understanding that ceremony at Arlington comes first, and everything else, including routine, necessary grounds care, must be squeezed in-between.

"We never really reach a level of turf we would like to main-



Horticulturist Erik Dihle stands in front of the Tomb of the Unknown Soldier overlooking the Mall, one of the high maintenance areas at Arlington National Cemetery.



A serene view of two of the nation's most prestigious landmarks — Arlington National Cemetery and the Washington Monument.

tain," said Dihle. "Arlington is a very active place with lots going on every day. Also, because Arlington is so prestigious, lots of tact must be used in dealing with the public."

Dihle said groups come in such as the survivors of Pearl Harbor or POW groups and want to do memorial tree plantings.

"We're always ready to assist where we can," Dihle said.

Add to that the fact that Arlington National Cemetery is also a tourist attraction with the grave of President John Kennedy

and the Tomb of the Unknown Soldier attracting thousands of

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international visitors yearly.

Kennedy's grave, the Mall in

front of the Tomb of the Unknown Soldier and the Memorial Amphitheater are high maintenance areas because of their high visibility.

Arboretum setting

Weed control is a top priority, along with turf and tree care.

"We are in the second year of a three year weed control program and are very pleased with the results," said Dihle. "We've practically eradicated our broadleaf weeds. We try to renovate 15 to 20

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acres each year with Roundup.”

The overall landscape effect of Arlington is a natural, woodland-like setting. Its 3,000 shrubs and hedges are not manicured into sculptured balls or boxes. They are kept neat, but natural looking. The cemetery has more than 9,000 trees scattered among the rows and rows of headstones. Three

hundred to 400 are pruned each year. Six crewmen work six months a year just pruning small trees and shrubs.

In fact, Dihle points out, if Arlington wasn't a cemetery, it would be a beautiful arboretum. On its grounds is the largest Post oak in Washington, D.C., the Arlington oak. It's protected from

lightning with wire terminals attached to the end of its branches and grounded. Magnolias, weeping cherries, hickories, cedar, oak, maple, elm and crabapple dot the cemetery. Dihle would like to get rid of the oaks (which comprise 1/4 of the trees) because of the potential for gypsy moth problems.

“We lose about 25 to 30 trees annually and plant about 80 large (3.5 to 5 inch) caliper trees a year,” he said. “I'd like to start adding more variety to what we have.”

He is also concerned that the many trees that were part of the original estate where the cemetery now is, are preserved.

“Many of these trees cannot be replaced in our lifetime,” he said.

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Dihle has an older, high pressure tree sprayer that uses a needle for feeding with products such as Davey's Arbor Green. His primary sprayer is a Root-app, a drill-like gun sprayer that pounds into the soil like a jackhammer and injects a measured amount of fertilizer. One crew member works full-time nine months out of the year feeding trees.

“Tree feeding is an ongoing project for us except in the fall,” Dihle said.

300 truckfulls of leaves

Leaf collection during November and December is one of the largest maintenance jobs. This, along with mowing, are two areas contracted out in a \$900,000 contract.

During those peak leaf collection months, Dihle estimates the 30 to 35 full-time people working collect about 300, 20 cu. ft. truckloads full of leaves. The two percent leaf removal the regular Arlington grounds staff does is ground and mixed with sewage sludge from the city and used as a topdressing.

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A crewman feeds one of the 9,000 trees on the cemetery grounds.

Lancaster Landscapes of Virginia holds the cemetery's mowing contract on its mainly bluegrass/fescue turf. According to Dihle, the company uses largely Gravely, Heckendorn and Jacobsen rotary mowers, cutting an average height of 2.5 to 3 inches.

"I like to cut the grass a little higher because it helps in moisture retention," explained Dihle. "Only 100 acres of the cemetery are irrigated - around the Kennedy gravesite, Mall and Memorial Amphitheater."

There's also a need for a mower with good flotation because of the "corduroy effect" settling graves have on the surface of the turf.

"The graves settle and as the mowers go across they have a tendency to scalp. That's why we need equipment with good flotation."

The hillside behind the Kennedy grave going up to the Arlington House mansion is a par-

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ticularly difficult landscape maintenance problem. Because it is behind the Kennedy grave, it must be given careful attention.

"We have a hard time keeping it green," said Dihle. "If we irrigate it, the water collects and floods out at the bottom. Because it's so steep, most mowers have a hard time making the grade."

They've found a National 84-inch triplex mower does the best job because of its lower center of gravity.

Trimming around the 190,000, 24-inch high headstones is done once a week, by hand, with Bun-trim trimmers.

"We used to use a soil sterilant around the headstones, but it turned the grass brown which is unsightly, so we went back to trimming," said Dihle.

Turf spraying used to be done with a high boom sprayer to clear the 24-inch headstones. The spray, though, since the sprayer

was so high off the ground, was being windblown to other areas. Dihle now uses a short boom with off-center nozzles which can spray into the next row. The white marble headstones were also

Arlington National Cemetery, unlike other national cemeteries, is under the Dept. of the Army.

being discolored when limestone was applied.

"We switched to pelletized limestone which we can shoot into the next row as well," he said.

Dihle is trying to get away from the bar-type tires on most of the department's vehicles.

"I'd like to get more turf-type tires on our equipment to mini-

mize damage and compaction." A three-point hitch Cyclone spreader is used for fertilizing.

Gearing up for Memorial Day

About 37,000 square yards of sod are used a year, mostly around graves.

There are several pesticide projects going on each week such as spraying for American Holly leaf miners and spraying for aphids. Five acres are under contract for spraying including the Kennedy grave and the administration building.

This month Dihle and his crew will be involved in spraying elms, tree planting, shade tree pruning, in-house pruning of ornamentals, preparation of flower beds for planting around the Memorial Amphitheater. High maintenance turf care will begin at the Kennedy grave, Mall and administration building.

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tion building. He will also be gearing up for the cemetery's busiest day -- Memorial Day. Usually, the President makes an address from Arlington.

Dihle maintains a 1/2-acre nursery where various replacement shrubs are grown.

Asking Congress for landscape money

Arlington National Cemetery, unlike most other national cemeteries, is under the Dept. of the Army, not the Veterans Administration. Because of this, cemetery superintendent Raymond J. Costanzo goes directly to Congress for funding.

"We've been very fortunate to have increased funding which is allowing us to improve our total maintenance program," said Dihle.

This year his budget breakdown includes (without salaries):

- \$150,000 — grounds maintenance supplies

- 40,000 — equipment
- 60,000 — tree maintenance (spraying and pruning)
- 40,000 — tree planting
- \$10-15,000 — other contractual work

Dihle holds a Bachelor of Science in Botany degree from the University of California at Davis. He has worked as a nurseryman in Sacramento before working with the Department of Agriculture as an ag inspector in Galveston, TX and Spokane, WA. He later worked in the D.C. area.

"I really missed ornamental horticulture, though, and when the job at Arlington became available, I was very eager for the opportunity to get back into it."

Besides issuing and writing all contract work, Dihle is technical advisor to the superintendent and acts as a consultant for all future landscape work to be done at Arlington. Eventually, the cemetery will be expanded to its full 612-acre potential. Dihle issues a weekly work agenda and meets daily with foremen. He also takes care of the Soldiers' Home and Airmen's National Cemetery, a 15-acre cemetery in Washington, D.C.

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