RYAN INTRODUCES THE
Lawnaire IV

The self-propelled walk-behind aerator that does a professional job on home lawns and smaller turf areas.

- Equipped with 30-3/4" coring tines providing an aeration pattern of 9 holes per square foot.
- Penetration up to 2 3/4".
- Two weight options provided for increased downward pressure - a 38 lb. steel bar and/or steel drum that holds 55 lbs. of water.

Convenient lift handle for raising and lowering transport wheels which provide added maneuverability.

- Covers up to 21,000 square feet per hour.
- Tine wheel shaft and water drum shaft are equipped with two grease fittings and protected by felt seals to keep out dirt.
- 3 h.p. industrial engine with rotary stop switch for easy shut-off.
- Fuel tank holds two quarts.

LAWNAIRE IV SPECIFICATIONS
Model 544863

DIMENSIONS
Width ......................... 28" 
Swath .......................... 19" 
Weight ........................ Dry-215 lbs. Water in drum-265 lbs. (6.6 gallon capacity).

POWER

UNIT
Penetration .................. Up to 2 3/4" Aeration Pattern ................. 3 3/4" x 7" center to center. Speed .................. Operation: 225 f.p.m. Transport: 190 f.p.m. Productivity ................. Up to 21,000 sq. ft. per hour. Tines ......................... 3/4" Coring-type, formed from .08" thick heat-treated alloy steel, 30 tines per aerator. Tires ......................... Two 8 x 1.75 semi-pneumatic with ball bearings.

Lubrication ................ Two grease fittings in each axle hub.

For more information call your Ryan Sales, Service and Parts Dealer today.
Or call toll-free 1-800-228-4444

OUR REPUTATION IS BUILT TO LAST

Cushman-Ryan, OMC Lincoln
P.O. Box 82409
Lincoln, Nebraska 68501-9971

Tine Replacement Part #522361

©Outboard Marine Corporation, 1986. All rights reserved.

Circle No. 112 on Reader Inquiry Card JUNE 1986/WEEDS TREES & TURF 21
Unlike its south Florida neighbors, Jupiter Hills Golf Club features characteristics you might find on a northern course—from the trees to the bentgrass greens.

by Heide Aungst, associate editor

Standing in the middle of Jupiter Hills Golf Course, you'd never guess you were in Florida—unless the balmy breeze off the nearby intercoastal waterway gave it away. Certainly the softly rolling hills and absence of palm trees would yield no clues.

The course, located just north of West Palm Beach, has been designed to resemble one of its northern cousins, right down to the trees—oaks, mahogany, and pine—scattered throughout the property.

"There's no course like it in the state of Florida," says superintendent Dick Herr.

It's the second-toughest course to get a chance to play on in the state, behind the very exclusive Seminole Country Club in North Palm Beach. But Seminole's superintendent even visited Jupiter Hills recently to get some hints on improving his course.

A Midwesterner himself, Herr likes Jupiter Hills' "northern" look with a tropical climate. That's just what the superintendent from Logansport, Ind., a small farming community north of Indianapolis, was looking for when he packed his bags and headed south.

Herr had visited the club briefly before deciding to move to Florida. He was hired at Jupiter Hills as an assistant to the superintendent. Two months later, his boss left and Herr took over.

Jupiter Hills was known as a graveyard for superintendents under the reigns of owners Tom and George Fazio; rumors say that some 40 came and went before Herr. But Herr's easy-going manner has allowed him to survive—more than survive—for six years.

He has shaped the course to where it's one of the best in the country, No. 51, according to GOLF DIGEST. The U.S. Amateur will be played there during Labor Day weekend 1987, a first for the club.

A second course, Village Course, is built around a residential area. The two courses were built on a sand bar (can you believe 200 sandtraps?) just off the ocean in 1970. Combined, the courses stretch 400 acres, 250 of which is irrigated. Herr is in the process of changing to year-round bentgrass greens.

A bentgrass overseeder
The usual process at area courses is to overseed each October with ryegrass or bentgrass. Herr uses...
The green at No. 17 shows finely manicured bentgrass prospering under the hot Florida sun.
Give us your tired, your grasses yearning to grow.
Yes, even your fairways.
Fungus diseases. They're spoilers. Give them an inch and they'll take a fairway.

But can you afford to keep your fairways as clean and green as your tees and greens? You can with economical BAYLETON Turf and Ornamental fungicide.

BAYLETON is absolutely the most economical fungicide you can use. With its lasting residual, up to 30 days and longer, you make fewer applications. And that saves you time, manpower, and money. Plus, BAYLETON is now available at an attractive new price. For control of dollar spot, anthracnose, and other diseases, there's nothing more effective, or cost-effective, than BAYLETON.

Tee to green and every inch in between, keep your golf course fungus free. With BAYLETON. Always read the label before use.

BAYLETON.
IT STOPS THE SPOILERS.

Mobay Chemical Corporation
Specialty Products Group
Box 4913, Kansas City, Mo. 64120

BAYLETON is a Reg. TM of the Parent Company of Farbenfabriken Bayer GmbH, Leverkusen.

Circle No. 132 on Reader Inquiry Card
MILES TO GO...

Rights-of-way landscape managers, who do things on a big-big scale, favor spraying non-selective herbicides and tree maintenance. An exclusive WT&T survey examines this important segment of the green industry.

Readers of Weeds Trees & Turf care for more than 16 million miles of right-of-way annually, according to a recent survey completed by the magazine.

Sixty-eight respondents to a questionnaire say they average 8,537 miles of right-of-way maintenance. Projected to the entire readership involved in this specialized type of landscape maintenance, that's a total of 16,675,000 miles of turf.

Nearly nine out of 10 (88.2%) rights-of-way managers practice weed control, and non-selective herbicides are their favorite choice of control. The survey notes that 79.4% of the respondents use non-selective herbicides on a regular basis and 64.7% use post-emergence herbicides.

Because 69.1% of the respondents are also involved in tree maintenance, it comes as no surprise that chain saws rank second only to sprayers as the most popular piece of equipment. Sprayers are used by 85.3% of the departments responding and chain saws by 80.1%.

Rights-of-way maintenance departments come in two sizes: large and small. The average department has 317 employees, but 87.6% of the companies in the survey have fewer than the average.

With an average of 317 employees and an average 8,537 miles of maintenance per company, that means that the average employee is charged with maintaining 27 miles of right-of-way.

What is in the future of right-of-way maintenance? A wider range of plant growth regulator (PGR) use, for one. One industry expert told WT&T that he expects use of PGRs among rights-of-way managers to increase 10-fold each year for the next 10 years. And many of the survey respondents agree.

"Growth regulators may be promising," says one respondent simply.

The current scenario whereby anti-chemical groups are complaining about pesticide use also has R-O-W managers worried.

"We need to educate the public to the benefits of chemical weed control," says one respondent.

Because so many rights-of-way landscape managers are involved in spraying herbicides, it is no secret—judging by survey results—that they would like more efficient chemicals and equipment.

"We need the use of a good bermuda release herbicide like Oust," says one respondent. "Even better ones will improve efficiency and safety.

"And spray tips capable of spraying in the 40- to -50-foot range with a good pattern, using no boom, are also needed."

Another manager foresees this in the future: "more sophisticated computerized spraying equipment..."
Introducing the surest, gentlest way to get all these grass problems off your hands.

You don't have to hand-weed grasses anymore. And you don't have to worry about herbicides that can injure your ornamentals.

Because now there's Poast® herbicide for flowers, trees, shrubs and ground covers.

Poast controls virtually all annual and perennial grasses. Like bermudagrass and foxtails, crabgrass and quack-grass. Even tough-to-kill grasses like johnsongrass.

And with Poast, you don't have to bother with directed or shielded sprays. Because Poast is proven gentle to ornamentals. You can apply Poast over-the-top at all stages of ornamental growth.

Best of all, Poast saves you all the time, labor and expense of hand hoeing.

So this year, get grass problems off your hands. And save yourself a handful of time and money in the process. Use Poast® herbicide. From BASF.

Always follow label directions.

BASF Corporation, Agricultural Chemicals, 100 Cherry Hill Road, Parsippany, NJ 07054

Circle No. 105 on Reader Inquiry Card
10 reasons why you should ask for a Continental R-Series engine

High performance, long life design — that’s what the Continental R-Series liquid-cooled engines from Teledyne Total Power can offer you.

Take a look at the counter-weighted spheroidal cast iron crankshaft with five main bearings and forged steel connecting rods... right down to the cast iron cylinder block and crankcase, you can depend on the quality to keep up with your equipment.

Ask for Continental R-Series engines from Teledyne Total Power, with over 5,000 distributors and service centers in over 90 countries ready to serve you.

Send for your free “Reasons Why” brochure today: Teledyne Total Power, P.O. Box 181160, Memphis, TN 38181-1160, 901/365-3600, Telex: 462-1058 (ITT)

forced water recirculating cooling assures long engine life
intake and exhaust valve seat inserts are dependable
cast iron cylinder block is tough
five main bearings are easily replaceable
precision rod and main bearings are trouble free
full flow lubrication system gives reliable service
aluminum alloy cylinder head is lightweight
cast iron crankshaft gives smooth performance
cast iron crankcase is durable
forged steel connecting rods take heavy loads

TELEDYNE TOTAL POWER
3409 Democrat Road • Memphis, TN 38118
Call toll-free: 1-800-932-2858
See Us at Booth #5300 at OPEI Show

PROFILE continued

using tank combinations at minimum rates for broad spectrum control, and new herbicides where rates are ounces or less.”

New technology, then, is of utmost importance. Witness this response from California Transportation Superintendent Robert Fowler: “Long range, there has to be a better method. In spite of the equipment, volume and material advances, we are still putting out herbicides similar to the way it was done in 1948.”

Fowler says the R-O-W segment of the green industry needs low quantity materials, formulations to reduce dust, and development of low volume techniques to control drift.

Finally, one respondent sums up: “We need more efficient herbicides that will have a wider spectrum of control and more advanced and efficient spray rigs having a wider range of tanks where more than two or three types of spraying can be done all at once.”

This is the future of rights-of-way landscape management. WT&T
Your search for a high capacity mower encompassing a one man operation is now concluded. The Hydro-Power 180 with its 15 foot hydraulically driven rotary mower has a mowing capacity of up to 11 acres an hour while incorporating rear wheel steering for maximum maneuverability. Cutting units are designed for maximum floatation and may be used individually or in any combination of the three.

A foot pedal controlled hydrostatic transmission affords variable mowing speeds as well as transport speed to insure maximum travel time between the job sites. The Hydro-Power 180 offers year-round versatility with a 2-stage, 73" snow blower and heated cab.

Manufactured by

18155 Edison Avenue
Chesterfield, Mo. 63017

Circle No. 122 on Reader Inquiry Card
In Maricopa County, Ariz., the shortest distance between any number of points is—or will be over the next couple of decades—under construction.

By 2005—if all goes well—Phoenix, the state capital and county seat, will be ringed and bisected by freeways which, among other things, will make it easier to get to surrounding cities such as Mesa, Tempe, Chandler, Glendale, Scottsdale, and Sun City, not to mention the West Coast and points east.

These highways will be more than just six-lane concrete ribbons snaking across the sprawling Valley of the Sun; they’ll be bordered by landscaping in tune with the Grand Canyon State’s unique ecology.

There are good, pragmatic reasons for this, not the least of which are water conservation and aesthetics.

Average annual rainfall in Maricopa County is a mere 7.03 inches. The Tucson area to the southeast gets about 11 inches a year and Prescott, to the northwest, 17 to 18 inches. Of the county’s 9,127 sq. miles, only 98.2 sq. miles are water—lakes, rivers and canals.

Low water, low maintenance
These figures become quite significant in light of the fact that Maricopa County is the largest producer of crops and livestock in the state.

"By and large, we’ll be using desert, low-water requirement plants along rights-of-way," says LeRoy Brady, manager of roadside development for the Arizona Dept. of Transportation. "Desert-type landscaping minimizes use of closely planted growth and maximizes use of large trees and shrubs, giving a green landscaping appearance and reducing water use."

A variety of natural and hybrid plants—some of foreign ancestry—have been selected to grace Arizona’s highways. "We’re using Chilean and Argentine mesquite, for example," Brady reports, noting that "they’re native to their countries, but in the process of nursery development in the U.S., they became hybrids. We’re also planting eucalyptus, which is native to Australia."

Other trees, shrubs and ground cover finding homes along roadways throughout Arizona include blue and Sonoran palo verde, desert willow, acacia, cassia, myroporum, oleander, and verbena.

Turf is being used along parts of some rights-of-way, decomposed granite along others. "We take a conservative approach; we leave some open areas," says Brady. "The soils here are low in organic material and when it’s dry, they’ll blow. We use decomposed granite for erosion control and ground cover to alleviate the dust you get from native soil."

The AMA list
What gets planted where throughout the state depends largely on the availability—or lack thereof—of water. With this in mind, Active Management Areas (AMAs) have been designated and will go into effect in Phoenix, Prescott, Casa Grande, and Tucson Jan. 1, 1987.

As of that date, says Brady, any plants not on the AMA’s low-water requirement list will not be planted along rights-of-way. "In the Phoenix AMA, for example, no turf will be planted after the first of next year," he says. "Each of the AMAs will be working to reduce per capita water consumption. In Phoenix, it’s 170 gallons a day."

Beautification also is a major factor in the scheme of things, Brady notes, pointing out that "neighborhoods are most certainly concerned about how highways going through their communities will look."

In some cases, development has started before road construction has begun, with the tacit understanding that these highways will be landscaped.

Chandler, Mesa, and Tempe to the southeast of Phoenix and Glendale to the northwest in particular are experiencing major growth; the first three because large tracts of land are available for residential and industrial development and Glendale, because a growing number of high-tech firms are finding their way there.

Interestingly, it is the very climate that dictates highway landscaping in Maricopa County,—average annual highs of 85.1 and lows of 55.4 and low humidity—that is bringing high-tech companies to the valley. An abundant