THE ATHLETIC FIELD MANAGEMENT MARKET

Photo courtesy of J & L Adikes, Inc.
ATHLETIC FIELD MANAGERS SAY BUDGETS ARE TOO LOW

Nearly two thirds of athletic field managers polled by Weeds Trees & Turf think their budgets for maintaining turf on athletic fields are inadequate.

Furthermore, inconsistent management structures of athletic fields and a lack of industry organization make pinpointing general characteristics difficult. Consequently, manufacturers may find it difficult to locate the person with purchasing responsibility and to better meet the needs of athletic field managers.

Pinpointing the person responsible is also a problem for trade journals trying to serve athletic field managers. This was a factor in the survey which received only a nine percent return out of 1,000 individuals polled. The 90 persons responding had 35 different titles.

According to the "Statistical Abstract of the United States", published in 1977, there are 2,700 commercial sports establishments, roughly 110,000 educational facilities with fields, and at least 19,000 municipal and county parks with fields. There should be at least 131,700 managers of athletic fields in the U.S. Using the median annual field management budget of $10,000, the market has a conceivable value of $1.3 billion annually!

More than 70 percent of the respondents manage park (42 percent) or university (31 percent) fields. Fifteen percent manage high school fields, 11 percent municipal stadiums, eight percent middle and elementary schools, and only two percent private stadiums.

The respondents manage from 12 to 3,750 acres, with a median figure of 173 acres. Athletic fields are one part of the total acreage managed.

The managers have an average annual budget, not including labor, of $14,081. Figures ranged from $275 to $90,000. Sixty-three percent said their budgets were too small to maintain fields at a desired level. Thirty-seven percent said their budgets were adequate. Those responding negatively said they needed an average budget increase of 54 percent to obtain desired results. One individual said he needed a 300 percent increase.

Most purchasing takes place from February through May (see table). Fall buying does not appear as common as in other Green industries. Three fourths of chemical and seed buying is done with local dealers. Five percent said bids are required.

Despite dominance of spring and late winter buying, applications of fertilizer, herbicides, amendments and seed follow typical timing with spring and fall applications. Only six persons said they apply fungicides to athletic fields. Post-emergerent herbicides are used to a far greater extent than pre-emergents.

The average amount of granular fertilizer purchased is about six tons per year. Liquid fertilizer is used in...
One example of the materials applied to football, soccer, and practice fields in the cool season turf area:

**FOOTBALL FIELD: 2½ acres**

April—1st week—Aerify four (4) times
April—1st week—Overseed with Victa/Baron Blend—25# per acre
April—1st week—Starter fertilizer w/Pre-Emergence—485# per year
May—3rd week—High density fertilizer 1188# per application
May—3rd week—Dry fertilizer plus dicot weed control 330# per year
June—2nd week—Overseed with Victa/Baron blend 25# per acre
June—2nd week—Aerify four (4) times
June—2nd week—High density fertilizer 1188# per application
August—2nd week—High density fertilizer 330# per application
September—2nd week—Athletic Blend 30# per application
November—2nd week—Overseed with Victa/Baron blend 25# per acre
November—2nd week Aerify four (4) times

TOTAL COST .................................................. $1,403.00

**PRACTICE FIELDS—9 acres**

April—2nd week—High density fertilizer 1188# per application
June—2nd week—High density fertilizer 1188# per application
August—2nd week—High density fertilizer 1188# per application
November—2nd week—Athletic Blend 30# per acre
November—2nd week—Starter fertilizer 158# per acre

TOTAL COST .................................................. $1,399.00

**SOCCER FIELD — 2½ acres**

April—2nd week—Fertilizer with weedgrass preventer 370# per year
May—2nd week—Fertilizer plus Dicot weed control 330# per year
June—2nd week—High density fertilizer 330# per application
August—2nd week—Fertilizer plus insecticide 450# per year
September—3rd week—High density fertilizer 330# per application

TOTAL COST .................................................. $695.00
ATHLETIC FIELD MANAGEMENT

PURDUE UNIVERSITY: THREE TYPES OF TURF

Melvin J. Robey is superintendent of athletic facilities at Purdue University, West Lafayette, Indiana, a position he has held for the last ten years. He received his Bachelor's degree from Utah State University and his Masters at Purdue, both in turf management. He is author of the book LAWNS, published by Davis McKay Company in New York and has another in the works which will be out soon.

All of the athletic facilities at Purdue University under the supervision of Melvin J. Robey are used extensively. They include an outdoor track, hockey field, baseball diamond, a natural turf practice field, a synthetic turf practice field, and the football stadium, a Prescription Athletic Turf system.

The stadium is used for spring football practice, anywhere from two to four times per week, averaging probably twice. In the Fall, it is used maybe 25 to 30 times for practice and games. It has also been used for the women's hockey games, and probably will be again this year. The field is seeded with a mix of Bonnie Blue, Baron, Nugget and Glade. It has just been recently resodded for the first time in four years. Plans in-

After the sod is put down, it is lightly rolled. The PAT system does not have a crown.

The first step in resodding the center of the practice field is removing the existing turf.
clude overseeding heavily this fall with Warren's A-34. The center of the practice field is resodded every year after spring ball is over. This includes an area about 40 feet wide and 30 feet long. The practice fields and baseball diamond have been overseeded with Manhattan rye-grass for the last ten years. This has proven to be a very tough, durable grass for athletic areas, according to Robey.

All of the fields except the stadium receive a complete fertilizer, including four pounds of nitrogen, per year. The stadium receives more.

Normal herbicide applications include a mixture of 2,4-D, dicamba and MCPP, depending upon the species of weed. Pre-emergence weed control includes applications of Dacthal. Diazinon and malathion provide insect control.

Grubs and the like have not been too much of a problem, says Robey, but leaf hoppers are, from a standpoint of annoyance to the football players.

Vacuuming the stadium turf gives it a well manicured look.

An endzone design requires painstaking measurement and painting.
Purdue University

The fields are normally mowed twice a week in the Spring and Fall, sometimes three times if growth is especially rapid. Frequency is cut down to once per week during the hot season.

Mowing height varies slightly for the fields. The baseball infield is mowed at one inch, while the outfield is mowed at 1¼. The other areas are all mowed at one inch. Height depends primarily upon the coaches preference, according to Robey, and management procedures are developed accordingly.

The stadium is the only athletic field that is on a preventative disease program. Manhattan's susceptibility to pythium becomes a problem in the stadium, where air circulation is limited. The stadium is sprayed every ten days. The other fields are watched with a sharp eye for disease signs and sprayed accordingly.

Fusarium hasn't been a problem in the stadium, but dollar spot, pythium and leaf spot can cause problems if not kept under. Snowmold hit hard this year, hitting the ryegrass a little harder than the blue. Quite a bit of grass was lost, although not enough to cause major concern.

The stadium does have heating cables, but Robey wasn't able to use them at all this year, due to the coal shortage.

Equipment used to maintain the fields include a nine-gang reel mower, a seven-gang hydraulic reel mower, a 48-inch rotary, and four 21-inch trim mowers. A monofilament trimmer is also frequently used. Utility vehicles include two trucksters, a pickup and a dump truck. A 100 gallon chemical sprayer and fertilizer spreader are used from the back of one of the trucksters.

There are three full time employees whose primary concern is athletic field maintenance. During the summer Robey picks up three to five college students.

Robey has found that he can maintain the natural turf systems with considerably less money than the artificial. He does feel a need for all three types of fields across the country. "The National League football players just held a vote and decided that they like the sand rootzone of the PAT system to play on the best," says Robey. (There are 11 PAT systems installed around the country presently.)

The Athletic Department at Purdue, of which Robey is a part, is responsible for maintaining its own facilities. Robey feels that it is much easier to maintain nice facilities under such a program. "I'm able to be associated much more closely with the various programs and coaches, and know what their needs are. I'm also able to explain my problems to them," Robey adds.

One thing Robey does like to stress, in maintaining athletic facilities, is that it is extremely important for the band to have a practice area other than the game field. Marching in place, as a band tends to do, creates severe compaction problems. The band will often do more damage to the field than the football team will."
Rollins College in Winter Park, Florida, has only eight acres of athletic grounds. However, the patterns of use are intense, and Jim Boston, assistant to the physical plant director, fights problems common to all turf managers.

A fertilization program, and control of disease and insects are the items of major concern to him. However, he is limited to how much he can do and when, because the fields are in use almost constantly. The soccer field, for example, is also used for intramurals during the day and through the off sports season. "We're fortunate if we can keep the field in good shape half a year, much less a full year, because of this constant use," says Boston.

"We're involved with a very limited space. We're in an area that is built up in every direction with no room for us to expand. Our baseball outfield is used for soccer practice, because the game is so damaging to turf. The only area that we can treat properly and keep in a condition where we don't have an excuse is the infield of the baseball field, because it is not used for anything but baseball."

"The rest of the field does have some weeds," says Boston. "It has some worn areas, simply because we can't control it." Boston feels that the key to maintaining healthy turf lies in the root system. "When turf-grasses are trampled down, just worn out so to speak, they're going to bounce back and fill in the bare spots a lot faster if the roots are strong, deep and healthy."

One very important aspect of keeping healthy turf in the South is pH. "We use dolomite lime to keep pH at its optimum to get the best growth from the grass during the periods when you have to try and coax it to do so. We apply 10 tons per year."

"Every two or three months, I
Rollins College

will pull plugs from our fields and check the condition of the root system. If I am satisfied with it, but yet the greenness I want isn’t there, I’ll apply heavy nitrogen or iron to bring it out. If not, then I will apply something that will be more beneficial to the roots. When I’m trying to recover an area, I’m more concerned with the roots than I am the top. The top will come if the roots are there.”

Both of the athletic fields at Rollins are bermudagrass. No overseeding is done, because the facilities aren’t in use during the winter months. That can be good and bad, according to Boston. “We would like our facilities to be growing and recovering during winter, but they’re not because it is winter. They’re also not in use, so we’re not really in that bad of a shape.”

Right now is the rainy season, and the fields might get rainfall almost every day. This past winter there was maybe only one shower during three or four months. During those periods, Boston relies heavily on irrigation through his quick coupler system. “Sometimes we may have to water night and day to supplement the lack of rainfall. We don’t like to water at night, because of the increase in disease susceptibility, but we’re more concerned with keeping the grass alive than we are with fungi.”

“I’d say that nematodes and mole crickets are our biggest pests. We have our fields treated for nematodes at least once a year. For some reason this also tends to drive the mole crickets out. It doesn’t kill them, they just leave.”

“Sometimes we have to water day and night to supplement the rainfall.”

“We don’t get the dollars that we’d like to have, but we get enough to do a decent job.”

priorities. You’ve only got so many dollars for the school to work with and our athletic facilities are not on the very top of the priority list. We don’t get the dollars that we’d like to have, but we get enough to do a decent job.”

One full-time employee takes care of the athletic grounds. An additional person is hired during the summer. “I’m fortunate to have an individual that’s taking care of the grounds who really cares about what he is doing and enjoys the results of his labor. That’s the key to the whole ball game in taking care of turfgrass.”

“Do you want to kill the weeds and leave bare spots or do you want the games played on a green outfield?”

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