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The Cover

The many and varied needs of the grounds at Great Neck Public Schools in Long Island, New York, are matched with an equally varied, large-scale turf management program. Building and grounds director Joseph J. Bazzani, who unfolds his story on this program beginning on page 8 of this issue, says the Great Neck approach is two-fold: Use of the latest techniques in landscaping for utility and aesthetics and in record keeping for efficiency and economy. Maintenance is based on the thought, "If you do not intend to maintain school grounds, you should not develop them."

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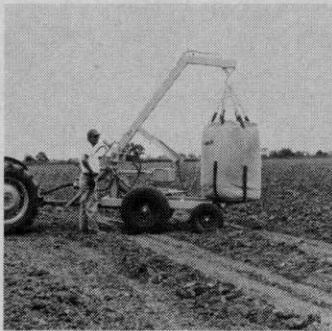
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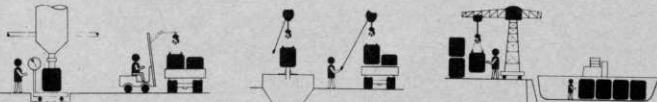
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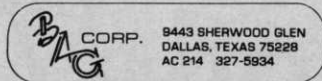
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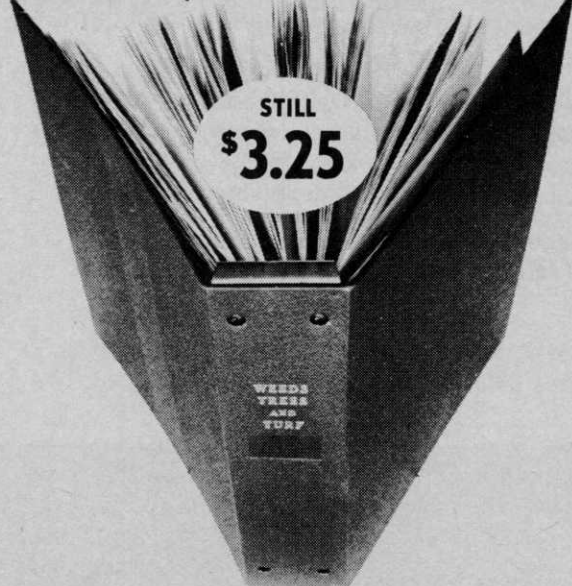


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Editorial

Environment Management

Our so-called "Green Industry" is charged with maintaining the environment — insofar as spreading "greenbelts" about is concerned. This is good.

We now have the public conscience on our side in that they are aware of the esthetic values. The public wish today, is without doubt to upgrade the environment and to do so in such fashion as to maintain the ecology for us and for the future. We have public support in this.

We have certain pluses in our favor: (1) EPA must be credited with a more realistic approach to chemical use than anticipated; (2) the public apparently is now more willing to study the problem rather than react emotionally. The emotional crisis, generated by rash statements with almost no attempt at documentation, seems less serious at the moment. Such voices of public figures and quasis scientists (some of whom are still around) enjoy less publicity. (Actually, they overplayed their hands very early in the game); (3) manufacturers have marshalled their forces via research and public relations efforts; (4) more support has been forthcoming from the University family; (5) biological control as an immediate solution is now publically viewed as a more distant supplement tool; and (6) more people today are aware of the role of pesticides in providing our voluminous and high quality food supply, and the further role of pesticides in conservation, disease control, etc.

Thus, our job becomes largely the responsibility for environmental management — both to sell the program and to carry it out. We haven't won yet, but we now know that the collective industry can do so. We are making strides — and big ones.

For example: utilities are developing a new look for rights-of-way. Power lines are being built below the crests of hills, and natural vegetation left and maintained for beauty and for wildlife; highway planners blend rights-of-way into natural surrounding and plan trees and shrubs for both beauty and utility; city planners look with favor on shopping centers and other developments which include lots of green; new turfgrasses, new tree varieties, and a wealth of new equipment to maintain them are on the market; and much more astute press and other media, have all helped.

We have a responsibility to use pesticides carefully-and not to MISUSE them. A few careless operators can hurt the entire industry. Because, today, news travels fast — and across the nation.

Another plus we enjoy is that pestilence (weeds, insects, and disease) constitutes a common denominator. Everybody, everywhere, is plagued.



Government News / Business

Gypsy Moth Sex Lure The Federal government is putting up \$370,000 in a joint venture with Pennsylvania Agricultural Experiment Station to test potential of the new synthetic sex lure for gypsy moth. Penn State is contributing \$22,000 for the planned 2-1/2 year study. Agriculture Research Service researchers reported discovery of the chemical identity of the lure last November, then synthesized the natural attractant, named disparlure.

Puerto Rico's Proposal Introduced in the Puerto Rico legislature and almost certain to pass its first test in the Puerto Rico House is a bill banning almost every chemical commonly used for control of weeds, insects and disease. In addition, there are heavy restrictions in the measure on aerial spraying, use of aerosols, etc.

New Insecticides Tested The USDA has reported experimental tests on 24 materials which they report equal to or better than DDT for face fly control. Five of the insecticides proved equal to or better than malathion which was used for comparison in tests with DDT-resistant house flies. Results are available in Production Research Report 132, Laboratory Evaluations of Candidate Insecticide Residues Against Face Flies and DDT--Resistant House Flies, 1961-69, from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402. Price is 40 cents.

Dow Files Objection Dow Chemical Company has charged the Environmental Protection Agency with failure to issue a definitive order relative to cancellation of certain restrictions for 2,4,5-T as required by law. Dow's action follows EPA announcement August 10 that final determination in the 2,4,5-T case would be delayed until after a fall public hearing. Dow claims cancellation action was improper and deprives the company of due process and its right to a prompt decision. Dow's director of government regulatory relations, G.E. Lynn, says no evidence has yet been introduced indicating hazards to health or environment resulting from normal use of the chemical in agriculture or industrial applications.

EPA Begins New Review William D. Ruckelshaus, EPA administrator, has initiated a review of all pesticides containing either chlordane or heptachlor... "to determine if any are endangering the environment." He said that, "If we find that any of the registered products raise substantial questions of contamination of the environment, I will take action to cancel the registration of the product." Cancellation, of course, could ban the product from interstate shipment, although the initial notice simply sets in motion the review mechanism when there is an appeal. Products of particular concern are those which include soil insect control, household insect control, termite control, foliage insect control, and lawn management.

LARGE-SCALE TURF MAINTENANCE

—Care and Cost

By JOSEPH J. BAZZANI

Director of Building and Grounds
Great Neck Public Schools
Long Island, New York

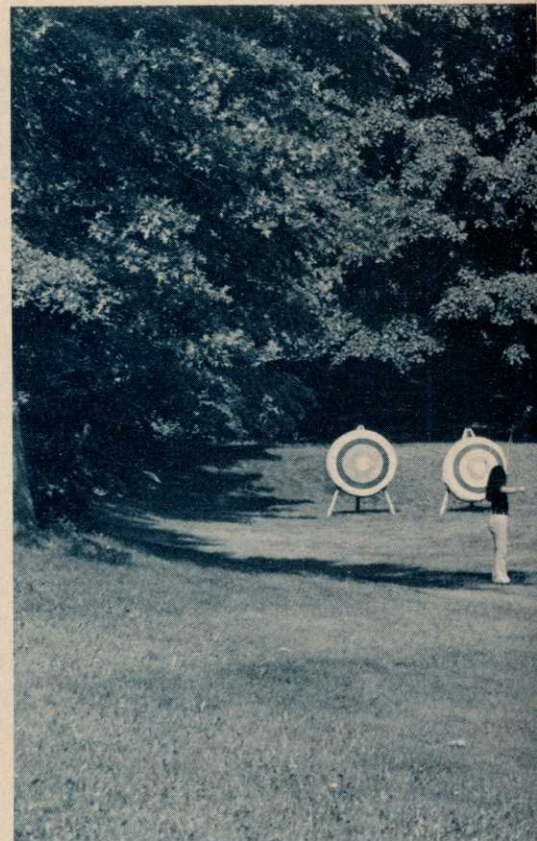
THE QUEST for excellence in the grounds maintenance program at Great Neck is literally a “grass roots” commitment. With 250 acres in buildings, woodlands, and grounds, some 80 acres are in turfgrass. Operating on the basis that “if you do not intend to maintain school grounds, you should not develop them”, our program to maintain these grounds is designed around the latest techniques in landscaping for utility and aesthetics and in record keeping for efficiency and economy.

A good turf maintenance program is vital to achieve this goal. It consists of seeding, fertilizing, mowing, irrigation, the use of pesticides in weed and disease control, cultivation, and trimming. In total, these things do not always conjure pictures of green grass and flowering shrubs. Those less concerned with aesthetics are, however, always interested in costs. The aesthetics and cultural care of good turfgrass are covered by the captioned picture story. The discussion is directed toward the record keeping required to evaluate costs.

Begin with the premise that quali-

fied and interested personnel and proper tools and equipment are essential to the operation that attains a goal of excellence. It is not enough to annually ask for adequate staff and equipment. There is a responsibility to keep records and to furnish the information that will substantiate such requests. Standards should never be the least acceptable—they should be set at a professional level and the support for them must be aggressively sought.

This simple application of record keeping is recommended as a base from which the needs of each district will indicate the necessary degree of expansion of the system. It has been proved that, all other things being equal, a high quality maintenance level will be achieved, at no additional cost, where there is an efficient record keeping system. The following information is offered as a budget guide to the five major areas of turf maintenance costs. It is based on a recent study made by Economics Research Associates of Los Angeles, California, for Thompson Manufacturing Company. The percentages allow in general for the





Grounds at the Great Neck Public Schools are a study in variabilities — usefulness and aesthetics. With good turfgrass, athletic fields and playgrounds can be used under most weather conditions. Grass areas are safer for play, resulting in fewer skinned knees and elbows (below) while large athletic fields (above) are used for a variety of activities.



differences found in the various geographical areas.

Labor consists of wages, salaries and fringe benefits. It is the most substantial component of turf maintenance expense and it runs anywhere from 55% to 75% of the total cost. Therefore any improvements in the methods used will have a significant effect in decreasing the cost of the operation.

Water Costs are relatively stable and easy to record. For instance, in my school district there are two water companies which service our schools. One charges 25 cents per 1000 gallons, the other 75 cents per 1000 gallons. This usually runs 5% to 26% of the total cost.

Supplies for turf care include such items as fertilizer, lime, seed, herbicides and fungicides, gas, oil, and topsoil. This usually runs about 4% to 17% of the total costs.

Equipment repair and replacement include parts and repairs necessary to maintain equipment. Purchases of equipment should be prorated for the life of the equipment. These costs usually run from 4% to 18% of the total cost.

Miscellaneous: These costs are usually more difficult for a school district to assess, since they include such items as depreciation, general insurance, and utilities. They run from 1% to 3% of the total costs.

For implementation it would be necessary to identify on a per acre basis the five cost classifications as they relate to specific maintenance operations. If a "do it yourself program" is to be developed, daily records may be kept on a weekly chart for each classification by function. The charts would provide the detail needed to analyze costs of labor, equipment repair, and supplies by area. The utilities including water, insurance, taxes, equipment depreciation, and other miscellaneous items that are fixed costs can be broken down to a daily and weekly rate. From a total cost analysis such as this, an internal cost comparison can be made as well as a comparison with costs from other geographical areas.

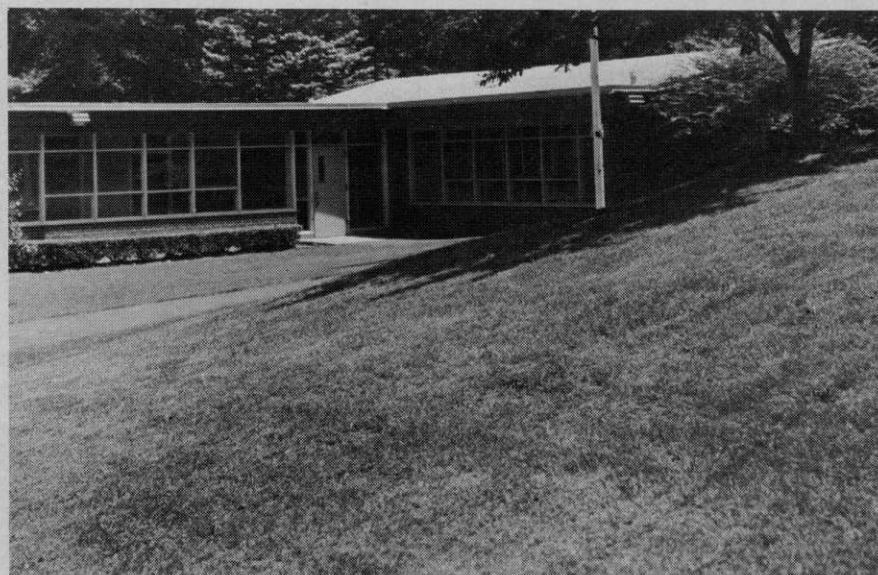
The application of some form of simple record keeping system can be helpful in determining the true costs involved in a meaningful turf maintenance program. Armed with these figures and with the aesthetic arguments for enhancement of school environments and the appealing and functional nature of grass areas, when discussing annual budgets, it creates the proper climate allocating the necessary funds needed to do this job.



Properly cared for and adequately fed, grass can thrive in this shade or withstand heat buildup near brick and glass in other areas.



A nursery honoring Edwin F. Harper, superintendent from 1930 to 1959, is an example of ecology work in addition to large turf areas. Joseph J. Bazzani, left, talks here with Al B. Wyatt.



Grass can be useful in providing erosion control for sloping areas as well as an element in good landscaping design.

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