

SUBURBAN MOWING EFFICIENCY IMPROVED BY GROWTH REGULATORS

Lynnfield, Mass., is a typical New England town. A suburb north of Boston, it offers its 12,000 residents more than their share of pleasures. But like any other American municipality today, it has its share of problems, too.

As costs for civic services escalate, cutbacks have become a way of life. Maintenance programs once taken for granted have been drastically reduced or eliminated entirely as more and more taxpayers demand less and less spending. The cold winds of Proposition 13 are blowing eastward.

But there's one service that can't be entirely eliminated — mowing of grass on town property.

In Lynnfield this not only encompasses street right-of-ways but also four ball fields, three parks, three active cemeteries and two ancient cemeteries where several Revolutionary War veterans slumber beneath majestic maples.

Under the supervision of A. David Rodham, director of Public Works, both Leonard Lilly, park and cemetery foreman, and Allen Caproni, highway foreman, schedule the activity of a seven-man mowing crew. During the growing season, this crew spends every weekday cutting grass. Until recently, it had time for nothing else.

But in June, 1978, a series of experiments were undertaken by Lynnfield with a growth regulator (Embark 2-S by 3M Co.) that promised to change this, freeing up mowing crews for equally important tasks, some of which had been shelved in recent years due to insufficient funds.

Registered by the Environmental Protection Agency in 1978, Embark 2-S has been marketed primarily for use along highway right-of-ways, golf course roughs, and cemeteries. Properly applied by qualified sprayers, it regulates the growth of certain species of grasses, including Kentucky bluegrass, tall fescue, common bermudagrass and several California native grasses.

Although rates vary according to the species being treated, one and one-half pints of the chemical mixed with 15 to 50 gallons of water is the recommended application for one acre of Kentucky bluegrass and tall fescue, according to the manufacturer.

An application made at any time when grass is actively growing reduces the growth of grass for a minimum of five to eight weeks. In addition to controlling turf growth, the growth regulator suppresses seedhead formation.

Leonard Lilly explained the procedures he used in Lynnfield to reduce the need for constant mowing:

"We used a 500-gallon spray tank mounted on the back of a six-wheel flatbed truck. This is the same rig we normally use for protecting trees from insects and diseases.

"We poured in 100 gallons of water at a time, added the recommended amount of chemical and sprayed with approximately 175 psi.

Lilly further stated that he applied this new plant growth regulator in a cemetery on June 10.



Grass in foreground was treated with growth regulator on June 10, while that in background was left untreated. Neither area was mowed. Photo was taken in August.

"There were no observable effects upon tombstones, shrubs or flowers. Following application, we mowed this area on July 14 for the first and last time."

In Freeman Park, a 10,000-square-foot expanse of grass, Lilly pointed out an especially lush patch of turf.

"We used to have to mow this moist spot once a week," he declared. "It was so thick that we had to spend an extra hour raking the clippings. They would smother the grass if left there."

After treating this area in mid-June, the grass grew no higher than eight inches. "We saved ourselves eight mowings just in this area alone."

Anyone who spends any time at all on public roads these days has seen what reduced mowing can lead to in terms of limited visibility and increased safety hazards that result from it.

Neglected, median strips — for instance — will rapidly deteriorate beneath a blanket of weeds that will choke out grass, shrubs, groundcovers and other desirable vegetation. In time, ailanthus, black locusts, poison ivy and other pest plants will take over as nature fills yet another vacuum.

Allen Caproni sees no need for this to happen in Lynnfield, because future use of the plant growth regulator should reduce mowings, thereby making funds available for broadleaf control.

"After all," he said, "this year we've cut the chemically treated areas only once in some cases and not at all in others. As a result, our work crew has had time to clear high brush from around the town ball field and accomplish other important jobs." **WTT**