other greenbelt problems, and recognizes something needs to be done about them.

**Designs Sales-Oriented**

"Initially, problems occur because subdividers are not supervised in their planning," he says. "Many developers want to show a good splash for sales purposes, and instead of including areas of slope easements in lots, they plant these into large permanent green tracts. When the sales reach the point where they turn the development over to the community association or service district, in order to maintain it, the tax rate often becomes tremendous.

"A few developers," continues Sampson, "Tend to overplant with high maintenance vegetation without any idea as to cost. We have had the attempts on the part of some people to dedicate parks to us that have 50-60% slopes on them. They are not workable, and this is the reason we now have a planned program of checking every subdivision, every planted area, to make sure the facilities that go in will not be a drain upon the service area."

With the growing popularity of planned communities across the nation, Sampson recommends strongly other park departments adopt a similar check system.

**Rebirth of Greenbelt Idea**

The first greenbelt plan Director Sampson recalls seeing was in 1926. "It was called the 'Radburn Plan' in New Jersey," he said, "where they took the back yards and made greenbelts so people could walk from one block to the next to visit and so on. It was copied from an English plan. Then the idea was dropped. We got into this big building boom right after the war, particularly here in the West. So it became a case of obtaining as many lots as you could, and getting as many tract houses built as possible."

Times change. People needed a greater incentive to buy. The advent of the cul-de-sac, promising privacy, was the forerunner of the rebirth of the greenbelt community, claims Sampson.

These self-contained units, today, with their honeycomb of arterials, offer residents quiet seclusion, vast expanses of beautiful work-free greenspace, family recreational centers, and schools so convenient children are under their parents' surveillance most of the time.

**Design Supervision Needed**

But there is always that dark moment that can turn these darlings of the building industry into service district maintenance monsters.

"Sometimes developers skimp on installation of the sprinkler system because these are costs they have to pay," hints Lester Fant, Management Services Company partner, presently contracting maintenance services to 23 Orange County Homeowner's Associations. "Then the sprinkler system has to be replaced, the cost of which falls into the maintenance budget of the homeowners' association. Also, more preparation materials should be put into the soil. I see no way of controlling this except perhaps education of the developers."

Director Sampson agrees. "This is our responsibility," he says, "to educate the developer and to protect the people. I feel a competent landscape architect should not only prepare the development plans, but that he should be checked and supervised by competent people, so the greenbelt will remain the usable piece of property for which it was intended, and not cause future problems."

The system of checkout, first developed two years ago by Orange County planning officials, whose boundaries of responsibility presently include 15 service areas with five Orange County Park Director Kenneth Sampson, left, has gained a measure of supervision over greenbelt design. He and Ralph Hudson, chief of development, are studying a greenbelt developer's final landscape design. Their signatures okaying the design are necessary before the developer can get his plans approved by Orange County's Board of Supervisors.

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JUNE, 1970 For More Details Circle (116) on Reply Card
American Sod Producers Gather July 28-30

If you want to know more about "The Sod Industry in the United States," then mark July 28, 29 and 30 on your calendar. This subject will be the theme for the fourth annual session of the American Sod Producers Association.

The conference and field day shapes up this way: On July 28, a bus tour, leaving from the Ramada Inn at Dolton, Ill., will be conducted to Warren’s Turf Nurseries and Evergreen Sod Farm. The educational session will begin at 9 a.m., July 29, at the Ramada Inn, followed by the annual meeting and banquet. Field demonstrations of sod equipment will be shown on July 30 at the H & E Sod Farm at Momence, Ill.

Arthur V. Edwards, editorial director of WEEDS TREES and TURF magazine, will keynote the educational session with an updated survey report on the national sod industry. Complementing his presentation will be reports on the “State of the Michigan Sod Industry” and a Chicago accounting firm’s survey of “Sod Production Costs in the United States.”

Ten-Point Checklist

What points in these plans do Sampson and his staff particularly consider? These can be broken down into the ten following steps with site selection receiving primary attention:

1. See that the terrain is a usable piece of property.
2. Check the site’s availability to the people it is going to serve.
3. Note the amount of turf space for playfields.
4. Determine what future maintenance costs the terrain, soil condition, availability of water, and other variables might produce.
5. Know what vegetation is going in, its upkeep, and replacement costs.
6. Suggest—if necessary, for more economical maintenance — where mow strips should be added, trees placed, ground cover and shrubbery minimized.
7. Decide, if the automatic irrigation system is of good standards and adequate.
8. Ask for details of the lighting plan to avoid dark spots and nuisance lights.
9. Consider the walks for aesthetics as well as maintenance.
10. Look into the maintenance financing plan.

"In other words," Sampson sums it up, "it is the tendency of all of us to get rid of culls. We don’t want to accept culls. We want to set our standard high so the whole planned community program will remain as tremendous as it set out to be.”

Beck Invents Sod System
For Harvesting and Laying

Beck Manufacturing Co., Auburn, Ala., announces development of a revolutionary new sod harvesting and laying system.

Using this new system, two men can easily harvest up to 1,000 square yards of sod per hour. A unique feature of the new system permits laying sod with an inexpensive tractor attachment almost as fast as it is harvested.

Manual lifting and handling of sod is completely eliminated, so tiring of workers is not a factor.

Sale price of the laying device is expected to be under $200.

Demonstration of the entire system is planned for the American Sod Producers Association field day in August.
More than 1,800 firms are now members of the American Association of Nurserymen. The figure is a new record. The latest membership statistics represent a net increase of more than 35% in four years. Forty-nine percent (882 firms) of the total AAN membership has joined in the past four years.

“Our goal of 2,000 members,” said President William Flemer, “appears much more realistic than it did four years ago when we had 1,300 member firms.”

New officers of the American Society of Consulting Arborists, Inc., are, from the left: Seated — Past president and director-at-large H. M. Van Wormer, Richmond, Va.; President Ray Gustin, Jr., Silver Spring, Md.; and President-elect George W. Goodall, Sr., Portland, Me. Standing — Vice-president Walter P. Morrow, Sewickley, Pa.; Secretary-treasurer H. N. Engledow, Indianapolis, Ind.; and directors F. L. Dinsmore of St. Louis, Mo., L. C. Chadwick of Columbus, Ohio, Riley R. Stevens of Portland, Ore., Director F. Earle Martin of West Toronto, Canada, was absent. H. M. Van Wormer received the Society’s first Service Award. Henry Vaughan-Eames of Stockton, N.J., received a special award for his “work and dedication to the establishment of the society.” He was the first president when ASCA was formed two years ago.

Real Estate Appraiser, Arborist Working Closer

E. L. “Bud” Dieudonne, real estate appraiser, and Phil Ziedner, U.S. Department of Justice attorney, discussed with the members of the American Society of Consulting Arborists the growing relationship between the real estate appraiser, the attorney and the arboricultural consultant. The discussion came at the Society’s second annual business meeting recently in Washington, D.C.

E. L. “Bud” Dieudonne is a licensed real estate appraiser in the Washington metropolitan area. Real estate appraising and arboricultural consulting, he said, must go hand-in-hand. He indicated that his job is made far easier when he can rely on the assistance of a qualified, professional arboricultural consultant.

Phil Ziedner, an attorney for the Department of Justice described the legal aspects of arboricultural consulting. He explained exactly what “facts” were and were not acceptable in a court of law. Ziedner related some of his own experiences in this field and explained to attending members just how they might better prepare themselves to be effective witnesses when called to the courts.

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For more details, contact Mitts & Merrill, Inc., Dept. WTT-91, 109 McCasky St., Saginaw, Michigan 48601.

Mitts & Merrill
Brush Chippers
European chafers got away with this Rochester area homeowner's lawn when they were unaffected by heptachlor, dieldrin and chlordane.

Sevin With One Blow Kills Lawn-Devastating Trio

Homeowners have always prided themselves on their fine lawns, attractive landscaping, and beautiful trees in the Rochester, N.Y. area. Each summer, however, they must battle a trio of highly destructive lawn insects — the sod webworm, bluegrass billbug, and the European chafer grubs.

Three important people in this "battle of the bugs" are Marshall, Allan and Donald Zinter, owners of a family business, High Point Mills at nearby Henrietta.

Rochester homeowners were exhibiting magnificent lawns, without serious problems, until 1967. As Marshall Zinter, High Point President related, "We had the sod webworm and European chafer pretty much under control during the early 1960s, but in July, 1967, home lawns near Benfield, a suburb of Rochester, started showing damage resembing that caused by European Chafer, despite preventive treatment taken with various chlorinated hydrocarbon insecticides.

"We didn't know what to make of it, until Cornell University and U.S. Department of Agriculture lawn specialists discovered the insects causing the damage — a small snout beetle and a tiny legless grub found in..."
The new threats around Rochester: On the left is the resistant European chafer adult male, female center, and the adult female bluegrass billbug.

the root zone of the lawns. They soon identified them as the bluegrass billbug, a widely distributed insect in the United States and Canada, and its larval stage.

While Cornell research specialists sought solutions to the billbug problem by testing new chemicals in 1968, a second major problem surfaced in 1969. "Last spring," Zinter continued, "we began to get quite a few calls from our dealers who reported many homeowners in Eastern Monroe County were complaining about heptachlor, dieldrin and chlordane. Applications of any one of these hydrocarbons, used at normally adequate rates, were not preventing considerable lawn damage by the European chafer. We called in Cornell specialists, including Dr. H. Tashiro, from the New York State Agricultural Experiment Station at Geneva, and Kirkwood Personius, our county extension agent. Dr. Tashiro collected several hundred grubs from many lawns, took them back to his laboratory in Geneva, and soon found that these European Chafer grubs had 'built-in' resistance to chlorinated hydrocarbon chemicals."

High Point Mills management continued to work with Dr. Tashiro and Cooperative Extension through 1969 in a general testing program to find chemicals that would be effective against this new resistant European Chafer. It was found that two widely used insecticides—Sevin and Diazinon—effectively controlled the resistant as well as the normal European Chafer. The same two materials had been previously tested in 1968 and found effective against the new billbug problem.

This year, remarked High Point Mills vice-president Allan Zinter, "We're ready as we've never been ready before, with facts, folders, information, and best of all, our new Turf Line products containing Sevin."

The Zinters say their new Lawn Insect Killer with Sevin will control all three—the European chafer grub, the bluegrass billbug, and sod webworm. "Any one of these insects has the capability of destroying..."
grass, says Monroe County Extension Agent Kirkwood Personius, although lawn damage in our Rochester area is often caused by not just one but a combination of two or even all three of these insects. I would estimate we had some 1,500 lawns damaged by these insects in Monroe County in 1969.”

While summer is the prime season for preventing damage, here is what Allan Zinter reports they'll be telling homeowners, “First, we're saying that eggs from these three insects will hatch mostly during June, July, and August into grubs or worms that will do the major damage to lawn grasses. Only the European chafer, of these soil insects, over-winters as a grub to feed on the grass in the early spring.” So the Zinter brothers’ Turf line recommended program will be as follows:

EUROPEAN CHAFER GRUB — Treat first in April, unless the lawn was treated the previous August, September or October with their Lawn Insect Killer containing Sevin. Then treat again in early August for the new hatch of summer grubs.

BLUEGRASS BILLBUG — Treat once between June 20, and July 10, to avoid damage.

SOD WEBWORM—The June and August treatment for bluegrass billbug and European chafer grub will also control sod webworm.

Right after World War II, Donald and Oscar Zinter started a feed and grain business near Rochester. By 1948 they were joined by Marshall and Allan, but as farming moved out and suburbia moved in during the late 1950s, High Point Mills gradually quit the feed business. Now Marshall, Allan, and Don Zinter concentrate solely on fertilizer and fertilizer-pesticide products, sold mostly in their Monroe County communities through more than 200 dealers and landscaping specialists.

International Harvester Company expects to garner a bigger share of the industrial equipment market, beginning right now. This goal was enthusiastically presented to dealers and the press at a showing of the new 1970 lines last month at Louisville, Ky.

Vice-President David C. Haney said the company expected a “brilliant growth of the industrial division.” He expanded on this by saying that IH expects farm equipment sales to hold firm in ’70 and a big upturn for the industrial equipment lines. Last year, truck sales accounted for almost half of IH income. Farm equipment sales brought in just over 30%. The balance of about 20% came from the industrial line, which included construction equipment.

Another IH executive, John F. Burk, divisional sales manager, said dealers already were reporting a retail upturn for spring. Burk felt that the few weeks preceding the showing were a good indicator since spring throughout the country was late in coming.

In outlining the industrial market for the press, Burk said that IH has five major competitors plus hundreds of smaller companies who make one or more industrial equipment items. He, like Haney, sees industrial equipment as the growing end of IH business. Burk said that IH would be interested in a new item only if the company could immediately capture 25% of the market. This, he said, is feasible because of the big IH dealer organization. Burk pointed to the new 3200 Compact Loader, designed and marketed to compete with the leader in the field, the Melroe Bobcat. Of the current $50 million market for this line, IH expects to pick up 25%.

The 3200 which features hydrostatic drive and oscillating wheels is but one new item presented to 800 dealers and about 30 trade magazine editors. Held at Freedom Hall on the Kentucky State Fairgrounds,
A completely new piece of equipment, this IH 3200 Compact Loader with hydrostatic drive has infinite forward and reverse speeds from 0 to 8 mph and anywhere in between. This ¾-ton, 6.8 to 20 cu. ft. capacity loader with 30 hp engine pivots in its own length, works under 6-ft. clearance, and passes through 4-ft. wide openings, and is available with ½-yd. bucket and 8-ft. backhoe.

Special emphasis on a number of engineering factors have become important in the manufacturing program at IH. Steven M. Young, manager of engineering, said emphasis has been placed on reducing noise levels through mufflers, insulation, and the manufacturing processes. Others are being studied, he said.

Haney pointed out that "operator protection is becoming the same concern for industrial equipment as for autos." Also emphasized was the fact that the safety approach for equipment is a prime concern today. This, according to Burk, is not a new company philosophy but one that is getting more attention.

Arthur V. Edwards, right, editorial director of WEEDS TREES and TURF, chats with Charles E. Walker, general supervisor of farm equipment and advertising and sales promotion. Walker is at the controls of one of three new series of fork lifts with lift capacities ranging from 4,000 to 6,000 lbs. and heights from 14 to 28 feet.
The Respirator.

A blade of grass.

It's quiet. It has no moving parts.
Yet it and its fellow blades take in carbon dioxide and the worst atmospheric pollutants — sulfur dioxide, ozone, peroxycetyl nitrate, hydrogen fluoride — and give up pure oxygen in return.

The sturdier the plant, the more the purification. In fact, actively growing grass on a plot 25 feet square releases enough oxygen to sustain life day after day for a grown person.

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Think of it.

O. M. Scott & Sons of Marysville, Ohio
100 years in the grass-roots business.
AQUA SHEET, Male International Corp., New York, N.Y.

Aqua Sheet is a mechanical device for the complete elimination of nuisance water weeds. Though initial cost may seem high, it will last for years, making yearly cost reasonable. Aqua Sheet is a special vinyl-covered nylon with high tear resistance. Special perforations relieve gases of decomposition from decaying aquatic vegetation. Special tie-downs and sandbags are furnished. Aqua Sheet is deep blue in color. It creates a "swimming pool" in your lake. It may be left in the lake year around or removed when desired. Aqua Sheet usually kills all nuisance aquatic weeds in three to four weeks maximum. Installation or removal takes less than one hour. For more details, circle (707) on the reply card.

SHORE CONVEYOR: Aquamarine Corporation, Waukesha, Wis.

A new feature of the mechanical weed harvesting system from Aquamarine allows one-man operation of the H-650 aquatic weed harvester and the S-650 shore conveyor. The operator maneuvers the weed-filled harvester into the coupled position (as shown) with the shore conveyor. He then can go ashore to start up the hydraulically operated, two-section shore conveyor. Through the use of electrical, shore-mounted remote controls, the operator can convey weeds from the harvester into a truck at the rate of four tons per minute. The complete "Aqua-Trio" consists of the above two units plus a third barge-mounted unit, the T-650 transport. For more details, circle (709) on the reply card.

JUNE, 1970

KNAPSACK BLOWERS, Vandermolen Co., West Caldwell, N.J.

The KWH-66TT is a combination mistblower and duster. It features a powerful blower capable of generating 480 cfm of air at 225 mph. The unit weighs 23 lbs. and disperses dust, wet dust and granules. Spray will reach 40 ft., granules 30 to 40 ft. Controls allow fine metering with positive, instant shut off. Each tank holds 1.6 gallons. Dust capacity is about 15 lbs. The KWH 66TT is the only power knapsack that can apply a liquid spray and a dry dust together in one operation. Dust and atomized liquid mix outside of the patented KWH "non-clog" nozzle before reaching the plant. For more details, circle (708) on the reply card.

LIQUID FERTILIZER CONCENTRATE, National Liquid Fertilizer Corporation, Chicago, Ill.

Two new formulations of ENVY liquid fertilizer concentrate have been introduced. Recommendations for use of the solutions state that one quart of the 10-8-6 turf fertilizer be diluted with water to 50 gallons and applied to 1,000 sq. ft. of turfgrass; that one gallon of the 10-20-10 general purpose fertilizer be diluted to 100 gallons and applied to the foliage of all types of broadleaf plants. Both formulations contain secondary nutrients and essential trace elements. The material can be combined with many pesticides, applied with any spray device, is readily absorbed, does not burn, and produces a balanced growth. For more details, circle (710) on the reply card.
COMMERCIAL ROTARY MOWER, Goodall Division, Louisville, Ky.

Any operator, young or old, can do a better mowing job and do it faster, riding or walking, as conditions and safety permit. Fingertip power steering makes this 52-inch the most maneuverable and easiest to use, high capacity, commercial rotary mower. Mows steep grades, heavy grasses, cuts its own width and trims close with both sides. All three blades rotate clockwise with discharge chute on right side to mulch clippings evenly. Short wheelbase lets this "big" 52-inch cut and turn shorter than some 24-inch mowers. Dual wheels and brakes are standard equipment. Models also available in 21, 28, and 36 inch cutting swath. For more details, circle (711) on the reply card.

DIadem SPREADER AND SEEDER, Vander-molen Corp., West Caldwell, N.J.

New epoxy finish that promotes equipment longevity and makes cleaning easier is a new feature of the Diadem spreader and seeder. The unique anti-corrosion and rust-proof epoxy over coating is designed to last a lifetime. Centrifugal spinner capable of spreading powder, seeds and granular fertilizer in 50-ft. swath. The Diadem is ideal also for applying herbicides, salt and sand. For more details, circle (712) on reply card.


This third model added to Ryan's JR line cuts sod to the standard commercial 18" width. While the JR4-18 is an ideal rental unit, it will find wide use by golf courses, institutions, commercial and industrial firms. Ryan says this self-propelled unit increases sod production by 50%; it cuts up to 1,150 sq. yds. per hour, at any thickness up to 2 1/2". Among optional equipment is a Tote Trailer specifically designed for the unit. Optional blades are for edging, tilling, trenching, sod stripping and laying flexible pipe or tubing. For more details, circle (715) on the reply card.

50-INCH WHIRLWIND ROTARY MOWER, Toro Manufacturing Corp., Minneapolis, Minn.

This TROJAN II is Toro's answer to heavy-duty institutional and commercial grass-mowing problems. The totally new line of attachments make it a quick-change artist: from rotary broom, snow grader, leaf blower and mulcher, and snow thrower. The Trojan II is shown with an optional sulky and padded seat that converts it from a walking to riding mower. Both the engine shut-off and choke are now on the dashboard. Gas tank is farther from the engine, a 12 hp Kohler. Four forward speeds, quick forward-reverse shifting, new recall starter, parking brake, and power-steering. For more details, circle (716) on the reply card.