

THE WEEDS WILL BE BACK NEXT YEAR. WILL YOUR TRIMMER?



It happens all too frequently. You grab your trimmer, top off the gas tank, and give it a crank.

It doesn't start.

A few more tries. Then another. And another. Something rattles inside. Now, you're rattled.

You only bought the thing a few seasons ago. Repairs are probably going to run half the cost of the trimmer. Some bargain.

If what you really want is equipment you can depend on, see your Stihl dealer.

Every Stihl is built, and tested, to what may be the most exacting standards in the industry. So it's no mere coincidence that a Stihl trimmer lasts.

Stihl. It'll put an end to weeds. And, definitely, any notion of bothering with a discount trimmer.

STIHL
When You Depend On Tools,
Depend On Stihl.



Supercut™ cutting head automatically dispenses line. Improved anti-vibration design and clutch. Longer shaft for hard-to-reach places. Perfect for home use.
FS-40

Centrifugal clutch disengages cutting head at idle for convenience. Available with loop or bicycle handle. Incorporates anti-vibration system.
FS-66

Solid drive shaft for heavy-duty trimming and brush cutting. Electronic ignition, and anti-vibration system. Uses 8 different cutting attachments.
FS-81

QUICKIE-QUIZ

Warm season insect control

ED. NOTE: Answers to all questions can be found in this month's "Warm Season Insect Control Guide."

1. Biological control agents:
- require very few host pests for establishment purposes
 - work best when environmental requirements (moisture, temperature, etc.) are met
 - will completely eliminate rather than suppress insects

2. "Precision placement" refers to:
- the arrangement of insects on a leaf
 - subsurface application of control products
 - the patterns in which shrubs are planted to deter colonization

3. Mole crickets are considered primary pests in (multiple answers):
- Tennessee
 - Florida
 - southern Georgia

4. Chinch bugs and adult billbugs become active by:
- mid-March
 - late May
 - June
 - early April



Bluegrass billbug

5. Green June beetle grubs are easily distinguished from other grubs because:
- they are green
 - they resemble billbugs
 - they crawl on their backs with legs in the air

6. Milky spore for Japanese beetle control may be best accomplished in:
- late March
 - late April
 - early May

7. Sod webworms overwintered as caterpillars usually pupate in:
- April, and moths emerge in May
 - March, and moths emerge in April
 - June, and moths emerge in July

8. If the turf feels "squishy" when walked on:
- you aerified too much
 - spittlebug nymphs may be present
 - beetle grubs are present

9. Wet springs usually mean _____ chinch bug damage in June.
- more
 - less

10. Mole crickets can be effectively controlled in most areas in:
- June and July
 - July and August
 - May and June



Mole cricket

11. Fall armyworms confine most of their damage to:
- bluegrass
 - perennial ryegrass
 - tall fescue
 - bermudagrass

12. Most years, grub treatments are effective through:
- June
 - July
 - August
 - September

13. Mole crickets are difficult to control because:
- they are hard to see
 - they burrow deep into turf
 - they are very mobile
 - they are mistaken for moles

14. Pre-treatment watering during hot weather:
- eliminates the effectiveness of control products
 - quenches the insects' thirst
 - moves pests closer to the surface
 - causes the pests to burrow further down to dry ground



Fire ant

15. In summer, area treatments for fire ants are still effective unless drought conditions exist. Mound treatments are most effective if done:
- late or early in the day
 - in the evening
 - time of the day is not important

ANSWERS:

1.b; 2.b; 3.b,c; 4.d; 5.c; 6.a; 7.b; 8.b; 9.b; 10.a; 11.d; 12.d; 13.c; 14.c; 15.a

Daconate[®] 6. The first word in grassy weed control. Bahiagrass. Barnyardgrass. Crabgrass. Chickweed. Dallisgrass. Nutsedge. Sandbur. Woodsorrel. Goosegrass. Cocklebur. Johnsongrass. Buckhorn. Clover. Common Chickweed. Curly dock. Dandelion. English daisy. Ground ivy. Knotweed. Lambsquarters. Mallow. Mouse ear chickweed. Morning glory. Pigweed. Plantain. Purslane. Ragweed. Red clover. Red sorrel. Speedwell. Stitchwort. White clover. Wild garlic. Wild onion. Yarrow. **2 Plus 2. The last word in broadleaf weed control.**

Two proven postemergence performers. Broad-spectrum. Effective. Cost efficient. It adds up to more for your herbicide dollar.

Daconate 6 gives you economy and convenience, with an excellent built-in surfactant for first-rate control of tough grassy weeds. It's the ideal warm weather postemergence herbicide.

2 Plus 2 (MCPP + 2, 4-D Amine) delivers superior control of hard-to-control broadleaf weeds on a wide variety of turfgrasses.

And 2 Plus 2 contains no dicamba. So it can be used in turf areas which include trees and shrubs without risk of root pruning on the ornamentals. A major worry with some other products.

For real value in grassy and broadleaf weed control, make your postemergence herbicides Daconate 6 and 2 Plus 2. That's the word.

**ISK Biotech Corporation, 5966 Heisley Road,
P.O. Box 8000, Mentor, OH 44061-8000**



Always follow label directions carefully when using turf chemicals. Daconate[®] 6 is a registered trademark of ISK Biotech Corporation.

Mulching keeps plants healthy and moist

Mulching beneath ornamental plants is an established practice in today's landscapes.

It is even used as an ornamental feature by itself without the addition of plants. In that situation, there are few (if any) guidelines necessary for applying and using mulch. But there are specific rules to follow when mulching plants to maximize their growth and health.

Mulching around ornamental plants involves covering a portion or all of the rootzone with shredded hardwood bark, bark nuggets, wood chips or other materials. Select a material that features:

- consistent color and texture;
- compaction resistance;
- wind and water erosion resistance;
- fire resistance;
- slow rate of decomposition; and
- ability to reduce weed growth.

The mulch that you select has to do more than just cover up the bare soil.

From the plant's standpoint, mulch must allow for an exchange of gases (oxygen into the soil, carbon dioxide out of the soil) and the penetration and the slow evaporation of water. If mulch slows or stops these processes, plants will decline and eventually die, according to David Whitworth, horticulturist at the Davey Human and Technical Resources Center.

The most important benefit of mulching plants is the conservation of soil moisture. When mulching is done correctly, soil water evaporates slowly and provides plants with a consistent source of water. Over a few



New mulch should be applied when existing mulch is nearly decomposed. Most mulches should be two to four inches deep.

Mulch selection

The National Bark & Soil Producers Association has developed an advisory brochure on mulch product selection.

Aimed at helping landscapers decide what products are best-suited for different lawn and garden applications, the "Mulch Selection Guide" contains a reference table rating nine products (pine nuggets, hardwood mulch, etc.) by six

characteristics, five use benefits and six typical applications.

Additionally, the guide includes five helpful hints on application depth, bed preparation, excessive mulch build-up, nitrogen depletion and wood content.

Individual copies of the "Mulch Selection Guide" are available free from the NBSPA office, 13542 Union Village Circle, Clifton, VA 22024.

years, as organic mulches decompose, the underlying soil's ability to hold water may be improved. In most cases, mulched trees and shrubs survived the drought of 1988 better than those that did not have mulch.

Mulch can actually improve water infiltration into the soil. Raindrops falling on bare soil not only cause erosion but also cause soil surface compaction. Mulch reduces or eliminates erosion and cushions the impact of raindrops. Water can then penetrate to a greater depth, as well as can plant roots.

Two common mistakes in using mulch are applying it too deeply and mounding it up against tree and shrub trunks. Most mulches should be only two to four inches deep. Use the low range for heavy, clay soils and the high range for lighter, sandy soils.

the existing mulch is nearly decomposed and has been lightly incorporated into the soil.

To renew the appearance of mulch in the intervening years, consider using one of the new mulch colorant sprays. Simply raking the existing mulch can be a dramatic improvement.

Mulches will not eliminate the headaches of weed competition, but can reduce the density of undesirable grasses and broadleaf weeds. Maximum weed control can be achieved by applying a pre-emergence herbicide and/or landscape fabric (not sheet plastic!) before spreading the mulch.

Mulches are an integral part of landscaping. Use them the wrong way and expensive plants will die. Use them correctly and your plants will reward you with years of beauty. **LM**

It is not unusual to find landscapes with mulches that are six to eight inches deep or more. Air and water exchange are dramatically reduced and the soil becomes an inhospitable environment for roots. Mulch that buries the base of a trunk encourages the development of decay fungi.

The annual re-application of mulch to a planting bed certainly improves the initial appearance of the landscape, but it can also lead to unattractive, sick plants. Annual mulching causes a build-up that exceeds the maximum recommended depth. One to two inches of mulch applied every two to three years is adequate to maintain the beneficial aspects of the mulch. New mulch should not be applied until

Woods makes the grade... the commercial grade, that is.

Since our introduction of the first tractor powered rotary mower in 1947, customers have consistently awarded our equipment top grades for innovation and reliable performance.

Now we've applied our engineering and manufacturing expertise to an expanded line of commercial turf maintenance equipment. From the design stage right through component specification and assembly, these products are in a class by themselves.



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Zero turning radius mowers in five tractor sizes with mowing decks from 44" to 72".



Landscape Rakes

Seven rugged model series in 6 ft., 7 ft. and 8 ft. lengths for tractors rated up to 60 hp.

Isn't it time you moved to the head of the commercial grounds maintenance class with Woods professional equipment? For more information contact your Woods dealer or write today to Woods, Dept. LM, Oregon, Illinois 61061.



Walk-Behind Mowers

Smooth operating hydrostatic drive mowers with cutting swaths from 36" to 61".



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Circle No. 153 on Reader Inquiry Card

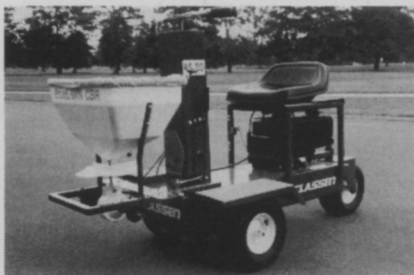
PRODUCTS

Fertilizer spreader both maneuverable, flexible

The Classen RS-30 rider spreader from Classen Manufacturing Co. has a 12.5-inch turning radius and fits through a 30-inch gate.

The spreader hopper accepts most fertilizers and comes equipped with a cover to protect contents. The rider has a two-speed transmission with reverse and an 8 hp gasoline engine.

A liquid applicator attachment



will be available later, the company says.

Circle No. 191 on Reader Inquiry Card.

Hoses manufactured with durability in mind

Two new hoses available from the Gates Rubber Co. are kink-resistant and capable of handling insecticides, herbicides, fumigants and fungicides.

Thermo-AG600, for low pressure situations and Thermo-AG800, for high pressure work, are reinforced with polyester cord woven in a locked-braid angle. The lines are also coated with PCV tubing which Gates says gives them stability, lessening a tendency to shorten or lengthen during pressure surges.

Gates says the lines can convey two percent concentrations of Toluene or Xylene and over 60 other water soluble mixtures.

Both are available in ID sizes, stan-

3 EASY MINUTES. NO REWORK. GUARANTEED.



You plant a lot of trees in a year. So why mess around with twine, rope, burlap and wooden stakes?

Your crews can support new plantings in as little as 3 minutes each — for only a few dollars more per tree — with a system that's stronger, safer and looks a lot better than staking.

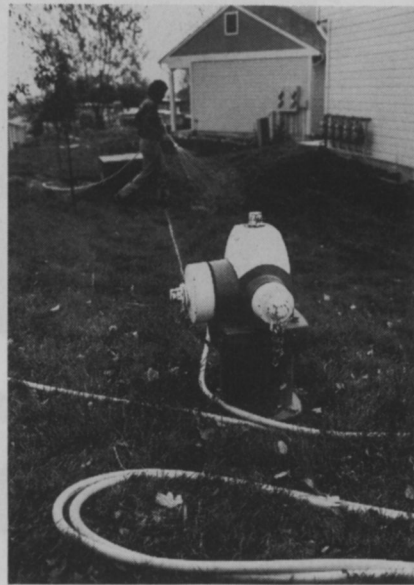
DUCKBILL® Total System tree support kits are ideal for all trees. With them, you eliminate making-do with odd stakes and the hassles of re-staking. You'll get the professional appearance you want for your projects. Kits feature the advanced DUCKBILL earth anchor, with strength-matched, pre-assembled hardware and galvanized steel cable — bare or vinyl-coated for high visibility.

Give your trees the best fighting chance to survive. And save time and money. Call toll free for the dealer nearest you or for details on DUCKBILL tree support kits. They're the top choice of professional landscapers.



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An advanced anchoring system of:

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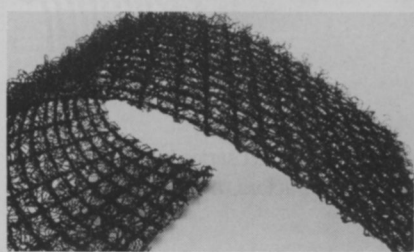


dard 300- and 400-foot lengths and reels lengths to order.

Circle No. 192 on Reader Inquiry Card

Erosion control matting designed for strength

Akzo Industrial Systems now sells Enkamat S; an erosion control matting which combines nylon with PVC



polyester. The company says Enkamat S is ideal for erosion control projects

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LANDSCAPE MANAGEMENT

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Subscription Fax



Complete this form
today and fax it to:
218-723-9433

I wish to receive (continue receiving) LANDSCAPE MANAGEMENT free of charge:

YES no

Signature _____ Date _____

Name (please print) _____

Title _____ Phone No. (_____) _____

Your Firm's Name _____

Business Address _____

City _____ State _____ Zip _____

Do you wish to receive promotional materials? YES NO

1. BUSINESS & INDUSTRY

My primary business at this location is: (Check only one in either A, B, or C)

A. LANDSCAPE/GROUND CARE AT ONE OF THE FOLLOWING TYPES OF FACILITIES:

- | | |
|---|--|
| 0005 <input type="checkbox"/> Golf courses | 0050 <input type="checkbox"/> Cemeteries/memorial gardens |
| 0010 <input type="checkbox"/> Sports complexes | 0060 <input type="checkbox"/> Military installations & prisons |
| 0015 <input type="checkbox"/> Parks | 0065 <input type="checkbox"/> Airports |
| 0020 <input type="checkbox"/> Rights-of-way maintenance for highways, railroads & utilities | 0070 <input type="checkbox"/> Multiple government municipal facilities |
| 0025 <input type="checkbox"/> Schools, colleges & universities | <input type="checkbox"/> Other type of facility (specify) _____ |
| 0030 <input type="checkbox"/> Industrial & office parks/plants | _____ |
| 0045 <input type="checkbox"/> Condominiums/apartments/housing developments/hotels/resorts | _____ |

B. CONTRACTORS/SERVICE COMPANIES/CONSULTANTS:

- | | |
|--|---|
| 0105 <input type="checkbox"/> Landscape contractors (Installation & maintenance) | 0135 <input type="checkbox"/> Extension agents/consultants for horticulture |
| 0110 <input type="checkbox"/> Lawn care service companies | <input type="checkbox"/> Other contractor or service (specify) _____ |
| 0112 <input type="checkbox"/> Custom chemical applicators | _____ |
| 0125 <input type="checkbox"/> Landscape architects | _____ |

C. SUPPLIERS

- | | |
|---|---|
| 0205 <input type="checkbox"/> Sod growers | <input type="checkbox"/> Other supplier (specify) _____ |
| 0210 <input type="checkbox"/> Dealers, distributors | _____ |

2. WHICH OF THE FOLLOWING BEST DESCRIBES YOUR TITLE? (Check only one)

- 10 EXECUTIVE/ADMINISTRATOR—President, owner, partner, director, general manager, chairman of the board, purchasing agent, director of physical plant
- 20 MANAGER/SUPERINTENDENT—Landscape/ground manager, superintendent, foreman, supervisor
- 30 GOVERNMENT OFFICIAL—Government commissioner, agent, other government official
- 40 SPECIALIST—Arborist, forester, architect, consultant, agronomist, pilot, instructor, researcher, horticulturalist, certified specialist
- 50 OTHER TITLED AND NON-TITLED PERSONNEL (specify) _____

where high tensile strength is needed. The matting withstands stresses from materials as gunite, gravel and soil.

A high tensile strength is augmented by a three-dimensional grip design.

Akzo says Enkamat matting is the only product of its type on the market. **Circle No. 193 on Reader Inquiry Card**

Spray pattern indicator in premeasured packets

Milliken Chemical has developed a concentrated Blazon product in premeasured, easy-to-handle packets.

Milliken says each Blazon packet will color 50 gallons of spray solution. For smaller volume spray solutions, a portion of the packet can be used, and the remainder stored for later use.

Circle No. 194 on Reader Inquiry Card

Features aplenty on compression sprayer

New from D.B. Smith & Co. is a compression sprayer with a lifetime warranty and several features. The Max has a thick high density poly tank, chemically-resistant O rings



and braided hose, a pressure relief valve and two nozzles, including an adjustable brass head and flat fan.

Circle No. 195 on Reader Inquiry Card

Patented drainage system now commercially ready

A waterproof and radon-proof plastic drainage system from Albee Trieber

Co. is now on the market.

The piping system features waffle-type plastic core as a baffle plate for water collection.

Surrounding the core is a non-woven filter fabric which permits ground water to permeate and collect on the core but prevents adjacent soil from washing through the porous surface.

Styrofoam panels abut the concrete foundation.

Uses include man-made lakes, golf courses, leachfields, airport runways, commercial and residential foundations and retainer walls.



Circle No. 196 on Reader Inquiry Card

Compact hydrograsser sports fine features

A hydrograsser model from Reinco,



NO MATTER HOW YOU CUT IT.

You can depend on Champion® spark plugs to run longer and better.



Made for all makes of domestic & imported engines.

Circle No. 105 on Reader Inquiry Card



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Serving the needs of the professional lawn care operator

LEAD VOCALS

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Outstanding Solo Performances

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Nebraska

LANDSCAPE MANAGEMENT is written for golf course and landscape professionals, while LAWN CARE INDUSTRY satisfies the information needs of chemical lawn care professionals. Together, they provide total show and industry news coverage.

You could call their editorial and marketing teams "roadies," because they spend 50% of their time traveling to shows, tracking stories and getting candid perspectives from suppliers. Listed here is just a portion of the shows they'll be attending this year. Frankly, it's the only way to stay on top of late-breaking news and keep both books fresh and on the cutting edge of their market segments. This dedication makes them the authoritative voices on industry problems and opportunities readers need to be aware of...and explains why their competitors look like warm-up acts.

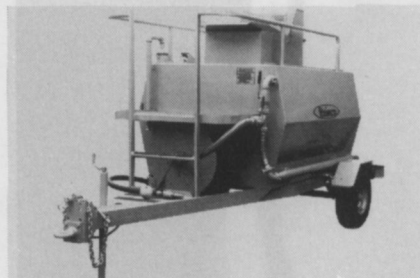
Play to a Sellout Crowd

When your product message appears in either LANDSCAPE MANAGEMENT or LAWN CARE INDUSTRY, your ad plays exclusively to loyal fans and earns rave reviews that will improve your bottom line. Call your LANDSCAPE MANAGEMENT or LAWN CARE INDUSTRY representative today to reserve space in the superstars of the industry.

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Irrigation Show
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Southwest Desert
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Michigan
STMA
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OPEI
GMA/NAC
KOLN-MESSE

Inc. is equipped with a 500-gallon working capacity tank, 125-foot spray range and "tilt-load" fiber mulch grinder. Reinco says the new model is the only one in the industry with the mulch grinding feature.

One tankload covers about 5,000 to 8,000 square feet. Other finer points include Reinco's dual agitation and "hydro-jet" agitation.



Circle No. 197 on Reader Inquiry Card

New lightweight trimmers are super quick starters

From Husqvarna Forest and Garden Co. comes 10 new lightweight trimmers equipped with a one-button injection starting system.

The company says the system eliminates choking and half throttling

by pushing a button. The trimmers are equipped with pull starts.

Five models are powered by a 1.6 cubic inch engine, five by a 1.9 cubic inch engine. Weights range from 11.5 pounds to 13.4 pounds.

Circle No. 198 on Reader Inquiry Card

Summer weed herbicide has winter uses, too

American Cyanamid Co. announces its Image herbicide is now effective in controlling winter weeds such as henbit, lawn burweed, buttercup, chickweed, hairy bittercress, parsley-piert and wild



onion and garlic.

Image, in use as a summer weed controller, may be applied after the first frost for effective winter weed

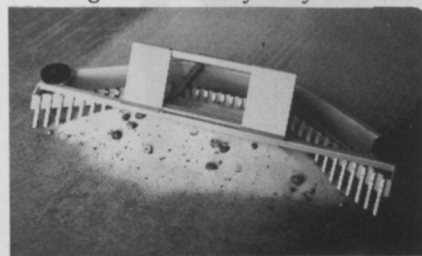
control. The herbicide also assists in control of *poa annua*, cudweed and dandelion. The firm said Image also provides residual control of winter annuals until spring.

In summer use, the herbicide can control weed populations in turfgrasses.

Circle No. 199 on Reader Inquiry Card

Grading tool levels, shapes and spreads soil

The Insty Grader is a solid leveling and finishing tool of heavy duty construc-



tions with replaceable hardened steel edges.

Countryside Sales Co., Jordan, Minn. says the tool serrates and sifts the top soil, leaving the surface soft and ready for sodding or seeding.

Levels and spreads piles of top soil

Olathe TURF CARE EQUIPMENT

Field Proven Olathe Equipment For The Landscape Professional!

Reliable, durable and innovative Olathe Brush & Wood Debris Chippers/Tub Grinders have been helping turf and grounds maintenance programs control brush and limbs for over 18 years!

Model 12 Brush Chipper

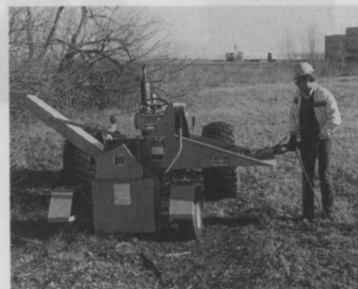
PTO-powered chipper reduces brush and limbs to a mulch sized chip. Features 7" diameter brush and limb capacity. Trailer mounted or 3-pt. hitch available. Folds into a convenient size for ease of transport and storage in a 5 ft. square area.

Model 182 Brush Chipper

Trailer mounted hydraulic feed disc chipper reduces limbs and brush up to 6" diameter. 20 and 24 hp gas or 21.5 hp diesel engines available. 12"x20" infeed opening with 360° discharge chute and 170° chipper head rotation.

Model 818 Tub Grinder

Compact and portable with a 78" wide x 32" deep rotating tub. Load directly into tub or pre-size larger wood materials with the attached hydraulic feed disc chipper. Reduce branches, limbs and brush up to 6" diameter.



Model 12



Model 182



Model 818

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