Meet the sure-footed track star that goes where wheeled vehicles fear to tread.

Through muck and mud, slop and slime — you can't stop the Brush Cutter.


Diesel powered. With rubber-belted tracks reinforced by steel cables for strength. And a toboggan-type watertight chassis.

Up front, two rugged rotary mowers clear an 8-foot swath through the underbrush. All clearly visible from the centre-mounted cab.

Before your next job gets bogged down, give Brush Cutter the business. Contact your local Bombardier distributor.
employees. It’s a good idea to have a pseudo-background check made before employees are hired. At least, check references, if any. Bear in mind throughout your security plan that fire protection and security must go hand in hand. Plan fire exit routes that are workable. Some patented security systems have built-in fire alarms. Incidentally, a fire alarm bell can be used to scare away burglars. Develop your security system so that fire fighters will not be deterred by inaccessible locks or security gates that must be destroyed before entry is gained.

Security in your business is not the final objective in doing business. Rather, it must be implemented as a means of protecting your investment. The professional thief usually can outfox even the best devices if he desires. Your approach to security must be developed as a deterrent.

**Park Irrigation Problems Toro Brochure Solves**

For a park or recreation area to be an attractive, healthy, green environment for people, it must be watered adequately and consistently. And that can be accomplished with a minimum of manual attention, while actually conserving water, with the use of modern automatic underground irrigation systems, according to a new brochure from the Irrigation Division of The Toro Company.

The Toro brochure, titled “The Innovators Solve Turf Irrigation Problems in Park and Recreation Areas,” points out that turf areas serving different purposes, such as picnic grounds and open play fields, require varying amounts of water at varying intervals.

Those variables can be accommodated with precision and efficiency, regardless of topography, soil or climatic conditions, geographic location or seasonal changes, with modern automatic irrigation systems, the brochure states.

According to Toro, irrigation equipment—including master controllers, satellite controllers, valves and sprinkler heads—can be matched to the specific watering needs of “any park or recreation area, under any given set of circumstances, present or future, anywhere, anytime.”

Copies of the brochure may be obtained by writing to: Dept. PRA, Irrigation Division, The Toro Company, P.O. Box 489, Riverside, Calif. 92502.
FERTILIZE TREES
IN ONE THIRD THE TIME
AND ABOUT HALF
THE COST USING JOBE’S
TREE FOOD SPIKES.

Here’s proof when fertilizing a 5” tree:

Old Method¹

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk 16-8-8 fertilizer—$70/ton</td>
<td></td>
</tr>
<tr>
<td>(Average price throughout U.S.)</td>
<td></td>
</tr>
<tr>
<td>2 lbs./inch of trunk diameter = 10 lbs. × 3.5c/lb.</td>
<td>$0.35</td>
</tr>
<tr>
<td>1/2 hr. labor @ $4/hr.</td>
<td>$2.00</td>
</tr>
<tr>
<td>Labor and materials</td>
<td>$2.35</td>
</tr>
<tr>
<td>$2.35 ÷ 5&quot; tree = 47c/inch of diameter</td>
<td></td>
</tr>
</tbody>
</table>

1 Using electric auger.

Jobe’s Tree Food Spikes Method²

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 spikes 16-8-8 fertilizer—22c/spike</td>
<td></td>
</tr>
<tr>
<td>1 spike/inch of trunk diameter</td>
<td>$1.10</td>
</tr>
<tr>
<td>5 min. labor @ $4/hr.</td>
<td>$0.33</td>
</tr>
<tr>
<td>Labor and materials</td>
<td>$1.43</td>
</tr>
<tr>
<td>$1.43 ÷ 5&quot; tree = 29c/inch of diameter,</td>
<td></td>
</tr>
<tr>
<td>based on 20 case order.</td>
<td></td>
</tr>
</tbody>
</table>

²Based on results of university field tests and recommendations.

Professional tree and turf men who use Jobe’s Tree Food Spikes can save 50% and more in labor and materials. Recommend the fall fertilization of trees now to your customers. Save time and money by using Jobe’s Tree Food Spikes. Order from your local supplier—or write for his name.

Jobe’s TREE FOOD SPIKES

International Spike, Inc., 462 East High Street
Lexington, Ky. 40508

To: Jobe’s Tree Food Spikes
462 East High St., Lexington, Ky. 40508

☐ 3 cases Tree Food Spikes @ $30 per case, f.o.b. Paris, Ky.
(105 spikes—40 lbs. per case)

☐ 12 cases Tree Food Spikes @ $25 per case, freight pre-paid.

☐ Name of local supplier

Name__________________________
Organization__________________
Street________________________
City__________________________State__________Zip Code__________

For More Details Circle (155) on Reply Card
**Transplants Large Trees In Minutes**

**Works All Day For Pennies An Hour**

If you own one of The Diggin' Dutchman's TS-44A Tree Spades, you might already have discovered that it transplants large trees all day long for just pennies an hour. Requires no coffee breaks, no lunch hours, no overtime wages... just an occasional tank of gas to keep it hydraulically-operated spades digging, balling and transplanting without even a pause. Saves you thousands of dollars annually because one man can handle the entire job in minutes, much faster than a whole crew of laborers (at more than $?? ? per hr.). Interested? Write The Diggin' Dutchman today or, better yet, call him (515/628-3141) NOW for a FREE demonstration of any Vermeer Tree Spade. Vermeer Mfg. Co., 7207 New Sharon Road, Pella, Iowa 50219.

**ROPE SAFETY** *(from page 12)*

is by actually loading it. But if a rope is getting weak and you put weight on it, you'll weaken it further. So that system wouldn't be very fair. As far as a rule of thumb on use life of a rope, I would not consider using a rope as a safety line that was over a year old. A brand new manila rope, of course, if it's stored properly has almost an indefinite life. But proper storage is a pretty hard thing to come by, particularly in a smaller business.

WTT: *Is manila rope treated?*

Liebenauer: Since manila rope is an organic material, it's self-

*(continued on page 36)*

**Table of characteristics in the comparison of one inch rope made from manila, nylon Dacron polyester and Esterlon polyester.**

<table>
<thead>
<tr>
<th>Description</th>
<th>Manila</th>
<th>Nylon</th>
<th>Dacron</th>
<th>Polyester</th>
<th>Esterlon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile Strength Dry</td>
<td>9,000 lbs.</td>
<td>25,000 lbs.</td>
<td>22,000 lbs.</td>
<td>20,000 lbs.</td>
<td></td>
</tr>
<tr>
<td>Working Strength</td>
<td>1,800 lbs.</td>
<td>2,890 lbs.</td>
<td>2,450 lbs.</td>
<td>2,220 lbs.</td>
<td></td>
</tr>
<tr>
<td>Repeat Loading</td>
<td>Poor</td>
<td>Good</td>
<td>Excellent</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Elasticity-Stretch</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent Elongation</td>
<td>4.8%</td>
<td>8.0%</td>
<td>6.2%</td>
<td>6.0%</td>
<td></td>
</tr>
<tr>
<td>At Working Loads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temporary Stretch</td>
<td>5.0%</td>
<td>16.0%</td>
<td>5.9%</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>Under Load</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Absorbed Into Fiber</td>
<td>Up to 100% of weight of rope</td>
<td>Up to 9%</td>
<td>Less than 1%</td>
<td>Less than 1%</td>
<td></td>
</tr>
<tr>
<td>Resistance to Rot, Mildew &amp; Marine Organisms</td>
<td>Poor</td>
<td>100% resistant</td>
<td>100% resistant</td>
<td>100% resistant</td>
<td></td>
</tr>
<tr>
<td>Deterioration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Due to Aging</td>
<td>About 1% per year</td>
<td>Zero</td>
<td>Zero</td>
<td>Zero</td>
<td></td>
</tr>
<tr>
<td>Due to Sunlight Exposure</td>
<td>Some Slight</td>
<td>Some Slight</td>
<td>Almost None</td>
<td>Almost None</td>
<td></td>
</tr>
<tr>
<td>Resistance to Chemicals</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To Acids</td>
<td>Very Poor</td>
<td>Fair</td>
<td>Very good to Excellent</td>
<td>Very Good to Excellent</td>
<td></td>
</tr>
<tr>
<td>To Alkalis</td>
<td>Very Poor</td>
<td>Excellent</td>
<td>Very Good</td>
<td>Very Good to Excellent</td>
<td></td>
</tr>
<tr>
<td>To Solvents</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>Wear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resistance to Surface Abrasion</td>
<td>Good</td>
<td>Very Good</td>
<td>Excellent</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>Resistance to Internal Flexing Wear</td>
<td>Good</td>
<td>Excellent</td>
<td>Very Good to Excellent</td>
<td>Very Good to Excellent</td>
<td></td>
</tr>
<tr>
<td>Resistance to Cutting</td>
<td>Good</td>
<td>Excellent</td>
<td>Very Good to Excellent</td>
<td>Very Good to Excellent</td>
<td></td>
</tr>
</tbody>
</table>

* This table was compiled from "Table of Natural and Synthetic Fiber Characteristics" developed by Wall Rope Works, Beverly, New Jersey.
Overhanging edges, steep slopes, traps, and bunkers  High, wet grass  Under benches, close to trees, buildings

Problem spots trimmed quick and clean with...

Flymo®

The world’s only airborne mower

Riding on a controlled cushion of air, the Flymo mower cuts smoothly through the toughest jobs. In wet grass or dry, long or short, and on flat surfaces or steep inclines, Flymo maneuvers easily, trims clean and close.

In use on golf courses and institutional grounds throughout the world, and meeting with enthusiastic acceptance in the U.S., the job-proven Flymo cuts expensive hand trimming by gliding under bushes and benches, and by floating right up to trees and posts. Cutting height is adjustable from ½” to more than 2½”.

Designed for safety and ease of operation, the Flymo is ruggedly constructed throughout. And a nation-wide network of distributors and dealers stands behind Flymo with prompt, dependable service.

Flymo — a cut above.

Flymo Division, Keltec Inc.
P.O. Box 939, Elkhart, Indiana 46514
Telephone 219/293-8661

For More Details Circle (161) on Reply Card
For fastest-starting turf

PARK Variety
Kentucky Bluegrass

More Park is seeded each year in the U.S. than any other certified variety of bluegrass. The 1972 seed crop is the best ever. We recommend that you order your supplies early.

Available exclusively from
TWIN CITY SEED CO.
500 30th Ave. N.E., Minneapolis, Minn. 55418
Phone (612) 789-8821

Manila rope is composed of fibrous strands that can break or become worn. Safety lines should be inspected daily and stored properly at night.

This is Esterlon polyester rope. Note the frayed strands. They tend to stay together to form a tight bundle of fibers. Color is lighter than manila.

crotch in a tree. Eventually nylon rope almost dropped out of the picture completely.

But the rope companies didn't give up. They developed polyester fibers that more nearly suited the job. The two most commonly used polyester fibers are Dacron and Esterlon. These seem to be the answer to the rope problem for the arborist. The various characteristics of polyester rope fibers are very similar to manila rope.

WTT: Are combinations of polyester filament fibers used in rope manufacture?

Liebenauer: Sometimes other synthetic fibers are blended in the rope to alter the handling and feel characteristics. These ropes have all proved to be satisfactory in tree care work. The big problem, however, is user resistance to synthetics.

WTT: Can you explain that more fully?

Liebenauer: A man becomes used to using manila rope. He doesn't want to change. There's always some resistance to change, regardless of what the change may be. Early nylon rope was not satisfactory as far as the tree care business was concerned. Many arborists still recall the deficiencies of nylon. Modern synthetic ropes are actually far superior to manila rope. But because they don't look or feel like manila users have a resistance to them.
Bet you can’t name another insecticide that kills as many bugs as **Zectran**. That’s because there’s nothing quite like **ZECTRAN** insecticide. It’s the powerful, general use product that may replace other insecticides you’re now using. **ZECTRAN** insecticide works on almost all major foliage-feeding insects—including hard-to-kill kinds, foliage-feeding worms and caterpillars, even many major turf pests. And more. **ZECTRAN** insecticide is also effective against slugs and snails. Use **ZECTRAN** on over 600 different flowers, ground covers, trees, shrubs, house plants and turf. It’s biodegradable, easy to apply—in either liquid or powder form. Just remember to read and follow all the directions for use and precautions for safe handling on the product label.

*Trademark of The Dow Chemical Company*
Only one compact loader can run this obstacle course.

Our 3200A.

We built her for your obstacle course. You need a machine that’s small enough to get into those tough corners, and big enough to do the work once it gets there.

So we gave her a full 30 hp engine, and an automatic power amplifier that provides increased power to the loader for maximum breakout.

True hydrostatic transmission. Delivers any speed, from, barely moving to 8 mph — with full power to your hydraulics.

Plus a long list of quick-attach accessories — including an 8½ foot backhoe that mounts on the back and doesn’t have to be removed for loader work. Exclusive!

Got an obstacle course on your job site? We have a winner for you.

We keep getting better at our business to get more of your business. And keep it.
Lift height: 9' 6". Dump height at 45° angle: 7' 6". When you consider it can handle 1500-lbs. of material, our 3200A isn't so "little" after all.

Both bogies oscillate a full 5". Combined with four-wheel drive, this gives you a little loader that "walks" through ruts and over rocks. With a level bucket.

Industrial Equipment, International Harvester. Chicago. Ill. 60611

ational
CLEAN AIR MACHINES is the new logo of the Florida Nurserymen & Growers Association. Here, Raymond Brush, administrator, American Association of Nurserymen speaks to FNGA members at the dedication in the Palm Beach, Florida.

Green Industry Newsmakers

PEOPLE PLACES EVENTS

A ROSE FOR A ROSE. A new rose, developed especially for the 150th anniversary of the San Francisco-Solano Mission in Sonoma, Calif. is being presented to Mrs. Richard M. Nixon by Cong. Don H. Clausen. It will be planted in the White House rose garden.

It's called "Operation Eyesore," a project in environmental improvement in Manchester, England. Here, parks department operators pause with new Trojan II heavy-duty riding mowers by Toro. Object of "Eyesore" is to make new playgrounds and parks, plant trees, and landscape neglected public land. Toro says that Manchester now has 32 Toro units.

This is not the craters of the moon. It's a bluegrass sod field weakened by spring flooding and low temperatures. Results? A severe case of Fusarium blight. This disease has been reported frequently this year.

Not exactly the "Teahouse of the August Moon" but close. This is the International Harvester Company’s "20th Century Shibui Garden" exhibit which won two special awards at the recent Chicago Flower and Garden Show. IHC walked off with the Chicago Horticultural Society's Silver medal award and the Men's Garden Club of America top prize. Pictured is Mrs. Atsuko Suzuki of... Chicago.

For More Details On Preceding Page Circle (126) On Reply Card

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