

chickweed and henbit — weeds that are usually untouchable. Plus Surflan can be used in many tank mixes. So when it comes to protecting ornamentals while killing weeds, let's just say we've got an offer you can't refuse. For more information on Surflan or any other product in the extensive line of Dow AgroSciences products, call 1-800-255-3726 or visit our web site at www.dowagro.com.

How do I manage wild garlic and onion weeds in lawns? We have difficulty managing them with our regular program. We have used Trimec 899/3-Way with sporadic results. Appreciate your comments.

-MICHIGAN

Mycorrhizae is actually a

symbiotic association of fungi

and tree roots. There are two

rhizae which are basically on

types of mycorrhizae: ectomycor-

the external surface of the roots

and endomycorrhizae which are

have some sort of mycorrhizae

It is difficult to determine

needs mycorrhizae. It is also dif-

ficult to tell how much mycor-

Bay

rhizae is in the soil associated

whether or not a tree actually

inside the roots. Most plants

fungal association.

Ectomycorrhizal

Aspen (Populus)

Trees

Beech

Birch

Fir

Basswood

Chestnut

Hemlock

Hickory

Madrone

Populus (True

Both Ecto & Endo

Larch

Oak

Pecan

Poplar)

Spruce

Plants

Alder

Cedars

Cypress

Willow

Arborvitae

Casuarina

Cottonwood

Eucalyptus

Pine

Chinquapin

Douglas-Fir

Linden (a basswood)

Wild garlic and onion are difficult to manage. However, repeated applications of herbicides such as 2,4-D ester should help manage the weeds. 2,4-D ester is a selective, post-emergent herbicide. This means the target weeds, such as garlic and onions, must be actively growing. This product will not help manage the weeds as a preemergent. A common problem is timing. If you apply herbicide treatments when the weeds are not present, your application will not have any effect.

Use caution when applying products such as 2,4-D ester herbicides near non-target desirable plants (vegetable garden plants, flowering plants, etc.). Ester formulations can volatilize and drift to nearby plants and cause injury.

fications for best results.

How do I know if a tree needs

Endomycorrhizal Plants Acacia Ailanthus Apple Ash

Barberry Blackberry Boxelder Buckeye Carrotwood Catalpa Cherry Chinaberry Citrus Crabapple Crape Myrtle Cryptomeria Cycads Dogwood Elm Gingko Gums Grapevine Hackberry Hawthorn Hibiscus Holly Hophornbean Horsechestnut Hydrangea Juniper **Leyland Cypress** Ligustrum Lily Locust London Planetree Magnolia Maple Melaleuca Mesquite Mimosa Mulberry Monkey-Pod

with a particular tree without studying and analyzing it scientifically. If the growing soil/site is good, and if there are a number of other trees growing nearby, there should be adequate mycorrhizae. If the tree is under stress or growing in poor soils, such as subsoil from a construction site, it may respond to the addition of mycorrhizae. The table below indicates the specific mycorrhizae for different plant species. LM

Olive



BALAKRISHNA RAO

Manager of Research and Technical Development for the Davey Tree Expert Company, Kent, Ohio

SEND YOUR QUESTIONS TO:

"Ask the Expert" Landscape Management 7500 Old Oak Blvd. Cleveland, OH 44130

Please allow two to three months for an answer to appear in the magazine.

Avoid use in windy conditions. Read and follow label speci-

mycorrhizae fungus? If it does need mycorrhizae fungus, how do I determine which one?

-NEW YORK

A representative from Plant Health Care, Inc., the manufacturer of several mycorrhizae containing products mentioned the following, which might help answer your question.

Osage-Orange **Palms** Paulownia Persimmon Pittosporum Raintree Redbud Redwood Rose Russian Olive Sassafrass Serviceberry Sequoia Silverbell Sourwood Sumac Sycamore Tree-of-Heaven Tupelo Viburnum Walnut Yellow Poplar Yew All shrubs and foliage plants (except laurels, rhododendron, & azalea) All berries (except blueberry, cranberry & lingonberry) All nut trees (except pecan)

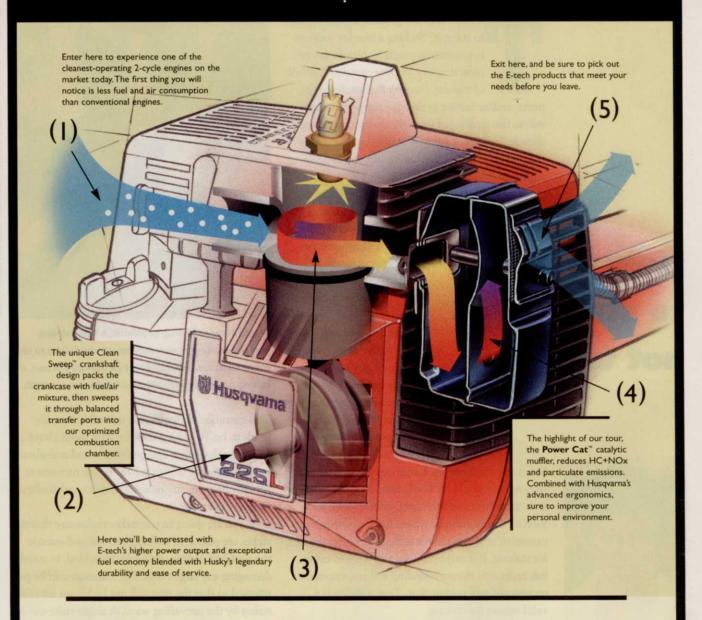
All flowers

All grasses

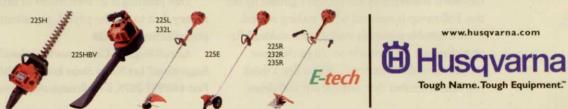
All vegetables

All fruit trees





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he tree is in the ground, are you going to stake it? Staking a tree for support is a common practice. Nearly as common is injury to trees as a direct result of staking. Incorrectly installed supports, and/or failure to remove supports can result in the girdling of young trees by compressing the cambium and killing the tree, or weakening it (not just weakened tree health but weakened tree

In some instances, small trees appear to be staked in order to keep them from escaping.

structure as well).

Triple guy wires tightened to a significant degree of tension will indeed keep a tree from moving, however, the majority of small trees do not require any staking let alone to the extent of tightened guy wires.

The questions to ask when considering the need for staking trees are:

Does the tree need to be staked? In some cases

the answer will be yes. Large trees with a heavier crown and a small root ball, trees in wet or sandy soils, small trees which cannot stand alone and trees in windy areas or where the possibility for excessive tree movement is high are all candidates for staking. It is important for the trees to establish roots into the surrounding soil and excessive movement will impair that. Tree stability is a valid reason for staking.

Will the manpower and time required for stake removal be scheduled in a timely manner? More often than not, the answer is no. Most supports can and should be removed after one growing season. If this commitment cannot be met, the supports will very likely remain on the tree until the tree is wounded by the stakes or girdled by the ties. Follow-up is essential when staking is used.

Are suitable materials available for staking? Repeat after me: "Wire inside an old garden hose is NOT suitable tie material." If you don't think you can remember that, write it out 100 times.



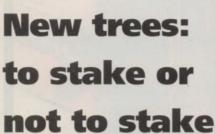
Method and follow-up problems: A triple staked tree allows for no trunk movement and failure to remove wires has wounded and weakened the tree, affecting present tree health and future tree strength.

This common tie material is inflexible, as wire tends to be. Anything used for a tie should have a flat, smooth surface and be flexible and non-abrading, to allow the tree to move. Trunk movement actually helps to strengthen the tree trunk and increase trunk taper.

If you are going to use stakes make sure that the stakes are placed in undisturbed soil and outside the root ball, before the backfill is added, to avoid damaging any large roots. The stakes should be positioned so that the tree will not be blown into the stakes by the prevailing wind. A single stake can be located on the side of the prevailing wind so that the tree is blown away from the stake. Double stakes should be positioned perpendicular to the prevailing wind. Don't forget to remove the stakes and ties after the first growing season. And definitely don't remove the ties and leave the stakes.

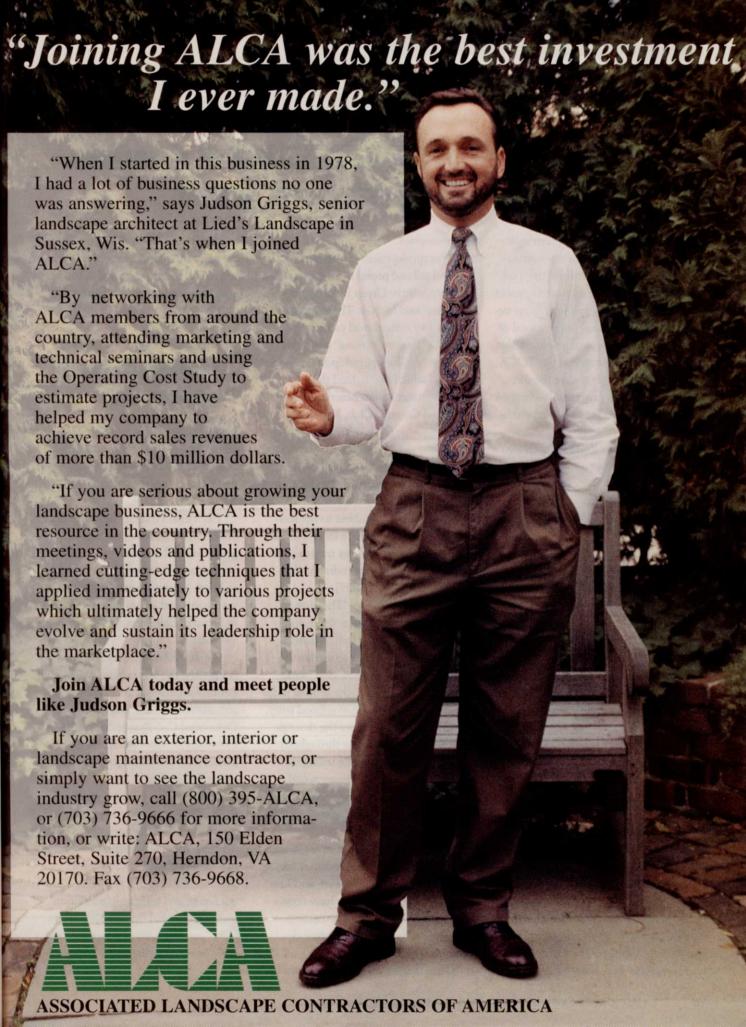
Tree planting is an investment of time and money, but to see the payoff, pay attention to post-planting care. **LM**

Agree/Disagree? Comments/Questions? Column Suggestions? Let Nancy Stairs know at 440/891-2623. Fax: 440/891-2675. E-Mail: nstairs@advanstar.com.





NANCY STAIRS
Technical Editor



LANDSCAPE MANAGEMENT wins big at TOCA for second year

CLEVELAND— For the second straight year, LANDSCAPE MANAGEMENT magazine made a strong showing in the Turf and Ornamental Communicators Association (TOCA) writing/photography/ design competition, taking home a total of six awards for writing and graphic design.

The awards, presented at the TOCA annual meeting in May, were the most awards won by any lawn and landscapeor grounds maintenance-targeted publication.

Managing Editor Ron Hall won two

first place TOCA awards in the categories of "Feature Writing" and "Product Information Article."

Graphic Designer Lisa Bodnar swept the key design award categories for the second year in a row, winning:

► first place in "Feature Design"

- ► first place in "Cover Page Design"
- ► first place in the most impressive design category of "Overall Magazine Design"
- ➤ merit award for "Cover Page Design"

"LANDSCAPE MANAGEMENT'S showing at this

year's TOCA Awards are more meaningful than last year, because many more entries were submitted by Green Industry magazines," said Terry McIver, LM editor-in-chief.

"This speaks volumes about our ability to stand tall and proud in a very crowded and competitive Green Industry publishing arena" said McIver. There were a total of 149 entries in all categories.

Hall's "Feature Writing" award was given for "A Championship Maintenance Facility," which highlighted the efforts of the equipment maintenance team at Prestonwood Country Club, Raleigh, NC

(Aug. 1997).

A second award was given to Hall in the category of "Product Information Article," for "Rubber to the Rescue," a look at crumb rubber used as a soil amendment (Jan. 1997).

> "The author uses description well to paint a picture for the reader," wrote the writing judge

about the Prestonwood story.

"Hall carries the description technique throughout the story, while telling the story of the Prestonwood Country Club's maintenance program. This was a fine job of writing."

"Ron Hall has long been a leading Green Industry editor, reporter and writer, and Lisa Bodnar's talents have consis-

tently shined through in LANDSCAPE MANAGEMENT covers and feature designs," said McIver.

"Our mission is to serve the Green In-

dustry with the best-written, best-presented information," McIver said, "and we are grateful to be recognized in this way by an independent panel of judges."

AgriBioTech gets bigger in seed

LAS VEGAS—Add the Las Vegas Fertilizer Co., Inc., (LVF) and Rothwell Seeds of Lindsay, Ontario to the list of turf or forage seed companies acquired by AgriBioTech, Inc.

Las Vegas Fertilizer has revenues of about \$16 million a year, and sells turfgrass seed and ancillary products to golf courses and lawn and garden products to home improvement centers, mass merchants and independent nurseries in Nevada, California, Utah, Idaho and Wyoming.

On April 28 AgriBioTech, Inc., completed the acquisitions of Zajac Performance Seeds, Inc., and its Oregon affiliate, Kinder Seed, Inc.; Van Dyke Seed Co., Inc.; and Ohio Seed Company on April 28. The four companies have combined annual sales of about \$30 million.

"Zajac is an excellent turfgrass company which specializes in providing proprietary turfgrass varieties to independent wholesale distributors under private label," said Dr. Johnny R. Thomas, CEO of AgriBioTech. Kinder is a forage and turfgrass distribution company located in the northeastern U.S.; Van Dyke is a production company involved with forage crops such as

cont. on page 19

A 'championship'

aintenance facility



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cont. from page 16

red and crimson clover; Ohio Seed is a distribution company with about 60 percent turfgrass seed and 40 percent forage seed with sales primarily in Ohio and Michigan.

AgriBioTech is buying J&M Seed Company in Kentucky and Oseco Inc., Ontario, Canada, including all its seed and seed coating operations, Canadian Seed Coaters, North Battleford, Saskatchewan and Precision Seed Coaters, Inc., Yuma, AZ. The two companies have combined sales of about \$17 million.

AgriBioTech has completed 23 acquisitions since January 1, 1995 and claims annualized net sales of about \$426 million, including the previously announced pending acquisitions of Willamette Seed Company, Peterson Seed Company, Inc., Geo. W. Hill & Co., Inc., Fine Lawn Research, Inc., Geo W. Hill of Indiana, Inc., J&M Seed Company, and Oseco, Inc.

TOCA / Terra to award best Green Industry communicator

The Turf and Ornamental Communicators Association (TOCA) has officially announced the start of the *Environmental* Communicator of the Year Award Program.

Sponsored by Terra Industries, Inc., Sioux City, Iowa, the award will be given annually to an active Green Industry member for outstanding efforts in communicating the benefits of environmental stewardship. The award will build awareness among turf and ornamental communicators of the need to

LM adds technical editor to staff



Nancy Stairs, LM's new technical editor

Nancy Stairs, B.Sc.F., has joined LANDSCAPE MAN-AGEMENT to serve as technical editor.

Previously employed by the Davey Tree Expert Company, Kent, Ohio, as an urban forester, Stairs brings a wide variety of arboriculture-related experience to the technical editor position. She earned a Bachelor of Science degree in Forestry from the University of New Brunswick, NB, Canada, has a diploma in horticulture, specializing in urban forestry and is a certified arborist with the International Society of Arboriculture.

Stairs has extensive writing, research and field experience. She has carried out tree inventories and has written management plans for cities, parks and golf courses, has authored technical bulletins and urban tree plans, and has

conducted arborist consultations at golf course sites.

"Nancy Stairs is a fine addition to the LANDSCAPE MANAGEMENT editorial team," says Editor-in-Chief, Terry McIver.

"Having a technical editor on staff significantly raises the level of our in-house technical expertise," says McIver, "at a time when many of our readers want and need more technical information on all turf, ornamental and tree care topics."

Stairs will write a monthly column, "Arbor View", and will contribute articles on a variety of Green Industry topics.

"Joining LANDSCAPE MANAGEMENT opens the door to a whole new set of challenges for me," says Stairs. "I am hoping that with the phone, fax and e-mail accessibility we have that the readers will help direct that process by asking questions about specific tree and turfgrass issues. We then can answer them in a timely and useful way in our articles."

If there is a specific tree care topic you'd like to see covered in the pages of LAND-SCAPE MANAGEMENT, write to Nancy Stairs at: nstairs@advanstar.com

provide informative and education information to their audiences on environmental stewardship issues;

"Environmental stewardship began in the Green Industry many years ago, but it has never been fully appreciated, due to distractions from another brand of environmental activists, and media bias against pesticides and the profit motive," says Terry McIver, editor-inchief of LANDSCAPE MANAGEMENT magazine, and a TOCA director.

"The Environmental Communicator of the Year Award is TOCA's way of acknowledging people whose literary tal-

ent and environmental concern has helped tell the truth about how the Green Industry benefits the environment," says McIver.

The award competition is open to anyone in the Green Industry. Nominees must be a TOCA member or be nominated by a present TOCA member.

Applications must arrive in the TOCA offices by January 15, 1999.

Any member may nominate himself for the award.

The award carries a \$500 cash stipend, which will be presented to the winner at cont. on Grab Bag page 58

Community heros, how you can qualify!

By being a 'contributor' to your community, you can make great things happen for your neighbors, your organization and yourself.

By RONALD HALL/Managing Editor

urprise, Mr. Green Industry
Pro, the public doesn't seem to
know how important you are.
It is not aware of the positive
role that your company or golf course plays
in your community.

Why should it? What have you done for it lately? Have you spoken out?

If you've been letting others be the business or environmental heros in your community, get off your duff. You'll discover that the rewards for participating in your community (apart from just doing business in it) are enormous. You'll meet and get to know other business and civic leaders. You'll generate good will for yourself and your operation. You may reap some positive publicity too, the kind you

help improve that long-neglected community ball park? How about that shabby garden in front of the elementary school? (Ask to put a plaque with your company name at the site.)

And there's always a charity looking for sponsors. A student career day that needs speakers. The positive ways to involve yourself with the public are unlimited.

Ron Keefer admits that his heart always melts a little when a neighborhood young-ster looks up at him and, wide-eyed, asks if he's going to have his Halloween hay ride again in the fall.

"That's really all the reward I need," says Keefer who owns and operates the Clean Lawn application company. "I say, 'of course, we're going to have the hay ride again'." For 20 years he's said that. So, every Halloween he converts his yellow tanker work truck into a hay wagon, and makes the rounds in and around his Pennsylvania neighborhood. When the truck bed is packed with costumed youngsters (and a few parents as chaperones) Keefer takes the noisy group from house to house, making sure that everybody gets candy—lots of it.

This is just one way that a green industry professional reaches out to his community. There are many, many more. For instance, Keefer also allows the American Red Cross to use his truck as a billboard on wheels at local blood drives. While his support of the Red Cross is sincere, he says, "when you have a lawn care truck parked inside a mall or in front of a church, people are going to notice it."

The Groundskeeper is one the largest landscape firms in the Southwest. When it offered to help beautify a quarter-acre park and adjoining entrance to the Tucson City

Dale Woulf, Northwest Grounds Maintenance, below, helped make this youth ballpark a reality.



can't buy at any price. But, best of all, you and your employees will build a growing satisfaction and pride in yourselves, and in the communities that you serve. These are great payoffs no matter how you figure it.

Where to start? How about something that will show immediate and lasting results? Can your expertise