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LM

'KENT' OUTSHINES COMMON WHITE CLOVER

Although white clover in a lawn can be slippery, stain clothes and is unsightly to some, many prefer it to a grass monoculture.

by R. E. DeGregorio and R. A. Ashley, Dept. of Plant Science, Univ. of Connecticut.

Landscapers are often surprised to discover the advantages of having white clover present in a lawn. Many are delighted to find that white clover offers a biological production of a slow release nitrogen fertilizer (clover seed should be inoculated), has deeper roots than many lawn grasses—implying some drought tolerance—and that it thick-

ens sod. Also, some grass pests do not damage white clover, and ecosystem diversity more often than not decreases pest epidemics.

We found a grass and legume cover crop mixture to contain fewer weeds than either the grass or the legume grown as a monoculture. In England a white clover cover crop "successfully dominated" annual bluegrass and

chickweed (*Cerastium* sp.).

"Kent" white clover is considerably shorter than common white clover. The latter is sometimes referred to as "Dutch," but this term is scientifically and legally meaningless. However, as long as the myth of "Dutch" white clover is perpetuated, the lawn industry and lawn owners are likely to perceive white clover as a weed.

Common white clover may be any of the three types of white clover (small, intermediate, or large) but is usually intermediate. We suspect that much of the problem with white clover in lawns is due to the height, leaflet and stolon size, abundance of flowers, and lack of persistence of common white clover.

Benefits of 'Kent'

Kent is not only shorter than common white clover, it also has smaller leaflets and stolons, and flowers less profusely and over a shorter period of time. There are also reports and observations of Kent, or the small white clover type in general, persisting longer, being more resistant to molluscs and mites and requiring less water.

We recently have observed consid-

In England a white clover cover crop 'successfully dominated' annual bluegrass.

erably fewer Japanese beetles and leafminers on Kent than on common white clover. These results are of interest because of the problem of Japanese beetle larvae in lawns and adults on landscape plants. Leafminers can harm forage legumes.

In an adequately fertilized and mowed lawn, there should be little problem with heaving, competition for light, water, phosphorus or potassium. These are critical to the estab-



Not just a weed? Kent may challenge your opinion of white clover.

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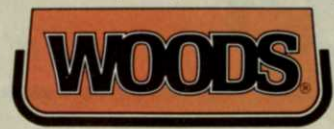
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Circle No. 174 on Reader Inquiry Card

ishment and maintenance of white clover, as identified by those working with white clover for pasture and as a living mulch for row crops. However, a reduction in nitrogen fertilizer after the lawn is established may be economical, ecological and beneficial to the persistence of white clover. Abundant potassium and moderate phosphorus and lime will also favor clover and disfavor some weeds.

The remaining barrier to increased use of Kent is the inconvenience of obtaining seed and its higher price compared to common white clover. Seed of certified Kent white clover can be obtained by simply writing to Goldsmith Seeds, Bury St. Edmunds, England, where you can receive price information as well. Whatever amount you send Goldsmith Seeds, the company will send you as much seed as that amount will buy, less enough for surface mail, which takes two to three weeks.

Considering cost

If seed cost is the only factor in deciding whether to use Kent or common white clover, the size of the area to be seeded would be the primary consideration. However, it would seem

As long as the myth of 'Dutch' white clover is perpetuated, the lawn industry and lawn owners are likely to regard white clover as a weed.

"penny wise and pound foolish" not to spend an additional 10 cents or so per 1,000 square feet for a nicer lawn. Landscapers may distinguish themselves as unique within a certain geographical area in offering this certified clover and charge accordingly.

The purity of the Kent white clover seed lot we used, according to Goldsmith Seeds, was 99.1 percent and total germination 94 percent (hard seed eventually germinates and may actually be insurance if the seeds that quickly germinate fail to establish). Thus pure live seed was $(.991) \times (.94)$ or 93 percent. Our most recently used common white clover seed, which was labelled "extra fancy" and intended for use in lawns, was 90 percent pure live seed. Combining the extra 16 percent seed due to Kent's small seed size and the 3 percent extra pure live seed, one might use 19 percent less weight of Kent, reducing the expense to about 81 percent of the

originally estimated cost. Of course seed viability and purity can vary from year to year and source to source.

Further research and development is needed to determine if and in which climates the potential advantages of Kent white clover in lawns exist. We note that some large, rather attractive lawns on the grounds of this university contain a considerable amount of small white clover. Perhaps this clover was chosen because these sites have undergone years of frequent mowing at a low stubble height, similar to the 10 or more years of pasturing necessary prior to certification of Kent as a wild white clover.

It seems likely that many of today's lawn owners, after reading about pesticides, nitrate and groundwater contamination, will be willing to accept clover in a lawn. If so, Kent seems worth the extra cost, at least for smaller lawns or on a trial basis. **LM**

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ONE STEP BEYOND

Lawn care operators that say they are going to diversify may find it's 'easier said than done.' And it might make or break your business.

by Rudd McGary, Ph.D.

The marketplaces of the country are becoming more saturated with companies offering lawn care and landscape services. Consequently, diversification becomes one of the major avenues for these companies to earn more money from their current customer base.

In many cases, only through diversification can you achieve the type of growth you want. In many cases, the markets have so many companies offering the same services that it is extremely difficult to continue previous growth patterns.

Several issues should be considered when diversifying. Failure to consider these will result in problems.

Why more?

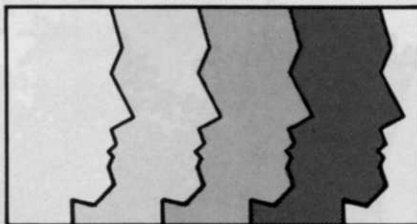
The first consideration is the reason behind offering new services.

For many companies, it is necessary to diversify. The growth rate in one type of service just isn't sufficient for many companies. This is espe-



Rudd McGary, Ph.D., is a senior consultant with All-Green Management Associates, Columbus, Ohio.

MANAGEMENT



IN BUSINESS

cially true of companies that have been in business for a number of years and which have worked very hard to build up a loyal customer base. In this case, diversifying makes sense.

There are, however, some companies that decide to diversify simply because "the thrill is gone." When the company was just starting, there was a certain excitement. Everyone put in long hours, did all the jobs, and were driven by starting a new company. Many of these companies go on to mid-sized existence. The management talents needed to grow to the present size aren't useful to take the company to the next level. So the decision to diversify is a combination of losing both that initial excitement and finding out that the company doesn't respond the same way to the old management skills. If your company is diversifying for these reasons, you're not taking the right action.

What customers?

Assuming that you are diversifying for the right reasons, your next task is to profile your current customers. A great many questions should be asked. It's easier to profile them if you ask them in sequence:

1. What kind of demographic profile can you see among your customers? If you are in residential work, you should determine the average age, income and home value of your customers. Using these three basic variables will give you a good start on a demographic profile.

If you are in commercial work, you need to determine the type of organizations you service, how big they are and who the buyer is.

2. What is the usage profile of your current customer base? Do you have customers who receive periodic — weekly, monthly, etc. — work? Is your customer base made up of people who purchase your services on a one-time basis, like certain types of design/build work? If your customer base is mostly people who purchase periodic services, how long have the accounts been customers of your company?

3. What kind of marketing/advertising have you done in the past? There is a big difference between marketing lawn care and marketing design/build landscaping, between mowing/maintenance and tree and shrub work. You should consider your past marketing/advertising efforts with this in focus.

How have you approached your current customers? You should also consider the most efficient methods among those you use. What approaches gave you the best results in terms of customer attraction? In terms of closing percentages? You need to be aware of the past efforts and their effectiveness if you want to be effective in your future marketing.

4. Why do you believe your current customer base will buy your new offering? This question must be answered before you begin any attempts to purchase equipment, to begin a new marketing program, or to consider new personnel. For instance, many companies that were in lawn care decided to try carpet cleaning. They haven't been hugely successful. Some offerings make sense, others don't. Before you begin, consider the fact that consumer buying behavior is very different from service to service. So you must make sure your offering makes sense to your current customer base.

5. Did you check with your current customer base before you decided to offer a new service? Some companies do, some don't. There is no guarantee either way, but often it is helpful to ask your current customers what new services they would purchase. In order to get this information, you should start sending out questionnaires the year before you want to add the service, perhaps even two or three

EVENTS

FEBRUARY

11-13: International Golf Course Conference and Show, Anaheim (Calif.) Convention Center. Contact: GCSAA, 1617 St. Andrews Dr., Lawrence, KS 66046; (800) 472-7878 or (913) 841-2240.

13-15: Inland Northwest Turf and Landscape Show, Spokane, Wash. Contact Jones and Associates, (509) 327-5904.

15-18: Progress and Profits in the 90s, Astro Village Hotel, Houston, Texas. Contact: Dr. L.S. Pope, 129 Kleberg Center-TAMU, College Station, TX 77843-2471; (409) 845-3808.

15-18: 20th Annual International Erosion Control Association Conference and Exposition, The Pan Pacific Hotel, Vancouver, B.C., Canada. Contact: Ben Northcutt, (303) 879-3010.

16: Connecticut Turf and Landscape Conference, Exhibition Hall, Hartford Civic Center. Contact: Anthony Penkrat, 23 Atwater St., Westhaven, CT 06516; (203) 934-3103.

16-18: Florida Nurserymen and Growers Association Spring Trade Show, Prime Osborn Exhibition Center, Jacksonville, Fla. Contact: Jennifer Franzen, (407) 345-8137.

17-18: Leaving No Stone Unturned III, Bethesda Holiday Inn, Bethesda, Md. Contact: Joel M. Lerner, PO Box 15121, Chevy Chase, MD 20815; (301) 652-1212.

21-22: Ohio State University Professional Lawn Care Seminar, Holiday Inn on the Lane, Columbus, Ohio. Contact: Sue White, (614) 292-4230.

21-23: Western Pennsylvania Turf Conference and Trade Show, Pittsburgh Expo Mart/Radisson Hotel, Monroeville, Pa. Contact: Christine E. King, Pennsylvania Turfgrass Council, P.O. Box 417, Bellafonte, PA 16823-0417; (814) 355-8010.

21-March 5: AAN International Study Program, several sites in New Zealand and Australia. Contact: Geoffery Robertson, (202) 333-1800.

23-24: Associated Landscape Contractors of Colorado Annual Conference and Trade Show, John Q. Hammons Trade Center, Denver, Colo. Contact: Diane Matt, (393) 425-4862.

23-24: Alaska Greenhouse and Nur-

ery Conference, Fairbanks, Alaska. Contact: Cathy Wright, Alaska Division of Agriculture, S.R. Box 7440, Palmer, Alaska 99645; (907) 745-4119.

23-26: ISPO-Spring, Munich Trade Fair Center, Munich, West Germany. Contact: Gerald G. Kallman, Kallman Associates, Five Maple Court, Ridgewood, NJ 07450-4431; (201) 652-7070.

27-28: The Cash Flow of Trees, a symposium sponsored by the Penn-Del Chapter of the International Society of Arboriculture, Hershey Lodge and Convention Center, Hershey, Pa. Contact: Sara Pilling, 29 Garrett Ave., Rosemont, PA 19010.

27-28: National Institute on Park and Grounds Management Regional Seminar, Dallas, Texas. Contact: National Institute, P.O. Box 1936, Appleton, WI 54103; (414) 733-2301.

28: 12th Annual Grounds Maintenance Conference, Sheraton Columbia Northwest, Columbia, S.C. Contact: George V. Hyams, P.O. Box 12109, Charleston, SC 29412; (803) 762-1595.

years in a row. Most consumers will respond to your inquiries if you phrase them well enough. By listening to them, you may find that you can determine the best possible new service offering.

One word of caution. Two or three people may respond that they would like a new service. That doesn't make up a customer base. Don't take what a few people say for what a large group says. If you do, you may find that in fact you don't have a true base for the sale of your new service, but rather have a very few people who are interested in your offerings.

After you've gone through profiling your current customer base, determining why you are going to offer a new service, determining what that

Two or three people may respond that they would like a new service. That doesn't make up a customer base.

new service is going to be, and making sure that you have some input from your customers on how well they will accept your new offering, you can ask the final marketing/advertising question:

6. How is your company going to reach the current customer base in order to let them know of your new offering? The basic consideration is whether to use your current advertising mechanism to advertise your new service. Will you use new mailers? Will you include your new service offerings with the invoice? Should you consider these new services as service extensions or will they be completely new offerings? Every answer given to each of these questions will help determine your advertising/communication strategy.

Summary

It's next to impossible to give answers to the above questions unless you consider each of them from a single company point of view. No one single way of introducing new services to your current customer base is correct. It depends on your current customers, the types of services you are going to offer, and how you have reached your customers in the past.


By considering all of the above questions, you should have a better planning system for marketing new services to your current customer base. **LM**



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Circle No. 134 on Reader Inquiry Card

Compost: a profitable solution

by Bob Scott

For many years, fairs and shows have been in a quandary over the disposal of livestock and horse bedding. We had to get rid of it, but traditional disposal methods were no longer available.

But we have found a way to not only get rid of it, but make money at it.

Livestock shows use straw for bedding. Farmers came to the showgrounds and hauled it away. However, as the number of farmers diminished, disposal methods changed. We began dumping ours in a landfill area west of town. Since the landfill and the fairgrounds were owned by the Town of Estes Park, labor and equipment were the only costs we incurred. In 1984 however, the landfill was filled to capacity.

The problem was studied for almost one year before we decided that we'd use a private transfer station. The station compacted the used bedding and transported it by truck 37 miles down the mountain to the county landfill. However, it was soon discovered that the cost of this service was too much.

Affordable alternative

Other ideas and suggestions were kicked around, but only one option seemed to be able to handle the volume of the material the shows were producing. With the approval of the elected officers, we purchased a used 125 hp tractor and a used tub grinder to make compost.

However, the area's sandy soil and rocks made the maintenance of this machine too expensive.

In 1987 we replaced the standard hay tub grinder with a cone-type grinder that has about 1/10th the moving parts. As a result, the machine's maintenance cost is no longer a burden.

We have ground well over 1,000 cubic yards with this new machine. It eats rocks, small pieces of lumber and about everything else except horseshoes and oil pans (exhibitors will dispose of about any and every-

Bob Scott is manager of the Estes Park Fairgrounds in Colorado.

thing in the used straw pile).

The standard tub grinder would throw rocks, horseshoes and about everything else out the top of the tub, sometimes as far as 200 feet away (and sometimes through the tractor cab window).



A cone-type grinder is much less expensive to operate than standard tub grinders for making compost. It's also safer and faster.

The cone-type machine has a hopper/feed table on top that prevents foreign object discharge, which pleased our insurance carrier immensely.

During the 45- to 60-day busy season, we store the bedding and let the rain and sun start the decomposing process for us. We begin daily grinding on October 1 with the intention of grinding all the used bedding at least once before the season's first hard freeze (ice creates excessive wear and breakage, no matter what type of machine you use).

During the grinding process, we add water by connecting a one-inch hose to a fixed sprayer head at the end of the conveyor. The presence of water and air are essential if the compost pile is to heat up to the desired 160° (140° and above is the temperature needed to kill weeds, fly eggs, etc.).

The temperature will come back down in about 10 days, as the weather elements tend to solidify the outside of the pile and cut off the air. Once the temperature drops down to around 110° (we have a three-foot thermometer for testing in the middle of the pile) we grind, mix and water it before heating it up again.

We grind twice with the cone machine. If we feel there is a need for fur-

ther breakdown of the material we just turn the compost pile with the loader.

With the right mixture of used bedding, water, and air we can get our first grind up to 160° within 10 days. The material is ground into windrows eight to 10 feet high and 150 to 200 feet

long. From the first grind, the piles will shrink about 30 percent. After the second grinding our total finished product is about 50 percent of the starting material.

The finished compost is very much like potting soil, dark in color and with smells similar to good black dirt. The compost has some nutrient value, but it's not a fertilizer. It is a soil builder that saves water and is a

very good bed for worms—which in time add air to the soil.

The end product

Compost, because it is darker than most soils, will absorb heat from sunlight, therefore extending the spring and fall seasons.

Thus far we have been able to find customers for every yard of compost we produce. Our local park department uses it for all their flower gardens by mixing it 50/50 with sand for a top dressing on the lawn areas in the fall. Local residents come to the fairgrounds with pickups and bring home a half-yard or more. We sell to landscaping contractors in 100 yard quantities and deliver bulk loads of two or more yards to consumers in our local area.

Peat moss enthusiasts, after learning about compost, tend to be some of our best customers.

For additional information on making, using and the benefits of compost, I recommend reading *Rodale Guide to Composting*, by Terry Minnich, Marjorie Hunt and the editors of *Organic Gardening* magazine. It is published by Rodale Press, Emmaus, Pa. There are, however, other books and articles about composting that you'll find helpful. **LM**



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Circle No. 130 on Reader Inquiry Card

PRODUCTS

Stump cutter is self-propelled

Vermeer Manufacturing's new stump cutter is especially designed for rental operators and commercial users.

The handle bar-style Model 206 is self-propelled, and cuts out stumps 10-1/2 and 21 feet above ground level.

A Kohler M20S gasoline engine operates at 19.25 hp.

Vermeer says the self-propel fea-



ture makes for easy maneuvering of the 812-lb unit. The drive wheels advance the machine into the stump, giving unlimited tongue extension. Swing-away fingertip controls provide good operator visibility and solid down pressure to the cutter wheel ensures positive cutting action without fighting for control.

Circle No. 191 on Reader Inquiry Card

New tractor makes homeowners happy

The new YT6800 is the "ultimate grass cutting machine for large acreage homeowners," says Joe Stahl of Yamaha. Stahl says the company has taken the features from its YT3600 and added more power and a wider cut.

The mower is powered by an OHV V-twin 18-hp, air-cooled engine mounted in a heavy-duty reinforced steel frame and hydrostatic transmis-



sion. Other features include stellite exhaust valve seats, a pressure lubrication system with filter and electronic ignition.

Circle No. 192 on Reader Inquiry Card

Five-gang mower cuts a productive profile

The HM-11 from Jacobsen cuts an 11-foot swath to get you through the big jobs in no time. Four-wheel drive and a reel lift control make for good traction and easier cross-cutting, and an up-to-date LCD instrument panel monitors all critical functions.

The HM-11 is powered by a durable 49-hp liquid-cooled diesel engine. Jim Byrnes of Jacobsen says the mower's five hydraulically powered reels give superior cutting action and float easily over surface undulations. Soil compaction and tread marks are reduced, thanks to large tires and low ground pressure.

The four-wheel drive is a standard feature, and wide-track stance and



rear wheel steering provide excellent stability and maneuverability.

Circle No. 193 on Reader Inquiry Card

Finn HydroSeeder holds 1,500 gallons

The Model T-170 is Finn Corporation's newest HydroSeeder. It has a full 1,500 gallon working capacity and a new hydraulic system, and mounts



on the truck chassis or a Finn mounting bed.

A new discharge pump and piping provide for increased distance and smoother slurry flow. Slurry mixing is

faster thanks to a large loading hatch and increased agitation.

Circle No. 194 on Reader Inquiry Card

Backhoe is compact, ready to work

A backhoe designed to be used in conjunction with small vehicles is now available from The Wag Co. The



Hydra-Hoe has a full swing of 360°, digs to 5', has a reach 9' 6" and a lifting height of 10'.

Circle No. 195 on Reader Inquiry Card

Out-front mower handles variety of cutting duties

The Pro Master from Gravelly is here, complete with an 18 hp Kohler Magnum engine to power an Eaton 850 hydrostatic transaxle.

The Pro Master is designed for top maneuverability at speeds from 0 to 6.3 mph, and 0 to 4 mph variable reverse.



The mower has a zero turning radius, a 60-inch cutting deck and yoke handlebar steering that's guided by 3/16 inch aircraft cable.

An attached tool box is standard, as is a hydraulic deck lift.

Circle No. 196 on Reader Inquiry Card

Cub Cadet mower converts to thrower, power brush

The latest Power Unit from Cub Cadet is a multi-purpose maintenance vehicle. The mower unit easily converts to a power brush or snowthrower. More attachments are being developed.

continued on page 112