



EXTENSION

Institute of Food and Agricultural Sciences

Market Expansion Strategies for Turfgrass Producers in the Central United States¹

J.J. Haydu, A.W. Hodges, L.N. Satterthwaite, and J.L. Cisar²

Introduction

When the International Turfgrass Producers Foundation (ITPF) funded the first phase (eastern United States) of its market research effort in late 1998, the U.S. economy was vibrant and the outlook for sod production was good. Research from the eastern region confirmed this assessment (Haydu and Hodges, 2000). Results suggested that the problem confronting producers was not demand, but ineffective approaches to marketing or insufficient resources directed at marketing. Interviewed customers reiterated the most fundamental marketing problems (e.g., not being able to find sod *when* it was needed, *where* it was needed, and *how* it was needed).

The second phase of ITPF's marketing effort covered the central United States (Arkansas, Illinois, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, and Wisconsin). This report discusses research findings from the central region, comparisons of key

results with those of the eastern region, and offers specific marketing recommendations.

Results

Market Outlets

Turfgrass sod customers were grouped into four broad categories: general contractors, landscape services, retailers, and sports turf facilities. Figure 1 illustrates that for the central United States, the most important sod market was landscape services, followed by sports turf businesses, retailers, and general contractors. Roughly 80 percent of the sod in the central United States was purchased in the southern region (Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas) and, within this sector, landscape services and sports turf businesses were the largest sod consumers.

1. This is EDIS document FE357, a publication of the Department of Food and Resource Economics, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL. Published September 2002. Please visit the EDIS website at <http://edis.ifas.ufl.edu>.

This is an excerpt from Economic Information Report 01-04 (Market Expansion Strategies for Turfgrass Producers in the Central United States, by Haydu and Hodges, published in 2001, located online at <http://hortbusiness.ifas.ufl.edu>). The project was funded, in part, by Turfgrass Producers International, the U.S.-based trade association for turfgrass producers.

2. J.J. Haydu, Professor, Department of Food and Resource Economics, Mid-Florida Research and Education Center, Apopka, FL; A.W. Hodges, Assistant-In, Department of Food and Resource Economics, University of Florida, Gainesville, FL; L.N. Satterthwaite, Senior Statistician, Mid-Florida Research and Education Center, Apopka, FL; and J.L. Cisar, Professor, Fort Lauderdale Research and Education Center, Fort Lauderdale, FL; Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, FL.

The use of trade names in this publication is solely for the purpose of providing specific information. UF/IFAS does not guarantee or warranty the products named, and references to them in this publication does not signify our approval to the exclusion of other products of suitable composition.

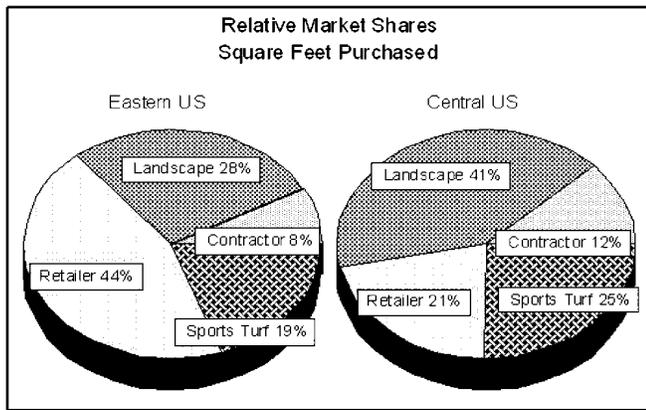


Figure 1. Market share comparisons of turfgrass buyers in eastern and central United States.

Inter-Regional Assessment

When buyer groups are compared on a larger regional scale, variations in purchasing patterns are evident. For example, retailers in the eastern United States accounted for the largest share of purchases (44 percent) compared to 21 percent in the central United States, whose market outlet could grow, since it is driven by new housing developments and an increased interest in outdoor landscaping by homeowners. Also, whereas retail chains (e.g., Wal-Mart, Home Depot, and Lowe's) were the predominant outlets in the eastern United States, the landscape service sector was the predominant outlet in the central United States, with 41 percent market share. Sports turf businesses were fairly similar across regions, as were contractors whose group purchased the smallest share in both regions.

Intra-Regional Assessment

With the exception of landscape services, considerable differences in the quantities of sod purchased were apparent between customer groups in the north central (Illinois, Iowa, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin) and south central (Arkansas, Kansas, Louisiana, Missouri, Oklahoma, and Texas) United States (Figure 2). Very little sod was bought by contractors and developers in the north, while considerably more was purchased by their counterparts in the south. Similarly, home improvement chains were important distribution outlets in the north, but much less so in the south. Finally, sports turf facilities were prominent in the south but not in the north.

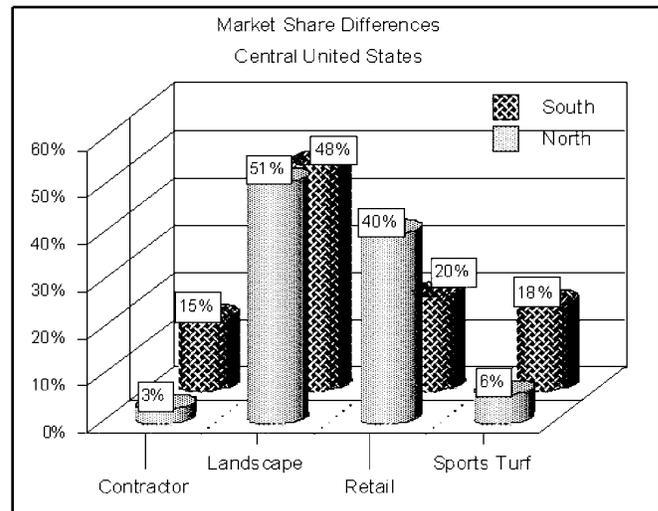


Figure 2. Market share comparisons of turfgrass buyers in central United States, 2000.

These results have important implications for sod producers. First, although landscape services remains a traditional market channel for sod in the central region, this trend is expected to diminish as other outlets become more popular, such as the retail market in the eastern United States. For instance, retailers used twice as much in the north as in the south, suggesting a movement in that direction by producers. Second, the type of product used by chains has begun to shift from plugs to more sod. Conversations with chain store managers and producers indicated that sales for sod used in small landscape renovations by homeowners and small landscape contractors have grown appreciably in recent years. Third, opportunities in the sports turf market have been far greater in the south due to the preference for seeded fields in the north (Figure 3); however, this situation may be changing. Personal interviews with owners and managers of golf courses revealed that some chose to sod the entire course, with the exception of the putting greens. Reasons cited were the demand by club members to begin golf play immediately and the realization by club owners and golf course superintendents that major revenue would be lost during the six to nine months required for the seeded or sprigged grasses to develop adequate thatch.

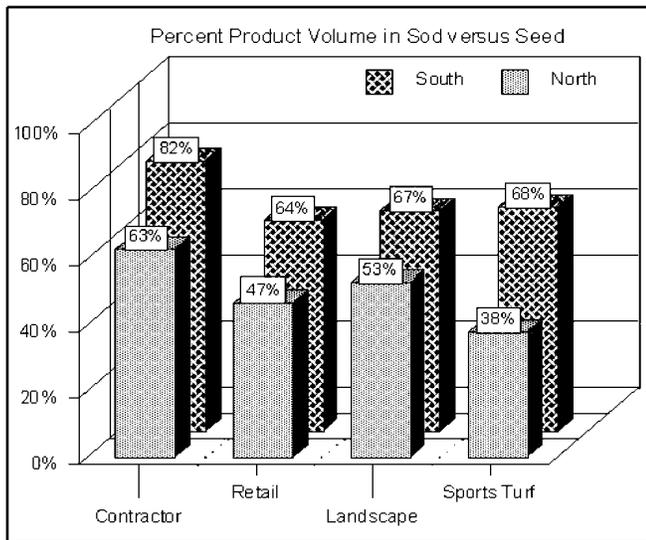


Figure 3. Percent of volume, sod compared to seed in central United States, 2000 data.

Purchasing Characteristics

Regional Differences

The preference for particular grass varieties was highly influenced by geographic location. In the north, grass varieties were heavily concentrated (98 percent) into either bluegrass (47 percent) or a bluegrass/fescue blend (49 percent). The remainder was bermudagrass and several other grasses of little prominence. In contrast, states within the southern region planted a much greater diversity of turfgrass. The top four grass varieties were bermudagrass (56 percent), bluegrass (20 percent), St. Augustinegrass (10 percent), and zoysiagrass (five percent).

Type of Buyer

Purchasing characteristics varied according to buyer type and grass variety (Table 1). For bluegrass, sports turf was the most prominent customer category, with 57 percent share of total dollar amount. Bluegrass was second in terms of quantity of sod purchased. A high dollar amount but lower quantity indicates that sports turf buyers paid a high per-unit price (\$0.87) for their sod. On the other hand, landscape services and retail garden centers accounted for smaller shares in terms of dollar amount but larger (relative) quantities bought, translating into lower unit prices paid.

For the bluegrass/fescue blend, landscape services and retailers comprised the lion's share of

the market for dollar amount and total square feet purchased, while paying the lowest per-unit price for their sod. Sports turf and general contractors were essentially a negligible part of the market but paid substantially higher prices for sod.

Landscape services dominated the market for bermudagrass both in terms of quantity (80 percent) and dollar amount (62 percent). The combination of high quantity and dollar amount translated into high prices paid. Interestingly, sports turf buyers, who paid high prices in the previous categories, paid the least for bermudagrass. Similarly, retailers represented a negligible component within this category, suggesting bermudagrass is of little importance to them.

Use of St. Augustinegrass was dominated almost entirely by general contractors who accounted for 70 percent of product volume, 93 percent of dollar amount, and expended the highest unit price. Because of its susceptibility to cold, St. Augustinegrass is restricted to the warmer southern regions where it remains a preferred grass by many developers. Retailers (four percent) and landscape services (three percent) were similar in terms of the dollar value of purchases, but retailers paid substantially higher prices. Finally, sports turf facilities accounted for very little of the St. Augustinegrass purchases.

Sod Versus Seed

Another factor examined was the proportion of land that was planted in sod as opposed to seed. In the north, the average respondent used roughly equal proportions of sod and seed (Figure 3). In the more southernly regions, the average portion of sod being used increased to more than two-thirds. In terms of use patterns across business categories, the northern region experienced considerably more variation than did the south. For instance, contractors in the north sodded roughly two-thirds (63 percent) of their developments, while sports turf facilities sodded only about one-third of their turf areas. Retailers and landscape services used sod and seed nearly equally at about 50 percent. In the southern states, use patterns for sod were nearly identical across business categories. The exception to this was general contractors, who utilized sod about 15 to 20 percent more than the other business types.

Market opportunities for increasing sod sales by enticing current grass seed users to buy sod are more abundant in the north, where more seed is currently being used, and perhaps less abundant the farther south one goes.

Desired Product Characteristics

An important market function is to determine what consumers want from a product or service. Product suppliers should try to match product characteristics with buyer expectations; the closer the match, the more value is attached to that product. For producers, value should translate into higher prices and greater quantities sold. To determine buyer expectations regarding sod, three interrelated questions were asked:

1. What are the most important criteria you consider when purchasing sod?
2. What features do you like *most* about sod?
3. What features do you like *least* about sod?

Respondents ranked criteria on a scale of one to four, with four being the most important. The results (Table 2) are weighted ranks of desired characteristics by type of business and for all firms combined.

Purchasing Criteria

Quality was the number one attribute identified by the participating firms, with an average weighted value of 3.58 (Table 2). The large difference between *quality* and *price* indicates that sod *quality* is of far greater concern to the average buyer than is *price*. In addition, *availability* is nearly as important as *price* as a purchasing criterion. With a rank of 1.54, *delivery* was either not important or was considered negligible compared to the other product features.

Variability concerning desired product features became more evident when examined by type of business. *Quality* was ranked highest by sports turf users (3.58) and by landscape services and retailers (3.50). Contractors placed more importance on *price* (2.94) and *availability* (2.63). Very little variation existed across business types for product *delivery*.

Based on these results, producers should emphasize *quality* over *price* for all groups except contractors. There are several explanations as to why contractors placed a higher premium on *price* than on *quality*. For example, contractors deal with sod indirectly through their landscape contractors and, from a marketing perspective, this group is furthest removed from the final consumer whether it be a homeowner, a garden center shopper, or a member of a golf and country club. Perhaps because they are more distant, contractors tend to be less aware of consumer concerns and more focused on their own financial bottom line.

Features Liked Most about Sod

Rapid establishment was the most desired product feature, with an average weighted rank of 3.36 for all firms. Respondents noted that sod provides a finished, professional look to the entire job in contrast to seed, which generally conveys an image of work left undone. *Attractive appearance* was the second dominant feature (2.90), which may be related to *rapid establishment*. Interestingly, even though *attractive appearance* is an aesthetic feature as opposed to functional, it underscores the importance of perception by the end-user. People expect a finished product to look good and sod provides that quicker than seed. The last two features, *erosion control* (2.28) and *weed control* (1.49), are more functional attributes and were identified as less important to respondents. However, *erosion control* was ranked much higher than *weed control*. This may stem from the fact that erosion (which is harmful to streams and rivers) is heavily fined by local government authorities in some areas.

Although *rapid establishment* was ranked number one by all business types, sports turf users ranked it highest (3.63) and ranked *attractive appearance* significantly lower (2.59). These findings, coupled with the high consideration given to *quality* by sports turf users, may indicate that they need a product that gives them less "down time" and a rapid and high tolerance to traffic as a matter of function. The other business types indicated a much smaller spread between *rapid establishment* and *attractive appearance*, indicating they desire a product that looks good.

Features Liked Least about Sod

High initial cost, the fact that it is *heavy and dirty*, and the substantial *labor to install* were the most undesirable sod characteristics identified in the personal interviews. Expenses for *labor to install* (3.19) was viewed as the most undesirable characteristic, followed closely by *high initial cost* (3.16) and not nearly so closely by the *heavy and dirty* (2.34) factor of sod as compared to seed. Clearly, the extra labor required to complete a sod job drives up overall costs. In both the case studies and telephone interviews, "cost" became the overriding issue. Although *heavy and dirty* was also cited repeatedly, it was not considered as important probably because most people recognize there is little that can be done about it.

The *high initial cost* of sod versus seed was ranked most disliked by general contractors (3.53), while all other business types considered the *labor to install* sod as its most disliked feature. Since sod landscaping is not usually part of the housing package, general contractors may be less concerned about this cost than would other business types that directly feel this expense. Although retailers also considered *heavy and dirty* to be the least important of the three features, they ranked it slightly higher than did all the other business categories. Retailers are more likely to hear customer complaints as they either purchase the sod or switch to the more convenient seed.

Market Expansion Strategies

Ultimately marketing must concentrate on two related objectives: (1) how to *move* more product and (2) how to *add value* to that product. Both objectives require a consumer-oriented approach to marketing. Typically, producers sell their sod to contractors, landscape services, retailers, and sports turf facilities. They seldom sell directly to end-users. Sod producers should therefore develop partnerships with their major customers to establish linkages to the final customer, the end-user. These relationships, if solidly constructed, can be used to routinely transmit crucial market information back and forth between producers and consumers.

Strategy 1: Partner with a Garden Center

Research from this study has confirmed that producers are using the retail sector increasingly as a market outlet. This situation varies considerably depending on geographic location and type of grass being sold. Research has also shown that the retail sector has untapped potential. Both independent retail garden centers and chain stores cited that (many) producers' current sales approaches were not sensitive to their needs. In particular, they noted that sod farms typically offered only large loads and infrequent product deliveries and sometimes offered only limited shipping distances. These service features are nearly the opposite of what most garden centers actually require. The majority of retail garden centers have limited space and their customers are mainly homeowners or small residential landscapers who purchase small quantities of sod. As a consequence, garden centers absorb higher storage and labor costs (e.g., unsold sod must be frequently removed from storage pallets to be watered and then restacked) and sizable losses from the unsold product. In spite of these obstacles, retailers still purchase and sell sod, but not nearly as much as would be feasible under more user-friendly conditions.

Business Innovation

Innovation requires "working outside the box" by developing a new mode of thinking, changing the way business is done, or altering the basic structure of the firm. Businesses unable to provide what consumers want through new products and services will not succeed.

The objective of *business innovation* is to move more product and add value. For instance, in addition to on-site sales, a garden center could act as a broker to homeowners and small landscape contracting businesses. To increase sales, producers should be willing to provide customers with smaller quantities of sod and more frequent shipping.

In the past, quality of product took preference over service. However, times change, and sod producers need to innovate and add value to service. For example, in the study, many garden center nursery managers noted two factors that prevented them from increasing sales of sod: (1) the high

perishability of sod once it is cut and (2) limited storage space in most garden centers. Sod that is not sold within a few days must be removed from the storage pallets after hours for overnight watering in the parking area and then restacked on the storage pallets early the following morning before customers arrive. Not only is this labor intensive and costly, but quality is compromised each time the sod is handled, which means that a sizable portion must be discarded at a loss to the garden center.

A New Pallet System

Increasing the on-site sales of sod at the garden center will require developing a new pallet system and implementing more flexible shipping/distribution practices. Conceptually, between each layer of sod, the new pallet should have spaces sufficient to allow air and water to penetrate each layer. Because of these spaces, each pallet might hold only half the quantity of sod (200 square feet) of standard pallets currently used by the industry. Such a system will cost more to construct, but it should dramatically improve shelf-life and increase sales. This is the essence of a value-added process (i.e., enhance the quality of the product, provide convenience to garden center handlers, and increase service to customers).

The Garden Center as Broker

Another partnering innovation is to use the garden center as a broker for large volume sales. Although brokering itself is nothing new, channeling sod through a garden center is new. Brokering sod would allow homeowners interested in complete lawn restoration and smaller-sized landscape contractors doing restoration to have sod directly shipped from the farm/nursery to the work site. For example, in the study, one garden center averaged sales of nearly 10 million square feet annually. This was in addition to on-site sales, which averaged another one to two million square feet. This arrangement benefitted all three parties:

- The garden center received roughly \$0.02 per square foot for negotiating the transaction.
- The sod producer moved more product and, since it was a retail sale, received a price higher than he would have in a wholesale transaction.

- The customer received guaranteed, fresh, quality sod shipped direct to the required location.

The garden center manager commented that the arrangement worked particularly well because the producer provided exceptional service in four ways: consistent high quality, product guarantee, follow up of customer problems, and reliability. The end result was that the sod looked better, more of it was sold, and it sold at a higher price. According to the garden center owner, both the garden center and the producer are recognized as innovators and reliable suppliers of a high-quality product. This perception has enhanced their local reputations and improved business volume and profitability.

Strategy 2: Partner with Developers and Architects

Of the four buyer categories presented in this study, developers had the smallest market share (12 percent). Under normal circumstances, landscaping occurs at the end of the development process, and sod is laid after other landscape ornamentals are in place. At this point, homeowners are often looking for ways to cut costs. Their choices are to seed the area, install xeriscape (which is really no less expensive), or do nothing. When developers do nothing, customers may be dissatisfied with the "unfinished" property, which can tarnish the developer's reputation. Although seed is a viable alternative under certain conditions, it requires a long growing period.

Sod actually represents a very small proportion of the total cost of a home, roughly one-half of one percent. Moreover, studies have shown that quality landscaping can add 10 to 15 percent to a home's value. In other words, if value is the criterion, the last item that should be cut is quality landscaping; yet this is precisely what is eliminated first.

To overcome this difficulty, some producers have negotiated with developers and architects to incorporate a landscape package into the total cost of a home. In this way, landscaping is not loosely placed at the end of the contract, but becomes part of the contractual agreement. From a sod producer's standpoint, the benefits are that sod is not line-itemed as a last detail, but rather it is part of a value-added

package. Specifically, benefits include longer-term production contracts, higher sod prices, more volume sold, and improved planning capacity for the developer and the producer.

A second innovation was that some developers were also partnering with local water authorities. This partnership promoted the use of reclaimed water and helped develop educational material on water-efficient irrigation practices. This demonstrated that developers and sod producers were environmentally responsible and wanted to work with regulatory agencies, not against them.

References

Haydu, J.J., and A.W. Hodges. 2001. Market expansion strategies for turfgrass producers in the central United States. Economic Information Report EI-01-4, Department of Food and Resource Economics, University of Florida, Gainesville, FL. Available online at <http://hortbusiness.ifas.ufl.edu>.

Haydu, J.J., and A.W. Hodges. 2000. Market expansion strategies for turfgrass producers in the eastern United States. Economic Information Report EI-00-2. Department of Food and Resource Economics, University of Florida, Gainesville, FL. Available online at <http://hortbusiness.ifas.ufl.edu>.

Haydu, J.J., J.L. Cisar, and L.N. Satterthwaite. 1998. An economic and agronomic profile of Florida's turfgrass sod industry in 1996. Economics Information Report EI-98-7, Department of Food and Resource Economics, University of Florida, Gainesville, FL. Available online at <http://hortbusiness.ifas.ufl.edu>.

Table 1. Dollar amount, quantity, and average price of major turfgrass types purchased, by type of buyer (for respondents reporting both dollar amount and quantity purchased).

Type of turfgrass and buyer	\$ Amount (\$1,000)	% Share	Quantity (1,000 ft ²)	% Share	Price (\$/ft ²)
<i>Bluegrass</i>	3,190.5	100	10,303.8	100	0.31
General contractors	50.6	2	208.5	2	0.24
Landscape services	614.9	19	3,414.1	33	0.18
Retailers	697.1	22	4,591.0	45	0.15
Sports turf	1,827.7	57	2,090.2	20	0.87
<i>Bluegrass/Fescue Blend</i>	390.1	100	4,813.6	100	0.08
General contractors	3.0	1	20.0	(—)	0.15
Landscape services	152.5	39	2,270.8	47	0.07
Retailers	183.5	47	2,415.8	50	0.08
Sports turf	51.0	13	107.0	3	0.48
<i>Bemudagrass</i>	12,296.5	100	17,007.2	100	0.72
General contractors	2,100.9	16	2,182.2	13	0.92
Landscape services	9,813.5	80	10,465.9	62	0.94
Retailers	163.9	1	1,247.5	7	0.13
Sports turf	318.0	3	3,111.6	18	0.10
<i>St. Augustinegrass</i>	2,215.6	100	3,433.7	100	0.64
General contractors	2,058.1	93	2,366.8	70	0.87
Landscape services	61.3	3	786.2	23	0.08
Retailers	89.9	4	224.3	7	0.40
Sports turf	6.2	(—)	56.3	2	0.11

Table 2. Importance of major product features affecting the purchase of sod, differentiated by type of business.

Major Sod Features*	Contractors	Landscape Services	Retailers	Sports turf	All Firms
<i>Purchasing Criteria</i>					
Quality	3.10	3.50	3.50	3.58	3.58
Price	2.94	2.76	2.45	2.55	2.64
Availability	2.63	2.22	2.37	2.36	2.36
Delivery	1.39	1.50	1.68	1.53	1.54
<i>Features Liked Most About Sod</i>					
Rapid establishment	3.34	3.22	3.19	3.63	3.36
Attractive appearance	3.00	3.16	3.14	2.59	2.90
Erosion control	2.24	2.25	2.37	2.25	2.28
Weed control	1.37	1.52	1.44	1.54	1.49
<i>Features Liked Least About Sod</i>					
High initial cost	3.53	3.10	3.04	3.15	3.16
Labor to install	2.77	3.18	3.17	3.37	3.19
Heavy and dirty	2.34	2.35	2.46	2.24	2.34
* Weighted rank on a scale of 1 to 4, with 4 being the most important.					