SECTION 6

Engineering, Economics, Structures & Innovations

Travis Phillips
Section Editor and Moderator

Section 1 and Section 13 may contain related titles.
Management Assistance Needs for Production and Wholesale Nurseries

Forrest Stegelin
Dept. of Agr. Economics, University of Georgia, Athens, GA 30602

Nature of Work: Researchers have long argued that a major gap exists between the management assistance needs of small and rural agribusinesses and the available information and services. Increasing management education is the most frequent suggestion for reducing business failure, including among production and wholesale nurseries.

Nine reasons have been cited for this gap (Torok, Menkhaus and Schroeder [1991]). First, small and rural business management must recognize that they have a problem. Second, managers have to admit they lack the expertise to solve a problem and then make the decision. Third, agribusiness managers claim that they simply lack the time to utilize management assistance services. Fourth, managers with exogenous problems (weather, markets, legislation, inputs/suppliers, etc.) feel these problems are beyond their control with little to gain by seeking management assistance. Fifth, some managers disdain government interference associated with government services. Sixth, recommendations of management assistance services are too risky or too costly. Seventh, management assistance services that require minimal effort to employ are more likely to be used. Eighth, face-to-face sources of management assistance are preferred to impersonal sources. Ninth, agribusiness managers may not be provided with the kinds of management assistance they need.

The objectives of this paper are to provide survey results that identify specific management assistance needs of agribusiness managers of production and wholesale nurseries. Scattered among the 13 Southeastern States, 124 managers of production and wholesale nurseries who attended various trade industry conferences and educational seminars during 1995 and 1996 were asked to report any impediments experienced in obtaining management assistance, and to rate 15 specific management assistance needs using a four-point scale.

Results and Discussion: As to any impediments experienced in obtaining management assistance, the leading responses were: accessibility (51%), cost (29%), timeliness (24%), and availability (24%), with the frequency cited among the respondents as percentages.

As for the specific management assistance needs, the following scale was employed: 1 = no problem; 2 = minor problem; 3 = considerable
problem; 4 = likely to put me out of business. The list of needs used was
compiled from other similar studies for small business and/or rural
business and/or agribusiness. The weighted average prominence of the
selected specific management assistance needs were typically economic
or financial in nature, at least they had a bearing on the “bottom line” for
the business. The 15 management assistance needs (and calculated
weighted average scores) are presented in the accompanying table.

Having an accurate record of the past (financial statements and book-
keeping) and having a business plan for goals and strategies (and
feedback mechanisms) were the leading management assistance needs
identified by the surveyed production and wholesale nursery managers.
These needs correlate positively with the noted impediments of accessi-

tility, timeliness and availability.

Significance to Industry: The acknowledgment of these needs and an
indication of their prominence to managers’ thinking gives prioritization
guidance to the plethora of management assistance sources available to
production and wholesale nurseries. Such sources of economic informa-
tion (as noted in the listing) include the Cooperative Extension Service,
Small Business Administration, Small Business Development Centers,
University/College Business Outreach Services, and the numerous
private consultants, trade associations, Chambers of Commerce, and
other state and federal agencies or organizations. In most cases, the
management assistance is available just by asking the respective
sources.

Literature Cited

“Management Assistance Needs of Small Food and Kindred Prod-
ucts Processors.” Agribusiness, An International Journal 7(5):447-
462 (September 1991).
Table 1. Rank and Weighted Score of Management Assistance Needs Among Production and Wholesale Nurseries.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Management Assistance Need</th>
<th>Weighted Score</th>
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<tbody>
<tr>
<td>1</td>
<td>Record keeping and financial accounting.</td>
<td>3.67</td>
</tr>
<tr>
<td>2</td>
<td>Preparing a general business plan.</td>
<td>3.62</td>
</tr>
<tr>
<td>3</td>
<td>Personnel management.</td>
<td>3.60</td>
</tr>
<tr>
<td>4</td>
<td>Inventory planning and control.</td>
<td>3.57</td>
</tr>
<tr>
<td>5</td>
<td>Financial and managerial analysis.</td>
<td>3.56</td>
</tr>
<tr>
<td>6</td>
<td>Sources of capital.</td>
<td>3.53</td>
</tr>
<tr>
<td>7</td>
<td>Production technologies.</td>
<td>3.46</td>
</tr>
<tr>
<td>8</td>
<td>Sales and merchandising.</td>
<td>3.42</td>
</tr>
<tr>
<td>9</td>
<td>Tax management.</td>
<td>3.39</td>
</tr>
<tr>
<td>10</td>
<td>Legal needs.</td>
<td>3.38</td>
</tr>
<tr>
<td>11</td>
<td>Preparing a marketing plan</td>
<td>3.36</td>
</tr>
<tr>
<td>12</td>
<td>Pricing strategies.</td>
<td>3.24</td>
</tr>
<tr>
<td>13</td>
<td>Government rules and regulations.</td>
<td>3.18</td>
</tr>
<tr>
<td>14</td>
<td>Starting a business.</td>
<td>3.09</td>
</tr>
<tr>
<td>15</td>
<td>Advertising.</td>
<td>3.01</td>
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Using the World Wide Web to Provide Information to the Nursery Industry

Dept. of Horticulture, Clemson University, Clemson, SC 29634

Nature of Work: A substantial amount of information is generated annually related to landscape plant production and use. Dissemination of this information to the nursery and landscape industries has traditionally been accomplished by printed publication in trade magazines, news letters, journals and presentations to industry groups. The World Wide Web (WWW) is another alternative for providing information to the industry.

There are several advantages of using the WWW to provide information to the landscape plant industries. “Publication” or posting on the WWW is immediate so there is no lag time between submission and dissemination. On the WWW it is simple and inexpensive (only film processing and computer equipment costs) to use slides, photographs and color graphics in articles. The use of slides and photographs adds another dimension of information available and greatly enhances the appeal of articles. Articles can be updated and modified as research continues or new information becomes available. Updates on current research and issues of concern to the industry can be addressed quickly.

The concept for the web page was formed by several faculty at Clemson. The layout and artistic design was done by Kelly Petoskey, who recently earned her master’s degree in horticulture at Clemson on using multimedia. The technical aspects, such as links and uploading articles, were implemented by Scott Gibson and Yvonne Hodges, undergraduate students in horticulture at Clemson. These web pages are constantly being updated and added to with contributions from faculty and maintenance of the page is accomplished with the help of undergraduate students from the horticulture department.

Results and Discussion: In January of 1997 the South Carolina Turf and Ornamental Program web page (http://agweb.clemson.edu/Hort/sctop/sctophome.htm) was posted on the WWW. The goal of this web page is to provide pertinent information from Clemson University research and extension programs to the commercial turf and landscape plant industries. This is an interdepartmental web page that is linked to the Departments of Horticulture, Entomology, Plant Pathology and Physiology, Forestry, and Biological and Agricultural Engineering.
The web page is broken down into sections of interest related to industry groups. Since the project was jointly funded with turfgrass funds, there are sections pertinent to the turf industry. The landscape plant information has been partitioned into sections for greenhouse production, nursery production, landscape management, and perennial plant evaluations being conducted at Clemson. Some of the turfgrass information is also important to the landscape industry. The sections relating to turfgrass are the athletic field management, golf course turf management, lawn management and sod production sections. Within each of these sections are reports on research projects from Clemson related to that topic. Many of the articles posted on this web page have been published in various journals, magazines or newsletters, however, they have been enhanced on the web page with color slides, photographs and figures as well as any updates from additional research. All authors of material posted on these web pages have links to their e-mail address and biographical information so that communication with the authors is easily conducted.

Additionally, information from other departments, universities and institutions can be utilized. There is a “Suggested Surfing” page with links of interest to industry professionals. Some of these links include the University of Tennessee’s trial gardens, Texas A&M’s web page, the USDA Cooperative Extension Service page and North Carolina State University’s horticulture home page. There are also links to various arboreta and botanical gardens such as the South Carolina Botanical Garden, the Arnold Arboretum and the Royal Botanic Gardens at Kew.

From January 16 to July 7, 1997 there have been 1035 visits to this web page. Considering the limited publicity the page has had to date, this is encouraging. As the industry begins to use the WWW more for marketing and communication and becomes more familiar with using the WWW this type of information transfer should increase.

**Significance to Industry:** The South Carolina Turf and Ornamental Program web page and other university and institutional web pages are a means of rapidly and effectively transferring current research results and pertinent information to the industry. The WWW provides another medium for communication with the industry where a large array of visual aids can be utilized and feedback and questions can be communicated directly to authors with links to their e-mail. Also, by training horticulture undergraduate students to maintain and update these web pages, the industry will be provided with students capable of navigating the WWW and producing web pages for the nursery and landscape industries.