

Woody ornamentals placed according to design throughout a golf course provide reference points for the golfer and create vistas of scenic beauty which change when viewed from different directions.

Plants to Enhance Environment

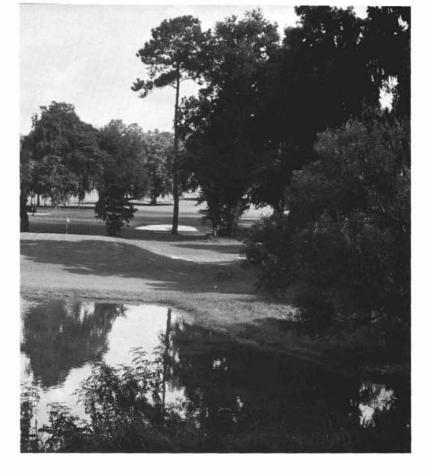
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We are confronted with a constant change of environment from rural areas to the central city, and we must know what particular plants will do well in an almost unlimited number of situations. Further, we must learn to manipulate the environment so that the plants which are required to produce a desired effect, whether beauty, function, or economy, will thrive.

In addition to the influence that the environment has on the use of ornamental plants, the plants themselves have a profound influence on our environment. This concept of modification or enhancement of man's environment by use of ornamental plants must be further developed and recognized by horticulturists and the public alike.

Ornamental plants are used in five varying environmental situations, i.e., controlled (golf clubhouses, residences, offices, museums, theaters, conference centers, hospitals, restaurants, enclosed malls, etc.) **urban** (downtown concrete canyons, high rise developments, single and multiple family residences, golf courses, city parks, outdoor shopping malls, street plantings, etc.), **suburban** (individual and multiple homesites, industrial and government facilities, memorial parks, golf courses, recreational parks, botanical gardens, conservation areas, etc.), **transitional** (freeways, highways, rapid transit systems, airports, helioports, greenbelts, etc.), **rural** (individual residences, town squares, community forests, small parks, shelterbelts, windbreaks, highways, recreation areas, etc.).

In each of these situations the placement of the proper plant in the proper place, and the proper culture and maintenance of these plants



Reflections of trees and shrubs in a small pond contribute to the enhancement of this environment for man's enjoyment.

can create a work of art that will make that place more livable, more pleasing to view, more restful, more conducive to business, or more desirable for shopping, dining, or conversation. In other situations, the landscape architect and ornamental horticulturist may create golf courses and other recreational facilities that so modify the local environment that they may revitalize tired, discouraged, or frustrated men and women. Highway design and its relationship to roadside development form but another example of the important nature of proper use and maintenance of ornamental plants. Finally, as we become more concerned with the restoration of our cities and in preventing the degradation of industrial, business, and residential areas, we must recognize the essential nature of the ornamental plant and the landscape plan in modifying environment.

Emphasis on Art

The use of ornamental plants has a closer relationship to the arts than to the sciences. Design research concerned with ornamentals is as important to ornamental horticulture as design research is to the automotive industry. In other (agricultural) terms, it may be likened in importance to using research directed toward development of new and improved products from existing substances. We have a wide variety of existing products (ornamental plant materials); we are in great need of research to determine new uses for these plants in the modification of man's functional and aesthetic environment. Design is a major criteria in these areas.

The problem in obtaining recognition for this research is related to the fact that ornamental and landscape horticulture bridges an area between arts and sciences. Agriculture is readily identified with the science aspects, but it tends to avoid confrontation with the arts aspects. The fact that design research is more like research in the liberal arts and quite different from scientific research is no reason to ignore it or fail to recognize its importance.

Another complicating fact relates to the realization that very few ornamental horticulturists are qualified to conduct design research. Most research in this area at the college level results from theses for the Master of Landscape Architecture degree. Other research is conducted by state highway departments, various agencies concerned with forestry and recreation and by architectural concerns. It seems likely that increased research in this area will come from public and private agencies outside of agriculture.

Business Aspects

Generally speaking, people who purchase ornamental plants have little appreciation for the relationship between price and quality of the plant. Further there is a widespread belief that landscaping information and landscape plants are free to hand on from neighbor to neighbor, and that these items have little relation to any specific business structure. Rather than luxury items, ornamentals should be classified as essential to environment.

Further, the value of the ornamental increases; does not depreciate. Of course we recognize that this depends on good management, and this is where ornamental horticultural research and extension programs have an influence. The importance of agricultural economics research and extension programs lies in determining ways and means of improving business aspects of ornamentals production and in providing data on the value of these plants in the environment.

The value of ornamental plants is partly aesthetic and difficult to assess in terms of money, and partly economic, since it involves the value of fertilizers, irrigation systems, pest control practices, mowers, and maintenance equipment, and requires service by specialists. All of this (value of ornamental plants) is agriculture's contact with tourism, an increasingly important aspect of the economy in many parts of the country, and one which has direct implications with golf and golf course facilities.

The production and use of ornamental plants in the United States is a far larger and more important series of interrelated activities than agricultural economists have recognized. A Pennsylvania turfgrass survey conducted by the Pennsylvania Department of Agriculture indicates that turfgrass (flowers, shrubs, and trees not included) was the largest single agricultural enterprise in the state, equal to 63% of the total cash receipts from the sale of all agricultural products. We need to recognize the importance of information of this type concerning ornamental plants.

A Further Resource

Much has been said concerning the value of projects involving ornamental plants as a means of promoting more rapid recovery from mental and physical illness. A patient who has the desire to recover because he has something enjoyable to do, such as a job to accomplish, often has a better rehabilitative record than a patient who has lost interest in life. Although not everyone is interested in ornamental plants and in natural beauty, most individuals appreciate flowers and foliage plants and are concerned about their preservation and culture. Perhaps something about the fragile nature of a plant makes the patient want to protect and nurture it, and in so doing, gain strength and satisfaction for himself. Whatever the reason, sufficient evidence exists to indicate that the concept of therapy through use of ornamental plants is a vital force, and that this procedure should be further researched. Horticulturists, along with medical doctors, psychologists, psychiatrists, sociologists, and landscape architects should be encouraged to develop projects and procedures involving ornamental plants for use in recovery programs with patients with different medical backgrounds and prognoses for recovery.

Summary

We are thus witnessing the development of a new concept involving the importance of ornamental plants in our environment. Plant materials, placed in accordance with up-to-date concepts in landscape design, modify the environment so that the mood of the individual is affected. Frame of mind and state of feeling are influenced by our surroundings, for better or for worse. We should make every effort to see that our surroundings contribute to the betterment of man.

In order to accomplish this, the art of ornamental plant use must be co-featured with the science of plant culture. Anyone who enjoys the beauty of landscape plantings should recognize the importance of imaginative uses of plant materials in enhancing our environment.

Characterization of business and economic aspects of ornamental plant production and use is essential in planning for future needs. The potential for service is great. Shortsightedness in preparing for the challenge ahead would be tragic.

Finally, the importance of ornamental plant use is not only to be identified with group response, but it also can become highly personal, as evidenced through horticultural therapy.

In all our effort to feed, clothe, and house ourselves we must not jeopardize our future by failing to satisfy our hunger for natural beauty.

Green Section Staff Change

A. Robert Mazur, Eastern Agronomist with the Green Section Staff, has resigned and entered the University of Illinois where he plans to continue work toward a Ph.D. degree. Mazur joined the Green Section Staff in 1968 after completing his MS studies at the University of Rhode Island.