

By Bill Roberts

## JUST GROWING GRASS?

By Bill Roberts

Earlier this year the Wisconsin Golf Course Superintendents Association participated in a meeting of a seemingly diverse group of organizations from throughout the state who, in a larger perspective, actually represent a common theme; a reasonable approach to the utilization of Wisconsin's resources. Adopting the acronym "STEWART" Conference (Silviculture, Tourism, Environment, Wildlife, Agriculture, Recreation and Development), this gathering was an opportunity to provide input to development and presentation of a legislative agenda.

A similar opportunity presented itself to the WGCSA recently through the Wisconsin Agri-Business Council. Later this year, November 9-10, 1987, Governor Thompson will convene a state "Small Business Conference" in Madison. Over 10,000 small businesses throughout the State have received information from Lt. Gov. McCallum's office in order that the concerns of such operations (and in this overall grouping one must include golf courses, country clubs, golf clubs, etc.) can be vocalized. In fact, the point of this Conference will be to, again, develop a legislative agenda that can be supported by the Governor in the overall interest of small business.

This process, however, will first involve a series of regional meetings across the state which will entertain local discussion and will select delegates to the Madison conference. It is at these "regional meetings" that an opportunity exists to impact the direction that the State of Wisconsin may take for the next two years. It is an opportunity to place on the agenda those

items which are of concern to our industry.

The Wisconsin Golf Course Superintendents Association, the Wisconsin Turfgrass Association, the Wisconsin Golf Course Association and the Wisconsin Forestry/Rights-of-Way/Turf Coalition have met and developed a set of issues which will be incorporated into a larger perspective to be presented by the Wisconsin Agri-Business Council. This WA-BC view will then be presented at the various regional meetings in order to impact the ultimate process in Madison.

As agreed upon by the WGCSA, the WTA, the WFROWT and the WGCA, areas of concern for our industry will include:

1. the need to enhance requirements in the area of pesticide usage in order that "economic thresholds" are recognized and that the judicious use of pesticides by professionals who have demonstrated proficiency in the use of such essential management tools is accepted.

This enhancement of requirements may take form by way of refining and enforcing existing regulations rather than by continually drafting new regulations which may be either unworkable for small business or unenforceable by the State because of staffing or other budgetary restrictions.

2. the need to recognize that economic development and the "quality of life" in Wisconsin are inevitably linked and that factors such as recreation, both active and passive, are part of that "quality of life".

It is a basic truism that "a healthy environment supports a healthy econo-

my" and that both require a degree of management. The environment in which recreational opportunities exist is, to a large degree, provided by the turfgrass industry, which by conservative estimate as recently as 1984 is a \$794,000,000.00 industry in the State. This environment is a tangible asset which has been and can be effective in attracting new business and retaining current business.

3. the need to recognize that state and local government must develop an attitude of "shared responsibility" with the private sector if we are to be effective in protecting, while utilizing, our resources.

This effectiveness will be determined, to a great degree, by the ability of government and the private sector to develop or enhance, mutually, those regulations or that legislation which is pragmatically workable for small business and practically enforceable by state and local government.

4. the need to recognize the ultimate importance for consistency in legislation and regulation and that local government usurpation of state government responsibility in protecting our resources will only lead to confusion, at best, and chaos inevitably.

It will be imperative for the courts of the State of Wisconsin to recognize situations such as the "Town of Casey" controversy as undesirable if

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this state is to continue to develop a directed, focused plan for the practical protection and utilization of our resources.

Included with this column you will find a tentative schedule for the regional meetings of the "Governor's Small Business Conference". We need people (Golf Course Superintendents) to attend in each and every area to support the ultimate positions which can be of benefit to our industry. If you need further explanation or clarification, please give me a call. It has become obvious that the profession is no longer "just growing grass" but requires an interest in all issues affecting that most honorable task.

### Governor's Small Business Conference Regional Meetings

DATE	LOCATION	FACILITY	COUNTY ALLOCATION
Tues., Sept. 1	Racine/Kenosha	UW-Parkside	Racine, Kenosha
Wed., Sept. 2	Sheboygan	Lakeland College	Sheboygan, Manitowoc, Ozaukee
Thurs., Sept. 3	Milwaukee	Ramada Inn - Airport	Milwaukee
Tues., Sept. 8	LaCrosse	Radisson Hotel	LaCrosse, Adams, Jackson, Juneau, Monroe, Trempeleau
Wed., Sept. 9	Hudson	Hudson House	St. Croix, Pierce, Polk, Dunn
Thurs., Sept. 10	Eau Claire	Ray Wachs Civic Center	Chippewa, Clark, Pepin, Rusk, Taylor, Eau Claire, Buffalo
Mon., Sept. 14	Madison	Quality Inn	Dane, Sauk, Columbia, Dodge
Tues., Sept. 15	Platteville	UW-Platteville	Crawford, Grant, Iowa, Lafayette, Richland
Wed., Sept. 16	Janesville	Hoffman House	Rock, Green, Walworth
Fri., Sept. 18	Green Bay	Ramada Inn	Brown, Door, Kewaunee, Menomonee, Marinette, Oconto, Shawano
Mon., Sept. 21	Stevens Point	Elizabeth Inn, Plover	Marathon, Portage, Waupaca, Wood, Marquette
Tues., Sept. 22	Rhineland	Nicolet College	Florence, Forest, Iron, Langlade, Lincoln, Price, Oneida, Vilas
Wed., Sept. 23	Hayward	Lakewoods Resort	Ashland, Burnett, Barron, Sawyer, Washburn
Thurs., Sept. 24	Superior	Quality Inn	Douglas, Bayfield
Tues., Sept. 29	Waukesha	Waukesha Co. Tech. Inst.	Waukesha, Jefferson
Wed., Sept. 30	Appleton	Liberty Hall, Kimberly	Winnebago, Outagamie, Waushara, Calumet
Thurs., Oct. 1	Fond du Lac	Moraine Park Tech. Inst.	Fond du Lac, Green Lake, Washington

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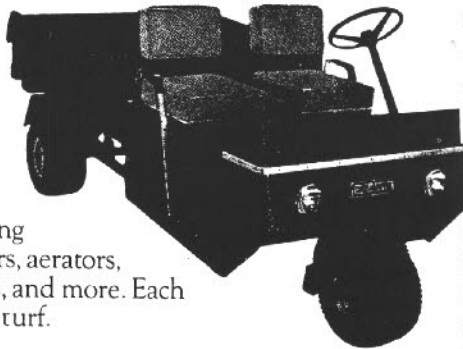
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## A Local Hero

By Monroe S. Miller

I'm really happy for Gayle Worf. He's very deserving of our Distinguished Service Award. And I'm really proud that our professional association presented it to him. Friends as good as Gayle don't come along very often and it gives me a good feeling to see friends like him given the thanks they deserve.

It will probably embarrass him to read this, but for myself and a lot of other people I know, Gayle is a hero. He maybe could be best described as a "local hero", a phrase I've borrowed from the *New England Monthly* magazine. The NEM has a feature each September that honors people from their little corner of the world who "care passionately about what they do, who are accomplishing their goals with skill, perseverance, imagination and courage, and who are enriching their communities." That's Gayle Worf, all right.

This time in our history is a tough time for those of us who need heroes in our lives. We've gone from the times of my youth and "Profiles in Courage" to today when "A Hero Ain't Nothin' But A Sandwich", and these changes are troublesome. Our baseball idols are forced to leave the ball diamonds of America for months in drug treatment centers because they are spending much of their exorbitant salaries on nose candy. Our beloved Green Bay Packer heroes of yesteryear are gone and have been replaced by players who are spending time in court and jail for crimes from traffic violations to rape. The public perception of the Packers has never been lower. Where, oh where, are Bart and Vince and Ray and Jerry? We miss them much, not for the victories they gave us, but for the examples they set.

People and professions that used to inspire us have turned sour. Lawyers no longer are guardians of the law, but rather courtroom players who are using the judicial system in selfish, unfair and even insidious ways to serve their sometimes questionable purposes.

Doctors too often are viewed as money grubbers who are unfeeling and uncaring about their patients. The men of Wall Street no longer play by rules or observe laws, so we think, and instead we assume they are all "inside traders" who are cheating investors for personal riches.

Scott Fitzgerald wrote, "Show me a hero and I'll write a tragedy." Doesn't that bring to mind the rapid and total fall of Gary Hart? Politicians are distrusted almost completely. Look at the Iran-Contra hearings of recent months; seemingly good people resort to breaking the law. A Vietnam war hero, Oliver North, ends up being nothing more than an extortionist in the eyes of some Americans. And yet, others in our country are so desperate for a hero that North is faring very well in public opinion polls. General Secord was more interested in a huge profit than anything else. Former National Security Advisor Bud McFarlane was so busy trying to imitate Henry Kissinger that he missed the big picture completely.

Maybe the worst of all this sleaze has been the "Holy War" started by the filthy greed of Jim and Tammy Bakker. This morally bankrupt pair still sees nothing wrong about their life of excess at the expense of so many sincere and innocent believers who gave generously to them in the name of religion.

I asked my two oldest daughters, one a college freshman and the other a high school sophomore, who their heroes were. No reply. William Bennett, the Secretary of Education, reports that a recent survey of 1200 junior high school kids which asked the question, "Who is your hero?" had the most popular response of "None" or "Nobody". This is the age in life when heroes are the most important. At least it was for me.

It's all really very sad. I still feel that, fundamentally, we do need heroes. There is such a paucity of them in our society right now that too many people have taken to the paths of greed and

hypocrisy. Betrayal, deceit and avarice come too easily for too many too much of the time.

But then, in the midst of all of this, you remind yourself of those around you, people like Dr. Worf. He's given so much to us over the last twenty years that we nearly take him for granted. That's his humility speaking, loud and clear. He has made a singular commitment to our profession, I think, and then I find out the Wisconsin Arborists feel that way about him too. So do his colleagues in the Plant Pathology Department. So do his peers in Extension and in the CALS. So it is with other Pathologists from around the country. He has left a lasting impression on all groups his work touches.

Heroic credibility, it has been said, is found only in those who give of themselves, rather than for themselves. That seems to be the bottom line for Gayle Worf. The ideas and visions and values and challenges he has given to us and for us have, fittingly, put him in a class most only dream about. He has helped open up the possibility for the best in all of us in the golf course management profession.

This "Distinguished Service Award" presentation came at a good time for me. We are reminded of Gayle's hard-won professional skills and his hold to high standards when much else of what we read and hear is cynical and pessimistic. He has restored my faith in heroes and their idealism. I'll bet he has done the same for you.

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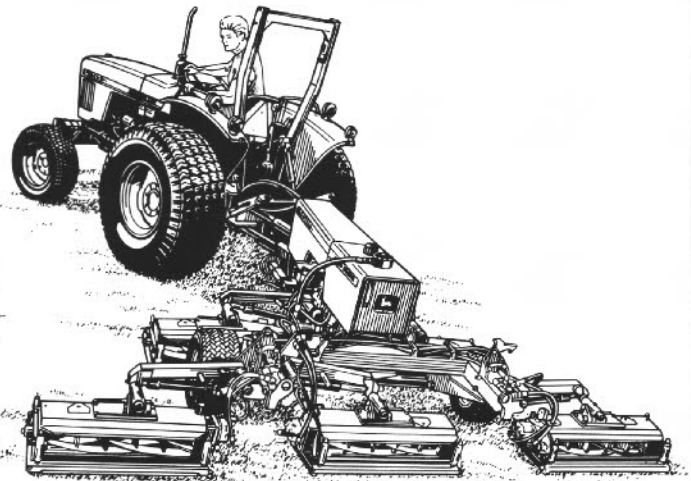
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# Ornamentals and Dry Weather

By Dr. Lois Berg Stack  
University of Maine

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This season has served as a reminder that although we can modify the environment to a certain extent, nature plays a big role in determining which plants succeed and which plants fail. The high temperatures and low precipitation levels of this summer have created drought problems across the upper Midwest. Plants generally considered to be “maintenance-free” have required rather frequent irrigation, and plants newly installed this year have been difficult to establish.

On golf courses, where irrigation systems are designed to service the turf, many ornamentals have suffered from the drought because of the extra labor and expense involved in getting water to them. It’s simply too difficult to water ornamentals not within reach of the irrigation systems. Even those flower beds covered by the turf irrigation systems are suffering, since the amount of water supplied to established turf is not always adequate or frequent enough for newly planted flowers.

This is a good time to think about the relationship between dry weather and ornamentals—the effects of drought on ornamentals, methods that can be employed to reduce dry weather damage to landscape ornamentals, and some of the drought-tolerant plants to consider for dry spots.

### The Effects of Drought on Ornamentals

Newly planted ornamentals, particularly those with small root systems, often suffer during dry weather because their root systems cannot take up enough water to compensate for the water lost through their leaves. An example of this is newly planted annuals. Their root systems are often very limited, while their above-ground portions are often well-developed. If they were greenhouse-grown in a peat-lite mix and then planted into a heavy soil, their roots may not readily grow out into the soil. This combination of extensive, rapidly growing stems, leaves and

flowers, and limited, slowly-growing below-ground roots spells trouble in hot weather. Recently planted annuals wilt readily in hot weather, and sometimes suffer severe stunting or even death—all due to lack of water.

Shrubs and trees, if planted in early spring, suffer less damage during hot, dry weather simply because they have time to develop good root systems during the cool spring. By the onset of summer heat, their root systems are generally able to supply adequate water to stems and leaves. However, it is not uncommon in summers like this to see the stress of drought on woody ornamentals in their first year of establishment. Leaves may turn brown and dry, and in extreme cases some pruning of damaged young branches may be required.

It is less common for large trees and old shrubs to show signs of drought stress, since their roots are extensive, drawing water from a large surface area, and since many have roots that penetrate deep into the moist subsoil. However, even old, well-established plants can suffer during extended dry spells. The most common damage is browning and drying of leaf edges.

### Reducing Dry Weather’s Damage to Ornamentals

An accomplished horticulturist uses many cultural techniques to alter the environment enough to grow a wide variety of plants. In fact, creating “microclimates” is one of the challenges and joys of landscape gardening.

The first step in reducing the threat of drought is to evaluate the environment. In order to alter existing conditions, you must first recognize and understand them. Look at wind patterns, annual precipitation patterns, and soil qualities such as organic matter content and drainage.

Wind can be a problem in both summer and winter. For deciduous trees and shrubs, perennials and annuals, wind is a problem only in summer, because these plants do not actively

grow in winter. Plants that are especially prone to drying summer winds can be planted against a wind break such as a row of established trees or a building. Determine the direction of the prevailing summer winds, and plant accordingly. Evergreen trees and shrubs, on the other hand, often suffer desiccation because of winter winds. Evergreens continue to grow in winter, and when the winter winds cause the leaves to lose excess water, the roots often are unable to draw replacement water from the frozen ground. The “burned” leaves and dead twigs that result frequently need to be pruned out in the spring. Such winter wind damage can be reduced by planting susceptible evergreens against a winter windbreak, protecting them with a wind-blocking structure such as snow fencing or a burlap screen, or using an anti-desiccant spray.

When evaluating precipitation rates, look not only at annual totals but also at distribution throughout the year. If summer precipitation is low or infrequent, you need to irrigate. Most ornamentals do well with about 1-1.5” water per week, with irrigation as needed to supplement rainfall. Once established, most ornamentals perform better with one deep watering per week, as opposed to several light irrigations. To reduce winter desiccation of evergreens, be sure to water deeply in late fall, before the ground freezes, to be sure the plants go into winter with a water reserve.

The soil plays a very important role in water availability. Always test the soil before selecting and planting ornamentals. A high percolation rate indicates a soil that allows water to pass through quickly, perhaps too quickly to be available to plants’ roots. Some nutrient imbalances cause more severe problems when soil water levels are low. A soil high in organic matter will retain far more water than a mineral soil. If the soil is low in organic matter, incorporate some. Not only will water retention be improved, but nutrients will be added as well.

A very important step in reducing future problems, including drought problems, is to buy healthy plants. A healthy, well-grown, vigorous plant is better able to fend off most problems than a diseased, weak plant. Check the roots for vigorous, healthy growth. Check for good branching, good form and freedom from disease and insect problems.

Follow proper recommendations for planting, according to the soil test

results and the specific plant. Help the plant get established by providing what it needs for healthy growth. Plant during a cool period, such as spring, to promote establishment. Irrigate the plant deeply to prevent shock in the early rooting period. Watch for any signs of insect or disease problems.

Mulching is an important step in drought-damage prevention. Although synthetic mulches (black plastic, clear plastic) are available, most ornamental landscape mulches are organic (bark, shredded bark, cocoa bean hulls, wood chips, leaf mould) or natural inorganic (stone, crushed granite). Such materials, when applied in a 2-4" layer on the soil surface, prevent the pounding the water droplets from forming a hardpan at the soil surface, a process that prevents penetration. They also promote slow, even penetration of water into the soil, preventing runoff and erosion. Most mulches keep the soil somewhat cooler than ambient soil temperatures, promoting good root growth. Mulches also reduce the rate of water evaporation from the soil surface. Mulch is important not only in woody ornamental plantings, but also in flower beds. The amount of maintenance required in an annual flower bed can be greatly reduced with a mulch.

You may have noticed at some time a plant thriving in a given location, while several feet away a plant of the same species appeared to be near death. This often indicates the presence of a microclimate. Some plants have a fairly narrow tolerance of certain environmental conditions—perhaps a specific pH need, or a soil type. By understanding what the natural environment offers and what the plant requires, you can often make subtle changes that help a plant thrive in a location where it might have failed on its own. Many annual flowers, for example, require a great deal of water when planted in full light, but when planted in very light shade they continue to produce a good flower show with a reduced need for irrigation. Young shrubs establish more quickly if protected by a wind break which shields them from the hot, drying summer breezes. Planting an evergreen in a site protected from winter road salt and harsh winter winds can make the difference between failure and success. The only way to learn about microclimates is to learn the environment, learn the needs of specific plants, and experiment.

### **Drought-Tolerant Shrubs, Perennials and Annuals**

It is far easier to grow plants adapted to the existing environment than to change the environment to suit the plants we want to grow. There are many drought-tolerant plants readily available in the nursery industry, and many of them very valuable in the landscape. These plants perform well under normal weather conditions, but they really shine during periods of drought, when they survive and even thrive without the extra care demanded by other plants. They are all suitable for golf course use—available, high quality, high performance, long season, low maintenance.

*Juniperus*, the genus of the "Jupiters," ranks among the toughest of evergreen landscape plants, growing in all parts of the country and tolerating a wide range of cultural conditions. Junipers range from trees to groundcovers, with several species and a tremendous number of cultivars used in the landscape industry. Although the foliage is generally described as being "needlelike," it varies greatly in texture and color from one cultivar to another. Junipers prefer full sun, sandy or light soil, and will tolerate drought very well. In the landscape, they are high-performance plants, serving as specimens, screens, windbreaks, hedges and groundcovers.

*Potentilla fruticosa*, the "Bush Cinquefoil," is a familiar yellow- or white-flowered shrub, 1-4' in height. It tolerates poor, dry soils and is quite free of insects and diseases. It is effective in borders, in mass plantings and in a perennial garden. Many cultivars are available, valued for their continuous flowering throughout the season.

*Rhus typhina*, the "Staghorn Suman" reaches 30-40' in height in the wild, suckering profusely to form large stances. In a landscape, it reaches 15-25' in height, with a loose, open, picturesque profile. It grows fairly rapidly, and offers several positive characteristics: its foliage is bright green in summer, turning orange or red in fall; the greenish-yellow flowers turn to crimson fruits in late summer; its unique form is very attractive. Staghorn Sumac is useful for massing, naturalizing, and filling in waste areas or banks. It tolerates very dry soil and does well in urban conditions. Two cultivars, *R.t.* "Dissecta" and *R.t.* "Laciniata", have more deeply divided leaflets than the species, offering a fern appearance. These cultivars are very effective as small-tree size specimens, if the

suckers are controlled.

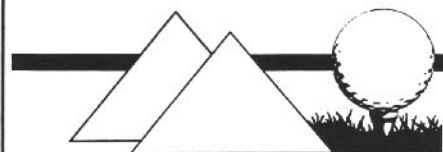
The roses are often considered very high maintenance ornamentals, but some of the shrub roses are not only low-maintenance, they also tolerate drought and other adverse conditions. *Rosa rugosa*, the "Rugosa Rose," is 4-6' tall and 4-6' across, a sturdy shrub that grows quickly. The clustered flowers are pink or white, present most of the summer. Rugosa Roses are easy to grow, tolerant of salt (they're common seaside plants), adaptable to many soils, and tolerant of drought. They are excellent for difficult spots like sandy banks. Another rose, *Rosa virginiana*, the "Virginia Rose," reaches a height of 6'. It has excellent crimson and yellow autumn color, persistent red fruits, and reddish stems in winter. It is also tolerant of sandy and salty soils. Both of these shrub roses are very vigorous, but prone to some insect and disease problems that may require control.

Among the many outstanding viburnums, *Viburnum prunifolium*, the "Blackhaw Viburnum," is one of the outstanding specimen shrubs for a droughty location. It reaches 12-15' in height, forming a rounded or multi-stemmed shrub with stiff branches and a course winter texture. The dark green leaves turn purplish in fall, and the white flower clusters are attractive in May. The Blackhaw Viburnum is used most effectively as a specimen, in a mass planting, or in a shrub border.

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Among the drought-tolerant perennials, *Achillea filipendulina* is an excellent choice for the golf course. Its ferny gray-green foliage remains good quality all season, and its golden-yellow heads appear in mid-summer, lasting several weeks. *A.f.* "Coronation Gold" reaches 3-4' in height, while several cultivars are 2-3' in height.

The Daylilies, or *Hemerocallis*, are well-known as tough, hardy, free-flowing erosion control perennials. With a proper selection of cultivars, a garden of Daylilies can produce flowers from late May through August with very minimal care.

*Limonium latifolium*, or "Sea Lavender," is a good candidate for the golf course. It is very hardy, forms a low mat of large, dark green leaves, and produces a 3'-tall cloud of tiny lavender flowers in late summer. It is high quality all summer, requiring only dead-heading at the end of flowering. Since the flowers dry on the plant, they can be left until the end of the season if desired.

Many succulents are hardy, and most tolerate droughty conditions. *Sempervivum* species, called "Hen and Chicks," make an excellent edging plant around a flower garden, with neat rosettes of thick, gray-green leaves. The genus *Sedum* offers several hardy perennials, from *S. acre*, the "Gold

Moss Stonecrop," with its very low-growing mat of foliage and bright yellow flowers in spring, to *S. spectabile*, the "Showy Stonecrop," a 2-3' perennial with pink or red flower clusters in late fall.

*Yucca smalliana*, "Adam's Needle," is a 2' spiky-appearing perennial that sends up a 4' cluster of striking white flowers in midsummer. This perennial is effective as a single specimen, as a mass planting or as a part of a mixed shrub border. Native to dry regions of the Southeast, it is very tolerant of drought.

Among the drought-tolerant annual flowers, "Dusty Miller" is outstanding. The common name refers to members of the genera *Centaurea*, *Cineraria*, *Chrysanthemum*, and *Senecio*, but whatever the genus the plant is outstanding. Its neat 8-12" bushy form combined with its silvery-white, dissect foliage and tolerance of adverse environmental conditions make it a very desirable annual in any garden.

The "Morning Glory," *Ipomoea tricolor*, is an old-fashioned annual vine offering pink, lavender or blue funnel-shaped flowers. Newer selections have green-and-white foliage, and some branch well enough to be used as an annual groundcover-like edging around an annual bed. Morning Glories tolerate a wide range of environ-

mental conditions, but flower best in poor, dry soil.

"Annuala Statice" is *Limonium sinuatum*, a common dried flower which has recently become more available as a bedding plant. The flat rosettes of foliage produce 2-3' tall blue, white, pink or yellow "straw-like" flowers. It thrives in drought, and serves as a good filler plant in an annual flower garden.

*Mesembryanthemum* is an umbrella-generic name for a group of plants commonly called "Ice Plants." These low-growing plants are frequently seen as groundcovers along the highways of California, and are becoming quite common as annual flowers in dry spots of the upper Midwest. Flower colors include pink, white and yellow, and the daisy-like flowers are prolific all summer. The foliage is quite succulent and grainy in texture, with fleshy, glistening bumps that give the plants their common name.

*Sanvitalia procumbens*, the "Creeping Zinnia," is the ultimate low-growing annual plant for a hot, dry location. The tiny yellow or orange daisy-like flowers are abundant throughout the entire growing season, and the plant requires no maintenance. This is a plant that belongs in every garden, as an edging plant, a hanging basket specimen in a hot location, or cascading out of a planter.

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Columbia ParCars are so dependable, beyond routine maintenance there's virtually nothing else to do. Our lineup boasts the simplest, yet most ingenious golf cars in history — incorporating design advances that make our ParCar virtually free of surprises . . . and that keeps extra expenses down.

Two-cycle engines have fewer parts. No valves. No gear box. No oil to change. Columbia's efficient two-cycle 250 c.c. American-made engine is designed specifically for golf cars.

Inspect the front cowling on our four-wheelers. You'll find they're made of a nearly indestructible material that absorbs

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Furthermore, Columbia offers an exclusive lifetime warranty on our tubular steel frame and a full two-year warranty on parts. See your dealer for details.

You'll find dependable ideas on every ParCar, plus electronic ignition, a spring loaded choke, drum brakes . . . and more.

For more information, contact your local dealer or call Columbia, **1-800-222-GOLF**.



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