



B. \_\_\_\_\_



C. \_\_\_\_\_



D. \_\_\_\_\_



H. \_\_\_\_\_



I. \_\_\_\_\_



N. \_\_\_\_\_



P. \_\_\_\_\_



T. \_\_\_\_\_



U. \_\_\_\_\_



O. \_\_\_\_\_



V. \_\_\_\_\_



W. \_\_\_\_\_

# Landscape

TABLE 3. Weeds controlled by pre-emergence herbicides

The following list of grasses and broadleaf weeds are labeled as being controlled by the pre-emergence herbicides. An (X) in the column indicates the weed is controlled for the herbicide listed.

	BETASAN	CASORON	DACTHAL	DEVIRINOL	ENIDE	EPTAM	FURLOE CHLORO IPC	ORNAMENTAL WEEDER	PRINCEP	RONSTAR	SURFLAN	TREFLAN
<b>Grasses</b>												
Annual Bluegrass	X	X	X	X	X	X	X		X	X		X
Barnyardgrass	X		X	X	X	X	X		X	X	X	X
Bermudagrass						X						
Cheat (Chess)				X	X							X
Crabgrass	X	X	X	X	X	X	X	X	X	X	X	X
Downy Bromegrass				X			X		X	X	X	X
Fall Panicum	X			X	X	X			X	X	X	X
Foxtail	X	X			X			X	X		X	X
Bristly Foxtail				X							X	X
Giant Foxtail				X		X					X	X
Green Foxtail			X	X		X			X	X	X	X
Yellow Foxtail			X	X		X				X	X	X
Goosegrass	X		X	X	X	X			X		X	X
Johnsongrass (from seed)			X	X	X	X		X			X	X
Nutsedge						X						
Quackgrass		X				X						
Ryegrass (annual)				X	X	X	X		X			
Sandbur			X		X	X						X
Stinkgrass (lovegrass)			X	X	X	X	X					X
Wild Oats				X		X	X		X		X	
Witchgrass		X	X		X	X	X		X			
<b>Broadleaf Weeds</b>												
Annual Morningglory						X			X			
Carpetweed		X	X	X	X	X	X		X	X	X	X
Chickweed		X	X	X	X	X	X	X	X	X	X	X
Common Groundsel				X			X		X	X	X	
Dandelion		X										
Deadnettle (Henbit)	X	X				X			X			X
Dodder			X				X					
Dogfennel		X										
Evening Primrose		X								X		
Galinsoga										X		
Knotweed		X		X	X		X					X
Lambsquarters	X	X	X	X	X	X	X	X	X	X	X	X
Lesser Bittercress											X	
Mugwort (Chrysanthemum Weed)		X				X						
Mustards		X						X	X			
Nightshades						X			X			
Peppergrass		X			X				X			
Pigweed					X			X	X			X
Prostrate Pigweed						X					X	X
Redroot Pigweed	X	X	X	X		X				X	X	X
Tumble Pigweed						X						
Plantain		X										
Prickly Lettuce				X								
Prickly Sida						X						
Purslane		X	X	X	X	X	X		X	X	X	X
Ragweed		X		X		X		X	X			

continued

combinations below have been used extensively in trees with excellent success.

PARAQUAT at 1-2 qt./A plus PRINCEP 80 W 1-2 lbs. aia (1.3-2.5 lbs.) Use as a directed spray and treat regrowth as needed with PARAQUAT only. Avoid contact with foliage and green, yellow or immature bark.

RAD-E-GATE or PHYTAR 560 at 3 gal./A plus PRINCEP 80 W 1-2 lbs. aia (1.3-2.5 lbs.) can be used in the same way as PARAQUAT and PRINCEP with the same precautions.

ROUNDUP at 1-3 qts./A plus SURFLAN 75 W at 2 1/2-5 1/3 lbs. is labelled for use on crops which appear on both labels.

continued on page 76

## ANSWERS TO PHOTO QUIZ

- A. Mouse-ear chickweed
- B. Crabgrass
- C. Yarrow
- D. Goosegrass
- E. Prostrate knotweed
- F. Creeping speedwell
- G. Dandelion
- H. Goosegrass
- I. Broadleaved plantain
- J. Perennial white clover
- K. Yellow nutsedge
- L. Annual bluegrass
- M. Tall fescue
- N. Buckhorn plantain
- O. Corn speedwell
- P. Red sorrel
- Q. Mugwort
- R. Nutsedge
- S. Heal-all
- T. Prostrate spurge
- U. Black medic
- V. Ground ivy
- W. Oxalis

Photos courtesy of New York State Turfgrass Association.

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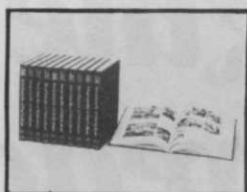
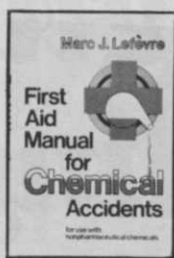
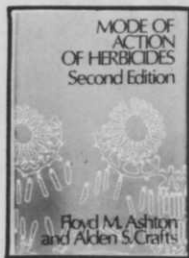
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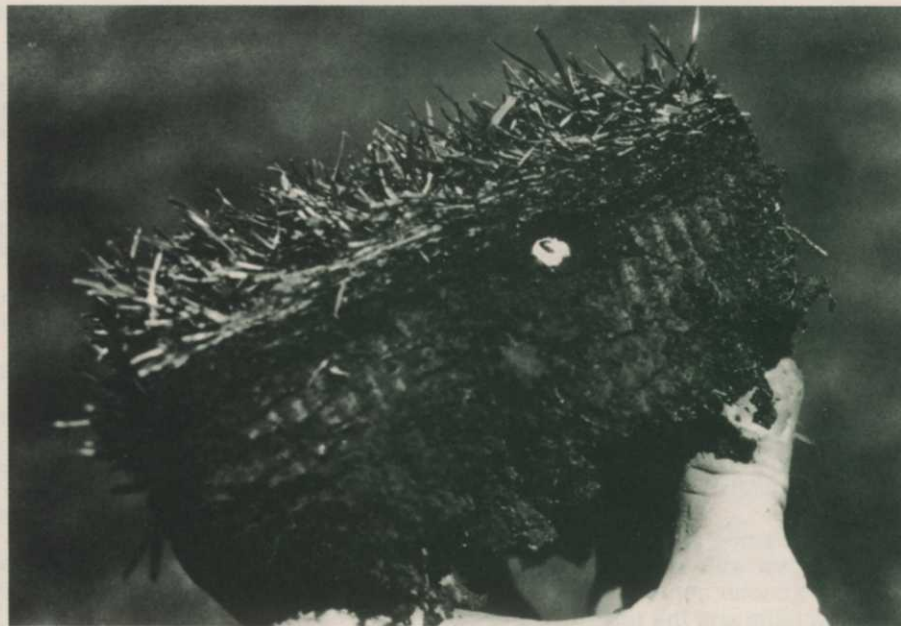
WTT 33

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# Landscape

TABLE 3. Weeds controlled by pre-emergence herbicides

Continued

	BETASAN	CASORON	DACTHAL	DEVIRINOL	ENIDE	EPTAM	FURLOE	CHLORO IPC	ORNAMENTAL WEEDER	PRINCEP	RONSTAR	SURFLAN	TREFLAN
<b>Broadleaf Weeds</b>													
Red Sorrel					X		X						
Shepherdspurse	X	X			X	X				X			
Smartweed (Pennsylvania)		X			X		X	X		X	X		
Sow Thistle				X								X	
Speedwell			X							X	X		
Spurge, Leafy		X											
Spurge, Petty		X	X								X		
Spurge, Prostrate												X	
Thistle, Bull		X											
Thistle, Canada		X											
Timothy		X											
Velvetleaf								X					
Wild Aster		X											
Wild Carrot		X											
Yellow Rocket		X									X		
Yellow Woodsorrel (Oxalis)		X											

## Precautions

Read the entire label on the container.

All directions and safety precautions should be followed, store herbicides in closed, clearly-labelled, original containers, in dry places, out of the reach of children and pets.

If herbicides are spilled on the skin, wash thoroughly with soap, if herbicides are swallowed, come in contact with the eyes or are absorbed to the point of showing symptoms, call a doctor immediately.

Emergency first aid directions and the telephone number of the nearest Poison Control Center should be posted in a conspicuous place in the workshop and in the truck.

## Herbicide Manufacturers

The Anderson's  
PO Box 119, Illinois Ave.  
Maumee, OH  
419-893-5050

BASF Wyandotte Corp.  
100 Cherry Hill Rd.  
Parsippany, NJ 07054  
201-263-3400

BFC Chemicals Inc.  
4311 Lancaster Pike  
PO Box 2867  
Wilmington, DE 19805

Ciba Geigy Corp.  
PO Box 11422  
Greensboro, NC 27409  
919-292-7100

W.A. Cleary Chemical Corp.  
1049 Somerset St.  
Somerset, NJ 08873  
201-247-8000

Crystal Chemical Co.  
1525 N.  
Post Oak Rd.  
Houston, TX 77055

Diamond Shamrock  
1100 Superior Ave.  
Cleveland, OH 44114  
216-694-5000

Dow Chemical USA  
PO Box 1706  
Midland, MI 48640  
517-636-0968

Drexel Chemical Co.  
2487 Pennsylvania  
PO Box 9306  
Memphis, TN 38109  
901-774-2132

E.I. du Pont de Nemours  
Wilmington, DE 19898  
302-774-2132

Elanco Products Co.  
730 S. Alabama St.  
Indianapolis, IN 46285  
317-261-3638

PBI Gordon Corp.  
300 S. Third St.  
Kansas City, KS 66118  
816-421-4070

Hopkins Ag. Chemical Co.  
PO Box 7532  
Madison, WI 53707  
608-222-0624

Lakeshore Eqpt. & Supply Co.  
300 So. Abbe Road  
Elyria, OH 44035  
216-323-7544

Mallinckrodt Inc.  
3600 N. Second St.  
St. Louis, MO 63147  
314-982-5043

MoBay Chemical Corp.  
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Hawthorn Rd.  
Kansas City, MO 64120  
816-242-2000

Monsanto  
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Nor-Am Ag. Products  
350 W. Shuman Blvd.  
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Chevron Chemical Co.  
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Pennwalt Corp.  
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Philadelphia, PA 19102  
215-587-7000

PPG Industries Inc.  
One Gateway Center  
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412-434-2252

Rhone Poulenc Chemical Co.  
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Philadelphia, PA 19105  
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Stauffer Chemical Co.  
Ag. Chem Div.  
Westport, CN 06880  
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Thompson Hayward  
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Kansas City, KS 66101  
913-321-3131

TUCO Div., Upjohn  
9823-190-45  
Kalamazoo, MI 49001  
616-385-6609

Union Carbide, Ag. Prod. Co.  
7825 Baymeadows Way  
Jacksonville, FL 32216

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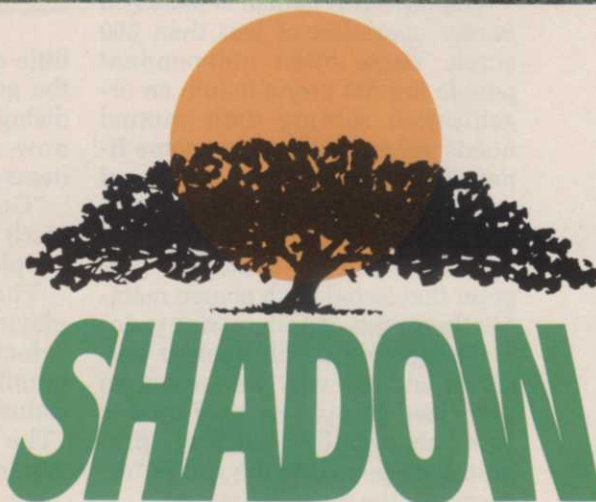
mix to remedy these difficulties. For our shade mix we chose 90 percent Shadow Chewings Fescue and 10 percent A-34 bluegrass. We see exceptional results when proper overseeding procedures are followed. Shadow makes us look good, too."



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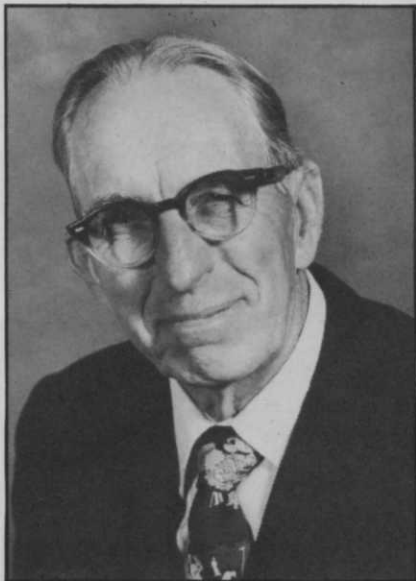
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# THE LITTLE GOLF COURSE

## Smaller Courses May Hold Golf's Future

By BILL LYONS  
The Lyon's Den, Canal Fulton, OH



Bill Lyons

The U.S. Government classifies a small business as one having fewer than 500 employees. With that in mind, the number of golf course operations topping that 500 figure could be counted on one's fingers.

Figures are hard to find on the dollar volume of business that the small courses do annually. For our purposes, we will say a "little" golf course is one doing less than \$250,000 a year gross. Perhaps it is a 9-hole, a short, executive style course, a par three or a regulation 18 or 27 hole course.

The Small Business Administration says that the 10.9 million small businesses in the USA averaged only 2.6 percent profit based on the latest figures to date. On a \$¼ million gross at 2.6 percent, that would equal \$6,500; not much net profit for the little golf course whose market value may be two to four times its gross.

The little golf course is usually a family operation of less than 500 acres. These often independent people are not prone to join an organization serving their mutual needs unless they can see some financial benefit. This was true of the Michigan Owners Association which had 70 members before it came up with an insurance program that saved each course member thousands of dollars each year.

Perhaps we should look at ourselves and ask why we are not an organized group. The NGF tried to bring us together but their programs are geared to the golf industry minus the little courses.

The GCSAA does not want us. After paying my dues for many years I was told by some of its members I was not welcome because I had opened a little course. They had no classification for an owner.

The PGA so far has nothing to offer the little courses. They have come up with no programs to date that will benefit the little course.

The 50 or more turf management schools have failed to teach sound business management. Our study of their products shows they would rather mow grass than push a pencil. Record-keeping takes thinking.

By conservatively observing, it appears ¼ of all golf courses are

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"The little course is a tax-paying entity not a tax consumer."

---

little ones. They are a vital part of the golf industry. Their merchandising sales are falling off. Most now sell only the eye-catching items—balls, gloves, tees and caps.

"Golf is a selective game," says Herb Graffis, "attracting selective people to it."

There is still some status to playing golf. The little course gives selective people in small communities a place to improve their status. Then, too, as Graffis says, "The little course helps make America beautiful."

*continued on page 80*



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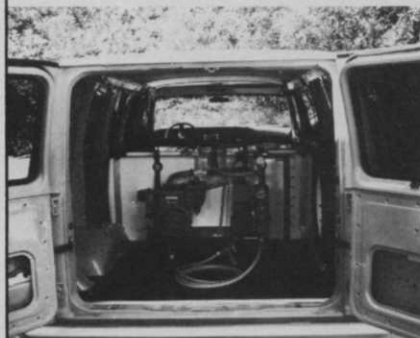


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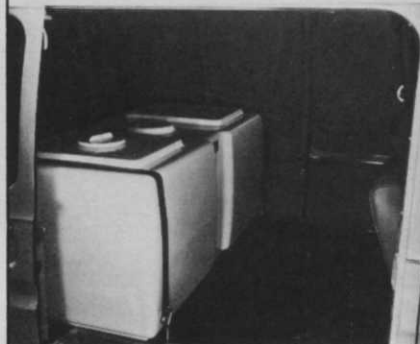
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## SMALLER COURSES

*continued from page 78*

The little course is a tax-paying entity not a tax consumer. The course is overtaxed compared to adjoining farm property. Yet, it's been shown, it improves tax valuation of all housing within a five mile area.

There are 17 of these little

"Perhaps we should look at ourselves and ask why we are not an organized group."

courses in our area alone. Too many? There is one for each 18,000 in population. Yet, just because they are all so well manicured they still produce a livelihood for their owners.

What each course offers is different and unique. The little course cannot supply "high speed" turf that is advocated by the USGA and the pros for their tournaments. But the little courses do provide a pleasant setting for golfers to enjoy their sport year after year.

When Bob Toskie was in Cleveland this past fall, he said more small golf courses are needed for youth to grow on. Arnold Palmer was quoted in Golf Management magazine as saying, "Kids need a (little) golf course as accessible as a ball diamond." I agree with this, but who will make it free to them? It costs more to maintain one small putting green than several ball diamonds.

Many of the little courses are doing more than their bigger counterparts to promote junior golf. Many children who started playing the little courses 20 years ago are now country club members. Others, who have moved away, are playing on someone else's course.

Once I had the honor of addressing the Golf Course Architects Society on the little course subject. None of them took my suggestion to build "push-up" little courses with low maintenance costs. Maybe they felt it would be unethical. Yet, America needs that kind of course.

Around April 10, as always, we will mail out a free nine holes to

*continued on page 82*

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