

Innovations make more color

BY MARK LESLIE

To flower or not to flower: the question is controversial if nothing else for golf course developers, architects and superintendents as well as seed companies.

Now, two innovations have added a new dimension — and new questions — to wildflower use on golf courses.

"Color is king and this is a way to achieve color," says John R. Thomas of Wildseed Inc. in Eagle Lake, Texas, whose J-Thom 42 wildflower drill seeder has added a new, cost-effective method of adding dynamic color to large areas of rough for some regions of the country.

And Norm Poppe of Applewood Seed Co. in Arvada, Colo., whose company is producing a new carpet loaded with wildflowers, says, "There's a lot of good interest" in wildflowers from golf course superintendents, but mostly for special, small areas.

Yet there are warnings.

Lesco, Inc. Vice President for Research and Development Art Wick says, "Wildflowers are not for everyone. They are not for the guy who lays his money down and says, 'I want results tomorrow.'"

Architect Jeffrey D. Brauer of GolfScapes in Arlington, Texas, said of using wildflowers on a course: "The key phrase is 'in particular places.' We as architects like the visual high-contrast stuff but you go and play with the typical player and he likes the more traditional things. They like to hit the golf ball and have it land in normal turf and they don't care for the wild stuff. They don't mind it if they can hit in it, that's what it boils down to."

Tony Halterlein, curator of horticulture for American Horticulture

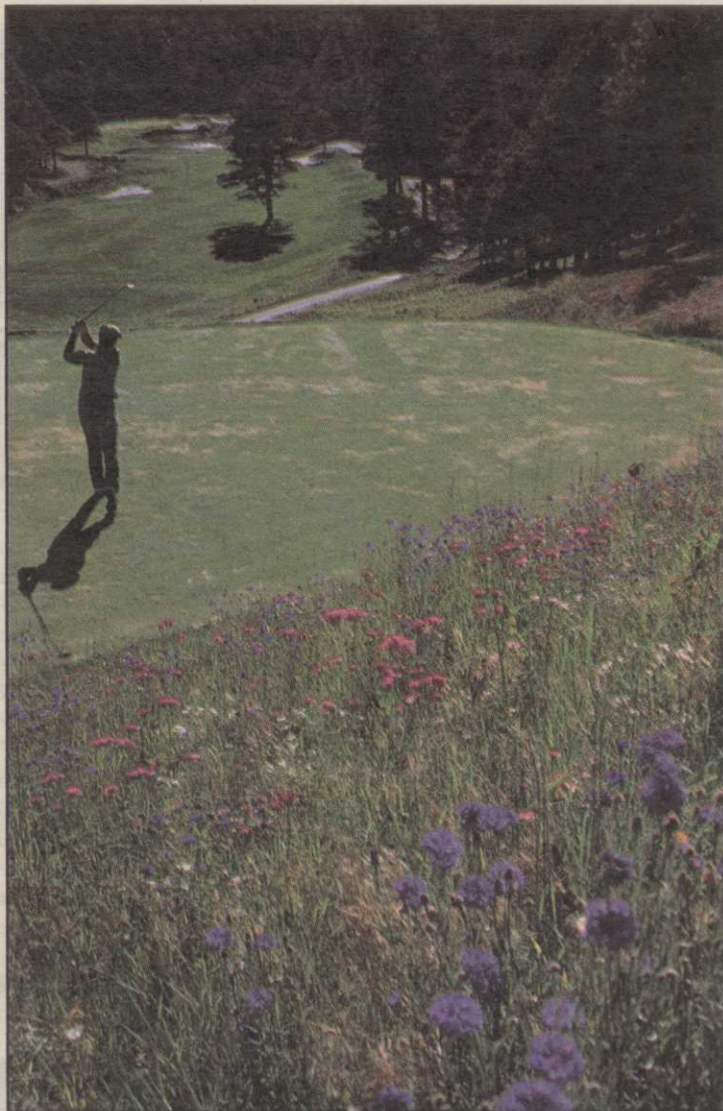


Photo courtesy of Applewood Seed Co.
Wildflowers provide a pleasant surrounding as a golfer tees off at Forest Highland Golf Course in Arizona.

Society in Virginia, said wildflower use is "a new area in the last six or seven years. We don't even have any specialist in that area on the staff here."

Wick of the Ohio-based Lesco said interest in wildflowers among

golf course superintendents peaked two to three years ago.

But Marie Pompei of the New Jersey-headquartered Lofts Seed Inc. said, "Yes, interest peaked out West and in the Midwest awhile ago, but in the East they're hot."

Most people in the seed industry produce answers for particular problems, and the variety of those answers suggests golf course superintendents should closely scrutinize their options.

Drill seeding possible

Sharlotta Krupala, horticulture and forestry supervisor for the Arlington, Texas, Parks and Recreation Department, is sold on the J-Thom 42 and how it has helped beautify her city.

Three years ago she started using the tractor-drawn machine, which implants wildflower seeds into the soil, along the median strip on the highway loop around the city. "Then we started in some of our parks that are very open, very natural," she said. "And we've just expanded it. This is the first year on the golf course."

Krupala last fall sowed 11 varieties of seed on five areas covering five acres of roughs on the Chester W. Ditto Golf Course at a cost of \$1,000.

Although a couple of severe storms hurt some of the wildflower growth this winter, she is happy with her three-year experiment and promises to plant on other areas of the Ditto course as well as Arlington's second municipal course.

Krupala stressed that wildflowers must be seeded while the turfgrasses are dormant, so that they can germinate and grow during the winter and get a head start on the grass come spring.

"Then, while the flowers are blooming in the spring, the grass is just starting to green up," she said. "And for the most part your flowers are going to thrive and grow before your grass really gets aggressive and thick. So by the time your flowers are starting to

dry out, your grass is coming in and you have a nice green carpet of grass." You just mow the wildflowers.

Wildseed's Thomas, who invented the J-Thom 42, said more non-native wildflowers are being used now than native varieties because "non-natives are less expensive, give a great deal of color, and can be trimmed and mowed after they bloom" and the annuals among the native varieties must go to seed to get a crop the next year "and they look pretty scruffy when they go to seed."

His machine is unique, Thomas said, because it will plant wildflowers through the existing turf. "Now they (superintendents) have the best of two worlds," he said, "seed into existing turf, get a colorful show of flowers and, after the bloom cycle ends, cut the wildflowers and you're back to turf."

Others say the Truax, Tye and Befco drill seeders can also be modified with different calibration boxes to plant wildflowers.

Thomas said that if a superintendent wants color for a longer time, they can use more varieties. The J-Thom 42 can plant up to nine varieties that will bloom over a period of three to four months.

"Most golf courses are planting from October to December so the flowers will bloom from starting in early spring, say from early March to June," he said. "In the North you would plant in the spring and get color later in the summer and fall."

The J-Thom 42 can be bought for \$8,500 or Wildseed can contract to do the planting.

Thomas gave as an example of the cost: If you decided on using corn poppy (\$50 to seed an acre) and corn flower (\$25), and then contracted with Thomas to seed, would run about \$350 per acre. Add more varieties and the cost goes up, such as \$100 per acre for the African daisy.

Dave Oatis, a USGA Green Section agronomist in the Mid-Atlantic Region, said he had never seen such a large planting and would have to reserve judgment on the procedure.

"The wildflowers, if they're tall enough to grow quicker than the grass (when the warm weather arrives), they're going to make a splash of color the first year," Otis said. "But then you are going to have to do it again the next year... Hopefully you'll get good enough germination with the wildflowers that they will be more apparent than the grass..."

"It's hard to say, there are so many variables," he adds.

Pompei said the South, where the J-Thom 42 has been used, does not have the problems of the East where "everything grows so lush it's hard to keep the weeds down and keep the area in wildflowers."

In the East, Pompei recommends eliminating the cover on the area and preparing the site just as you would a new grass seeding, minus the fertilizing or liming.

North American wildflower seed producers

Wildflower seed producers in North America include the following:

Adams-Briscoe Seed Co.
P.O. Box 18
Jackson, Ga. 30233
Tel. 404-775-7826
Circle No 260

Agway, Inc.
Box 4741, 333 Butternut Dr.
Syracuse, N.Y. 13221
Tel. 315-449-6682
Circle No 261

Amcorn Hybrids-Amturf Seeds
1093 129th Ave.
Bradley, Mich. 49311
Tel. 616-792-2241
Circle No 262

Anderson Seed Co., Inc.
Box 1017
Lamar, Colo. 81052
Tel. 719-336-2226
Circle No 263

Andrews Seed Co.
580 S. Oregon St.
Ontario, Ore. 97914

Tel. 503-889-9109
Circle No 264

Applewood Seed Co.
5380 Vivian St.
Arvada, Colo. 80002
Tel. 303-431-6283
Circle No 265

Arkansas Valley Seed Co.
4625 Colorado Blvd.
Denver, Colo. 80216
Tel. 303-320-7500
Circle No 266

Browning Seed, Inc.
Box 1836
Plainview, Texas 79072-1836
Tel. 806-293-5271
Circle No 267

CRM Ecosystems, Inc.
Prairie Ridge Nursery
9738 Overland Road
Mt. Horeb, Wisc. 53572
Tel. 608-437-5245
Circle No 268

Carter Seed
475 Mar Vista Dr.
Vista, Calif. 92083

Tel. 800-624-5700 (Calif.)
800-872-7711
Circle No 269

Comstock, Ferre & Co.
263 Main St., P.O. Box 125
Wethersfield, Conn. 06109
Tel. 203-529-3319
Circle No 270

Conlee Seed Co.
P.O. Box 23219
Waco, Texas 76702-3219
Tel. 817-772-5680
Circle No 271

Daehnfeldt, Inc.
P.O. Box 947
Albany, Ore. 97321
Tel. 503-928-5581
Circle No 272

Environmental Seed Producers
P.O. Box 5904
El Monte, Calif. 91734
Tel. 818-442-3330
Circle No 273

Ferry-Morse Seed Co.
P.O. Box 4938
555 Codoni Ave.
Modesto, Calif. 95354
Tel. 209-579-7333
Circle No 274

Garden Aid
1840 Howell Ave.
P.O. Box 17298
Dayton, Ohio 45417
Tel. 513-268-1212
Circle No 275

Garrison Seed & Co., Inc.
P.O. Drawer 2420
Hereford, Texas 79045
Tel. 806-364-0560
Circle No 276

Great Western Seed Co.
P.O. Box 387
810 Jackson St.
Albany, Ore. 97321
Tel. 503-928-3100
Circle No 277

Jonathan Green & Sons, Inc.
P.O. Box 326
Farmingdale, N.J. 07727
Tel. 201-938-7007
1-800-526-2303 (outside N.J.)
Circle No 278

Harris Moran Seed Co.
3670 Buffalo Road
Rochester, N.Y. 14624
Tel. 716-594-9411
Circle No 279

Continued on page 19

achievable for golf courses

Even if successful on the large scale, the J-Thom 42—or the Truax drill seeder—is not for those areas superintendents who have traditionally beautified with flowers.

Wildflowers, Pompei said, have "caught a lot of interest from superintendents who are looking to get a lot of color for low-maintenance areas, out-of-play areas, hard-to-maintain slopes, maintenance areas, and in the roughs."

Dr. David Northington, director of the National Wildflower Research Center in Austin, Texas, advised, "Be aware that wherever you are there are natural open areas, and look at the true natives (varieties) and pick a good grouping of species of grasses and flowers so that you have a natural community. Then they will be so successful and so thick, if you establish them properly, that not much of anything will grow in that's weedy."

A carpet with color

Applewood for the first time this year outside the Denver area is offering a wildflower carpet, a fiber mat similar to grass sod.

Applewood's Poppe said the most substantial expense is transporting the carpet.

"The shipping price is a large factor," he said. Without shipping, to buy it on pallets in 250-foot increments costs \$1.25 per square foot, which translates to \$48,696 per acre. Thus its forecasted use in smaller areas.

"We foresee it being used in high-traffic, high-visibility areas where people want to get immediate vegetation and to color fairly rapidly so it is an area that looks finished," Poppe said.

"We've also seen where people will fringe an area with sod, and seed in the background to reduce the overall cost; also areas with steep slopes where seeding doesn't work well."

Dr. Northington said of the carpet, "I think it has some potential. It's a new product and needs to be played with a little bit, but it puts an awful lot of plant out there awful thickly and there's a lot of self-elimination just because of how thick they are."

Northington said some people are suggesting that the carpet be cut into 2-inch squares and planted a short distance apart, and "I think that's a good idea."

"For the type of use some people want, it's ideal," he said. "They want it to color, they want it to work the first year, and they don't mind replugging or replanting after that."

Some replanting is necessary because the mat is perennials, and some of them won't re-establish themselves, he said.

Be choosy

While color may be king—and wildflowers the royal deliveryman—in some regions at least caution is suggested.

Lesco's Wick said that in his



Photo courtesy of Applewood Seed Co. Applewood Seed Co.'s wildflower carpet arrives with flowers 2 to 3 inches high.

experience "the interest has leveled off because many of the people who tried it either didn't do it correctly in their planning procedures or didn't understand they were going to have weed competition. They expected more than what they got and many people have backed away from the use.

"Likewise," he added, "there are many who have had good results and are happy with it and add to their plantings each season. It's something that takes a heck of a

lot more planning and ground preparation than many people think. You have to prepare a seed bed just like you were seeding a lawn."

Wick said the region west of the 100th meridian (located from central Texas along central Nebraska and central Kansas) is more successful because of lower rainfall and therefore less weed competition.

Wick said courses that have tried wildflowers in the West have had "a reasonably high level of success. You get into the semi-arid areas like western Kansas, western Texas, Colorado, the mountain states, California, they're able to produce good-quality wildflower areas."

His suggestion to people who wanted wildflowers has been "to buy a bunch of nursery containers like chrysanthemum pots which are relatively shallow and set them outside, side by side, and throw the top-dressing mix that they might use for their greens, assuming they are using a mix that contains some soil... and broadcast wildflower seeds right down over them. Let them grow in the pots, let them get well established, go out with a shovel and plant them in blotches all over the place..."

Wick said his suggestion to superintendents is:

Most wildflower seed companies are putting together specialty mixes — from concentrating on natives of particular areas to mixes of cut flowers, mall perennials, annuals, shade, and full sun.

• "If you are in a lower-rainfall area I'd say your chances are pretty good to prepare a good seed bed, water it and moderately fertilize it to get it established. If you're east of that (rainfall) line I'd say, Are you willing to kill the existing vegetation and the possible spot-weed volunteer stuff that comes up after you've seeded in that dead vegetation?"

"Be prepared to reseed in year number two if your catch in the first year isn't to the degree of density you want. Many supers say that's too much of a hassle."

• Get a sample kit of what the seed company has available and plant simple straight rows 15 feet long of the individual varieties. Then observe what varieties do well and what ones don't.

From that information the company can prepare a custom blend for the course.

Dr. Northington said most wildflower seed companies are putting together specialty mixes — from concentrating on natives of particular areas to mixes of cut flow-

ers, mall perennials, annuals, shade, and full sun.

"There's all kinds of combinations of species that are supposed to work in certain situations," he said.

"They will often also mix in other varieties that have a chance of making it anywhere, but the natives will come back the second year, the non-natives won't."

Many golf course superintendents may not want to wait the six or eight months it takes to establish plants.

Some may decide the color is worth the wait. Some may indeed dig deep and pay for instant beautification.

Still others may stick with grass and grass alone.

"We can't forget it's out there to be a golf course. And most golfers are going to think of a golf course in terms of memorability and playability," says architect Brauer. "Most golfers count up the number of balls they lose at the end of a round, too, and you can't steal their balls."

Harris Moran Seed Co.
26239 Executive Place
Hayward, Calif. 94545
Tel. 414-785-8880
Circle No 280

Hobby Gardener Seed, Inc.
P.O. Box 6342, St. A
Toronto, Ontario
Canada

Tel. 416-624-1532
Circle No 281

Hurov's Tropical Seeds
P.O. Box 1596
Chula Vista, Calif. 92012
Tel. 619-426-0091
Circle No 282

Johnny's Selected Seeds
RFD #1, Box 2580
Albion, Maine 04910
Tel. 207-437-9294
Circle No 283

Swede Johnston Co.
P.O. Box 296
Albany, Ore. 97321
Tel. 503-928-0011
Circle No 284

Johnston Seed Co.
P.O. Box 1392
Enid, Okla. 73702
Tel. 405-234-8712
Circle No 285

Kamprath Seed Co.
P.O. Box 2162
Bakersfield, Calif. 93303
Tel. 805-831-3456
Circle No 286

Kerr Brokerage, Ltd.
Box 1001
Lindsay, Ontario
Canada K9V 5N4

Tel. 705-324-1661
Circle No 287

Labon, Inc.
1350 Newton
Boucherville, Quebec
Canada J4B 5H2
Tel. 514-641-1050
Circle No 288

Lagomarsino Seeds, Inc.
5675-A Power Inn Road
Sacramento, Calif. 95824
Tel. 916-381-1024
Circle No 289

Lake Valley Seed
735 Walnut St.
Boulder, Colo. 80302
Tel. 303-449-4882
Circle No 290

D. Landreth Seed Co.
180-188 W. Ostend St.
P.O. Box 6426
Baltimore, Md. 21230
Tel. 301-727-3922
Circle No 291

Lesco, Inc.
20005 Lake Road
Rocky River, Ohio 44116
Tel. 216-333-6832
Circle No 292

Lincoln Seed & Feed Co.
P.O. Box 3528
Sioux City, Iowa 51102
712-255-1652
Circle No 293

Lockhart Seeds, Inc.
3 North Wilson Way
P.O. Box 1361
Stockton, Calif. 95201
Tel. 209-466-4401
Circle No 294

Lofts Seed Inc.
Bound Brook, N.J. 08805
Tel. 800-526-3890
Circle No 295

D.R. Mayo Seed Co.
Box 10247
Knoxville, Tenn. 37919
Tel. 615-577-7567
Circle No 296

North American Green
14649 Highway 41 North
Evansville, Ind. 47711
Circle No 317

Northrup King Co.
P.O. Box 1827
Gilroy, Calif. 95021
Tel. 408-847-4242
Circle No 297

L.L. Olds Seed Co.
2901 Packers Ave.
P.O. Box 7790
Madison, Wisc. 53707-7790
Tel. 608-249-9291
Circle No 298

Pennington Seed
Box 290
Madison, Ga. 30650
Tel. 404-342-1234
Circle 299

Peterson Seed Co.
Box 346
Savage, Minn. 55378
Tel. 612-445-2606
Circle 300

Otto Pick & Sons Seeds, Ltd.
Box 126, Richmond Hill
Ontario L4C 4X9
Canada
Tel. 416-884-1147
Circle No 301

Pickseed West, Inc.
P.O. Box 888
Tangent, Ore. 97389
Tel. 503-926-8886
Circle No 302

Clyde Robin Seed Co.
25670 Nickel Place
Hayward, Calif. 94545
Tel. 415-785-0425
Circle No 303

Robson Seed Farms Corp.
One Seneca Circle
Hall, N.Y. 14463-0270
Tel. 716-526-6396
Circle No 304

S&S Seeds
P.O. Box 1275
Carpinteria, Calif. 93013
Tel. 805-684-0436
Circle No 305

Sharp Bros. Seed Co.
P.O. Box 140
Healy, Kansas 67850
Tel. 316-398-2231
Circle No 306

Southern States Cooperative, Inc.
6606 West Broad St.
P.O. Box 26234
Richmond, Va. 23620
Circle No 307

Southwest Seed, Inc.
13260 CR 29
Dolores, Colo. 81323
Tel. 303-565-8722
Circle No 308

Stock Seed Farms, Inc.
R.R. 1, Box 112
Murdock, Neb. 68407
Tel. 402-867-377
Circle No 309

Sweeney Seed Co.
110 South Washington St.
Mt. Pleasant, Mich. 48858
Tel. 517-773-5391
Circle No 310

Dean Swift Seed Co.
P.O. Box B
Jaroso, Colo. 81138
Tel. 303-672-3739
Circle No 311

Turf-Seed, Inc.
P.O. Box 250
3017 G St.
Hubbard, Ore. 97032
Tel. 503-981-9571
800-247-6910 (outside
Ore.)

United Seeds, Inc.
75th and Burlington St.
P.O. Box 27322
Omaha, Neb. 68127
Tel. 402-331-4800
Circle No 313

Wildflowers International, Inc.
918-B Enterprise Way
Napa, Calif. 94558
Tel. 707-253-0570
Circle No 314

Wildseed, Inc.
P.O. Box 308
Eagle Lake, TX 77434
Tel. 800-848-0078
Circle No 315

Willamette Seed Co.
220 N. Jefferson
P.O. Box 791
Albany, Ore. 97321
Tel. 503-491-3675
Circle No 316