

Woody galls house the insects over winter, so infested canes should be pruned. Rose stem girdler may also be controlled by applying a systemic insecticide to the soil. Cultivars differ in their susceptibility to this insect.

There are over 50 cultivars of *R. rugosa* in existence today. At the University of Wisconsin-Madison, we evaluated 30 of the most commonly available cultivars.

Observations were made from spring 1987 until fall 1988—primarily at the Longenecker Gardens of the University of Wisconsin Arboretum-Madison and the University of Minnesota Landscape Arboretum, Chanhassen.

Additional observations took place at the Boerner Botanical Gardens, Hales Corners, WI; the Chicago Botanic Garden, Glencoe, IL; The Morton Arboretum, Lisle, IL; and the Secrest Arboretum, Wooster, OH.

Growing conditions at Longenecker Gardens during the summer of 1987 were warm and humid. This helped to reveal which roses resist blackspot and powdery mildew.

The 1988 growing season was critically hot and dry in Madison, as it was throughout the Midwest. We used supplemental irrigation to help the plants through the severe drought.

To ensure that we gathered accurate disease-resistance data, we did not apply any fungicides. We applied systemic insecticides only when absolutely necessary to keep a plant from dying.

We did not mulch the roses for winter protection either. The coldest temperature recorded in our observation areas for 1986-87 was -12° .

In 1987-88, it was -21° . A number of cultivars suffered injury during the second winter.

Our species nomenclature follows Hortus Third. Cultivar nomenclature is in accordance with Gerd Krussman's "The Complete Book of Roses," the most current and thorough shrub rose reference available today.

Despite the overall excellence of *R. rugosa*, there are other shrub roses with redeeming qualities. Here is a brief list of other useful rose species and cultivars:

Bonica (*Rosa* 'Meidomanac') is the first shrub rose ever to win All-America Rose Selections honors. Bonica is one of five cultivars recently introduced in the Meidiland hybrid shrub rose series.

Bonica has double, clustered light pink flowers and blooms continuously

from June until frost. It is slightly fragrant, with green, not particularly showy, hips (in Madison) and thick, glossy, dark green foliage. Bonica is very resistant to blackspot and powdery mildew but has no fall color. It has an upright, dense form with light suckering and grows 3 to 4 feet tall (in Madison).

It is not completely hardy in Zone 5a; the branch tips died back at least 12 inches in the winter of 1986-87 and to the ground during the 1987-88 winter. Although Bonica is not vegetatively hardy in the upper Midwest, it grows on its own roots, which are hardy.

Also, flowers are produced on current-season's wood, so even if canes die back to the ground, the shrub suckers back vigorously and produces flowers. The Longenecker plants grew to 3 feet and were in full bloom by mid-June, despite winter injury.

Bonica is not as maintenance-free as more hardy cultivars, but its disease resistance and flowers are well worth the added effort of pruning each spring. It is an excellent alternative to the popular, less-hardy cultivar 'The Fairy'.

Carefree Beauty (*Rosa* 'Bucbi') is a hybrid shrub rose with large, semi-double, medium pink, clustered flowers that bloom from June until frost. It is fragrant, with green hips (in Madison) and medium green, thick, glossy foliage.

Carefree Beauty is resistant to blackspot and powdery mildew but has no fall color. Its upright habit is somewhat open, and this shrub grows 3 to 4 feet tall and wide.

This cultivar is not completely hardy in Zone 5a. The branch tips died back 6 to 8 inches in the winter of '86-'87 and to the ground during the winter of '87-'88. Carefree Beauty is similar to Bonica in its hardiness, so spring pruning is necessary. Like Bonica, it is not maintenance-free, but its disease-resistance and flowering characteristics make it a worthy shrub rose.

Rosa blanda is native to the north-eastern US and Canada. This floriferous shrub has single, light pink flowers, although these fragrant blooms are non-recurrent. Bright red, globose, smooth and very persistent hips contrast with dull blue-green foliage occurring in groups of five to seven leaflets. *R. blanda* has yellow fall color.

R. blanda has an excellent flower display in late May and June. Flowers give way to bright red fruits, which color

in late July and remain showy throughout winter. In our observations, *R. blanda* proved to be one of the best roses for fruit display.

This shrub has sparsely thorned to thornless canes and attractive red bark. This strong-growing, suckering species forms dense, mounded thickets and grows 4 to 5 feet tall.

It is very hardy, and no winter injury was observed in Zone 2. This species' biggest drawback is its susceptibility to late-season blackspot. But if this can be tolerated, the fruit display throughout fall and winter is more than ample reward.

The floriferous *Rosa hugonis* is native to central China and has single, bright yellow flowers that are non-recurrent. Dark red hips are concealed by very fine-textured foliage (seven to 13 leaflets), so they are not showy.

This species is disease-resistant and has yellow to maroon fall color. The deep brown, slender canes, which can be prone to cankers, bear both prickly and bristly thorns. This rose has a vasselike habit and can grow 6 to 8 feet tall and slightly wider. It is hardy in Zone 5a. *R. hugonis* is still the best single, yellow-flowered shrub rose commonly available.

Rosa spinosissima altaica (*R. pimpinellifolia altaica*) is native to eastern Asia. It is an early, non-recurrent bloomer with single, pale yellow to white flowers and showy yellow stamens.

Small brownish red hips accent fine-textured foliage of five to 11 leaflets. This species is disease-resistant, with slender canes that bear fine prickles and bristles. It has a dense, profusely suckering habit and grows 3 to 4 feet tall. We did not observe winter injury in Zone 5a. This shrub is useful as a dense groundcover.

Rosa setigera is a native to central North America. This late bloomer has single, pale pink, clustered, non-recurrent flowers and small, red, clustered hips that are both abundant and persistent. The bright green foliage, in groups of three to five leaflets, is coarse-textured.

R. setigera is disease-resistant and has orange to maroon fall color and smooth sprawling canes with sparse recurved thorns. The reddish purple young twigs are 12 to 15 feet long.

We did not observe winter injury in Zone 5a. *R. setigera* is a useful shrub rose for naturalistic landscapes and is especially nice when grown on a split rail fence. It can also be used as a

hardy climbing rose.

Rosa virginiana is native to eastern North America and has single, light pink, non-recurrent flowers. The bright red hips persist throughout winter and contrast with the dark green, glossy foliage in groups of seven to nine leaflets.

This species is disease-resistant but is susceptible to rose stem girdler. It has orange to maroon fall color. The red, glossy canes are mostly smooth, with paired, stipular thorns. They are very showy in the winter landscape.

The upright, suckering habit forms dense thickets, and this shrub grows 3 to 5 feet tall. It is winter hardy in Zone 5a. *R. virginiana* was the best all-around performer among the species roses; no other rose can beat it for year-round interest.

Sources for *Rugosa* Cultivars

Hortico, Inc.
723 Robson Road, R.R. No. 1
Waterdown, Ontario LOR 2H0
(416) 689-6984

Roses of Yesterday & Today
802 Brown's Valley Rd.
Watsonville, CA 95076-0398
(408) 274-3537

Pickering Nurseries
670 Kingston Rd. (Hwy 2)
Pickering, Ontario LIV 1A6
(416) 839-2111.

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Recommended *Rosa rugosa* Roses

'**Albo-plena**' (*R. rugosa albo-plena*) is a selected mutation of *R. rugosa* 'Alba', according to Krussmann. 'Albo-plena' has double, pure white, fragrant flowers, dark green foliage and a dense, low habit. It grows up to 4 feet tall.

This cultivar does not produce hips, but it is highly resistant to blackspot and powdery mildew. 'Albo-plena' has yellow to orange fall color and is winter hardy in Zone 5a. It is a good white-flowered cultivar; its only drawback is its lack of hip production.

'**Belle Poitevine**' is an old (1894), hybrid cultivar. It has slightly fragrant, large, semidouble, light mauve-pink flowers with showy yellow stamens. The hips are not showy, and the foliage is dull, medium green. It has yellow to orange fall color and a dense compact habit, reaching 3½ to 4 feet tall and wide.

This cultivar is highly resistant to blackspot and powdery mildew and is winter hardy in Zone 5a. 'Belle Poitevine' is a tough cultivar with attractive flowers, foliage and form. Krussmann and other references do not mention that the flowers are sterile, but hips abscise shortly after they form.

'**Blanc Double de Coubert**' is very similar to 'Albo-plena', differing only in flower form and ultimate height. This hybrid has semidouble

to double, pure white, fragrant flowers and showy yellow stamens.

This shrub is a vigorous grower with glossy, dark green foliage and yellow fall color. It grows 4 to 6 feet tall. It is highly resistant to blackspot and powdery mildew and is hardy in Zone 5a.

'Blanc Double de Coubert' also produces fairly heavy suckers and can get somewhat leggy. References don't indicate that it is sterile, but if hips do form, they abort before becoming showy.

'**Frau Dagmar Hastrup**' ('Frau Dagmar Hartopp') is a *R. rugosa* seedling that proved to be the best all-around performer of all cultivars evaluated. It is a prolific bloomer, with fragrant, light-pink, single flowers and showy yellow stamens.

This cultivar produces very large red hips in great quantity that color as early as July. They appear along with the flowers and remain showy until November.

'Frau Dagmar Hastrup' has excellent yellow to orange fall color, rich dark green foliage, and a low, dense, mounded form growing 3 to 4 feet tall. It has the greatest resistance to blackspot and powdery mildew of any *R. rugosa* cultivar evaluated. It is very hardy; we did not observe any winter injury in Zone 5a.

Further Evaluation Needed

'**Dart's Dash**' is a hybrid recently added to Longenecker Gardens. It has large, semidouble, mauve flowers and large, orange-red hips. The foliage is bright green and showed no sign of disease last season. We are uncertain of its form and hardiness.

'**Roseraie de l'Hay**' is a cultivar of a sport of *R. rugosa* 'Rosea'. It has large double, crimson-purple and very fragrant flowers. The sparse hips are not showy.

We did not observe any black spot, powdery mildew or other diseases on the light green foliage. Krusamann says this cultivar has a bushy form and reaches medium height. Plants at Longenecker Gardens were protected by snow cover during our evaluations, possibly influencing their winter performance. The cultivar is listed as hardy in Zone 2.

'**Topaz Jewel**' is a recent addition to Longenecker Gardens. It is a recent hybrid cultivar and one of few yellow-flowered *rugosa* roses. It is a recurrent bloomer with semidouble, light yellow flowers and showy orange stamens. We did not observe any hip production. The medium green foliage had no evidence of blackspot or other diseases.

'Topaz Jewel' is described as having a dense, bushy habit with arching canes. It grows up to 5 feet high and 7 feet wide. We are uncertain of its hardiness.

Acceptable *Rosa rugosa* Cultivars

'**Delicata**' is an old (1898), hybrid cultivar with large, semidouble, lilac-pink, slightly fragrant flowers and showy yellow stamens. The large orange-red hips are sparsely produced and sometimes occur with the flowers. The dark green foliage turns yellow in fall.

'Delicata' is a vigorous grower with a good, dense form (3 to 4 feet tall) and is winter hardy in Zone 5a.

It is not as disease-resistant as 'Belle Poitevine', but it is useful when a darker pink flower is preferred. 'Delicata' was moderately infected with blackspot in late August and September 1987 but was disease-free during the drier 1988 growing season.

'**Hansa**' is a hybrid cultivar with semidouble, large, purplish red, very fragrant flowers. It produces many orange-red hips, often along with the flowers. This cultivar has dark green, glossy, blackspot-resistant foliage and yellow to orange fall color.

The upright habit is often tall and leggy, and this shrub grows to an ultimate height of 5 to 6 feet. We did

not observe any winter injury in Zone 5a, and 'Hansa' is a good performer except for its leggy habit.

This cultivar and 'Delicata' are rather similar, but 'Delicata' has lighter pink flowers and a better compact habit. 'Hansa' has a superior hip display and is more resistant to blackspot.

'**Scabrosa**' is a rather recent (1950) hybrid introduction. Its large, single, deep mauve-pink flowers have showy yellow stamens and usually appear in clusters of five. 'Scabrosa' produced attractive flowers and fruit, but not as freely as did 'Frau Dagmar Hastrup'.

The large, orange-red hips are abundant, and the bright green foliage is resistant to blackspot and powdery mildew. 'Scabrosa' has yellow to orange fall color and a dense, low, mounded form. It grows 3 to 4 feet tall. This cultivar is very hardy; we did not observe winter injury in Zone 5a.

'**Schneezweg**' ('Snowdwarf') is a floriferous hybrid with semidouble small, white flowers and showy yellow stamens. Small, orange-red, showy

hips often appear with the flowers. The dark green foliage has a finer texture than that of *R. rugosa* but is somewhat susceptible to blackspot. 'Schneezweg' has a mounded dense habit and ultimately grows 4 to 5 feet tall and wide. This cultivar is wintry hardy in Zone 5a.

'**Therese Bugnet**' is a hybrid cultivar with large, double, medium pink loosely clustered and very fragrant flowers. The red hips are rare, and the blue-green foliage is slightly susceptible to blackspot and turns yellow and orange in fall.

The attractive, glossy red canes are somewhat susceptible to rose stem girdler attacks. The upright habit suckers to form dense thickets, and this shrub grows 5 to 6 feet tall. 'Therese Bugnet' is very attractive in the winter landscape due to its shiny red canes and is winter hardy in Zone 5a.

It's biggest drawback is its susceptibility to rose stem girdler. This is not surprising since *R. acicularis*, one of its parents, can be extremely susceptible to this insect.

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Rosa rugosa Cultivars: Not Recommended

'**Agnes**', a hybrid is one of very few cultivars with yellow flowers. This cultivar blooms only once, in early June, and has large, double, pale amber-yellow, fragrant flowers. It does not have hips, and the dark green foliage appears tattered. It is very blackspot-susceptible, and the shrub is usually defoliated by mid-August. This thorny cultivar has an open, leggy habit. It grows 5 to 6 feet tall and wide.

'Agnes' died back to the snow line during the winter of 1987-88. This plant's only merit is its unique yellow flowers.

'**Alba**' is a cultivar of unknown origin with single, white flowers and showy yellow stamens. Orange hips are abundantly produced toward the end of the growing season. The lower leaves of the dark green foliage tend to yellow and drop late in the growing season. 'Alba' is yellow in fall and has an upright, very leggy habit. This shrub grows 3 to 4 feet tall, suckers quite vigorously and is very hardy. We found no evidence of winter injury in Zone 5a.

'**Charles Albanel**' is a hybrid cultivar with double, mauve flowers and sparsely produced red hips. It retains spent flower petals, which detract from the flowers and foliage. The foliage has a finer texture than that of *R. rugosa* and is resistant to blackspot and powdery mildew.

This cultivar has a dwarfed, dense habit and is a weak grower. Five-year-old plants at both the Minnesota Landscape Arboretum and Longenecker Gardens were less than 2 feet tall and wide and were susceptible to rose stem girdler attacks. This cultivar is hardy in Zone 5a.

'**David Thompson**' is a recent hybrid cultivar with semidouble to double, medium reddish pink flowers that retain old, brown petals. Hips are very rare. The fine-textured, dull, medium green foliage is resistant to blackspot and powdery mildew but lacks vigor. The 5-year-old plant in Longenecker Gardens is less than 2 feet tall and wide. This cultivar is hardy in Zone 5a.

'**Dr. Eckener**' is a hybrid cultivar that does not freely produce its semidouble flowers which are a blend of yellow and pink. It does not have hips. The non-rugose foliage emerges coppery and maroon, turning to medium green. It is blackspot- and powdery mildew-resistant. The upright habit is open, leggy and 5 to 6 feet tall. This cultivar is not hardy in Zone 5a; it died back to the ground in the winter of '87-'88.

'**F.J. Grootendorst**', a hybrid cultivar, has small, loosely double, dark pink flowers with fringed carnation-like margins that are borne in clusters. It has no hips. The medium green, glossy foliage is very susceptible to blackspot; it was defoliated by August in '87 and moderately infected by the end of the '88 growing season.

The mounded, dense habit becomes leggy when diseased lower foliage drops. This shrub is very thorny and grows 4 feet tall and wide. This strong grower is not hardy in Zone 5a. It died back to the ground when temperatures fell to -21° .

The hybrid cultivar '**Flamingo**' has large, single, medium pink, attractive flowers whose petals surround a cluster of long, darker stamens. The green, small hips are rare and not showy. The light green foliage is very susceptible to blackspot, as plants were totally defoliated during the '87 growing season.

This shrub grows 3 feet tall and wide and has a mounded form. 'Flamingo' is not hardy in Zone 5a. It died back to the ground during the '87-'88 winter.

'**Grootendorst Supreme**' is a sport of 'F.J. Grootendorst', similar to its parent in every respect except for its crimson-red flower. Of the Grootendorst group, 'Grootendorst Supreme' was observed to be the most blackspot resistant but is still quite susceptible.

'**Henry Hudson**', a recent hybrid introduction, has pink buds that open to semidouble, white flowers with tinges of pink. It retains old brown petals, and the small, red hips are not showy or abundant.

The fine-textured foliage tends to drop interior leaves and is unattractive throughout most of the growing season. Low-growing, 8-year-old plants measured only 3 feet tall and wide. This weak grower is very susceptible to rose stem girdler but is hardy in Zone 5a.

'**Jens Munk**' is a recent hybrid cultivar with medium pink, semidouble flowers and showy yellow stamens. It retains spent flower petals, and the small, red hips are rare and not showy. The medium green foliage is fine-textured and resistant to blackspot and powdery mildew.

'Jens Munk' has an upright, somewhat leggy form. This cultivar is a weak grower; 5-year-old plants in Longenecker Gardens are only 3 feet tall and wide. It is also very susceptible to the rose stem girdler but winter hardy in Zone 5a.

'**Martin Frobisher**' is a recent hybrid cultivar with double, light pink, fragrant flowers that retain unattractive brown petals. It doesn't have hips, and the light green foliage is unattractive and disease-susceptible. Plants dropped lower and interior foliage during both growing seasons. This shrub has an upright form and grows 4 to 5 feet tall. 'Martin Frobisher' is hardy in Zone 5a.

'**Mrs. Anthony Waterer**' is a hybrid with large, semidouble, purplish red, fragrant flowers that are not freely produced. The hips are insignificant. The non-rugose foliage is slightly bronzed when emerging then turns medium green. It is susceptible to blackspot. The vase-like form is very open and leggy. This cultivar is not hardy in Zone 5a; it died to the ground in Longenecker Gardens during the '87-'88 winter.

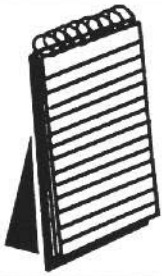
'**Pink Grootendorst**' is a sport of 'F.J. Grootendorst' and is similar except for its medium pink flower.

'**Rose a Parfume de l'Hay**' is a hybrid cultivar with large, double, dark pink, fragrant flowers that are not freely produced. It does not have hips. The bronzy red foliage is not rugose and turns medium green. It is very susceptible to blackspot and is often chlorotic. This cultivar has an open, leggy form. It is not hardy in Zone 5a; in Madison, it died back during the winter of '87-'88.

'**Sarah van Fleet**' is a hybrid cultivar with large, double, rose-pink, cupped, fragrant flowers. Its hips are small, green and unattractive. The dark green, coarse, glossy foliage is not rugose and is resistant to blackspot and powdery mildew. The sprawling, open habit is very leggy, with canes 6 to 8 feet tall. This cultivar is hardy in Zone 5a. 'Sarah van Fleet' makes a poor freestanding shrub because of its tall floppy canes but it could be useful as a hardy climbing rose.

'**Sir Thomas Lipton**' is a hybrid cultivar with cupped, double, white, fragrant flowers. It has a severe problem with brown-petal retention. It does not produce hips, and the dark green, leathery foliage is somewhat susceptible to blackspot. The stiff, upright habit is often open and leggy at the base. This very thorny cultivar grows 5 to 6 feet tall. It is not hardy in Zone 5a, where canes died back to the snow line at -21° .

'**White Grootendorst**' is a sport of 'Pink Grootendorst' and is similar except for flower color and vigor. It is disease-susceptible and a very weak grower.



Anticipation, Participation, Excitement

By Monroe S. Miller

These days the ceiling of our office is as high as the sky and the walls stretch to the very boundaries of the golf course itself. There are a thousand things that make the spring season on a golf course so special and such fun.

Golf course superintendents throughout the cool season regions of America see the new golf season as a time of anticipation. Haven't you spent months planning, organizing and preparing for what we all expect will be our very best year ever?

Despite the fact I am crowding middle age pretty hard, a lot of the fun I'm having is a result of taking an active role in the actual work on the course. Some is really necessary because the students aren't done with the semester yet. Every warm body helps.

It's easier to help with the work now because these are such great growing days—deep grass roots, moderate daytime temperatures and cool nights. You can mow and plant and cultivate and fertilize, the very things that interested you in this business in the first place.

You've got to savor it all because soon this kind of participation will be impossible and you will have to let go until autumn.

The excitement of this golf season started early for me, about the time in March when I pretty much knew the golf course had overwintered as well as it ever had. It was exciting to see players again on opening day, to watch mowing patterns evolve and to move all 18 holes into mid-season form so early.

Maybe best of all was having Vincent at work everyday. The golf season doesn't really get underway until he's at work again.

The spring season is one when we are especially interested in Wisconsin's soil conditions. Things like frost depth, moisture content and soil temperatures influence early planning for the golf season.

A lot of what we know is reported to us and the rest of the public by statisticians in the Department of Agriculture, Trade and Consumer Protection.

Where do they get their information? For the past 29 years, Wisconsin's grave diggers have been reporting soil conditions to the DATCP.

Grave diggers from all over the state check in with the stat people in the Ag Department and give data on snow depths, frost depths, moisture, etc. The reports are biweekly from December through March. They fill out index cards that even call for information like the necessity of heating soils before digging.

Wisconsin is one of very few states that make use of the tremendous information given by the grave diggers. Their reporting is a great resource for all agriculturalists, including golf course superintendents.

Tree planting is one of the great tasks of spring. While we were waiting for a meeting to begin last month, one of our Club directors and I were lamenting the loss of all the American elms on our golf course ten to twenty years ago. Tree planting has dampened their loss somewhat.

The Regal, the Sapiro Gold and the American Liberty elms we have planted on our golf course are not yet large enough to judge how well they'll replace the American elm. At least we have them to plant.

Well, soon there will be two more elms to choose from. These new cultivars are resistant to Dutch elm disease and are slowly working their way toward the market and wide availability. Both were developed by the University of Wisconsin-Madison.

"New Horizon" is the most disease resistant elm of the university's selections. It is a vigorous elm that has a full crown, grows well and tolerates harsh conditions. It inherits large, dark green leaves from its maternal parent, the Japanese elm. Its upright form and

disease resistance come from its paternal parent, the Siberian elm.

The other new elm has been christened "Cathedral". It shares the same parents as "New Horizon" only in reversed order. The mother is the Siberian elm and the father is the Japanese elm. "Cathedral" is a little more spreading than "New Horizon" and not quite as hardy.

Both of these cultivars are currently in production and await patents. The Wisconsin Alumni Research Foundation (WARF) applied for those patents late last year.

He really did it this time. Rob Schultz, GRASS ROOTS columnist who is also a sports writer for *The Capital Times*, has won a first-place award in the national contest of the Associated Press Sports Editors.

Rob received the top honor in enterprise reporting for papers with a 50,000 circulation for his six part series "The Student/Athlete: Torn Between Two Masters."

The series was published last May. He examined curriculums, admissions and graduation rates in Big Ten schools. He uncovered many reasons why Michigan and Iowa, for example, have better basketball and football teams than Wisconsin and Northwestern (gravy majors, easy admissions, no classes!).

The series was a classic example of Schultz and his work—detailed, thorough, in-depth and extremely well written. He left no stones unturned in his award winning work.

As you have read in years past, Rob has always finished high in this annual contest. This was his first first-place win, however. I'll bet it won't be his last, either.

Congratulations to a talented gentleman.

I couldn't believe the words before me as I read a letter the GCSAA's Pat

Jones sent to chapter presidents, government relations liaisons and newsletter editors.

The subject was "product warning". GCSAA learned that DuPont has issued an immediate recall of all Benlate 50 DF, Benlate 1991 DF and Tersan 1991 DF brand fungicides. The warning said these products should NOT be used or sold. Any golf course superintendents with any of these products should return them to the place of purchase for full credit.

DuPont believes the products may have been contaminated with low levels of atrazine and could therefore injure turfgrass or other plants. The company plans to keep the products out of our marketplace until it can verify their purity. If you have any questions, call DuPont at 800-441-7515.

DuPont plans to notify all customers who have purchased their benomyl fungicides of this problem. I won't wait until then, however. The stuff is coming off my shelf right now.

When I first started working on a golf course many years ago, Peter Miller taught all of us the importance of courtesy and the art of doing our work in a way that would distract players the very least.

One quickly learned of the reasons why a low profile is important. There are, of course, the serious and competitive players who are focusing on their game and score.

There are people on the course who have busy and active lives and want complete peace and quiet. Others

might be involved in side games, sometimes for sums greater than nickels and dimes and quarters. Those cats REALLY don't want to be disturbed.

And then there are those folks on the golf course—your golf course—to do business. There are more business deals cut and more decisions made on the course than any of us may realize.

So much so that a gentleman named Peter T. Braun has been giving seminars on "Powergolf—the game of cutting deals on the links".

A sampling of his lessons goes like this:

- don't fling that five iron; it might cost you a sale.
- if your prospective client refuses to take a penalty stroke for losing a ball in the rough, let him. But remember the guy is a cheat.

"Golf is not just a game—it's a business strategy," says Braun. His seminars are aimed at corporate executives new to the game.

"We believe that knowledge of the rules and etiquette of golf are just as much good solid business tools as any negotiating skills that a person might have."

Powergolf divides 18 holes of business golf into three parts:

- The first six holes establish a foundation for a relationship;
- The second six build rapport;
- The final six strike an alliance that could lead to a sale or a choice assignment.

"We don't emphasize trying to close deals on the golf course. The only thing you want to close is the date of the next

meeting, the chance to show your product and continue the relationship," Braun said.

The National Golf Foundation says the number of U.S. golfers more than doubled, from 11.2 million in 1970 to 24.7 million in 1989, and that nearly 12 percent of them play for business reasons.

Braun's program helps those previously unable to participate in golf outings, for example. He wants to reach novice golfers whose lack of knowledge about the game could undermine their ability to make an effective sales pitch or appear breezily confident while strolling down the fairway with a couple of potential clients and the boss.

"Understanding the proper timing and proper ways to address business issues is going to increase their confidence and comfort," Braun says. He reviews the game's rules and lessons on how to size up people as business associates as they line up their putts.

Players who don't repair their ball marks or replace divots probably won't attend to business details, according to Braun. And those who hit out of turn may not be team players.

He charges handsomely for his seminars, charging \$199 for the basic one-day course to \$499 for a weekend package that includes golf lessons and an 18-hole round.

Many golf course superintendents understand all of these bits of advice very well. I wonder if Pete Braun needs an instructor. . . ?

I was able to attend some superb educational meetings this past winter. In addition to the national and our own WTA meetings, I attended the UMASS Conference and the USGA Green Section regional meeting.

As you probably know, the UMASS conference is organized and chaired by Dr. Joseph Troll. Even though he is retired, he remains active in our profession.

Dr. Troll was the 1991 recipient of the USGA Green Section Award. He was most deserving of this high honor. His acceptance speech at the GCSAA banquet was the best I've ever heard. What a story his career has been.

That part of the education season is well over. Many golf course superintendents and faculty from around the country's turf management programs are planning for this summer's round of field days.

Dr. Bruce Branham dropped me a

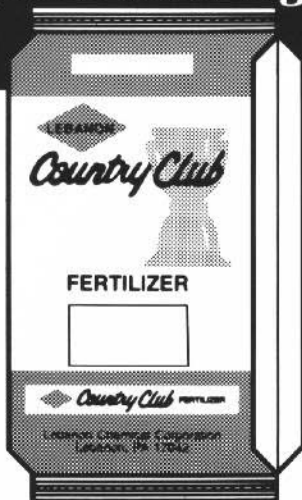
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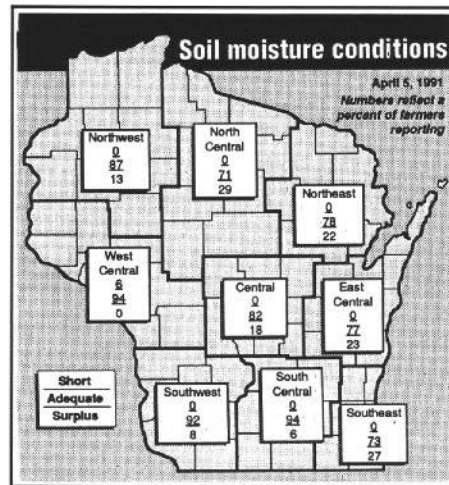
note and asked that we announce the Michigan State University Field Day for 1991 to GRASS ROOTS readers. It will be held on Thursday, August 22, 1991 at the Hancock Turfgrass Research Center on the MSU campus.

It's been both fun and interesting to watch the success and growth of Waupaca Sand as a part of our industry. From some sales of topdressing sand to Wisconsin golf course superintendents, they have grown to the point where they have opened a Pacific Rim Division.

Leading the way, in my opinion, has been Christine Faulks. The company named the part of the operation we deal with "Greensmix" and Christine has forged it into the country's leading rootzone mix blender. It is also the first company to set up custom blending in Guam.

Congratulations to all involved in the success of this Wisconsin family business.

The accompanying graphic, compiled from the Wisconsin Statisticians Service, clearly shows the complete reversal in soil moisture status from two years ago.



These statistics show the only place any soils are short of moisture is west

central Wisconsin. An even there only 6% are in the deficient category.

It will be very interesting to see the stats for the next period. One week after these numbers were recorded, we had 4.25" of rainfall at our golf course! That widespread precipitation across the whole state certainly sets the golf courses up for a good start to the season.

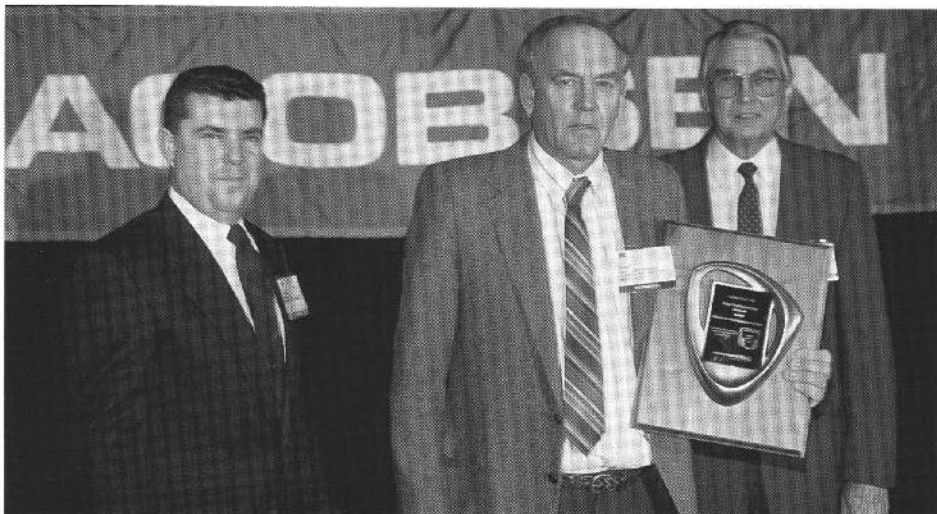
Our sympathy goes out to Danny Quast this spring as he grieves the loss of his daughter, Ann Quast-Pinter. Ann passed away on February 28, 1991 at the tender age of 21. She was diagnosed as having a rare form of leukemia.

It is impossible to say how much one can miss a daughter, especially when she is as close to her father as Ann was to Danny. We can only offer condolences, support and understanding.

Jacobsen Names Wisconsin Turf Top Performer

Jacobsen Division of Textron honored Wisconsin Turf Equipment Corp. in Janesville and New Berlin with the company's Top Performer Award. The award was presented to Wisconsin Turf President Dennis Christopherson during the Golf Course Conference

and Show in Las Vegas in February. Wisconsin Turf was selected from among the company's most successful North American distributors for its outstanding sales and service efforts in 1990.



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(Continued from front page)

one priority of the Long Range Planning Committee and the top spot in the 1991 budget.

How did it happen so fast? Well, a number of factors fell into place quite nicely. First and foremost, the leadership of the Board of Directors, the Long Range Planning Committee and the Green Committee all agreed that immediate action was needed to update our maintenance facility. Second, the Long Range Planning Committee was receptive to a building project that could be paid by budgeted capital improvement funds and did not require an increase in the club's mortgage debt. (NSCC completed a \$1.25 million clubhouse renovation in 1988 and the Long Range Planning Committee did not want to extend the club's line of credit.) And third, the current focus on environmental issues made the entire membership aware of the need to improve our pesticide storage-mixing-loading capabilities.

You can see that to a certain extent, my success in persuading club officials that we needed a maintenance facility was a function of the right people being in positions of influence and power. Nothing at all would have been done, however, if I had not made some noise and communicated the problem. I guess the old squeaky wheel theory really does work.

What was the next move? Why, form a committee to plan the new maintenance facility of course! The truth is I cannot complain a bit about the committee that was formed because it contained engineers and building contractors that did not want to screw around: they wanted a reasonably priced (not cheap), well-constructed building. Once again, the right people in the right place made it much easier to move the planning process ahead.

Chapter 2 — Rip It All Down and Start Over

For the first meeting of the maintenance facility committee, I was charged with coming up with a preliminary design that incorporated all my requirements and also described how the two existing buildings fit into the picture. Does that sound like a blank check, or what? Well, it did to me and I didn't waste any time in filling in the blank.

My first move was to contact several superintendents who had just recently finished planning or building a new main-

tenance facility. I added their ideas and experiences to mine and tried to come up with a better mouse trap. What I ended up with was a 60'x160', two story building with 13,600 sq. ft. of usable floor space. Believe me, it had all the bells and whistles!

As for the two existing buildings (along with an old farmhouse that is used for winter storage), I figured we could tear them down after the new building was up and running. After all, they were outdated, utilized space inefficiently and had a few structural problems. Besides, they were old!

Well, I got straightened out at our first committee meeting. First off, a building with 13,600 sq. ft. of usable floor space would cost approximately \$340,000 (assuming construction costs of \$25 per sq. ft.) Secondly, tearing down the 3 existing buildings would cost an additional \$30,000. And last of all, paving, landscaping and site work would add another \$40,000. The \$410,000 price tag was too rich for NSCC blood.

I knew that would be the case, but I wanted to start at the top and work my way down. Sometimes if your aim isn't high enough, you don't hit the intended target.

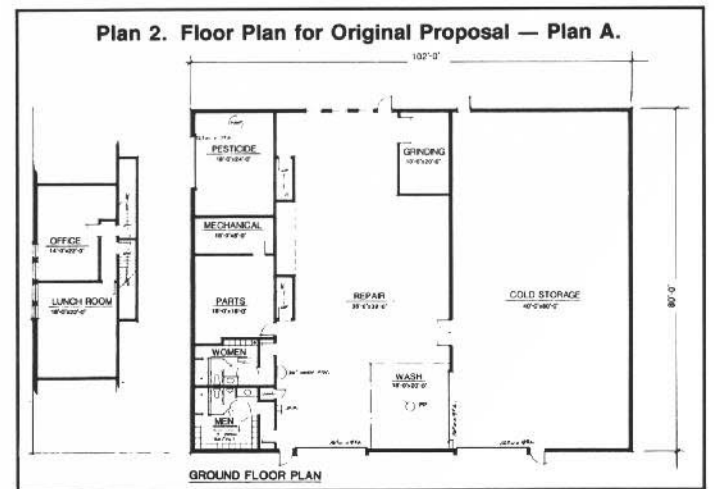
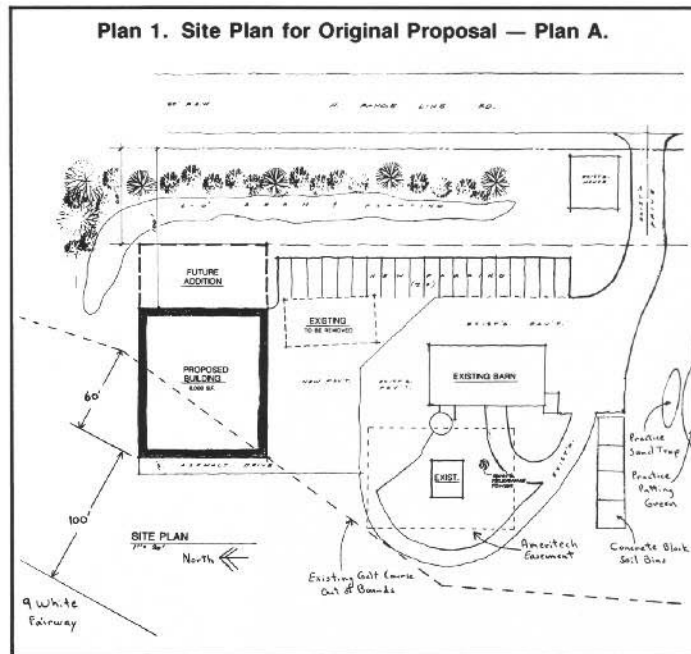
After further investigation and more meetings, the committee came up with these recommendations:

- 1) The new maintenance building should have 9,000 sq. ft. of usable floor space and cost \$225,000 (based on \$25 per sq. ft.).
- 2) Paving, landscaping and site work should not exceed \$30,000.
- 3) The barn should be kept and reinforced at a cost of \$10,000.
- 4) The farmhouse should be kept and used as storage space for the clubhouse.
- 5) The 1,800 sq. ft. building should be torn down at a cost of \$5,000.

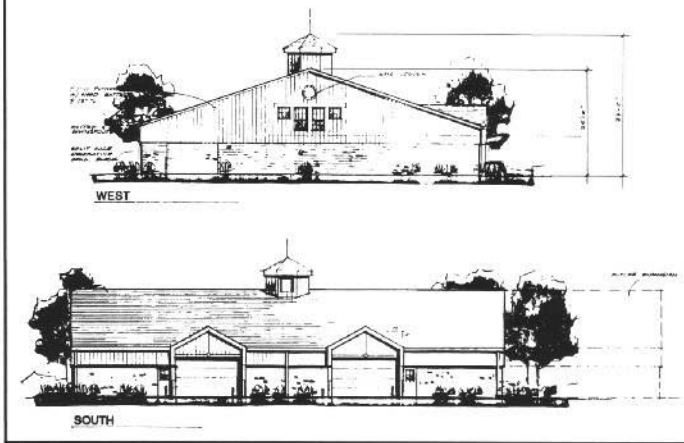
I was extremely pleased with these recommendations since the net result was a two building maintenance facility with 14,000 sq. ft. of usable floor space. The total cost of \$270,000 fit into the budget so the project was still full speed ahead.

Chapter 3 — Pretty Pictures

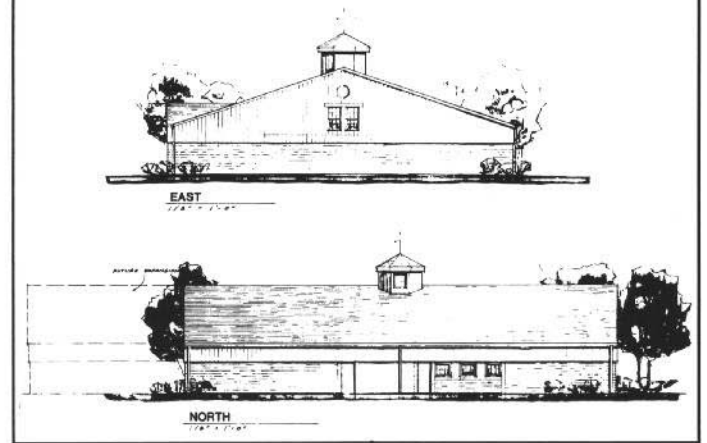
With a neighborhood of \$400,000 homes right across the street from the maintenance facility location, the committee was very sensitive about the appearance of both the new building and the entire maintenance complex. To assist us in designing a maintenance building that didn't look like a maintenance building, we engaged the services of BHS Architects, Inc.



Plan 3. Elevation Plan for Original Proposal — Plan A.



Plan 4. Elevation Plan for Original Proposal — Plan A.



The intention was to have BHS come up with the concept drawings needed for the City of Mequon's Planning Commission and then have the builder we select use the concept drawings to draft the detailed construction documents required by the State of Wisconsin.

Throughout the rest of the story, I will be referring to Plans 1-8 which accompany this article. Plans 1-7 are BHS drawings and Plan 8 is the work of Wandsneider & Associates, NSCC's landscape architect. All the plans are reduced copies of actual blueprints.

At our first meeting with BHS, we were given a capsule look at the best way to get our building approved by Mequon's Planning Commission. These were the recommendations:

- 1) Keep the building as small as possible and as low as possible—a two story design may not be approved.
- 2) The building should contain architectural features that disguise the appearance of a big rectangular shape.
- 3) The exterior must be constructed from all natural materials—no steel will be allowed.
- 4) The roof should match the angle of nearby homes and be constructed with textured asphalt shingles.
- 5) The entire maintenance facility complex should be hidden behind landscaped berms.

Combining our desire to build 9,000 sq. ft. of usable floor space with the recommendations of BHS, we arrived at the building design shown in Plans 1-4. Features of this design included:

- 1) An 8,000 sq. ft. first floor.
- 2) A profile that lowers the roof peak 6' under that of a similar two story building and results in only 800 sq. ft. on the second floor and 9' high overhead doors that are just tall enough for my largest equipment.
- 3) Decorative concrete block walls that are 12' high.
- 4) Extensive wood, board and batten siding that matches the barn.
- 5) An acceptable roof angle and shingle material.
- 6) Special architectural treatments such as dormers for overhead doors, decorative windows and an oversize cupola.

We all realized that these exterior, cosmetic touches would increase the cost of the building and probably force us to make some cuts in some of the interior details. The added expense was accepted as the cost of being good neighbors and constructing an attractive building that would not adversely affect property values in the surrounding residential area.

Most of the floor plan shown in Plan 2 is pretty much self explanatory with the exception of the 2 stairways to the second level that are required by State of Wisconsin Building Codes. I think you would agree that every superintendent has his own ideas on how to lay out a maintenance facility. Plan 2 represents my best effort based on the restrictions imposed by the size and height of the building.

I'm sure you're interested in my inclusion of a pesticide room in the building.

The building was placed on the site facing south (see Plan 1) which would present only an 80' exposure of the building towards the neighboring homes to the east. Extensive berms and landscaping along Range Line Road screens the building and the adjacent parking area. The existing 30'x60' building would remain during construction and then be torn down to make room for the asphalt shop yard. I'll cover some of the other details shown on Plan 1 in a future chapter.

Chapter 4 — *Red Tape*

As many of you know, dealing with government agencies can be a true test of a person's patience and determination. In most situations, I usually have just enough of the former and an excess of the latter. This time, however, I wasn't quite so sure!

First came the City of Mequon, where we needed approval from the Engineering Department and the Planning Commission. I was surprised to learn that the city was mainly concerned with the appearance and location of the building. How the building functioned on the inside was of virtually no concern. Given the care taken in the design and location of the building, I assumed that gaining city approval would be relatively easy. We'll see if I was right in the next chapter.

Next came the State of Wisconsin, where the detailed construction documents are reviewed by the Department of Industry, Health and Labor Relations (DIHLR). It is here that the structural design and the interior functions must be approved.

In order to insure DIHLR's approval of the building, I had many conversations with Madison early on in the project. I assumed that the construction documents generated by our builder would satisfy all the structural requirements and bath and locker room specifications found in the various state building codes. I was really only concerned about one part of the building—the pesticide room.

(Continued on page 21)

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