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# IN DEFENSE OF THE MOUND

Golf course mounds always have been around. I see what appear to be "built" mounds even at the Old Course. Donald Ross included a chapter in "Golf Has Never Failed Me" called Solid Mound Work. But, modern golf course architects expanded earthmoving as artwork compared to their predecessors, until the past few years, when it's fallen out of favor.

Owners and golfers are tired of 1990s style golf course mounds, and they're vilified now because of overuse and misuse. Even I'm tired of them and have become a reformed mound-a-holic.

Believe it or not, golden age architects used mounds similarly to modern architects – to support bunkers and frame greens. They built at smaller scales with horses and scoops, creating subtle slopes that looked natural and artistic. Time has helped mounds season, as tree planting and changing grass lines keep them from looking artificial. After World War II, mechanized earthmoving evolved and so did mounds – they became bigger and more prolific. But, they looked more repetitive and less natural for many reasons:

- **Paper-designed mounds** related too strictly to greens or fairways, typically fitting repetitively on most inside mowing curves, rather than following random patterns.
- **Philosophy.** With bulldozers, mounds were built to stand out as man-made, not blended in as natural.
- **Repetition.** No golf course architect or shaper is as varied as nature. Many mounds start looking alike. The tendency is to build mounds of similar height and slope no matter how much we try to emulate natural contours. Even when a green site has a gentle side slope, the backing mounds are often built to one height, rather than having the highest mounds on the higher natural side of the green.
- **Steepness.** When economics became more difficult, architects saved fill and construction costs by building steeper slopes. Robert Trent Jones and others built 5:1 to 7:1 slope, which looked natural in rolling terrain. Later, to get higher and more dramatic, mounds were often built at 3:1 slopes – the maximum slope most mowers can handle – or even steeper on Scottish links courses.
- **No feathered slopes.** Even steeper slopes can look good if the toe of slope ties naturally into natural grade at 6:1 or greater, even if the bulk of the mound is fairly steep. Many architects lost sight of this.

However, mounds can be built to look good, and they have many practical, visual, strategic and speed-of-play uses. They:

- Create a sense of enclosure on fairways and frames for greens to defined spaces. Trees do this, but on open land, mounds and ridges separate holes more cheaply and immediately than immature plantings.
- Hold approach shots without sufficient back spin near the green, a problem for average players. With faster greens and flatter slopes, those shots roll further, making small backing mounds more necessary.
- Encourage good players to play more aggressively at back pins.
- Contain shots on fairways or doglegs.
- Artificially create a valley fairway, which is always a comfortable shot.
- Help with distance judgment.
- Create variation in fairway landing areas and lies, especially in landing zones beyond 300 yards, where building bunkers for the few long hitters isn't justified.
- Test the short game around greens.
- Create shadow patterns for aesthetics.
- Screen objectionable views.
- Provide safety from adjacent fairways or practice areas.
- Give landscape plantings a good head start on achieving a desirable height and show off plantings by allowing back plantings to be higher than front ones.
- Hide cart paths.
- Create drainage.

While mounds solve some problems, they create others:

- They take longer and are more dangerous in some cases to mow.
- They require more irrigation and/or often dry out.
- While they contain off line tee shots, wild shots clearing the mounds have a blind approach and potential safety problems.
- When hot approach shots land wide of the mounds, they result in a difficult pitch.

Hopefully, mounds will find favor again, at least if used where they serve one or more valuable purposes and are built to fit the site, rather than being the be-all end-all of design. They deserve a better reputation than they currently have. **GCI**


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# IT'S TIME TO BUY

Because of the industry's difficult state, I gathered information about buying opportunities in the irrigation segment. The hurricanes of 2005 impaired our ability to receive raw materials needed to manufacture irrigation products, as well as the refineries needed to fuel the extruding, causing prices to skyrocket.

Allied products (pipe, wire, fittings, etc.) constitute between 30 and 40 percent of the total cost of an irrigation system budget. Therefore, the hurricane-related price increases and global demand for allied products have caused increases as much as 100 percent for goods in a short period. These increases, along with the workload contractors were carrying in 2005 and 2006, made projects extremely expensive and created challenges to purchasing quality goods and scheduling installations.

But that's not the case now. We've seen incredible buying opportunities related to irrigation system renovations or new installations that are the opposite of what was happening four years ago. Here's what various experts in the manufacturing and distribution segments are encountering.

With about 200 miles of wire on an average 18-hole golf project, the copper market's volatility has a significant impact on the irrigation industry. In the middle of 2008, according to the London Metals Exchange, the world copper inventories were about 120,000 tons, and copper was at about $4 per pound, says Vince Nolletti, vice president of irrigation and lighting operations at Paige Electric Co. By the end of 2008, the inventory levels had increased to 340,000 tons, and copper dropped to $1.29 per pound. The copper market, like other commodities, responds to supply and demand.

"Right now, there's never been a better time to execute a construction project," Nolletti says.

Like copper, piping (which can equate to about 25 miles on an average 18-hole project), was hit hard by the hurricanes of 2005 and world demand; plus, it's affected by petroleum costs.

Raw material pricing has stabilized finally, says Jack McDonald, president and chief executive officer of Lasco Fittings. With continued declines in the housing market and recent reversals of energy pricing, material costs have returned to normal again.

"Since 2005, procurement of steel, concrete and plastic has been a nightmare for the golf industry," McDonald says. "Gone are energy surcharges, material shortages and capacity constraints that forced suppliers to quote product at the time of shipment. Right now is a great time to construct an irrigation system because courses can secure materials at favorable rates without the fear of unbudgeted price increases and costly overruns."

Before, quotes for irrigation projects expired quickly, and delivery dates couldn't be secured. These two issues gave contractors and owners heartburn. Those days are over. Like copper, prices have stabilized and declined, and you can receive materials in a timely manner.

Regional product distributors have had an enormous challenge packaging all the components – allied and whole goods – necessary to install an irrigation system. Distributors know firsthand about the price increases from 2005 because of the challenges related to warehousing and transportation costs.

"Based on projects quoted last summer, we're realizing an across-the-board cost decrease of 26 percent, seemingly from stabilized overhead costs and drastically decreased PVC and wire costs," says Craig Jerome, golf irrigation sales manager for MTI Distributing, which covers seven states throughout the upper Midwest.

John Goetz, vice president and manager of Hector Turf, a southwest distributor, says the company compared costs, and if it uses a bill of material of $1 million from a project 8 to 12 months previously, that same bill of material would be decreased by about 26 percent, or a difference of $260,000.

"I've been in this business for 41 years, and this is the most drastic change in material cost over such a short time frame," Goetz says. "This is a great opportunity to save large costs."

The other factor is the labor cost and how contractors are willing to make reductions.

"We just went through a major renovation bid, and this is the first time the architect saw bids come in $1 million below budget," Goetz says.

The cost of money is conservatively 2 to 3 points lower than 12 to 18 months ago. The cost of goods has declined as much as 25 percent, and contractors have great incentives to keep their people working. For any golf course considering a 25- to 30-year irrigation investment, it makes business sense to take advantage of the environment we face today and secure a healthy future. **GCI**

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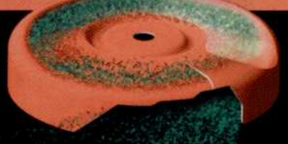

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**Monroe Miller** is a retired golf course superintendent. He spent 36 years as superintendent at Blackhawk Country Club in Madison, Wis. Miller can be reached at groots@charter.net.

# THE UPSIDE OF A RECESSION

The day I've been anticipating came on Dec. 31, 2008 – the day I retired. After 36 years at the same golf club, another six years as an undergrad and grad student in turf, and two years as a draftee soldier in the Army, it seemed to be a good time to do so. I've been dreaming for quite a while of an endless string of unstructured days to do as I please.

I'm 62 years old, in good health and have had notebooks full of things I've wanted to do for years. What could be fairer than to hang up my cup cutter at this time?

For the past two years, club officials helped me develop a plan to bring my rewarding career to a close. For more than a decade, my wife and I have worked closely with a financial planner. We had a plan, goals, discipline and the opportunity to be in great shape for retirement. We are savers and have avoided impulse purchases – imagine living in Wisconsin not having a boat or a snowmobile.

Our three children are grown, educated and married. Our house has been paid for. We own our vehicles and don't owe anyone anything. I vote in all elections, keep my lawn mowed, shovel snow from the sidewalks immediately, follow rules and attend church on Sundays.

I was prepared and ready to move on to the next era of my life at a time when others were sort of sorry to see me go rather than wonder how they were going to get rid of me. I was a happy man.

And then the massive economic tsunami hit, seemingly out of nowhere. Few have escaped damage from what has turned out to be a global financial crisis. The Dow is down about 40 percent from its high point in 2007, the country has lost nearly 500,000 jobs a month since September, there's a home mortgage crisis of huge proportions, and the credit markets are in turmoil. The auto companies are hanging on by a thread and asked for an enormous handout from the taxpayers.

These are uncertain times for our country and downright scary for those who are already retired or, like me, newly retired. My wisecracking brother jabbed me, saying, "You sure know how to pick a prime time to retire!" And yet, at the risk of being called a Pollyanna, I can't help but feel optimistic. I'm sure the beginning of a new year helps, as does a new president. A look at history offers the reassurance I need.

Since my birth in 1946, the U.S. has experienced 10 economic downturns – recessions, if you will – before the current one. Half of them occurred before my first day as a golf course superintendent, Jan. 1, 1973, so I can't relate to them.

Superintendents have proven themselves to be excellent, practical and sensible managers... almost all will come through stronger, savvier and perhaps even more imaginative...

The other five recessions happened during my career, and, honestly, I have only a vague recollection of each one's impact on our golf course budget. Those recessions were in 1973, 1980, 1981, 1990 and 2001. Granted, none were as deep or as severe as the current recession, but it's worth noting each was followed by a period of recovery and expansion that lasted several times longer than the preceding recession. I looked back through my file drawers full of budget data, and in the case of our modest golf club, each year of a recession was indeed followed by budget increases. If history counts for anything, my experience in golf has to offer some consolation.

The real issue today is that the current economic mess comes at a time when golf is already struggling nationally with decreased interest and fewer rounds played. It's a tough environment made worse by the economy.

Predictions are that we'll come out of this in late 2009 or 2010. The optimist will conclude that if we can tough it out for a year or so, we should be in for an extended period of prosperity after that, a time when retirees especially can again enjoy the fruits of their lifelong labor. Let's hope so for golf, too.

There are many positives we can take from our current economy, if willing. Course maintenance can be reduced without reducing the enjoyment or camaraderie for players, at least for the short term. I ask myself every once in a while why we ever mowed fairways seven days a week with baskets and triplex greensmowers. And did we actually need those 25 cards in the timecard rack? There are untold questions like those we can all ask.

Material inputs can be reduced somewhat. There might not be a better time to get golfers to reconsider the definition of quality playing conditions. More careful borrowing, stretching machinery life a little longer, and considering a joint ownership arrangement with other courses of some specialized pieces of equipment could all be helpful. We can remind ourselves there's a difference between what we want and what we need.

Superintendents have proven themselves to be excellent, practical and sensible managers. Put in the circumstances we now face, almost all will come through stronger, savvier and perhaps even more imaginative than in the past.

And from old John Wordsworth comes this poetic advice he offered in 1807:

"The world is too much with us;
late and soon,
Getting and spending,
We lay waste our powers;
Little we see in Nature that is ours;
We have given our hearts away,
A sordid boon!" **GCI**

# CONSUMER RESEARCH

A glimpse of how golfers' behavior affects the business of facility maintenance and management.

# BELOW THE EQUATOR

Although the game of golf appeared in South America about the turn of the 19th century, its popularity has grown significantly only during the past 10 to 15 years. Recent growth can be attributed partly to growing economies and the success of players such as Angel Cabrera, Eduardo Romero and Camillo Villegas.

As the elite image of the sport decreases slowly, the game is becoming more accessible to a larger share of the population, facilitated by the opening of new driving ranges and public and semipublic golf courses. The promotion of several South American areas as golf tourism destinations also has helped the game's popularity and golf resort development.

There are about 120,000 golfers in South America out of a population of about 380 million. The 0.03 percent golf-participation rate is very low, but the number of registered golfers is increasing – at more than 10 percent annually in recent years.

The average membership base of an 18-hole golf course in South America is about 550. It's less than half at nine-hole facilities. The average membership size at 18-hole courses is almost 50 percent higher than in the Caribbean but lower than most European regions.

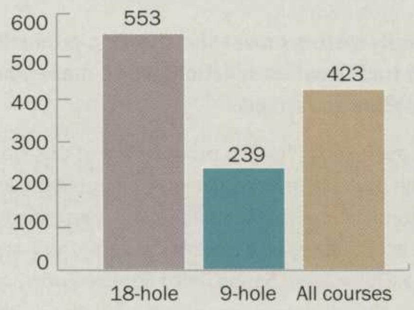
Golf courses in Argentina reported a lower average membership base than the South American average – 363 versus 423, considering facilities of all sizes. This number may be because of the country's larger golf course supply. On the other hand, some 18-hole courses reported more than 1,000 members.

The average number of rounds played on the continent's 18-hole golf courses was about 13,500, which is very low compared to other surveyed regions, especially with such favorable climate conditions. Golf can be played almost year-round in South America. The region's top-performing facilities recorded 26,600 rounds on average, with some courses reaching 30,000 to 35,000 rounds.

The majority (74 percent) of recorded rounds was played by club members, while green-fee rounds represented a quarter of the total rounds played. As expected, the share of member rounds and green-fee rounds were correlated to course location. Eighteen-hole courses located in country clubs and residential communities reported a high percentage of member rounds (between 70 percent and 80 percent), while facilities located in tourist resorts and in parks, which mainly operate on a pay-and-play basis, recorded a higher percentage of green-fee rounds – 58 percent and 78 percent, respectively.

*Source for text and charts: KPMG's Golf Benchmark Survey 2008*

**AVERAGE NUMBER OF MEMBERS BY SIZE OF GOLF COURSES IN SOUTH AMERICA**

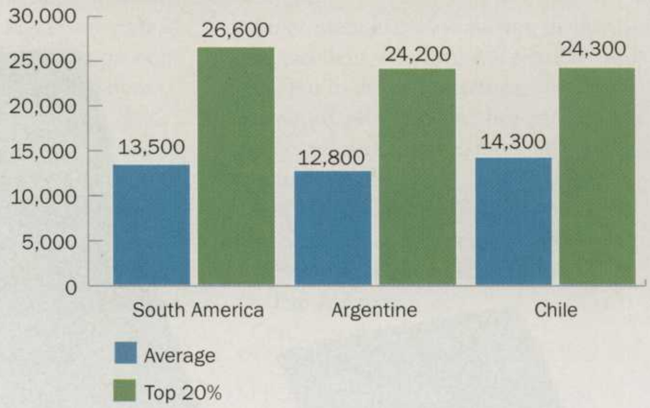



**SUPPLY AND DEMAND FIGURES FOR SOUTH AMERICAN COUNTRIES (2008)**

| Country | Courses | Players | Participation rate |
|---|---|---|---|
| Argentina | 264 | 48,300 | 0.119% |
| Bolivia | 9 | 1,500 | 0.016% |
| Brazil | 107 | 25,000 | 0.013% |
| Chile | 60 | 14,000 | .084% |
| Columbia | 47 | 11,000 | .025% |
| Ecuador | 10 | 1,500 | .011% |
| Paraguay | 6 | 1,200 | .018% |
| Peru | 14 | 2,900 | .010% |
| Uruguay | 9 | 1,700 | 0.049% |
| Venezuela | 24 | 10,500 | .037% |
| **Total** | **551** | **117,600** | **0.031%** |

*Source: National golf federations with KPMG elaboration*
1 Approximate numbers, received from federations
2 Share of registered golfers among the country's population

**AVERAGE NUMBER OF PLAYED ROUNDS IN SELECTED COUNTRIES - 18-HOLE GOLF COURSES**



Despite a high-flying career, Robert Waller's family – his wife, Heather, and children, Haley, 9 (right), Emma, 6 (left) and Jack, 2 – keeps him grounded.