



Greens, tees, and fairways at Cherry Hills Country Club were blanketed by hailstones ranging in size from marbles to baseballs.

JUST ONE MORE LITTLE CRISIS

by DAN PIERSON

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ON JULY 11, 1990, a tremendous hailstorm pummeled the Denver, Colorado, metropolitan area. It is documented to be the second most costly natural disaster in this country's history. Insurance claims now exceed \$750 million, and the costs of recovery are still climbing.

As fate would have it, Cherry Hills Country Club was located where the strongest portion of the storm passed through the city. Damage was severe and the storm inflicted its wrath on the course, clubhouse, and other amenities. Greens, tees, and fairways were holed

by hailstones ranging in size from marbles to baseballs.

The storm blew in with 80-mile-per-hour winds from the north. The greatest turf damage occurred on greens having a northern exposure, resulting in depressions measuring 3½ inches across and 2 inches deep. Trees and awnings were shredded, windows and skylights were broken, and patio furniture was thrown about. As if the storm wanted to emphasize its strength, the high winds changed direction after the hail stopped and pushed over two of our largest trees.

Initial cleanup expenses were in excess of \$45,000 for supplies and labor. The clubhouse awning alone cost \$20,000 to replace, and damage to the roof was estimated at \$400,000. These figures did not include expenses for the maintenance staff to remove and clean up the fallen trees and their debris. Our normal maintenance work per pay period averages close to 400 man-hours; the hailstorm increased that total by 100 extra overtime hours. The cleanup repair was a major project, but the problem was magnified by our club playing host to the USGA Amateur

Championship less than five weeks after the storm.

While standing on the first green and viewing the damage, I recalled the flood crisis that confronted my close friend Oscar Miles at Butler National. When faced with the damage that washed out his course during the Western Open, he said, "It is important to view these events as opportunities, not as catastrophes. It is essential not to panic." At that moment I hadn't the slightest idea of how I would incorporate that philosophy, but I remembered that a key to Oscar's successful handling of that situation was his confidence and leadership. The look on the faces of my staff at that moment and the concerned questions of many others later clearly indicated that they were looking to me for that leadership. It became the first opportunity . . . recognition.

AFTER a general inspection and some experimental repair, we determined that little would be accomplished with the few hours of daylight remaining that first day. Recognizing the efforts that would be required in the following weeks, my staff was sent home for some rest and mental relief from that first day's trauma. We planned to start at first light the next day, stay as long as light allowed, and continue the same schedule for quite a while.

That afternoon and evening provided time to formulate plans and communicate with the general manager, pro shop staff, club officials, tournament directors, and concerned members. This was the first time I recalled not having any difficulty contacting everyone I needed to speak with; they were all right there, wanting to help and looking for direction.

More importantly, I made the best use of the very few free moments I had to contact associates in the industry whom I knew and trusted, seeking their experience and advice. This communication garnered a great deal of technical support, and it proved to be a real psychological boost as well. The opportunity to discuss various options with others greatly enhanced my confidence.

As if by design, Jim Moore, the USGA Green Section's Mid-Continent regional director, had scheduled our annual turf visit for early the following morning. Jim was instrumental in supporting our initial efforts and developing a long-range plan. He instilled added confidence in all of us participating in the repair, as well as the ever-



growing number of concerned members who appeared. Many minds were eased with Jim's assessment that, given the total support of the membership and a little cooperation from Mother Nature, the necessary repairs might actually take playing conditions beyond what they had been before the storm. His words of wisdom were eventually confirmed.

The repair methods selected for each area of the golf course determined the assigned priority. Greens are usually given first consideration, and this was no exception. Following are the repair options we considered for our problem:

Greens

A. Broadcast seed on the damaged greens, topdress with a mix containing a light rate of seed, roll, and topdress

as often as possible. This process seemed the easiest and would allow players back on greens in the shortest time. It would also allow attention to be given to other areas of the golf course at the same time. This option, then, depended on new plants from overseeding to fill the voids. This would be a real risk.

B. Aerify with $\frac{1}{2}$ " hollow tines (1" x 2" centers), broadcast seed, and topdress using the cores as the topdressing mix. Roll the finished surface and topdress as often as practical. This process would provide a more efficient introduction of seed and a better growing medium. It would be more disruptive to play, require additional staff to accomplish, and still depend on fragile new growth to fill the voids.

C. Broadcast seed onto the damaged areas, hand repair as much as possible



(Opposite page, top) Cleanup and turf repair were major projects after the storm passed.

(Opposite page, bottom) The clubhouse awning shredded from the impact of the hail.

(Above) The greatest turf damage from the hailstones occurred on the greens, but the tees were not immune from injury, resulting in depressions measuring 3½ inches across and 2 inches deep.

with ball-mark repair tools, overseed again, roll, and topdress as often as possible during the five weeks before the tournament. Hand repair offered an additional method of incorporating seed into the soil.

D. Aerify after hand repair, in addition to accomplishing the items listed in "C." Aerification would provide another method of seed introduction and an initial topdressing from the existing greens mix.

The repair process on the greens was the only phase influenced by the approaching championship. At this late date, relying on a new population of bentgrass (as in options "A" and "B") to germinate, fill in voids, and reach reasonable maturity before the tournament seemed risky. With option "C," a moderate amount of mature grass could be moved into the middle of the

damaged area with a reasonable expectation of survival, and lateral growth into the remaining void would be initiated. New growth from the overseeding would eventually supplement the vegetative material. If there had not been other areas of the golf course to consider, option "D" might have proven to be the Cadillac of repairs, but there seemed a limit as to what could be accomplished and what the membership could reasonably accept. With this consensus, option "C" was chosen.

The next task was to locate a lot of bodies. Contract labor was considered, but the sensitivity of the job and a desire to involve people familiar with a golf course negated the idea. Our grounds staff of 35 and our 65 caddies (paid at a rate of \$20 for every 4-hour shift), were reliable, but their numbers were

not large enough. That's when our tournament director got on the phone and began calling for volunteers. Many members who could not miss work came at dawn and worked a couple of hours, returned at lunch, and then left work early to help again in the afternoon. Ladies who came to play that morning put their street shoes back on and pitched in with an attitude found only in dedicated lady golfers. At the height of the day we had three groups of 60 people, with each group tending separate greens. With this great turnout, the task became manageable and, surprisingly, was completed by mid-afternoon. With things progressing so well, I had the opportunity to start breaking away grounds staff to pursue the finish work of seeding, rolling, topdressing, dragging, fertilizing, and watering.

One of the things we didn't anticipate but learned soon enough was to keep lots of Band-Aids around when you ask someone to repair ball marks all day. Blisters developed rapidly and in some cases turned into open wounds. Vice grips made a more efficient weapon for avoiding injury than the divot repair tool. Expect a surprised look, however, if you go to the store and ask for 100 pair of vice grips. Thick carpet samples made good kneeling pads, saving knees and preventing knee prints in greens. We also kept the coffee, donuts, box lunches, and beverages coming to the field; it reduced desertion dramatically!

TEEES AND fairways were next. I felt similar repair programs would apply to both, but it wasn't clear how much would be necessary. Jim Moore, again, was a great help in sorting out the issues. Without specific attention directed to these areas, the best that could be expected was an undetermined amount of playing "winter rules," perhaps into the championship. I was sure the membership would prefer not to see this happen. On the other hand, with a little patience from the membership, a modified aerification and overseeding program could bring the course back to its previous excellence. Over the past several seasons we had been converting the fairways to ryegrass, which made this approach even more sensible. The club president, grounds chairman, and tournament chairman were there to lend their support for the renovation. The club would be closed to play during the time needed to accomplish the restoration.

Fairways were aerified with Core-master units in two directions. The cores were shattered with a dragmat to add a soil base for the overseeding. Overseeding then was accomplished using perennial ryegrass at a rate of 125 pounds per acre. The seed was dragged in, rolled, and irrigated.

Tee renovation was not as intensive as it was for the fairways due to the type of damage they incurred. The surfaces were restored by using deep-tine aerification, and they were smoothed by the rear roller on the machine. Topdressing and fertilization followed at 7- to 10-day intervals until the Amateur. One benefit resulting from the storm was that it allowed me to aerify in July in the same manner we normally do in September. When the fall season

arrived, we had an opportunity to deep-tine the entire golf course.

Routine maintenance after the storm was set back three to five days, but with the restoration process completed, course operations returned to normal. Within two weeks, fairways were being cut daily at $\frac{5}{8}$ " and there was little evidence of damage. During the recovery period, the greens cutting height was eventually lowered to $\frac{1}{8}$ " and then reduced to $\frac{3}{32}$ " for the Amateur. Signs of the incredible hail damage were difficult to find, with the exception of the newly germinated bentgrass.

Throughout the second day after the storm, I had another opportunity that Oscar would have enjoyed; once the word was out that Cherry Hills had

problems, the press was interested. Surely this can be viewed as another of those opportunities, but I personally tend to be a little camera shy. Everyone called that day, and I did three newspaper interviews and three television interviews. I was a nervous wreck, but a star.

With support from other local superintendents who provided extra equipment, labor, and supplies, the entire renovation process was completed in four days. Cooperative weather for the rest of the summer helped make every decision we made look like the proper one. This crisis was over and then someone asked me to write an article about it, providing yet another "opportunity."

After the storm, ball marks were hand repaired as much as possible, and the greens were overseeded, rolled, and topdressed to begin the repair process.

