Managing Weather Impacts During USGA Championships

Managing the various weather issues that impact USGA championships requires planning, prioritization, and communication. The same is true for managing weather-related challenges that affect golf events at your course.

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reparing golf courses to host USGA championships is challenging. For a major championship, such as the U.S. Open, logistics both inside and outside the ropes can seem overwhelming. Spectator experience and television broadcast windows impact the agronomic preparation of a golf course. Most golf facilities will never host an event that has the scale and complexity of a major championship. However, lessons can be learned from championship preparation that apply to daily golf course maintenance and the preparation for important events at any golf facility.

Current weather and the weather forecasts greatly impact planning and daily preparations during a championship. Rain events are generally viewed as the biggest concern, but extreme heat, winter injury, and even frost also impact championship preparations just as they do normal play. Understanding and planning for the potential impact of weather on turf health, course preparation, and playability will help produce a successful event even if the weather does not cooperate, albeit with some adjustment to expectations.

AN OUNCE OF PREVENTION

Fundamental agronomic programs and golf course infrastructure must be discussed before addressing weather impacts. Routinely implementing basic agronomic practices such as aeration and topdressing can modify poor soils and prevent excess organic matter accumulation below playing surfaces. These practices improve drainage, promote healthier turf, and make it possible to provide firm, fast playing

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Weather Planning Checklist

- Priority of in-play areas has been discussed with course officials.
- Course setup takes into account areas known to develop casual water on teeing grounds, in landing areas, and around hole locations.
- The sequence of maintenance tasks is clearly defined.
- Maintenance routes through the course are identified to prevent damage to wet areas.

- Workers are on call if needed.
- Rakes, squeegees, bunker pumps, etc. are ready to go.
- Poorly draining bunkers and other problem areas are identified.
- Known areas where debris from flooding or wind accumulates are identified.

Use a basic checklist to ensure preparations are in place should rain disrupt maintenance or play. Checklists can be tailored to a specific golf course or event and can help guide communication so that all parties are on the same page during what is often a stressful time.



During high temperatures, syringing may need to be performed during play. This practice can reduce wilt and prevent turf decline until more water can be applied after play.



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Fundamental agronomic programs play a critical role in preparing turf and soils for environmental stresses. Healthy turf and well-draining soils offer the opportunity to provide better playing conditions despite the weather.

conditions with reduced risk of turf damage. Effective surface and internal drainage is critical for removing excess water. Rapid drainage allows maintenance and play to resume as quickly as possible after a rain event. Good infrastructure and agronomic programs that satisfy the basic needs of turf provide a better opportunity to have good playing conditions despite unfavorable weather.

Bunkers provide another example of how proper infrastructure can make a big difference when bad weather happens. Drainage should be improved in bunkers that chronically hold water. Installing bunker liners, while costly, reduces bunker erosion and allows for easier restoration of playable conditions after rain.

Some weather events, such as a severe winter that leads to cold temperature injury, are harder to predict and plan for than common weather events like heavy rain or extreme heat.

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However, covering greens in injuryprone areas may reduce the risk of winter injury.

Regardless of the situation, thinking through the potential impacts of weather events well in advance enables the development of a proactive action plan. Having a plan is better than simply reacting when challenges arise.

WINTER INJURY

Winter damage, especially on putting greens, has a prolonged effect on playing conditions. If winter conditions raise concerns about damage, periodically remove plugs from putting greens and bring them inside to assess damage during the winter. If winter injury has occurred, plans for recovery should be developed and communicated weeks in advance.

USGA championships in northern climates have been impacted by winter injury on putting greens. Recovery



from severe winter damage is usually accomplished through an extensive overseeding program or with nursery sod, if available. Using sod, although sometimes necessary for a timely recovery on putting greens, is usually a last resort because of the impacts it can have on surface integrity. When winterkill occurs before a USGA championship, the goal is to have full turf cover on all surfaces before the championship is played. Affected surfaces should be closed to golf until healing is complete. Though a difficult decision, closing damaged putting greens offers the greatest likelihood of successful recovery. Championships are an opportunity for host sites to showcase their golf course, so strategies to maximize turf health are critical.

The strategies that promote the quickest recovery from winter injury leading up to a championship should provide the same results at any course.

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They include eliminating traffic from damaged areas until full turf cover is restored. Once the repaired putting greens are reopened, expectations for speed and firmness should be tempered to prevent the decline of immature turf. Communicating to golfers why playing conditions may not meet their expectations can foster understanding and help reduce complaints about golf course conditions during the recovery process.

EXTREME HEAT

High temperatures are not unusual during the summer championship season. However, when the heat becomes extreme, strategies must be employed to protect turf health. These strategies may include forgoing afternoon or evening mowing of putting greens and fairways and altering watering plans in the interest of turf health, even at the expense of putting green speed and firmness.

Syringing — i.e., applying light amounts of water to wet and cool the turf canopy — is another strategy that is often employed to maintain turf health through periods of heat stress. During extreme heat, syringing may even be performed during play at a championship. This results in a shortterm change in playing conditions that can upset golfers who feel that the maintenance staff should syringe only after play is complete. Unfortunately, a few hours can be the difference between survival and significant turf decline under heat and moisture stress. At times, syringing is necessary even when it is not convenient.

RAIN AND THUNDERSTORMS

The impact of winter injury is typically known well in advance of a championship. Even heat waves are fairly predictable several days before they arrive. While the impacts of some events can be easily anticipated and planned for, the impacts of rain events — especially thunderstorms — are difficult to predict. Storms provide the greatest challenges when preparing for and continuing play during a championship.

When rain is in the forecast, course setup decisions can have a significant impact on maintenance and the resump-

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tion of play. Hole locations should be placed in high, rapidly draining areas of putting greens. Poorly draining tees should be avoided. Sometimes a specific tee can be selected for play that provides an opportunity for most players to avoid hitting their tee shots into a poorly draining area of a fairway.

Light rain in the absence of lightning should not impact normal maintenance or play until water accumulates to the point that casual water creates unplayable conditions. Conversely, maintenance should be postponed and play suspended or delayed to keep workers and players safe in the event of lightning regardless of rain.

Planning and communication are critical before, during, and after weather events that could cause delays and dictate changes in maintenance programs. Bunker maintenance, fairway mowing, rough mowing, and sometimes putting green mowing may need to be scaled back or skipped altogether to keep play on schedule. In other instances, it may be too wet to perform maintenance practices without causing damage to the course. At a U.S. Open Championship, enough volunteers and equipment are available to overcome storm delays, but the same is not true for some smaller championships or the average golf course. Decisions must be made to prioritize maintenance, and those decisions must be communicated to course officials and golfers.

COMMUNICATION AND PLANNING

Communication and planning are critically important to successful management, especially when it comes to weather challenges. While the ultimate impacts of a weather event remain unknown until it occurs, plans to mitigate weather challenges at USGA championships are developed well in advance. The planning process starts by developing an understanding of the



Prioritizing maintenance when time and resources are limited is critical. The severe sand erosion on this bunker face should be repaired before play resumes, but the bunker floor could be left unraked in the interest of time.



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people and equipment that are available to deal with potential post-storm problems once the condition of the course has been evaluated. Alerting key decision-makers to what can be realistically accomplished before resuming play is critical. Striking a balance between resuming play as quickly as possible and restoring playing conditions after heavy rain is paramount. If there is not enough time to fully restore playing conditions, it is important to provide an honest assessment and adjust accordingly.

Putting greens are the top priority. In the instance of an overnight rain event during a USGA championship, the goal is to mow putting greens before play if they are dry enough. If rain during a round causes a suspension of play, efforts shift to focus on removing casual water and debris so play can resume as quickly as possible. Repairing severe bunker washouts is also important. However, raking bunkers in their entirety or even pumping water from the bunkers is not a priority if an opportunity exists for players to take relief from casual water in a bunker. When bunker sand is excessively wet, raking can diminish rather than improve playability.

The same principles used to manage weather-related problems and delays at USGA championships can be applied at any golf facility. Providing the best possible playing conditions should be the goal, but it is important to consider other parts of the operation, including food and beverage services and player schedules. Finishing an event on schedule may be very important, in which case compromises on playing conditions may be necessary.

KEY TAKEAWAYS

Whether you are planning a large golf event or trying to manage routine play, here are some recommendations that will help you plan maintenance around weather events at your course:

 Develop your response to potential weather events before they occur.
Consider who will evaluate areas of the golf course after rainfall or severe weather. Develop a good understanding of the time, manpower, and equipment that are available to recover from various weather events. It is also important to account for potential impacts on long-term turf health. Make sure that expectations are realistic and capable of being met.

- Discuss maintenance priorities with course officials and the head golf professional so that all parties have a clear understanding of the maintenance and playability goals following various weather issues. Allocate time and resources based upon these priorities to restore playing conditions in critical areas so play can resume.
- A clear communication plan should be developed to inform golfers how a weather delay will be handled and why it may not be possible or even necessary to perform full maintenance in some areas. Provide periodic updates as preparations progress and reminders that the goal is to resume play if the golf course is playable.



Plans for restoring playability should be in place before a storm. The plan should identify priority areas and be communicated to course officials.

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In some instances, weather prevents play from resuming. Knowing when to cancel play to prevent long-term damage and avoid unsafe conditions is as important as having a plan to mitigate problems.

Golf is an outdoor sport and weather is the overwhelming factor that dictates the conditions on a golf course, whether you are preparing for the U.S. Open, a charity tournament, or daily play. The sheer number of volunteers at a championship golf event allows the impacts of weather to be mitigated more rapidly than is possible at most golf facilities. Even during a championship, however, some maintenance practices might need to be skipped if severe weather strikes. Carefully manage golfer expectations to ensure that they are aligned with what's possible in the best interest of turf health and time. In some unfortunate instances, Mother Nature wins regardless of planning and preparation. Sometimes losing a day of play or having to cancel an event is simply unavoidable.

The same principles of preparation, prioritization, and communication that are used to manage weather impacts during championships apply at any golf course for any event. Developing a clear plan to address the challenges that weather conditions may create presents the best chance of conducting a high-quality, enjoyable event for everyone involved.

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