The following is collation of suggestions from veteran Carolinas GCSA superintendent members. Many will be things you have already thought of but if one is new or leads to a new thought altogether that bring some benefit, then the exercise has been worthwhile.

**Looking Ahead**

The COVID-19 pandemic has changed life for everyone, not just golf course superintendents.

Our family and loved ones must remain our highest priority.

At the same time, we should do all we can to control the things we can control and act accordingly.

We must be willing to consider governments order courses to close.

We must be willing to consider that such closures could drag on and even if they don’t, that it is likely business will be slow because of job losses in other parts of the economy.

We should make contingencies now, taking steps to save money for future essential maintenance and to try and provide hours and some income for staff and hourly workers.

Superintendents will likely need to accept conditions they otherwise would not tolerate. We need to adjust our mindset and our expectations.

The goal may become simply maintaining the golf course at a level that can be restored to playing condition once play resumes.

Saving money in the budget now will extend the period essential tasks can be performed.

Consider postponing non-essential purchases.

Reduce conditioning levels, devoting resources to the most critical aspects of the course with greens the highest priority.

Reduce mowing frequency and consider raising mowing heights.

Consider delaying or reducing spring fertilization to slow green up. (See recommendations from Dr. Bert McCarty at the end of this document)

When appropriate in terms of plant growth and health, use plant growth regulators to reduce mowing. (See recommendations from Dr. Bert McCarty at the end of this document)
If courses are ordered to close, those with overseeding should consider spraying out ryegrass to promote transition. Obviously, this is a complex decision with multiple factors at play and such a move should only be pursued after all those aspects are accounted for.

Consider spraying pond banks, bunker faces, fences lines – anything that would otherwise require weedeating or hand mowing.

Consider using a product like Plateau as a more affordable PGR on roughs and low or no mow areas, given that plant color may not be a factor.

Switch to riding mowers rather than walk-mowing on greens.

Reduce bunker maintenance but consider raking every 10 to 14 days to prevent weed buildup and spraying non-selective herbicide to prevent turfgrass encroachment.

Reduce irrigation and when possible, shut off pump stations to save electricity.

Pull the breaker on golf cart charging stations.

Turn off electricity to decorative fountains and non-essential night-lighting.

Invest in a programmable thermostat where air-conditioning is used.

Install motion-activated light switches in restrooms and the break room.

Postpone non-essential purchases.

Consult with your equipment technician to formulate a plan for equipment operation and maintenance with a goal to create savings without letting equipment slide into disrepair.

Consider disconnecting batteries and draining fuel for machines likely to be out of use for an extended period.

**Jobs and Income**

Reduce staff and crew hours now to save money and share remaining hours to provide some income for as many people as possible.

Consider using accrued paid time off, vacation time etc. but be mindful that such compensation does not compromise the opportunity for employees to receive government benefits that may be offered.

Communicate such possibilities as information not as advice or recommendations.

Consider deferring a portion of compensation for some salaried staff to provide some income for hourly employees.
**Employee Safety**

Determine and communicate clear standards for a safe work environment with employees, such as social distancing and regular handwashing.

Consider taking the temperature of staff members as they arrive.

Eliminate the use of time clocks or assign the task of punching in and out to one employee.

Wear gloves at all times, including in the maintenance facility whenever possible.

Where possible wash and disinfect equipment, hand tools and hard surfaces in the maintenance facility such as bench tops, light switches, faucets and door handles.

Have staff arrive at staggered intervals to reduce congregating in numbers that increase the risk of transmission.

Structure workdays to spread out staff levels as much as possible.

**Communication**

Whatever changes are made, clearly communicate those details to staff.

Stress that the reason for these changes is to protect the viability of the operation and therefore their jobs.

Invite and be open to input and suggestions from staff and others. Again, this situation affects everybody, and any solution or improvement is valuable.

Communicate frequently with other departments at the facility and be willing to suggest changes that may help their operations.

When changes are relevant to golfers, members, or surrounding homeowners, communicate relevant information to those parties, again, stressing that the goal is the long-term viability of the asset.

When questions come from golfers, members, surrounding homeowners, or others, remember that the Carolinas GCSA and GCSAA have staff and online resources and information that can help.

Monitor and mine social media and industry websites for ideas and suggestions generated by others.

**From Dr. Bert McCarty –**
**Fertilization**

Although courses should moderate their N uses until normal play resumes, this practice should not be abandoned. Bermudagrass greens-up in spring at the expense of its root system (termed *spring root decline*), going through about a three-week period with little to no roots and depends on N and K fertilization for regeneration. Also, if N is abandoned, turf will remain thin and non-competitive in growth, allowing annual grassy weeds such as crabgrass and goosegrass to become even more problematic than normal. I suggest using about one-half to three-quarters of the normal N and K rates until normal play resumes. If color wanes, apply an iron source for desirable green color without a surge of growth.

**Plant Growth Regulation**

Several plant growth regulators can be considered to slow growth, thus, reduce mowing frequency. The traditional product used is trinexapac-ethyl. TE slows top growth but still allows photosynthesis to occur, thus, roots are able to continue healthy growth. Rates and frequencies depend on how slow and for how long a particular course wishes to slow growth and of course, can afford. Twelve to 22 ounces per acre on fairways/roughs would be the normal range for this objective. Twelve ounces will slow growth about 55 percent for 2.5 to three weeks while 22 ounces will reduce growth about 75 percent for three to four weeks. Courses choosing this option should remember to remain on this program as if abandoned, the rebound growth effect is often worse than if the PGR was never used.

For courses considering to totally stop bermudagrass growth, imazapic (Plateau) can be used. Plateau is a powerful product and exact calibration and uniform application are necessary. Unlike TE which slows growth, Plateau stops it in its tracks. A general rule-of-thumb is for every ounce of Plateau used, expect about 1.5 weeks of total turf growth stoppage. For fairways, I suggest starting with two to three ounces per acre while for roughs or other out-of-play areas, three to four ounces per acre. I also suggest waiting until the turf has fully greened up before using Plateau unless the course can accept greenup to basically stop until the PGR wears off. Both TE and Plateau can cause some mild turf discoloration, but quickly recovers and generally isn’t noticeable to players unless application skips (aka, mohawks) occur.