

GRAND CANYON - A Must Stop

Text and Photography by David Bailey,
CGCS High Ride Country Club

This years GCSAA annual conference in Phoenix enables you to see one of the worlds great natural wonders. Plan now to take a few extra days to visit the Grand Canyon, only 218 miles away.

Mount Everest. The Sahara. The Amazon. The Grand Canyon. These are standards by which the earths immense wonders are measured. Rising toward an evening sky from the rim, purple shadows scale the canyon walls and monumental buttes with erosion scarred slopes, eclipsing in minutes a layered geological past measured in millions of years.

Because its over 2,000 miles away from southern Florida, many have never seen its splendor. Having visited the area five times in the last fifteen years let me share some tips and ideas.

Drive north from Phoenix on I-17 to Flagstaff. This 137 mile drive will take you thorough several climate changes from dry lowlands to semi-mountain terrain. Note the Arizona Highway Patrol works this road as a radar battle zone, pack your detector.

Flagstaff is an interesting little town. Many, many motels at low winter rates, half the cost of Phoenix. The University of Northern Arizona is there with a unique sports complex. A Big Sky Conference member they have a

25,000 seat domed stadium, and they use it wisely. Designed around the portable football field, in the winter it is transformed for hockey, basketball, volleyball, and other sports all set up at one time. Just sit in a different section for each event. If there is a game in town check. Just north of town on route US 180 will be snowcapped 12,670 foot Humphreys Peak. The snow ski area is called the Snow Bowl. Since you will be in a rental car drive past the clean cars in a parking lot at the mountain base and drive up the dirt road to the ski lodge. We are not talking Aspen or Jackson Hole but for Floridians that snow plow down the slopes it's fine. If you have never been on skis this is the place to start. Wear your golf rain suit pants or plan on a wet seat. You can rent all equipment needed.

Continue north on route US 180 which has merged with state road 64. Form here its a straight shot through the Kaibab National Forest. Look back to see Mt. Humphrey 50 miles away.

Before you enter the park stop at the town of Tusayan, a small collection of stores. Yes, those are the world famous golden arches you see on the right. Go into McDonalds they have an interesting story to tell. Since the community is so isolated they must house all their employees on the property. Because of its overhead a Big Mac is the highest priced in the nation. Next door is a souvenir shop with their typical authentic junk from Tai-
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Yaki Trail — Canyon takes on a new look below the rim

Photo by David Bailey

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wan. If this is your first trip to the canyon book a helicopter ride. It will be expensive so decide before you get there, otherwise the price range of \$60 to \$200 per person will scare you off. Prices vary on length of travel. That may not be your only scare but I guarantee you it will be very exciting and well worth the money. Since you will not get an immediate flight, maybe even the next day, kill some time at the movie theater across the street. This is an I-MAX movie. There are few in the east and none in the south. This revolutionary movie concept uses a film ten times the normal negative size of movie film, it has absolutely life like detail. The seats sit high like in a stadium, so pick one in the center at the top for the best view and effect. The movie theme is about the first white man explorers in the canyon so the history lesson is a good introduction. You will feel everything but the water in your face when you raft down the Colorado River.

Enter the park and stop at the first overlook view area. Words can not do the sight justice. Take time to watch other peoples reaction at the view. Next go immediately to the visitors center for all the info you need. Here is an excellent book selection, buy a 25¢ park map from the ranger behind the main desk. Watch the slide show prepared by Kodak.

Check into a hotel in the village area. The best bet is the Bright Angel Lodge. Its location is priceless, a good restaurant at fair prices. The historic El Tovar Hotel will cost twice the price but is no doubt the best. One company runs them all. No matter where you stay visit the El Tovar lobby, gift shop, and eat once in the main dining room. Wait for a window view in the table line.

When you drive the rim road go as far east as the Desert View. The stone Indian Watchtower gives a good view of the river in the distance. Because of new dams upstream

the color of the river has changed in recent years to blue form muddy brown. This area looks best in the early A.M. light. At this point when you look at your map do not get the idea to drive around to the north rim. Its a 200+ mile trip for nothing in the winter, its closed! The higher elevation has it snowed in four months of the year.

Do not go to the Grand Canyon and miss a sunset. The last two hours of daylight must be viewed from only one place Hopi Point. Pick a spot and do not move, the constantly changing light show varies every few minutes. This is the oldest and best laser light show on earth. Be There!

Winter is the best time of the year for a real feel of the canyon when you take a hike below the rim. Yaki Point is the best of the two trails. At least walk down the trail for one hour to the O'Neil Butte. This puts you 1,200 feet below the rim. Its a two hour return walk. The long hike is seven miles down to the Phantom Ranch on the river. Spend the night and enjoy the beefstew and starlight. To get there you must be in good shape, have quality footwear like hiking boots, a day backpack, canteen, and flashlight. You must carry out all food and drink containers you tote down. Leave early in the morning upon the return hike. The last two miles are harder than the first five, take your time, rest and enjoy the view. Which ever hike you select do not overdress. There can be forty degree temperature difference down in the canyon from the cool rim top in the early morning. Mule rides are available along Bring Angel Trail.

A much easier hike of a different nature is away from the main canyon. Still in the park boundry at the western edge, your destination is the Havasupai Indian Reservation with the most isolated village in the continental
(cont. on page 44)



Hauasu Falls is located on Indian Reservation in southwest section of park

Photo by David Bailey

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USA, Suapi. The location is about 200 miles from the village at the canyon headquarters. The only way there is to park at the reservation entrance and hike or horseback ride eight miles down a dry creek bed. Helicopters land for \$200 per person. Suapi is like another world in a different century. The population is about 400. But then you see two homes with TV satellite dishes that were flown in. There is a modern 30 room inn built since the park expanded in 1976 to include the Indians. It was needed because once there, you must spend the night, just like the Phantom Ranch trip. In the winter neither are filled to capacity. Why go there? The series of waterfalls are beautiful. Not powerful like Niagara, or majestic like in Yosemite, but perfect balance and rock formations, clear blue limestone mineral water. If a great photo is your objective this is the single best in all the canyon area. The hike is only a 2,500 foot elevation change so its an easy walk. Time is only three hours down and four hours back up. You can walk down and horseback ride back out for \$30. Do not over do it by walking to the village and then the falls. See them the next day, stay a second night, and out the next morning. The inn cost about \$40 and there is a trail fee of \$8.

The Grand Canyon is a one of a kind experience no matter how you view it. To go from Florida to Phoenix and not visit the Grand Canyon would be like coming here and not going to Disney World or seeing the Atlantic Ocean. ■



The trail to Suapi, a tree can grow anywhere except where you want it to. ■

MODE-OF-ACTION of Chipco Aliette will be Discussed at GCSAA Meeting

MONMOUTH JUNCTION, N.J. -- Scott Johnson, Rhone-Poulenc Inc.'s Aliette product manager, will make a presentation on the mode-of-action of Chipco® Aliette® at the upcoming GCSAA meeting in Phoenix. The presentation will be based on the results of a long term research project conducted by Dr. David Guest of the University of Melbourne, Australia.

According to Johnson, "the main conclusions from Dr. Guest's work are: Chipco Aliette's activity involves both a direct effect on the fungus and an indirect effect via host metabolism, the degree of direct vs. indirect action varies for each host-pathogen interaction and that the development of resistance to Aliette is unlikely because of the combination mode-of-action."

Chipco Aliette was introduced at the 1986 GCSAA meeting for the prevention of Phythium in Turf. The product is also registered in foliar and drench applications on ornamentals to prevent Pythium and Phytophthora root rot.

For more information on Chipco Aliette, write to Rhone-Poulenc Inc., Agrochemical Division, P.O. Box 125, Monmouth Junction, N.J. 08852.

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Both mixtures are widely used to overseed golf courses in the Southern U.S. as well as home lawns, parks and playgrounds. ■

DAY TRIPS FROM PHEONIX

Arizona is sometimes called the land of contrast because of the changing scenery and activities that are offered. You can swim and play tennis in the morning in Phoenix, and spend the afternoon fishing, hiking or sightseeing in the cool pines in Flagstaff.

The following driving tours are easily accessible from Phoenix and will add to the enjoyment of your visit.

GRAND CANYON

The Grand Canyon is one of the great natural wonders of the world. The South Rim is open year-round and features nature walks, mule rides down the canyon and the rim drives. The North Rim is open from mid-May until sometime in October. Lodging is available for visitors who want to spend more time exploring the Canyon, and reservations can be made by calling toll-free (800) 528-0483.

The Canyon is a 5-hour drive from Phoenix. Take Interstate 17 north to State Highway 179 from Phoenix to

Sedona; Highway 89A from Flagstaff to Tusayan. Leaving the Grand Canyon, take State Highway 64 to Cameron and go south on U. S. 89. Turn left off 89 at Wupatiki National Monument and Sunset Center. Rejoin 89 into Flagstaff and from Flagstaff take Interstate 17 back to Phoenix.

SEDONA/OAK CREEK CANYON

Sedona, a cultural community of 9,000, has become a mecca for art lovers and collectors who are drawn to this little community by more than a dozen commercial galleries featuring paintings, Indian art, sculpture and art objects.

Deep red rock formations and multi-colored buttes make this resort area unique throughout the area. Many of these boutiques are located in Tlaquepaque, a shopping village in Sedona, named after a little town near Guadalajara, Mexico, which was once the leading producer of crafts and glassware. A short distance from Tlaquepaque is the Chapel of the Holy Cross, a beautiful structure located on a higher altitude, providing a breath-taking view of the majestic red rock country.

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Sedona is a 2 1/2 hour drive one way from Phoenix. Take Interstate 17 north to Junction 179. Exit for Sedona — Oak Creek Canyon and enjoy the spectacular view of Oak Creek Canyon, rivaled only in its beauty by the Grand Canyon.

PRESCOTT

The small community of Prescott was founded after the discovery of gold in 1863 and was the first permanent capital of the Arizona territory. The early settlers had to contend with claim jumpers, outlaws and Indians. While in Prescott, stop at the Sharlot Hall Museum complex. You will see the first territorial governor's mansion, the historic 1857 John C. Fremont House and the restored 100 year old Bashford House.

The fastest route to Prescott is north on the Black Canyon Freeway (I-17) to Cordes, then northwest to State Route 69. Less than two hours one-way.

For the more leisurely traveler, a longer, more scenic route is available via Wickenburg, Congress, Yarnall and Kirkland Junction.

APACHE TRAIL

This world-famous trail winds through spectacular desert mountain scenery to the city of Globe. Highlights

of this trip include the dams and lakes of the Salt River.

As you start up the trail (official beginning is State Highway 88), the Superstition Mountains appear on the right. The legend of the Lost Dutchman's Gold Mine originates from this mountain range. Stories about Jacob Waltzer (or Waltz or Walz), nicknamed the "Dutchman", have been told for many generations. Legend has it that the Dutchman often appeared in public with pockets-full of gold nuggets and anyone who attempted to follow him was never seen alive again. There is some evidence that the man existed and that he was probably a miner from the thriving Vulture Mine near Wickenburg. However, no one has ever found the fabled gold mine.

About a 4 hour drive round trip. Follow U.S. Highway 60 east of Phoenix for 34 miles to Apache Junction. Turn left on State Highway 88 to the Trail. After passing Roosevelt Dam and Tonto National Monument, make the return loop to Phoenix by Highway 60.

MOGOLLON RIM

This magnificent geological fault, which was named after Jean Ignacio Flores Mogollon, governor of New Mexico (1712-1715), is referred to locally as "The Rim." The dramatic face of the rim consists of a multicolored wall of rock, dotted by pine, manzanita and oak shrub. This giant wall of rock juttied upward a mile above sealevel when the earth's surface shifted a thousand years ago. Several layers of grey shale, creme-colored limestone and deeper colored sandstone accent the rim's edge.

The Rim was made famous by author Zane Grey who spent many hours writing, hunting and fishing in this beautiful area. The Rim inspired many of his novels. Zane Grey's cabin is still standing for visitors to see and relive the past.

About a 1 1/2 hour drive one-way. Take Highway 87 northeast of Phoenix to Payson. Just beyond Payson, turn right on Highway 260. About 17 miles from the turnoff, watch for signs of Zane Grey's Cabin just after passing Kohl's Ranch. While at the cabin, stop at the fish hatchery up the road and see pools of fish raised from eggs by the Game & Fish Department. After returning to the main road, continue 14 miles past Tonto Creek (a great place for a picnic lunch) to the Wood Canyon Lake exit. Turn left at the sign and you'll be on the Old Rim Road. The road becomes an unsurfaced forest highway and frequently winds within a few feet of the fault line, providing a gorgeous panoramic view of the Rim.

MONTEZUMA CASTLE AND WELL

This impressive ancient Indian cliff dwelling is nestled high above Beaver Creek and is over six centuries old. The Aztec Emperor, Montezuma, for whom the castle is named, never saw the famous structure. The Sinaguas, Pueblo Indians who moved into the Valley during the

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twelfth century, built the cliff dwelling from limestone and adobe. When the white settlers saw it years later, they concluded only the Aztecs could have designed the castle and they named it accordingly. The structure was built on a step cliff to protect the Indians' property rights. The Visitors' Center is open from 8:00 a.m. until 5:00 p.m. daily and contains exhibits, artifacts and early historic relics.

About 7 miles northeast of the Castle on the Park Service Road is Montezuma's well, a limestone sink hole with a natural spring. Early Indians used this natural spring for irrigation purposes and the well still provides nearby Beaver Creek with a daily water supply of over a million gallons. The well is 55 feet deep and 470 feet wide. From the parking lot at the well, follow the trail to the surrounding plateaus - the result of volcanic lava flows.

To get to Montezuma's Castle, take Interstate 17 north to the Montezuma Castle turnoff just past the beautiful Verde Valley. About 1 1/2 hours one-way.

TUCSON

Heading south from Phoenix, a two hour ride will take visitors to Tucson, where a good bet for unforgettable sights is the Saguaro National Monument — Tucson Mountain Park area just west of the city.

Here are found examples of desert botanical species set amidst rolling foothills terrain. The Arizona-Sonora Desert Museum, regarded as one of the finest facilities of its kind anywhere, has its home here, too, featuring an array of desert life - - from insects to reptiles, birds and animals, as well as desert plant species - - all in natural settings that give the feel of being a part of the desert.

A few miles away, the scene shifts to the wild west at Old Tucson, a movie set constructed years ago to resemble Tucson of the 1880's. It's still the scene of many movie and television productions and also offers reenactments of shootouts and street brawls, stagecoach rides and other western-style activities for the enjoyment of visitors.

If time permits, a short ride south from Tucson to San Xavier del Bac Mission, just off Interstate 10, is worthwhile. Known as "The White Dove of the Desert," the mission was built by Franciscan Friars nearly 200 years ago and is regarded as the finest example of Spanish mission architecture in the country. The Franciscans still operate the mission for Papago Indians in the area, but the public is welcome to tour the facility daily.

Take Interstate 10 south about 2 hours to the Congress Street exit in Tucson.

Using Phoenix as a gateway, visitors can see the beauty of the state of Arizona — from the cool pines of the north country to the desert scenery and wild west atmosphere of Southern Arizona. And it's easy to make lodging arrangements prior to arrival in Phoenix by calling toll-free (800) 528-0483 for information on rooms and to make reservations. Reservations can also be made at the Grand Canyon Lodges, South Rim, by calling this toll-free number. ■

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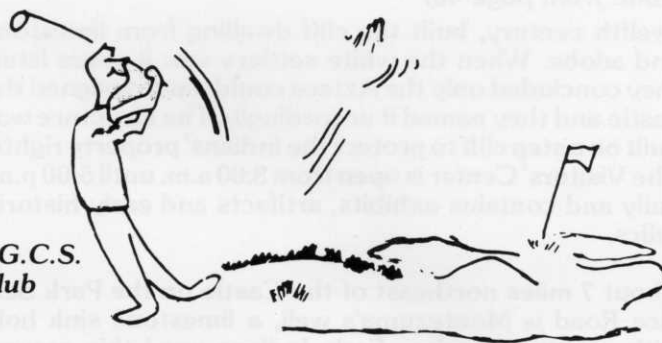
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DIVOTS

By Donald E. Kooyer, C.G.C.S.
Willow Lakes Golf Club



Cutting Costs Through Efficiency

The efficient management of personnel, equipment, chemicals, and time will most certainly keep your planned budget on line. When I accept the responsibility of managing someone's business, I have to know what the company wants out of the operation that I am responsible for.

To objectively manage any business you must have an understanding between management and owner on the cost of operations. As the superintendent of a golf facility you have the responsibility of being able to show that you are capable of operating your facility in a cost effective and efficient manner. When preparing your budget you have to know what type of operation you will be running. A course with nine holes of golf will have a lower budget than an eighteen hole course. Then again, a nine hole course in certain geographical areas will have a larger budget than an eighteen hole course in another

part of the country.

Your company may own two or three or more facilities and the budgets will be different at each course. Costs of operations will depend on the different types of clientele and the different types of amenities at the facility. Whether you are just taking over an operation or you have been at the same location for years, the costs of operations change annually, if not daily. To keep up with these changes and stay efficient, you must gain knowledge through continual business education and by being aware of the economic conditions of your area.

As the superintendent you have the responsibility of continuously reviewing your operations budget with the rest of the management team at your club. When you can show the owners or director of your club that you can run a cost effective operation you can then concentrate on turf and personnel management.

Now that you have the operations budget in your hand, the hard work has just begun. You now must make the budget cost effective. One of the budget line items at a course managed by a bank was out of line. The first thing the bank wanted was the equipment repair cost reduced. Before I arrived at the golf course I had the budget analysis report mailed to me. The first line item I looked for was the one in question. At 30% over to date and only seven months into the budget year, there was something wrong.

When I arrived at the course I had my work cut out for me. There were approximately 57 pieces of major equipment in the maintenance area and one was operable. Equipment repair budget at 30% over, no equipment running, and the company wants me to cut costs? Where does a superintendent start with a nightmare like this? I asked myself, was the preventive maintenance program effective — hardly! How can I cut costs and get operating at the same time? I opened the door to the mechanics area and virtually could not see the floor. The first things that came to mind was to get the area in order and use what I could find to get necessary machines running. Now I could inventory what we had on hand and see what needed to be ordered and where the over ordering had taken place.

After the first teleconferences with my home office to let them know that I had the inventory and purchasing areas on the right track, I would start on personnel. It was plain to see that costs surely could be reduced with a good

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personnel management program. As I hired and brought people into my operations, training became most essential. A well-trained golf course equipment mechanic can prevent what I found when I first saw the equipment at the course.

After showing a reduction in the areas of the budget that were immediate priorities, I started to work on the other areas. When training personnel in your operations, make them aware of the budget that affects their area of operations. When I hired my irrigation man, I made sure he understood how preventive maintenance and proper operation time can help keep costs down. The irrigation man should know that overusing the water system can lead to destruction of turf and cost overrun in the irrigation budget. By controlling the amount of water usage you can cut costs on maintenance of sprinkler heads, irrigation pumps, valves and controllers. By watching the weather closely (we check the rain gauge daily), you can cut costs on electricity for pump operations drastically. By knowing how much water is being distributed from the sprinkler heads, G.P.M., A.C., and time of operation, your properly trained irrigation man can help in the control of leeching of fertilizers, pesticides, and help check compaction. An irrigation department run efficiently can be very cost effective. Remember to let your employees know that they are directly linked to keeping costs down in their daily work habits.

I was at another course the other day that asked me for some help. We were walking through the equipment storage area and we were discussing new equipment purchases. When we got to the end of the building, the gentleman I was with looked puzzled. He said, "I didn't see our new machines." We walked back and stopped in front on a new triplex. It was so dirty it already looked six months old. In reality, the machine had been delivered two days ago. He asked me what he could do to prevent this. I explained my policy of training personnel. The very first thing I teach my operators is that the three most important steps to preventive equipment maintenance are: 1) check the oil, 2) check lubrication, and 3) cleanliness. These three steps can prolong the life of any machine to twice the life of one not taken care of properly. Take that life span times the amount of equipment you have and then add up the cost savings on your budget.

Cutting money costs is not the only way to improve your course operations. One of the most important factors in your daily operations is time. It is not just an old saying that "time is money"—it is a fact!

Effective manpower scheduling is a daily, weekly, and long-term task. Each day you could have from 3 - 15 employees coming to work. Each employee has a specific area of responsibility and each has to be trained in his duties. If a greens mower operator is an excellent equipment operator and fails in effective mowing time, efficiency is lost.

A mowing route should be established so the operator knows how much time it should take to complete his job. If you have trained all your operators properly they can use time efficiently to cut costs. If you can cut 20 minutes a day off your greens mowing operations the cost sav-

ings will mount with your time savings. One way I have implemented a time saving step is to have my greens men start at the edge of the green and not in the center. When the operator starts mowing he should start at the proper edge of the green so when he ends his clean up ring, he can leave the green he is on and head directly to the next green. By not having to drive the machine around the green to head in the right direction he can save valuable time. By starting the mowing operations at the edge of the green, he will pass through the green only once and will not have to backtrack.

If the operator starts on any other area of the green than the clean up ring area, he will have to go back to finish the other side he has not yet mowed. By having to go back and start over he will waste not only time but gasoline. The life of the machines is also shortened. These are just two of the many small time and cost saving steps that can improve your manpower scheduling by using time wisely. Remember, "time is money". ■

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This new method recording a seed's genetic code is far more reliable and consistent than electrophoresis, the only analytical method available up until now. And since no two seed varieties have the same genetic makeup it makes identification accurate and positive.

This new process has been developed with a specific purpose in mind. On the turfgrass market there has recently been widespread "pirating" of patented seed varieties. Such illegal practices takes the form of seed marketed in plain bags with the "claimed" variety name simply stenciled on the front as opposed to the "designer" bag used to package and market legitimate turfgrass seed.

Since the plain bag purports to contain a named seed variety, one of two scenarios presents itself. First, if the bag does contain the claimed names variety which legally belongs only to the patent licensee, it probably represents larceny.

Second, if the bag does *not* contain what is claimed by the stenciled variety name, the way is open to charges of misrepresentation and fraud. Either way the law is flouted and actually broken by a criminal act.

The new gene mapping technique will tell law enforcement officials "what's in the bag." The analytical method

was developed by Native Plants, Inc. of Salt Lake City, Utah, an organization most respected in agricultural and biological research.

Lofts, Inc., an industry leader in turfgrass marketing, has contracted, at great expense, to have leading varieties recorded for genetic identification.

"We at Lofts, are very concerned about what's happening in our industry. We're embarking on a very intense and costly project with Native Plants. These tests will stand up in the court of law and we intend to prosecute those found guilty of the illegal sale or misrepresentation of patented varieties.

Of course putting an end to these illegal practices will benefit us, but it's also going to benefit the entire turfgrass industry," says Rich Hurley, Vice President of Lofts Inc.

Now, with gene mapping, the weapon is at hand to stop pirates in their tracks. Illegal seed will be traced to the source of harvest and supply, perpetrators identified and prosecuted.

The action Lofts and Native Plants have taken against turfgrass seed pirates will be applauded not only by seed marketers who stand to lose their patent rights, but by research universities who lose their earned royalties, and by the turf professional who loses the integrity of his seed purchase. ■

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