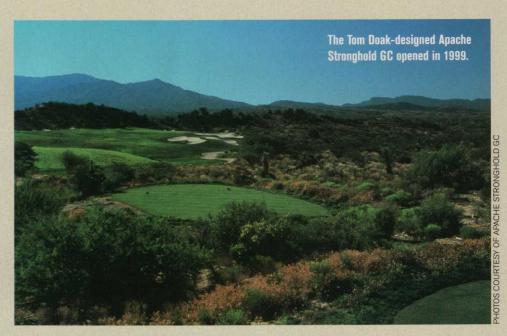
Real-Life Solutions

■ THE RIGHT GRASS FOR THE RIGHT CLIMATE

Righting A Wrong

It was a bad idea to grass the new fairways at Apache Stronghold in Arizona with a cool-season mixture of turfgrass. So it's back to bermuda to get the award-winning course back on track

BY SHANE SHARP



Problem

An experimental turf combination of cool-season grasses in the fairways of Arizona's Apache Stronghold GC proved to be a major mistake.

Solution

Go with what works best in the region – bermudagrass. The course's decisionmakers researched several varieties and opted for a blended seeded variety of Riviera and Yukon. he boom of casino resorts on Indian reservations in Arizona and other Western states began in earnest over a decade ago as an attempt by tribes to establish additional revenue streams. By the mid 1990s, a number of tribes had added resort and dailyfee golf courses in an attempt to lure more high-end customers to their facilities.

The 13,000-member San Carlos Apache tribe in Arizona followed this formula to a letter — first with the opening of the Apache Gold casino motel complex in 1994 and then with the opening of the Apache Stronghold GC in 1999.

However, when it came down to choosing a turfgrass for its Tom Doak-designed

layout, the San Carlos Apaches took anything but the traditional track. A consulting team, in conjunction with the Arizona Golf Association, recommended that Apache Stronghold plant a cool-season grass mixture of ryegrass, bluegrass and fescue in the fairways.

Conventional wisdom holds that courses in southern Arizona use bermudagrass on fairways in the summer overseeded with ryegrass in the winter. Even Doak and his turf consultant recommended that the entire layout be grassed with bermuda until healthy strands of bentgrass were developed for yearround use.

But the AGA and the consulting team saw an unique opportunity to save money

on grass seed and to bolster business by enticing golfers from the bustling Phoenix area to the course's remote location. The cool grass mixture, they believed, would enable the course to avoid the traditional fall overseeding period and the typically tumultuous transition back to bermuda in the summer.

The problem

Apache Stronghold is situated about two hours east of Phoenix at an altitude of just more than 3,000 feet above sea level. Summer temperatures are 10 to 15 degrees cooler than in the Phoenix metro area, and winter frosts are common.

The majority of courses in southern Arizona are located between 1,000 and 2,500 feet above sea level, and courses in central and northern Arizona fall anywhere between 3,500 and 7,000 feet. In other words, there was no clear-cut turf selection model to follow for tribal officials, the AGA and the consulting team.

"We are at 3,200 feet, probably just 800 feet too low to make it (the winter mixture) work," says superintendent Ron Mahaffey, who was hired at Apache Stronghold in November 2001 after a five-year stint in the consulting business. "We don't know of anyone in Arizona that had attempted this."

The experimental turf combination led to gradual turf loss each summer until the issue finally came to a head last summer. The winter grasses began to wilt and die in the face of triple-digit heat, and it was clear wholesale changes needed to be made.

According to Mahaffey, the only hole that retained "acceptable" playing conditions was the seventh, which was originally turfed with bermudagrass. Two other holes contained significant amounts of bermuda, and both were flourishing in the summer heat.

The solution

Apache Stronghold had recently been included in Golf Magazine's vaunted Top 100 You Can Play rankings and was rated as the No. 1 public access golf course in Arizona by GolfWeek. Yet when golfers made the trek from the Valley of the Sun to the San Carlos Apache Reservation to play Apache Stronghold, they were miffed at the conditions. The pressure to remedy the misguided

turf prescription was immense.

Toward the end of last summer, Mahaffey oversaw stringent soil analysis that revealed nutrient imbalances including excessive sodium and extremely low magnesium levels. The soils had compacted, and Mahaffey attempted to dry the course only to find that the head spacing on the course's irrigation system was such that it created alternating wet and dry spots.

He and his staff also ran pathology tests and found several diseases at work - none of which were aggressive enough to be a problem if the turf had not already been

under considerable stress. To remedy the irrigation and soil issues, all of the heads on the par-3 holes' greens, green banks and tees needed to be respaced.

"Basically, what we found was a poorly spaced irrigation system, compacted soils and nutrient deficiencies that stressed the coolseason grasses and enabled turf diseases to drive the final nail in the coffin," Mahaffey says. "After a thorough investigation, we decided to start moving heads. Money is not an issue. Time is what we are fighting."

As far as turfing options go, Apache Stronghold is shunning innovation now for a proven commodity.

"We sat down with our corporate board and recommended that we go with bermuda in the fairways until we are confident we can transition to bentgrass in a few years," Mahaffey says. "We researched which varieties we wanted to use and we opted for a blended seeded variety of Riviera and Yukon."

Riviera and Yukon have both performed well in recent National Turfgrass Evaluation Program studies. Mahaffey says fairways will start being seeded at the end of May and the beginning of June. Because he's using a seeded variety, the course won't have to be closed, Mahaffey says.

To provide improved playing conditions for the remainder of last winter and the current spring season, the Apache Stronghold

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Superintendent Ron Mahaffey and his staff have developed a simple goal for the summer of 2003: Establish the best bermuda fairways possible so golfers come back to Apache Stronghold in droves.

Read another **Real-Life Solutions** on page 88.

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Real Life Solutions: Apache Stronghold GC

"We just need to work on our soil, get our bermuda in and re-establish this course as one of the best in the state."

RON MAHAFFEY, SUPERINTENDENT, APACHE STRONGHOLD GC Continued from page 65 maintenance crew patched up the course's scars with lush stands of winter ryegrass.

Outlook

Mahaffey and his staff have developed a simple goal for the summer of 2003: Establish the best bermuda fairways possible so that golfers come back to Apache Stronghold in droves. Then, Mahaffey says, players will gain an understanding and appreciation of the overall quality of the award-winning layout.

"The design here is awesome, the surroundings here are awesome and a lot of the things that we have been beat up about have to do with conditioning, and that will be taken care of soon," Mahaffey says. "I believe American golfers are spoiled because they expect PGA Tour event-like conditions every day. If a course is not perfectly maintained or overseeded at extreme rates, the condition of the course gets knocked. Our architect believes in old-world type grassing. That means seeding several species and let what grows

grow. Here we will be bermuda in the fairways with rye and blue mixed in."

Mahaffey believes the selling point of the course will ultimately be its summer conditioning — the very albatross around the neck that nearly brought Apache Stronghold to its knees. Because winter temperatures on the reservation are cold enough to drive ryegrass into dormancy, Apache Stronghold will never be able to outcondition Phoenix and Scottsdale in January and February. But cool summer nights will allow the course's bentgrass greens and new bermuda fairways to flourish.

"We are working aggressively on our soils," Mahaffey says. "We have a gravelly, loamy soil, and we are going to aerify it in an attempt to improve the soil structure. We have good surface drainage, but we just need to work on our soil, get our bermuda in and re-establish this course as one of the best in the state."

Shane Sharp is a free-lance golf writer based in Charlotte, N.C.



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