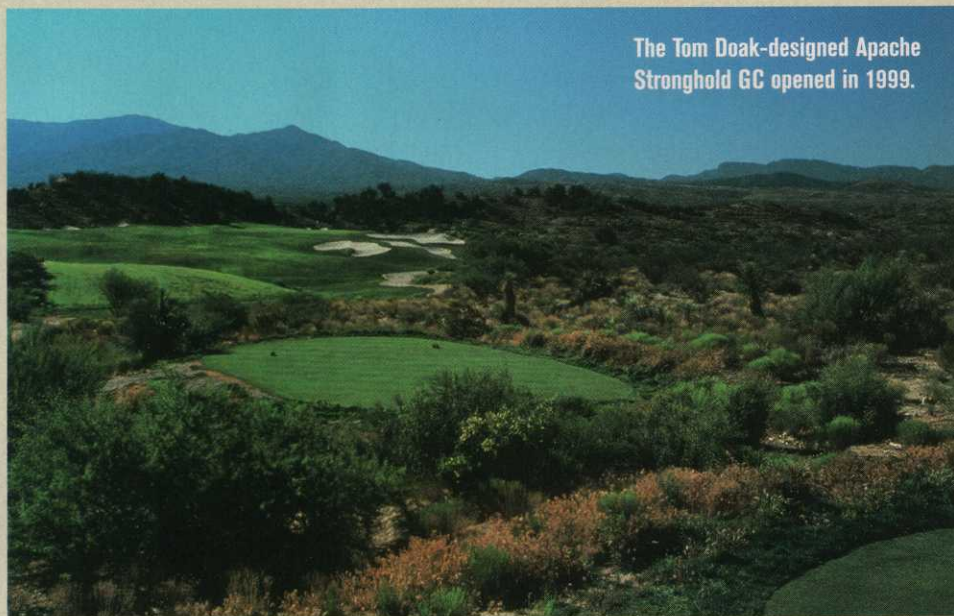


Righting A Wrong

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



PHOTOS COURTESY OF APACHE STRONGHOLD GC

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 decision-makers researched several varieties and opted for a blended seeded variety of Riviera and Yukon.

The 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 daily-fee 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 year-round 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 replaced.

"Basically, what we found was a poorly spaced irrigation system, compacted soils and nutrient deficiencies that stressed the cool-season 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."

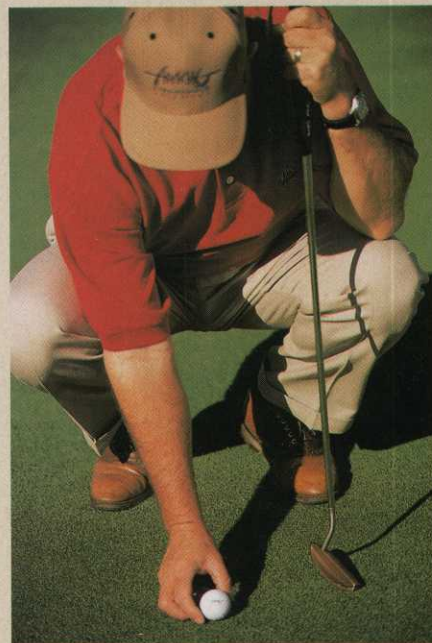
As far as turfing options go, Apache Stronghold is shunning innovation now for a proven commodity.

"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

Continued on page 66



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.**

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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Real-Life Solutions

MULTITASKING FAIRWAY TOPDRESSERS

Doing Double (and Sometimes Triple) Duty

Many superintendents blanch at the expense of buying a fairway topdresser. But innovative superintendents are finding new ways to use these machines that defray the costs

BY FRANK H. ANDORKA JR., MANAGING EDITOR

Jim McNair, certified superintendent of Orchard Beach CC in Aurora, Ill., never expected to get so much use out of his fairway topdresser. The piece of equipment cost him a pretty penny, but he felt it was worth it to keep the fairways from becoming rock hard and prevent a thatch layer from building up.

What he discovered, however, is that he could use the topdresser in ways he'd never dreamed possible. He used it to fill in bunkers during a recent renovation. He uses it as a mobile feeder station to fill his smaller machines for

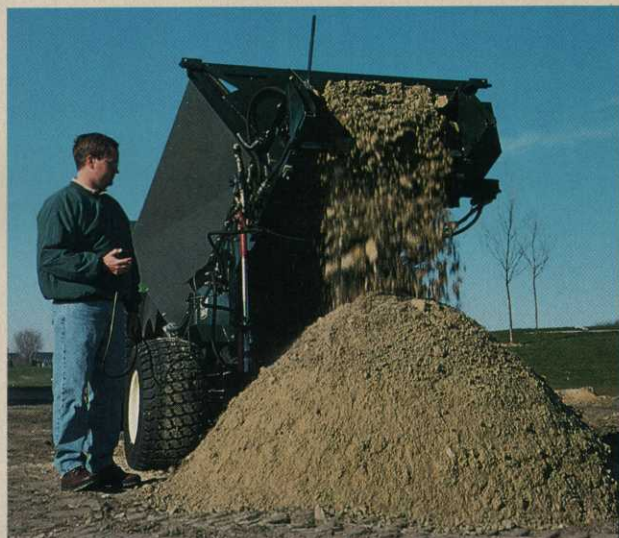
topdressing greens. With its balloon tires, he's even able to use it as a general purpose dump truck to move materials around the course without destroying turf the way his more conventional dump truck does.

"I didn't see all these advantages when I first considered buying it," McNair says. "But now that we have one, it's changed the way we care for our course. I'm also sure we'll find new uses for it that I haven't even thought of yet."

McNair's experience mirrors that of other superintendents who purchased a fairway topdresser for one purpose, only to discover its myriad uses afterward. In an era where budgets are tight and superintendents are being asked to do more with less, a multitasking topdresser could be one of the most useful tools a superintendent can own.

The issue

It's not an easy decision for superintendents to present plans to a green committee or an owner to purchase a fairway topdresser, says Scott Kinkead, vice presi-



PHOTOS COURTESY OF TURFCO

dent of Turfco Manufacturing, a Minneapolis-based manufacturer of turf equipment, including fairway topdressers.

"For the frequency of fairway topdressing, it's typically a larger investment than most clubs are willing to make," Kinkead says. "So superintendents are looking for a machine that will do more than just topdress fairways."

Kinkead says most superintendents are able to use his company's machines as all-around material handlers, which increases their usefulness to a golf course. The CR-10 has high-flotation tires and a cross conveyor attachment that makes it useful in multiple applications, like bunker renovations, trench-filling during irrigation projects and tee construction.

"These are jobs that are usually labor-intensive and

You can use your fairway topdresser to move materials around your course without doing damage to the turf underneath.

include multiple workers with shovels trying to move material around," Kinkead says. "If you can save time and labor from using one machine, the monetary savings will hit your bottom line."

Bunker building

As Quarry Hills GC is being built in Quincy, Mass., (the first nine holes are projected to open this summer), superintendent Dan Bastille has the opportunity to fill his maintenance facility with the equipment of his choice. To build the soil profile he wanted (the course is being built on an old landfill), Bastille knew he wanted to

Continued on page 92

Issue

How can superintendents justify purchasing a fairway topdresser that may only be used a few times a year?

Solution

Find other uses for the machine, from using it as a mobile fill unit for greens topdressers to filling bunkers during reconstruction.

Real-Life Solutions

Continued from page 88

topdress the fairways once a month. He shopped all of the alternative fairway topdressers on the market and finally settled on the Turfco CR-10.

What Bastille discovered, much to his delight, was that in addition to filling his topdressing needs the machine



Of course, you can always use your fairway topdresser in the traditional way, but where's the fun in that? Finding other uses helps defray the equipment's cost.

also functioned well as a bunker building tool.

"It was a real money-saver for us," Bastille says. "You can get right up to the edge of the bunker to fill it."

Bastille also said its cross-conveyor system provided much more accuracy in the sand placement.

"There was a lot less wasted sand with this machine," Bastille says. "You don't have it spilling out the sides of the bunker the way you might if you did the job by hand."

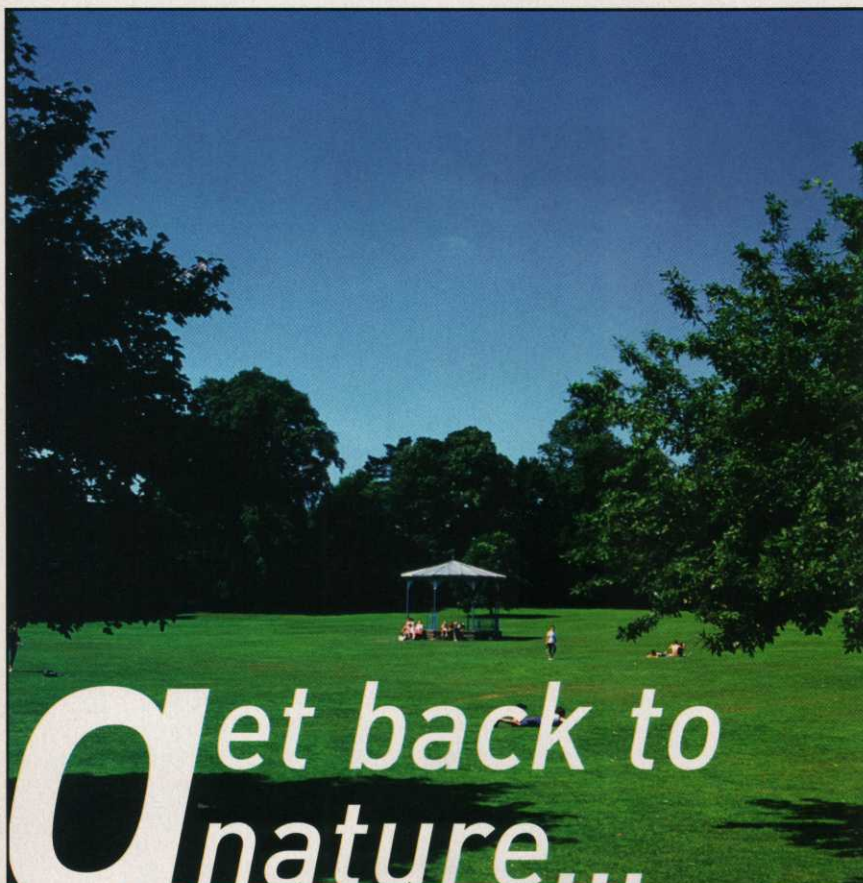
Robert Steinman, certified superintendent of Beekman CC in Hopewell N.Y., says he discovered he could more easily replace the 10 percent of the bunker sand he loses on an annual basis to wind and play by using his fairway topdresser. "It made the job go more smoothly and it saves labor costs year after year," he says.

Trench filling

Steinman also says he found his machine to be helpful in filling trenches created during a recent irrigation project.

"We have 40 acres of fairways, so it was big step for us to buy a machine strictly dedicated to the purpose of topdressing it," Steinman says. "But we were able to use it to fill up the trenches we dug when we replaced some irrigation lines recently. It was a huge timesaver."

Normally, the job would be done by five crew members with shovels, and it would take several hours to get



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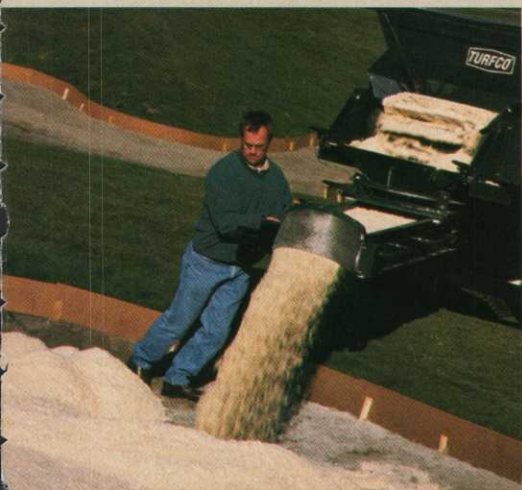
it done, Steinman says. By making use of his fairway topdresser, the job can be done by two people.

All-purpose material handler

McNair says he uses his CR-10 to move dirt around the course when he needs to reconstruct waste bunker edges that erode.

"It always occurs at the edge of the bunker nearest the green," McNair says. "That's the spot where golfers exit. When the edges erode, we need to go in there and rebuild them. I use our fairway topdresser to haul topsoil to the edge of the bunker to help me do the job."

He says he has also used his fairway topdresser to fill in washouts after bad storms. "We haven't had to do a lot of



Filling bunkers used to require multiple workers to do the job, but using a fairway topdresser can reduce the crew to two.

that, but when we do we use our CR-10 to handle the material."

The fairway topdresser also functions as a mobile "nurse truck" for his greens topdressing program, which prevents his crew members from wasting time running back and forth to piles of sand dumped around the course, McNair says.

Steinman says that although his course owns a large dump truck, he'd rather use his topdresser to move materials around because it

causes less turf damage with its high-flotation tires.

Kinkead says Turfco's spreaders can also spread organic fertilizers, which is important as superintendents move toward using more of these products in response to environmental restrictions.

"Our goal was to create an all-in-one machine that superintendents can use for a variety of tasks," Kinkead says. "The feedback we've received indicates we have succeeded, and we'll be looking to create more uses in the future." ■

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