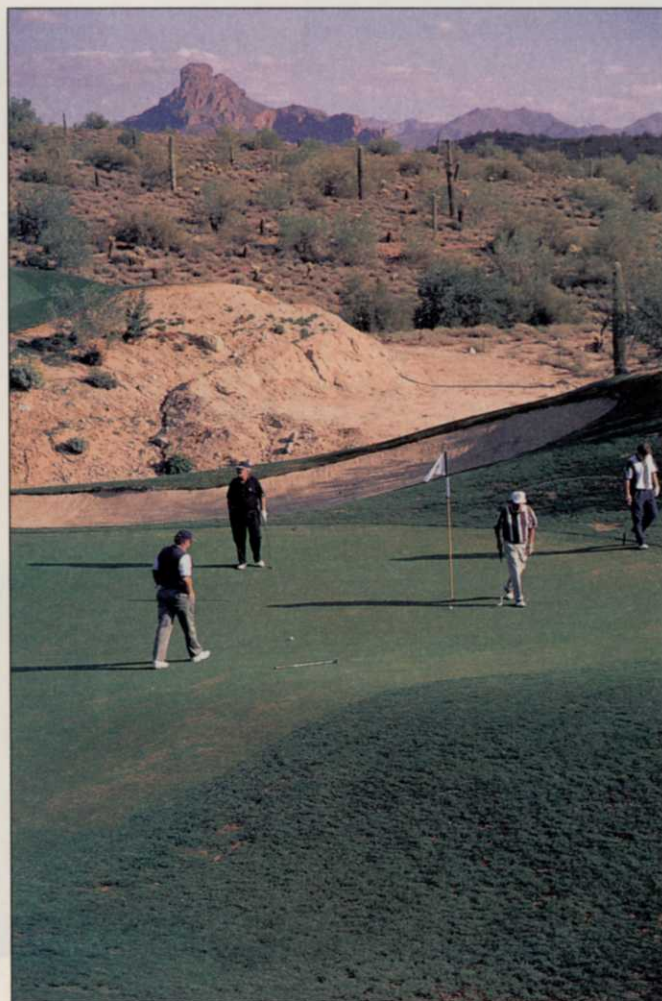


Eagle Mountain climbing higher

This top-rated Arizona golf course lays claim to some of the lushest fairways around, thanks to some redesign work that included soil modification and drainage repair.

by LESLEE JAQUETTE



"We envision [revegetated] areas of the course to look like they've been here 100 years," says Superintendent Kevin Smith.

Named as Arizona's top new course by Phoenix newspapers, Eagle Mountain aspires to offer some of the most interesting and plush fairways in the state.

Designed by Scott Miller in the foothills of the McDowell Mountains, the 18-hole public course opened in January of 1996.

There have been some problems along the way, but changes have been made. Golf course superintendent Kevin Smith and his staff of 30 have developed a number of creative ways to improve greens as well as increase employee safety and satisfaction.

Returning to Eagle Mountain last fall after four years at Hampton Cove, Huntsville, Ala., Smith found that the bermudagrass fairways had been over-seeded to a point at which they would not go dormant in winter. As a result, the perennial ryegrass could not mature to the desired color. With summer heat, the fairways looked burned and spotty.

Smith over-seeded in September and October. Elevated sections of the course—where high wind and wide ranging temperatures are common—were aerated heavily, every 30

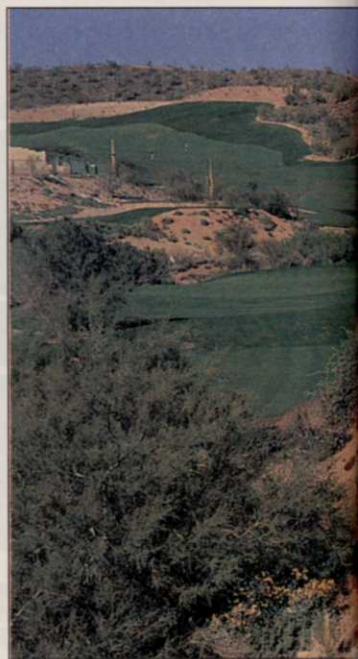
days, with an Aera-Vator turf drill.

The machine bores and swivels the top two to three inches of turf without leaving noticeable holes or cores.

Smith says the machine achieves maximum turf penetration and enhances water retention.

After aerifying, the crew applies sand topdressing, Zeolite and compost.

Smith also applies a spray mixture of charcoal, ferrous sulfate, potassium nitrate and seaweed-based biostimulants. He found the mix worked well, and brought some greener color to the course. Smith



plans to continue the applications every two weeks as long as cold weather persists, to coax the color along and avoid low temperature stress on the bermudagrass.

"We've fooled Mother Nature by changing the carbon to nitrogen," says Smith.

Better growing conditions

Besides bringing up the ryegrass color in the winter, Smith hopes this program helps establish an improved growing media. Due to the nature of the rocky desert soil, it appears imperative to cultivate a thatch independent from the soil, in which the grasses can develop into turf. With constant attention, Smith hopes to have the fairways well-established after next summer.

The foothills terrain has many fairly steep inclines. In order to make them more accessible and easy to climb, the crew has built steps on holes 2 and 17. The steps enhance play, golfer comfort. Native vegetation along the steps re-

duces the need to water what used to be turf.

Smith is experimenting with artificial turf to cover high traffic areas. Due to the excessively rocky and inhospitable soil, heavy use areas remain beaten and scarred. Smith has installed about 1000 square feet of artificial turf, and applied an athletic mix called Redi Play. He describes the mix as sprigged sand over artificial turf, with bermudagrass on top.

Smith plans to experiment with the mix on fairways, and wants to eventually use it to cover up to 10,000 square feet.

Irrigation adjustments

Variations in weather patterns are a challenge for the irrigation system programming. The course is exposed to the south and warmer than neighboring courses. It's also warmer due to the wind and elevation. Every night, the wind blasts through the canyon at 10 to 15 knots.

Some parts of the course are 7-10 degrees F warmer at

Back to the desert

Kevin Smith has been trying to restore much of the Eagle Mountain course back to the "desert look."

He uses burr sage, cactus and other plants to revegetate numerous perimeter areas, but

adds that it is difficult to revegetate. First, irrigation is complicated by the fact that cactus are very sensitive to over-watering, and require good drainage.

On the other hand, plants such as burr sage need more water. When starting the sage, Smith's crew fills the planting holes with organic plant material, to help retain moisture.

"We envision these areas of the course to look like they've been here 100 years," says Smith.



Smith has installed about 1000 square feet of artificial turf, and applied an athletic mix called Redi Play.

night, and 3-5 degrees colder during the day than nearby courses. As a result, the staff must continually adjust irrigation and overseed.

He adds that they choose a late date when the weather cools down to overseed.

Safety, friendliness

Smith holds in-house seminars for the staff on safety and maintenance etiquette. The safety seminars educate the staff on how to keep productive even during periods of play. They advise employees where to stand while golfers are in the area, and still continue working. Smith also outfitted the staff

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with "bump caps." Using a plastic insert in their ballcaps, the staff can work safer and still be comfortable.

Smith urges the staff to be outgoing, to help golfers rake traps and look for balls.

"We're getting great customer feedback because people enjoy being pampered," says Smith.

"We try to make pleasing their every whim part of the routing. We feel maintenance can have a tremendous effect on guests' overall perception."

During Employee-of-the-Month barbecues, the top employee receives a plaque and a gift certificate. □

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