

Parks in the Desert

The logo for 'Turf' features the word in a bold, black, sans-serif font. A green grass blade graphic is integrated into the letter 'u'.The logo for 'Tree Services' is in a bold, black, sans-serif font. A small green leaf icon is positioned above the 'e' in 'Services'. Below the main text is the tagline 'Taking Tree Care to New Heights' in a smaller, italicized font.The logo for 'DesignBuild' features the word 'Design' in black and 'Build' in orange, both in a bold, sans-serif font. A small orange square icon is positioned above the 'i' in 'Design'.The logo for 'PLOW' is in a bold, blue, sans-serif font. The letters are slightly slanted to the right.

Source: www.TurfMagazine.com

Aesthetically pleasing turf with limited water resources

By reducing turf to "functional" areas and installing xeriscapes or even bare dirt, the City of Henderson has saved 55million gallons of water since 2003. Inset: Tall fescue once was the dominant turf in the parks of Henderson, Nev., butnow, the heavy water user is relegated to play areas.

Henderson, Nev., is one of the fastest growing cities in the world—in the last 10 years it has almost doubled in population-and it is also one of the driest. Perched on the southern skirts of Las Vegas in the Mojave Desert, it is carved out of that desolate, stony terrain that once harbored almost no vegetation, and yet, Henderson is a park-friendly city. It now has 44 parks and builds them at a rapid clip, and surprisingly, turf is a very prominent feature in almost all of them. In fact, it is necessary.

“We use native or desert-adapted plant materials where possible,” says Patricia Ayala, a parks planner for the city of Henderson, but she quickly adds that parks are essential to a family-oriented city like this. In fact, a big part of the rationale for long-term parks planning is that since homeowners are discouraged from planting grass (they are given incentives to remove it because of valley-wide water restrictions), the city wants to provide those green, usable spaces for sports, picnics and other family

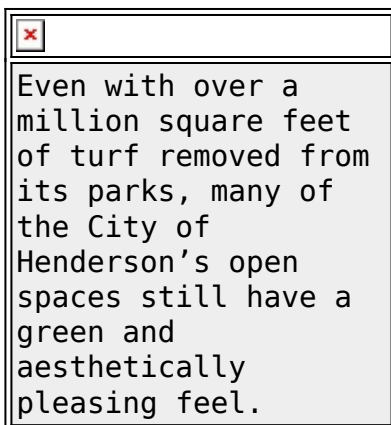
gatherings that the home may not be able to provide.

Ayala says that residential turf was very popular in Henderson at one time, and for good reasons, but now that water supplies have dwindled and the area is in the middle of a long drought, turf is discouraged if nonessential. The city wants residents to “embrace the desert climate” and its landscapes. When planning a park, the city aims to have from 2 to 3 acres of open turf in each park that is 5 to 10 acres in size. There is no definitive ratio of turf, because each park will vary according to the needs of each neighborhood.

In general, however, parks in the desert are going to have much more xeriscaping and native plants—or even bare dirt—than they used to. There will be a lot of revegetation with native species. “We use a rock mulch in those revegetated areas,” Ayala says. “We look at permeable pavings, on-site storm water management, mixes of vegetation that use less water.”

Turf planted in parks will be “usable turf,” she says, and not applied simply for aesthetic or traditional reasons. Most of their parks are 5 acres in size or over, and so each will have significant turf acreage. Most of the turf planted will be on flat ground because of the potential for multiple uses and the ease of irrigation, but at least one park has a “splash pad” of turf that is on sloped ground where kids can play and families can picnic.

Ayala points out that the city’s municipal golf course, Wildhorse Golf Course, will be the last one for the foreseeable future. Plans for more golf were on the table at one time, but water and budget restrictions have quashed those for now.



Even with over a million square feet of turf removed from its parks, many of the City of Henderson’s open spaces still have a green and aesthetically pleasing feel.

“They too have their own turf reduction program,” she says of Wildhorse Golf Course managers, who are not employed by the city. The club was an existing course purchased by the city. To show how fast the community has grown, the population was only 144,000 in 1997. Nearly half a million people are expected to live in this Vegas-adjacent city by 2035.

Dominick Casey, parks superintendent, says that a city drought report in 2003 was crucial in kicking off several water-saving steps. Turf removal was one—the city has taken out over 1 million square feet from parks alone since that time—but there were several others. A major one was the installation of a Rainbird Maxicom controller system that, when all of its ancillary aspects were figured in, cost over \$1 million.

"We have almost every valve in our parks on it," Casey says of the controller, and he brags that the city has saved 55 million gallons of water since 2003 with this and other techniques. The Maxicom system uses three new city weather stations, as well as other established stations in the area, to dole out water as needed. Henderson now uses 3 percent less water than it did in 2003, and it has five more parks.

Casey is very proud of city water savings, as well as city parks. He points out that savings are not all about turf restrictions. Other recommendations of the drought report, such as careful training of maintenance crews and the use of comprehensive monthly water audits on parks, are big contributors to savings. The city aims to hire graduates with ornamental horticulture degrees for supervisory positions (which is Casey's background too), because that gives them people trained in all aspects of landscape management.

The other recommendation of the drought report that has really affected Henderson park turf is the type of grass selected. Casey points out that at one time all parks in the city featured tall fescue. Even for sports parks. With 62 ball fields in those parks, that was a lot of water usage. It used more water in both winter and summer than bermudagrass. Fescue is still used, but now fescue blends of varieties such as Medallion and Mustang are used only in open play areas and in "parkettes," high-use areas around gazebos and playgrounds.

In other areas, and especially where sports like soccer or baseball are played, the city has converted turfed areas to hybrid bermuda. "We did it for the water savings," Casey says, but the Tifway 419 also plays better and lasts longer in high-traffic areas. It also requires less fertilizer and other inputs over the course of a year. The parks department also has a "mow the service" program that sets up mowing frequency patterns based on use and visibility, which saves on mowing costs in out-of-the-way areas.

Henderson ball fields are not overseeded with ryegrass in the fall, which is a big savings of inputs at that time and savings of water during the winter months. Kids play ball on dormant hybrid bermuda for several months, and it holds up well. The city experiments a lot with turf to find good varieties and applications, and one of the success stories is in the use of Diamond variety seeded hybrid bermuda to fill in heavily used sports areas, such as around the soccer goals. One of the secrets of having healthy bermudagrass year-round, Casey says, is to keep it healthy with proper fertility and aeration programs.

"We're using a lot more hybrid bermuda, and putting a lot less in," he says.

Casey says the city of Henderson's philosophy and outlook on turf is: "If it's nonfunctional, it's not going to be turf very long. If the only time you step on turf is to mow it, it's not functional." The city has surveyed all of its parks and made plans to cut out turf that does not get used by kids, families or sports teams. It has succeeded in that, and much of the turf came out of medians, parking lots and other areas where it was merely decorative. They obtained enough grants and water utility rebates to pay for all of that turf removal; it cost the city nothing in the long run to save all of that

water.

When you look at Henderson's parks, you see what appears to be a lot of turf. There are many green areas and sports fields, and Casey says the city is also committed to having beautiful parks that attract people. A big part of the philosophy is to compensate for the modern tendency to have small home yards by making public spaces available for residents to go for their picnics and touch football games.

It's all about being responsible to both citizen recreation requirements and long-term resource limitations, and that's how a desert city can be both park-friendly and water-friendly.

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