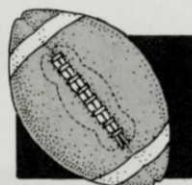


# EVERYTHING'S COMING UP ROSES

Improved drainage and timely renovations allow The Rose Bowl to head into its 64th season with its best face forward.

by Kent Kurtz, Ph.D.



William L. Leishman didn't realize on that warm August afternoon in 1900 that someday his dream would be enjoyed by 75 million people annually. Not on that day when, as president of the Tournament of Roses Association, he hiked the dusty Pasadena hills and looked down on the Arroyo Seco.

He saw a city dump. Also, he saw a rocky area that might be a good place for a football stadium.

Now 85 years later, Leishman's son Lathrop and two grandsons are members of that same Tournament of Roses Association.

Lathrop accompanied his father by train to New Haven, Conn., to visit the famed Yale Bowl where the Rose Bowl dream took shape. The elder Leishman, impressed, said: "This is the kind of stadium we should have in Pasadena," his son remembers.

William Leishman's dream became reality in 1922. He, architect Myron Hunt and builder William Taylor gave the people of Pasadena a football stadium in the Arroyo Seco. Not a bad seat in the house. That trio was determined to bring the game to the spectator.

That's one reason the Rose Bowl hosted the 1984 Olympic soccer finals and showcased that sport to the largest U.S. audiences ever. The playing surface impressed the World Soccer Federation which gave it a 98 rating (100 being the highest).

That's just part of the versatility of The Rose Bowl. Name it and this stadium's seen it. Concerts, religious events, holiday celebrations, motocross, swap meets, even the location for commercials and movies. And, don't forget, it's a football field, a

**Dr. Kent Kurtz on the  
Rose Bowl surface.**

**A packed—and beautiful—  
Rose Bowl.**





Setting up the field for an auto race.



A police helicopter dries the field last New Year's.

grass field, and home of the UCLA Bruins and the New Year's clash between the best of the Big 10 and PAC 10. The so-called "Granddaddy" of bowl games.

### The 1985 Rose Bowl game

Preparation for the Jan. 1, 1985 Rose Bowl game. Hectic. Full of surprises. Complications arose as winter storms dropped cold rains on Pasadena.

Renovation began with vertical mowing, aerifying, removing plugs, and sweeping. Perennial ryegrass seed, pre-germinated in 55-gallon containers, covered the field. Brushes carefully dragged about 110 tons of sand over the playing surface.

But 50-degree temperatures hampered germination and growth of the ryegrass seedlings.

The staff grew anxious as January 1 approached. It considered a polyethylene greenhouse over the field and using gas heaters to warm the germinating seed. Instead, someone suggested the new polyester field-covers. They soon covered the playing field.

Soil thermometers, checked daily, indicated temperatures under the covers averaged 62-65 degrees compared to 48-51 on the uncovered sideline area. This warmth pushed growth of the perennial ryegrass. Fertilization and mowing followed within two weeks.

Intermittent rains kept the field wet though. Calcium nitrate fertilizer could not be applied to the moist grass. The painting of the end zones and the center of the field would be difficult too. Help came from the Pasadena Police Department which volunteered the use of a helicopter to dry the grass.

Game day and everything came up roses. Credit the covers which provided a warm environment for the seed, and the sand topdressing for dry, firm playing surface for secure footing.

### Improvements for 1985

But even after the success of the Rose Bowl game, basic problems remained. The biggest was drainage which for 63 years depended on a 24-inch crown in the center, turtle-backed to the sidelines. Soil clogged the few catch basins along the sidelines. An engineer and a soils specialist joined the field improvement effort. They collected water infiltration and percolation data.

In the summer of 1985 test holes and soil samples showed that two feet beneath the turf surface lay the original Arroyo Seco gravel and sandy soil, good drainage material. However, the Rose Bowl topsoil contained a mixture of clay, silt, non-decomposed sludge and manure. Sod rooted in clay, installed prior to the 1984 Olympics, topped everything.

To provide drainage through these layers, workmen using backhoes dug one-by-two-foot trenches, spaced about 15 apart, the length of the field. The trenches were backfilled with medium grade sand. To help drainage further, workmen flushed the old catch basins with high pressure fire hoses and built four new basins.

With drainage in place, the Rose Bowl was ready for a motocross.

### The renovation

Even though polyethylene and soil covered areas where motocross competitors battled, UCLA's first football game three weeks later demanded a complete field rebuilding.

Workmen removed the sod and all soil and debris. Roto-tillers churned the field to a depth of six inches before it was rough graded. Care was taken to roto-till lengthwise to maintain the drainage sand slits. Some humus, however, was added to these slits to ensure even turf color throughout the field. Next came installation of a 24-inch crown and final grading.

It took two days to lay Santa Ana bermudagrass sod. Frequent irrigation knitted the sod to the surface.

This particular sod had been contract-grown for the Rose Bowl by Pacific Sod, Camarillo, Calif. A special black turfgrass colorant sprayed over the stolon surface accelerated growth. The colorant absorbed heat. Company officials believe it resulted in a 25-to-30 percent faster spread of the bermudagrass.

Improved drainage and the well-thought-out field conversion provided the Bruins with a first class facility in 1985.

The challenge now? January 1, 1986.

### The staff

All requests for events at the Rose Bowl must be directed to Constance Borg, Rose Bowl event coordinator. The Pasadena Board of Directors (city council) then must give its go ahead.

If the Board approves the event request, a contract (covering all phases of the activity from field maintenance to security) is drawn up and reviewed by acting Rose Bowl director Donald Hunt.

Rose Bowl field supervisor Richard Gonzales works directly under Hunt and oversees daily maintenance functions. Gonzales' staff performs the mowing, fertilizing, watering, aerifying, top-dressing, and other field preparations.

For large events—the Rose Bowl game, for example—a second turfgrass supervisor may be required. Pasadena's golf supervisor George Adge and his staff help with special field preparation, spraying or major renovation projects.

Coordination of maintenance schedules, advisement on agronomic practices, and evaluation of new materials and products are handled by Dr. Kent Kurtz, Rose Bowl agronomist and turfgrass professor at Cal Poly Pomona University, who works directly with Hunt.