Creating the Perfect
Landscaping the new museum required more than the gardener’s touch.

If the Sam Noble Oklahoma Museum of Natural History is the painting, then the surrounding landscape is its frame. Museum Director Michael Mares and his co-workers had a choice: make the frame a pristine, gilded work of art—albeit artificially so—or draw from the museum’s existing natural environment. Guess which option they chose.

“The easiest thing to do would have been to make this like a park, a mowed lawn, like the Duck Pond,” says Mares, in comparing the 60 acres surrounding the new SNOMNH with Brandt Park, a site of similar size in the heart of the campus. “It would be pretty. But this museum is really about Oklahoma’s history, diversity, and culture. If we had created an ornamental garden, it would have clashed with the mission of what we do inside the museum. That led us to say the outside should be a natural extension of the museum.”
Because the museum is located at an institution of higher education, it seemed only logical to seize upon another learning opportunity. Peter Tirrell, associate director of the SNOMNH, explains that input on the landscape design was considered from approximately 50 people within the University, including individuals from Architectural and Engineering Services, the Landscape Department, Landscape Architecture, and the museum itself.

“We view the acreage as a learning laboratory for OU students in the field sciences such as zoology, botany, geology, and archaeology. Our curators and their students can use the site for actual study as well as testing methods and techniques. In addition, the area can be used for public programs, outdoor events, interpretive trails, and representative environmental areas of Oklahoma. For example, we hope to have a model prairie with many of the native prairie flowers and grasses on display.”

Plans then were put in motion to produce a landscape that would achieve two goals simultaneously: complement the inside of the museum using what was available naturally. The byproduct would provide a 60-acre living laboratory, with more than 90 existing plant species.

“We want people to understand—since this is their official museum of natural history—how rich the diversity of plant and animal life is in the state of Oklahoma,” Mares says. “My goal has always been that when you walk through the museum, whether you’re a native Oklahoman or a visitor, you’ll never have the view of Oklahoma that’s so pervasive among people relative to the dust bowl days, the Grapes of Wrath, the Steinbeck era.

“There are very few states that have the natural history richness that Oklahoma has. I study mammals; you go to South Carolina, for instance, and they have 60 species of mammals in the state. We have 100 species, and it’s the same with birds. And plants. We have the third highest number of native plants in the country. California, Texas, and then Oklahoma. People don’t realize that. They don’t understand that diversity.”

The building itself creates an environmental diversity with which the gardeners now must grapple. With a footprint of an acre and a half, the massive structure creates two climatic extremes for the surrounding landscape: sunny and arid on the south side of the building, shady and moist on the north.

The water feature on the north side of the Sam Noble Oklahoma Museum of Natural History was the landscapers’ most ambitious project as they prepared for the May 2000 opening of the new facility. The area features limestone outcroppings and plantings native to southeastern Oklahoma and is constructed to geographically resemble the Blue River of that part of the state.
"When you think about it, that's exactly what you see in Oklahoma," says Tirrell, "although mainly more east to west. The east has the higher rainfall and the mountains—and you do get all those eastern species—and then when you go west, it's drier and higher, and you get the tremendous contrasts with the woods versus the prairie.

"Of course it's not a dust bowl. Visitors will see it's really a much different place than what they envisioned from the cowboy western movies."

With the May 1, 2000, public opening day of the museum looming, the landscape blueprint was implemented with no time to spare. By the time the 100,000th visitor strode through the doors much sooner than expected during the summer, most folks were unaware of the monumental effort necessary to make the grounds so inviting.

In its own way, the landscapers' task was nearly as daunting as the building's construction, for what greeted them at the contractor's departure was little more than bare, scraped earth. The soil was highly compacted, nutrient poor, and littered with construction debris. Not only was repair work, including basic soil amendments, necessary for many reasons, but also in order to adhere to the indigenous protocol, even the Bermuda grass, a non-native, had to be replaced.

After eradicating the Bermuda and other non-native or invasive species, the landscapers planted grasses that are found naturally in Oklahoma. Varieties include prairie dropseed, buffalo grass, and little and big blue stem grown on University land southeast of the museum, and Indian and other mixed grass prairie species found locally. All work together to create an environment conducive and inviting to birds and animals returning to their ancestral habitat.

Steve Hill, former director and now a consultant to the OU Landscape Department and adjunct professor in landscape architecture, says approximately 450 trees were planted with nearly half coming from the University's tree farm and landscape greenhouse. Most of the species are found native within five miles of the museum. One of the largest specimens is a W.W. II-era deciduous holly or possumhaw.

"We spotted it in a dense stand of cedars, locusts, and ash near the water tower on University property," Hill remembers, adding that the holly stands out because of its bright red berries during winter.

A very large tree spade and crane were used to place it in the shady north side garden. Also from the OU tree farm came camereed and white oak, sand plum, hackberry, soapberry, persimmon, sweet gum, bald cypress, and sycamore. Smaller trees were purchased bare root from the state tree nursery in Washington, south of Norman. Fast-growing cottonwoods were installed to screen the bright lights of neighboring L. Dale Mitchell Baseball Park. The goal was harmony with nature, a naturalistic approach, says Hill.
Native perennials and wildflowers were arranged in drifts around the museum, and berms were constructed, including one of earth and rock near the building's entrance. One of the most photographed sites at the museum, the berm supports the 2,000-pound, eight-foot-high bison sculpted by OU graduate student Kim Walker Ray.

The most ambitious landscaping project undertaken prior to opening day was the creation of a water feature on the building's north side. Constructed to geographically resemble the Blue River in southeastern Oklahoma, the area showcases limestone outcroppings and plantings.

Occupying the islands formed in the parking areas are woodlands of cedar, hackberry, rough leaf dogwood, sumac, Mexican and sand plum, wildflowers, and mixed grasses.

Public parking is but another category in which the SNOMNH is unlike its peers. With almost 200 visitors' spaces onsite and nearby Lloyd Noble Center lots available for overflow, the country's finest university-based museum of natural history also boasts the most parking. But no comparable facility sits on 60 acres, either. With the opening day "emergency" past, when concern had focused on the three-to-five acres immediately around the museum, attention shifted to areas away from the building.

Planners envision nature trails, possibly an outdoor sculpture garden, a lake, dense oak forest, perhaps an arboretum. Many believe the area would be a natural site for festivals and other activities; some hope to import stones and trees from Oklahoma's Black Mesa region. Others want to study the cycles of a natural prairie. A most popular idea involves the creation of a wetlands area.

Mares has dreams of securing an endowment to support the museum landscaping. To date, private gifts have funded three highly visible outdoor projects.

The Conoco Oil Pioneers of Oklahoma Plaza, northwest of the entrance, features bas-relief plaques with portraits and biographies of state oil pioneers from the late 19th and 20th centuries. The intimate area also includes benches and attractive landscaping.

Paving the entrance to the building are Wapunucka limestone blocks, each engraved with the name(s) of its sponsor's choosing. This Oklahoma Heritage Walkway continues with larger stones outside the W. R. Howell Pleistocene Plaza, where the bronze mammoth stands in the south rotunda.

Another sizable outdoor project was the painstaking relocation of an authentic log cabin to the new museum grounds from the old Stovall Museum, where it was on display for 20 years after being donated to the facility. The cabin fits in well on the mixed-grass prairie that is the museum's "backyard" and provides visitors a glimpse of the prairie lifestyle during the land run era.

Bounded on the south by corridors of undeveloped land to the river, the museum enjoys a providential relationship with the local wildlife population. With the construction crews long gone since the opening one year ago, the reawakening prairie again is luring the animals back to the site. Museum staff have spotted hawks, cotton rats, foxes, rabbits, and kestral falcons.

Museum staffers whip out their cameras and make for the south side of the building when the penstemon blooms—for the little blossoms appear only once a year—and briefly—but during that time, the landscape looks like it is covered with snow. Classified today as an endangered plant, the penstemon was prolific when bison grazed here in great numbers.
“It wasn’t very long ago there were bison here. They once were hunted on this site.”

Century-old buffalo wallows were still visible on the site selected for the new Sam Noble Oklahoma Museum of Natural History, testimony to the land’s former residents. And even today, the bison—a bronze one—stands at the entrance to the new facility. The exterior surroundings were planned as a natural extension of what goes on inside the museum, where the focus is on Oklahoma’s history, diversity, and culture.

“It wasn’t very long ago there were bison here,” reminds Mares. “They once were hunted on this site. Only an instant ago—geologically speaking—that little penstemmon (an endangered plant growing on the building’s south side) evolved with the bison, so it was grazed twice a year. We want to reproduce that regimen. In April, when the penstemmon blooms, it looks like snow out there.”

With the record-setting hot and dry summer of 2000 a distant memory, the University green thumbs proceeded with plans dictated by the temperature region in which Norman is situated. “We have completed the installation phase,” says Jay Thompson, director of landscape services, “now we are focused on the crucial maintenance needed in the first couple of years while establishing a native landscape.”

Hill agrees. “You don’t see much in the first year or two because many prairie plants grow down, establishing big root systems before they grow up. We should see a real community of plants established by the third year.”

Some trees on the acreage are reaching the limits of their lifespan, making replacement decisions easy. Lining what once was the road to a rifle range on the former naval base, the Siberian elms are beginning to die. Even the pine trees, which were planted as wind breaks by the W.P.A. during the Depression, are beginning to fade and will be replaced by native pines.

“Many of us may be dead and gone by the time this area really is developed to completion, but the plans we’re setting into motion now will have fruition in the long term, like planting a tree,” says Mares.

“We really see this landscaping plan as our reaching into the future generations that are coming. Every trend indicates most of the natural habitats of the world are disappearing. Well, here’s one little patch we’d like to try to bring back or preserve. And if you can’t do it in a natural history museum like this, then really, where can you do it?”

OU crews will continue to plant and nurture. Nature and time will finish the masterpiece.