

## **NO HORSING AROUND** Equestrian facilities are not easy to maintain

ACK IN THE STORIED DAYS of the Wild West, equestrian facilities were the open range or possibly the paddock outside the stables. There wasn't a lot of consideration given to the surface being ridden on, and as long as stalls were mucked out, there wasn't a great science to what went under the horses' hooves once they were inside a barn.

But just as sports surfaces have changed for human athletes, they've changed for horses as well. Now, what goes underfoot is at the top of an owner's mind and at the head of the list of a trainer's concerns. Equine veterinarians dedicate years of study to ways of keeping horses' hooves in good shape, and farriers have chipped in with their insights as well. Footing, as the performance surface is called in equestrian circles, has become a science as well as an industry. And the facilities in which horses perform have evolved as well. So for those who are working with equestrian facilities, much needs to be considered. And it all starts from the ground up, according to the pros.

## **ON THE SURFACE**

"One of the biggest challenges with getting good equestrian footing is making sure you have the right surface for the discipline that the rider and horse are doing, such as jumping, dressage, reining and simply pleasure riding," says Lori Douglass of Thor Turf Equestrian Surfaces in Sandusky, OH.

According to Douglass, each discipline has its own needs. "Jumpers like the footing to be more compacted but still have the ability to grab the surface on takeoff and landing. They also require some cushion for the protection of the horse's joints. Dressage riders like their surface to be somewhat compacted but the surface needs to have cushion and a little spring to it. Reining horses need the surface to be a little deeper and looser so the horse has the ability to slide and spin. English Equitation riders with highstepping horses also like the surface a little more compacted; this creates more of a level surface which is good for balance. It is very hard to please all disciplines in one ring with one type of surface."

Many recreational horse shows are still held outside on grass, while others take place at fairgrounds, either inside or outside. Over the years, the latter events had taken place on sand, dirt, wood chips and a

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mixture of some or all of these. Over time, however, there arose a demand for equestrian-specific surfaces. After all, if the horse's feet aren't right, nothing is right.

"There have been many changes in surfaces over the past few years," Douglass notes. "Many facilities use a sand and clay mixture, sand and geotextile felt-like product, and also a manufactured synthetic footing made up of sand, fiber, wax or polymer coating. The surfaces that are not synthetic use water to get the consistency that they need for the discipline they ride. Of course with a synthetic dustless surface, you do not have to ever water for compaction or dust issues because they stay compacted and you will have no dust issues. Typically, synthetic surfaces are the same whether they are used in indoor or outdoor installations. They may have to groom the surface a little differently for race tracks as opposed to riding rings. You also need to be sure that you have a base that drains very well for outdoor installations because of weather. The footing will drain if your base drains."

The preferences of the rider will depend a great deal upon what they have trained on, what they are used to riding on, and what is a traditional surface for that discipline. Polo riders, for example, because they generally compete on outdoor grass fields, are used to surfaces that do not produce dust, or do not produce much dust. As always, however, the climate of the area the rider generally trains will determine his or her comfort level.

## THE FACILITY ITSELF

According to Jack Kamrath of Tennis Planning Consultants, Inc. in Houston, the design of an equestrian-specific facility is more than just enlarging upon a barn or refining a pasture. TPC discovered this upon embarking upon the design of a tennis, equestrian and polo complex in Richmond, TX in 2008. The need to balance all aspects of the project, and particularly, to design a horse-sensitive and rider-friendly environment, was a learning experience.

"We learned some fundamental design parameters," Kamrath noted, "which we followed at nearly all times including allowing the horses to live with and be near other horses, keep spaces safe for the horses, provide enough stall space to allow the animals to roll on the ground and be free to stretch and exercise, give horses good windows to allow them to smell and interact socially in their stalls, provide plenty of run out space according to land available and providing ample fresh air (without drafts) and as much natural light as possible. For the staff, safe and ease of access to boxes, open sight lines, dryness and warmth, easy access to water, feed and bedding material is important as a few of the basic design needs."

According to Kamrath, the covered indoor equestrian building needed to be a minimum of 300 feet long and 150 feet wide to accommodate the events planned for the facility. TPC went with a pre-engineered covered building that had a midpoint of 25 feet to allow for adequate air circulation from a fan system.

"In the south, summer heat and adequate air circulation is a major need which, as we discovered, was a major need even in northern latitudes of the United States



>> AERIAL VIEW OF THE NANCY G. HELD EQUESTRIAN CENTER, Albion College, Albion, MI. Thanks to Mark Frever, CSFM for this photo.

when the summer sun is at its most severe northwestern azimuth," Kamrath noted.

The facility required two sets of stables: one for equestrian training and events near the covered facility, and a second set of stables near the polo fields for the polo ponies. Kamrath noted that infrastructure planning was also essential.

"In both stables, adequate trailer parking for unloading and loading of the horses was a paramount planning need and we were able to accomplish that goal. This trailer space helped also to determine the road master plan for the project. Roads needed to be 28 feet wide for two lanes in order to have adequate trailer maneuverability as well."

The facility also included 'run-out' or exercise space near the events facility for horses to warm up and exercise prior to events. An additional eight to ten turnout paddocks, a minimum of 50 x 50 feet, were also incorporated.

"The stables themselves needed to be 10 x 15 feet for each horse, have plenty of fresh water available, excellent air circulation and ease of access for both horses, trainers and riders," Kamrath said.

Housing was needed not just for equine residents, but for humans as well, Kamrath noted, so on-site apartments of about 20 x 20 feet were provided between both the polo stables and equestrian stables. A central cooking/grill area for the trainers was built in as well. The ancillary sports facilities on the campus—tennis and golf (as well as a clubhouse)—were planned so as to be non-intrusive to the horses, stables and equestrian activities.

At its core, however, says Kamrath, planning for a facility has to take into account the needs of the users: in this case, the kind with four legs and a tail.

"In general, it is critical that the well-being of the horse and allowing it to reach its full potential should be kept uppermost in mind," he notes.

Mary Helen Sprecher wrote this article on behalf of the American Sports Builders Association. Available at no charge is a listing of all publications offered by the ASBA, as well as their Membership Directory. For info, 866-501-2722 or www.sports builders.org.

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