

Seabright Lawn Tennis Club offers its membership a variety of tennis court surfaces, including all-weather, clay and bentgrass.

TENNIS: The Sport of Choice

ennis has the widest choice of surfaces of any sport played outdoors. While this choice continues to grow, so does the number of tennis aficionados who want to test their game on a variety of surfaces. Once they grasp the basic strokes and strategy on hard surfaces, they start hungering for a few sets on clay, hard-true or the ultimate-grass.

Graduates of public courts to date have been limited to a relatively small number of tennis clubs and resorts. Reputedly high maintenance costs have discouraged many recreational facilities from building hardsportsTURF 14

true or grass courts. The latest concept in tennis courts surfaces is a sand-filled artificial surface which originated in Australia. One version called Omnicourt is touted to play like grass without the maintenance needed by natural turf. Proponents of grass courts have labelled the sand-filled courts "mod sod" in a less than complimentary fashion.

The truth of the matter is tennis fanatics want to try all types of courts whatever they cost to maintain. They will support facilities with a variety of court surfaces. Then it becomes the sports turf manager's job to maintain them. A review of the various types of surfaces and their maintenance might be wise.

The ultimate threat to any tennis court is poor drainage. Subsurface water can defeat even all-weather courts by making the base of the court unstable or by heaving and cracking during freezing weather. A perimeter drain separating the court from surrounding run-off is important in preventing subsurface drainage damage.

Sealing a hard surface court not only reduces damage from water and sunlight, continued on page 16

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but can provide a smoother surface and a "truer" bounce. A good sealant applied periodically is well worth the expense considering the longer life and improved appearance of hard surface courts. Sealants retard the oxidation of the binder in asphalt by shielding the surface from infrared and ultraviolet radiation. Oxidation of the binder is what makes asphalt brittle and likely to crack.

Laykold hard surface courts use a special asphalt binder and acrylic coatings to reduce the damage caused by radiation and weather. The company also makes tracks and offers a rubberized asphalt tennis court surface and a non-acrylic coating. Sportec International in Kenmore, NY, builds both Laykold and Omnicourt tennis courts.

Maintaining enough moisture is a concern with clay or hard-true courts. The material is very similar to baseball basepath mix and needs to be wet down periodically for firmness and dust control. The court needs a dry skin but a sufficiently damp base. The topmix and the base mix affect maintenance. Fred Allen, superintendent at Seabright Lawn Tennis Club in Rumson, NJ, says his six cinder-based hard-true courts are the best on the East Coast because they retain moisture so well. "We also have nine stone-based hard-true courts that require considerably more care," says Allen. "The difference is in the base."

Even though grass courts require more year-round care, 95 percent of the members at Seabright Lawn Tennis Club prefer them over clay.

One reason people like clay or hard-true is the surface absorbs some of the impact and the ball does not bounce as far. "You can't stand on the baseline and pound away at your opponent," says Allen. "Actually the court may be slower but the tennis player has to be faster to get to the ball. Tennis players drag their toes and play the net in the same general areas," says Allen. "That's where the maintenance comes in.

"Dust is our biggest problem with clay or hard-true courts. The courts are dragged, rolled and brushed daily and wet down at night and at noon. During the summer the stone-based courts need to be watered every hour. We also keep an eye on the courts for any extra care like brushing off line tapes and net adjustments.

"Even though grass courts require more year-round care, 95 percent of our mem-16 sportsTURF bers prefer them over clay," Allen claims. The club is open from Memorial Day to Labor Day, yet work on the grass courts continues during the off season. Bentgrass courts were the rule when the club was first opened to play 110 years ago. The 30 grass courts are maintained "just like a golf green," says Allen. That's why Allen attended the winter turf management course at Rutgers University for two years to gain an associate's degree in turf management.



Fred Allen, superintendent of Seabright Lawn Tennis Club.

"After Labor Day we aerify with a Dedoes drum aerifier and vertigroove with a Rogers 512. The vertigroover uses a 1/8-inch blade to cut into the topsoil in rows three inches apart. This gets the seed in contact with the soil. Then 14 tons of topdressing (80 percent sand and 20 percent loam) are applied with a Gandy drop spreader to the three acres of bentgrass. We then apply fertilizer (1 lb. nitrogen/1,000 sq. ft) followed by a 50:50 blend of Colonial and Seaside bentgrasses spread at a rate of one half pound per 1,000 sq. ft. Late in the fall we apply fungicide to guard against snow mold."

The preventative disease program continues in April to guard against leaf spot and dollar spot. Before the weather gets hot and humid Allen starts applying fungicides to prevent pythium. He likes to alternate fungicides to reduce the chance of disease resistance.

In late April Allen aerifies again, runs the verticutter over the plugs to break them up, blows off the thatch and topdresses a second time. Another fertilizer application of one pound of nitrogen is made and Tupersan is applied to halt germination of any weed seed on the courts. Milorganite is applied in mid-season.

The courts, cut throughout the winter at 3/8-inch, are now raised to 5/16-inch, their playing height throughout the season. Only fifteen of the 30 grass courts are in play on any particular day. This allows Allen and his assistant Joe Hammond to remove the tennis nets and standards and mow every other day.

Lines are also marked every other day. Nails with marking washers are sunk below the surface on corners so they do not interfere with mowers. For "lining out" string is strung from these nails and a mixture of 50 percent chalk and 50 percent water is applied with a marking wheel. The lines are touched up as needed while the courts are in play.

This winter the club converted its old manual irrigation system to an automatic Toro hydraulic system. Allen plans to set the controller to irrigate before 5 a.m. and use an afternoon syringe cycle during July and August. Before players are allowed onto the courts the dew is removed by dragging hoses over them.

In addition to 30 grass courts and 15 clay/hard-true courts, Seabright Lawn Tennis Club has one "all-weather" Laykold court and four platform tennis courts. This variety of tennis in the wealthy New Jersey Shore city of Rumson has attracted a strong membership for more than a century. Today the wait to become a member is four years.

The Parks and Recreation Department of Knoxville, TN, opted for Omnicourt over resurfacing its asphalt courts this past year. Recreation Administrator Cotton Jackson found he had to resurface the asphalt courts at Tyson Park every three years due to cracking. The park is the site of three major tennis tournaments, one with more than 600 players. Jackson described his cracking courts with tennis professional Louis Royal. Royal had heard from other professionals about the sand-filled courts and told Jackson he should check them out before resurfacing.

Once tennis players grasp the basics on hard surfaces, they start hungering for a few sets on clay, hard-true or the ultimate – grass.

Jack Wilson, president of Surfmark, the Omniturf distributor for the area, met with Jackson to explain the construction process. The asphalt base of the courts has a subtle end-to-end slope (1 inch drop per 10 inches of surface). A porous polypropylene grass-like fiber carpet is placed over the base. All lines are inlaid into the carpet so the need for painting is eliminated. Then a sand dressing is applied over the top of the carpet. The amount of sand can be varied to control the surface speed of the tennis ball upon impact. Knoxville uses a fairly high level of sand for a medium-toslow speed.

The manufacturer calls the first five to six weeks of use the "break-in period" during which the court should be watered and continued on page 25



Developers of the Omnicourt have combined a grass-like carpet with sand topdressing to simulate the characteristics of natural turf tennis courts with reduced maintenance.

brushed daily to help the sand settle into the carpet. Any excess water flows through the carpet and pad and drains off the base.

Brushing keeps the fibers upright and not laying over the sand where they might wear prematurely. It also helps evenly distribute the sand in heavy play areas such as the service line. Sportec suggests brushing the courts every 80 hours of playing time and more often during hot weather. The Knoxville courts are brushed every morning during hot weather according to Jackson. No other maintenance is required since lines are permanently inlaid in the green carpet.

The night before Knoxville was to have its inaugural tournament on the new courts, there was a heavy rain and the director felt certain they'd have to cancel. Instead, the courts were playable the next morning and the tournament was a community success.

There are more than 3,000 Omnicourts at clubs, colleges, parks and municipalities from Switzerland to Sydney. The first courts were perfected in 1979.

It's clear that tennis offers the player a greater choice of surfaces than does any other sport. Local demand for a particular type of surface will determine which one is used in the future at individual locations.

While maintenance costs may be the greatest concern of budget-bound parks and schools in choosing their court surfaces, resorts and tennis clubs will be more concerned with giving their members and guests as wide a variety of court surface as possible.



