5ROUND CONTROL

THE (REAL) TRUTH ABOUT SYNTHETIC SURFACES

by BILL FINLEY



horse racing these days, something he never imagined possible. His grandparents owned three-time Hollywood Gold Cup winner Native Diver, and he still remembers the thrill he felt every time he'd go to the track to watch the great gelding run. He went to college, ran a harness track, owned horses himself and built a successful real estate business. In 2005, he accepted the position as the chairman of the California Horse Racing Board, bringing with him a passion and enthusiasm for the job and a clear goal: he wanted to make California horse racing every bit as great as it once

These days, his work hours are spent in his office in Calabasas, California, where he runs Winco Asset Management. He resigned from the hate e-mail." CHRB position Dec. 16, 2008, before his term had expired. He rarely goes to the racetrack. It's not that Richard Shapiro doesn't like horse racing. It's that horse racing doesn't like Richard Shapiro.

His crime? He's the guy who forced synthetic racing surfaces on California racing.

"I'm labeled the poster boy for synthetic surfaces," Shapiro said. "I get quite a bit of hate mail and hate e-mail."

To prove it, he pulls out a folder filled with letters and e-mails he has received. It is large and jammed with papers.

"One guy said I should be hung from the Seabiscuit statue at Santa Anita," Shapiro said.

In 2006, Shapiro ordered that all major California racetracks switch to synthetic surfaces by the end of the following year. He did so in the midst of a turbulent time in racing, nationally and in California. Barbaro's breakdown in the Preakness stunned and angered an entire nation. The 2006 Del Mar meet was among the deadliest in the track's

Richard Shapiro doesn't have long history. According to Califormuch of anything to do with nia Horse Racing Board records, 14 horses died that meet as the result of training or racing accidents. Shapiro believed he had found a solution, a way to end the destruction of so many horses. It was a new racing surface, one that had received nothing but favorable reviews among European horsemen and racetrack officials, and had a proven record of success at Turfway Park, where fatal injuries had become nearly non-existent and

> 'I'm labeled the poster boy for synthetic surfaces. I get quite a bit of hate mail and

- Richard Shapiro

weather-related cancellations had become a thing of the past.

"In May of 2006, the issue of synthetic tracks came up for a vote at the board level," Shapiro said. "Every organization—the Jockeys' Guild, the trainers, the Thoroughbred owners, every track—was in support of this. Every board member but one was in full support of this and that member [Jerry Moss] abstained. We went into this with high hopes and felt maybe we could stem the increasing number of fatalities that were occurring."

Shapiro wasn't wrong.

As loud and as angry as the critics may be, the facts are not on the side of the legions of synthetic surface haters who insist the switch to Polytrack, Cushion Track, Tapeta and Pro-Ride is well on its way to destroying the sport. While synthetic surfaces are far less than perfect and have not been the panacea that many had hoped they would be, they have fulfilled their most important promise, to reduce the number of horses that die on the racetrack.

Though the compilation of data concerning fatalities on all forms of racing surfaces is still a work in progress, every report done so far on synthetic surfaces comes to the same conclusion: when it comes to fatal injuries, synthetic surfaces are considerably safer than conventional dirt racetracks.

According to a report released by Dr. Rick Arthur, the California Horse Racing Board's equine medical direc-



Under Richard Shapiro's chairmanship, the CHRB adopted a synthetic surface mandate for all major horse racing tracks in California.

tor, the state's racing industry was averaging 3.09 fatal breakdowns per 1,000 starters on dirt racetracks in the years prior to the installation of synthetic tracks. Arthur derived those figures from a study of 80,492 races run at Bay Meadows, Golden Gate Fields, Hollywood Park, Del Mar and Santa Anita over 29 racing meets that preceded the switch to synthetic tracks.

In 52,266 races run over synthetic surfaces since the Shapiro-ordered mandate went into effect, the number of fatalities has fallen to 1.68 per 1,000 starters. That's a 45.6- percent decrease.

A report done by Martin Collins Surfaces and Footing, the company that manufactures and sells Polytrack, which is in use at Keeneland, Turfway, Woodbine, Del Mar and Arlington, was even more favorable. At the final dirt meets at the

five Polytrack tracks, there were 57 combined fatalities. (The statistics do not include catastrophic breakdowns occurring during training hours). At

a doubt, synthetic tracks are safer than dirt tracks."

-Michael Dickinson

the comparable meets that took place after the installation of Polytrack, the number of fatalities dropped to 20, a 65-percent decrease.

Those numbers were bolstered by a

ing the 2006 winter/spring season, but Polytrack continues to outperform dirt when it comes to safety. In "Without 2008, the same five meets produced 36 catastrophic breakdowns over the synthetic track, 21 fewer than the combined figure for the final dirt meets.

The industry is waiting for what should be the most comprehensive report yet on track surfaces and safety. The Jockey Club is in the midst of compiling an exhaustive amount of data relating to injuries and breakdowns. No date has yet been issued concerning when the report will be released, and The Jockey Club will not release any information on the study until it is complete. However, a source that has seen much of The Jockey Club data compiled so far said the final report would shine a favorable light on synthetic tracks.

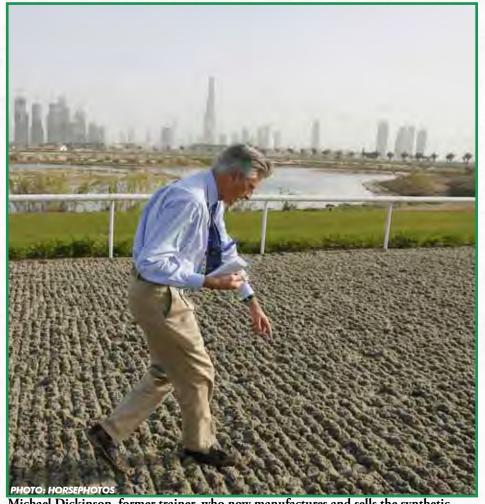
particularly safe meet at Turfway,

where no horses broke down dur-

A 13-month pilot program conducted earlier by The Jockey Club showed that the rate of fatal injuries on synthetic tracks was 27.59 percent less than it was on dirt surfaces.

"Without a doubt, synthetic tracks are safer than dirt tracks," said Michael Dickinson, the former trainer who now manufactures and sells the synthetic surface Tapeta. "There have been some bumps in the road with synthetic surfaces in the USA, and it has been a learning experience for manufacturers, track superintendents and trainers, but people have already had 100 years to perfect dirt tracks and have failed miserably. People are forgetting the huge public outcry after several high-profile fatalities in big races. We have 58 jockeys under permanent disability and an estimated 1,000 horse fatalities annually. Those numbers are unacceptable for the public and most decent people."

The numbers would seem to speak for themselves, but they haven't quieted or swayed the anti-synthetic forces or made much of an impact



Michael Dickinson, former trainer, who now manufactures and sells the synthetic surface Tapeta, inspects the Tapeta surface at Al Quoz in Dubai.

on the overall consciousness of the horse racing industry. The simple fact is that a lot of people hate synthetic tracks.

That includes a lot of gamblers, particularly big bettors. Synthetic surface racing is definitely different than dirt racing. It doesn't favor speed horses, the fields are more bunched up at the finish and some horses won't run their best over the surface. It's different, and that's something some players don't like.

"I know people who make a living gambling and those guys don't trust Polytrack," said Kentucky-based gambler Eric Adelson. "They'd rather bet a dirt race at Penn National than bet a race at Keeneland. There are guys who would bet \$20,000 a day at Keeneland when they ran on

to wager on races over these quirky surfaces. The reality is something entirely different.

Comparing presynthetic era and synthetic era handle figures is often the ultimate apples-to-oranges exercise. Some tracks switched surfaces in the middle of the

year and one, Woodbine, changed over in the middle of a meet. Santa Anita went from dirt to Cushion Track, Cushion Track to Pro-Ride, and had to cancel 11 days of racing when the Cushion Track became unusable. Turf races are included in meet handle fig-

"I know people who make a living by gambling and those guys don't trust Polytrack."

- gambler Eric Adelson



In 2009, Arlington averaged \$787,592 more in handle per day with Polytack than it did in 2006, when the track last had a dirt surface.

the dirt. They'll bet Churchill, but they won't touch Keeneland. Handicapping was difficult enough with just turf and dirt, and now you've got one more thing to adjust to. With Polytrack, there are too many unknowns. It becomes guesswork. Any Polytrack track, the handle goes down."

That is the perception--that tracks with synthetic surfaces have seen major declines in handle, all of them attributed to the players' reluctance

ures and obviously have no bearing on how customers have reacted to the switch to a synthetic track.

But there are some comparisons that come pretty close to an ideal applesto-apples situation, and all of them show that bettors have done anything but flee from synthetic surface tracks.

Arlington Park last ran on the dirt in 2006. A Polytrack surface was installed in time for the beginning of the 2007 meet, and bettors embraced it. The average daily, all-sources handle at

Arlington increased 9.2 percent from 2006 to 2007. According to figures supplied by the Illinois Racing Board, in 2009, Arlington averaged \$787,592 more in handle per day than it did in 2006, when the track last had a dirt surface.

At Keeneland, 2005 was the last year that both meets were run over a dirt surface. Handle improved dramatically in both 2006 and 2007. The average daily handle for the 2007 spring meet on Polytrack was \$2,480,743 more than it was for the 2005 spring meet run over dirt. Keeneland's numbers have since fallen significantly, but the 2009 figures represent only a minor decrease over the 2005 numbers. Moreover, recent decreases in Keeneland's handle are due in large part to management's decision to cut off two offshore rebate shops, Racing and Gaming Services (RGS) and Elite Turf Club.

Del Mar, where the Polytrack era debuted at the beginning of the 2007 meet, is another track where comparisons easily can be made. With the switch to Polytrack, handle increased by 3.2 percent in 2007. It has gone down since, with the 2009 meet averaging \$13,040,512 a day, a 3.7 percent decrease over the final year of dirt racing.

That Keeneland and Del Mar are among synthetic-surface tracks that have experienced recent declines in handle has fueled the argument that artificial surfaces are bad for busi-

WHEN IT COMES TO LEADERSHIP IN OUR SPORT, YOU CAN ALWAYS COUNT ON TVG.

With over 150 tracks worldwide, unrivaled television programming and innovative wagering systems, TVG is horse racing's most complete wagering company.

Only TVG offers four ways to wager: online, mobile, phone and remote control. And TVG.com is the #1 legal wagering website in the USA, providing our loyal customers with safe wagering platforms, secured deposit options and funds that are 100% insured.

We're proud to be a part of the beautiful sport of horse racing and that's why, among Advanced Deposit Wagering companies, TVG is proud to contribute the most dollars back to the industry.

FOR THOSE DEDICATED TO HORSE RACING, TVG IS A SURE THING.







Del Mar, which installed Polytrack in 2007. has weathered the gambling downturn better than many other racetracks.

ness. Those arguments are easily refuted.

The horse racing business is bad most everywhere. According to Equibase, \$15.5 billion was wagered in North America in 2006. In 2009, the final number dipped to \$12.3 billion. That's a 20.6-percent decrease. Some tracks with synthetic surfaces may be down in handle, but they aren't down nearly as much as the North American average. If anything, synthetic surfaces seem to have helped tracks prevent the type of devastating handle decreases that are plaguing the rest of the industry.

That's no doubt the case at Woodbine. Amidst one of the worst economic times in the history of the sport. Woodbine's all-sources handle for 2009 increased 7.0 percent. The main track at Woodbine is a Polytrack surface.

If synthetic tracks are safer and they aren't leading to declines in handle, then what is the problem? Perhaps, ironically, many critics use the safety issue as their main argument against synthetic tracks. They believe they are, in fact, dangerous.

Owner Jess Jackson has been one of the loudest objectors to synthetic tracks. Jackson doesn't seem to like anything about them and he is the one who added the word "plastic" to the synthetic surface debate, a word he used every time he referred to synthetic tracks, doing so with obvious disdain. Even though Rachel Alexandra won a race at Keeneland over Polytrack when handled by her prior connections, Jackson refused to

run her in the Breeders' Cup because of his misgivings about "plastic" surfaces. But Jackson, who declined to be interviewed for this story, isn't backing down. In a post-Breeders' Cup article that ran in the Daily Racing Form, he said: "The health of the horse is more important than running in a big race."

Michael Dickinson is among those who believe Jackson's real problem is a failure to accept Curlin's defeat a year earlier in the Breeders' Cup Classic over the Pro-Ride surface. Instead of blaming his horse, he seemed to find an easy excuse in the racing surface, Dickinson said.

"Jess Jackson blamed the synthetic surface at Santa Anita for Curlin's defeat in the Breeders' Cup Classic," Dickinson began. "He ignores the fact that in his last two races he struggled to beat inferior opposition; he was life-and-death to beat Wanderin Boy and Past the Point, who have never won a Grade I race between them. He was almost certainly past his peak from the brilliance we had seen in the Breeders' Cup the previous year and in the Dubai World Cup. It was obvious that the horse handled the surface and moved well."

Had Jackson been the only one to criticize synthetic tracks, it would be easy to dismiss him as embittered or misguided, but he is far from alone. Synthetic surface haters are not hard to find.

"Artificial surfaces are just too unpredictable," Wayne Lukas said. "It's not a good race track. It makes good horses average and average horses

A synthetic Tartan track surface makes its debut at the Meadows, a harness track near Pittsburgh. Problems eventually arise with the synthetic track and it is replaced after one year with a traditional stone dust surface

1963

Tropical Park installs Tartan Track, a rubberized surface inside the main track. Many owners and trainers refused to race their horses on the surface.

1966

Calder installs a synthetic track, a surface called Saf-T-Turf. Calder's synthetic surface remains a work in progress over the next several years and undergoes a handful of significant changes. In 1991, Calder management gives up and installs a traditional dirt surface.

1971

good."

Said trainer Darrell Vienna: "Is there anything good about these tracks? I think the problem starts with what the expectations were and the promises that were made. The purveyors of these tracks elevated the expectations. They told us they would be safer. They told us they would be more consistent. They told us they would need less maintenance. They told us they would operate under any conditions. They scored a perfect 100 percent: every one of those things is incorrect."

Even Shapiro is no longer firmly in the pro-synthetic corner.

"Where we are today? I'm mortified," he said. "They have not proven to be what we thought they would be."

In many respects, Shapiro is right. Synthetic tracks were hailed as something that would bring horse racing out of the dark ages and solve many of the sport's problems. That hasn't exactly been the case. Synthetic tracks have been far from perfect and have presented a new list of problems that rarely surfaced with dirt tracks. Some of the anti-synthetic complaints are legitimate.

One of the most frequently heard criticisms is that while synthetic tracks may cut down on fatalities, they cause a number of injuries that did not necessarily occur on dirt. Numerous California-based trainers insist that their problems with unsound horses increased significantly once California went synthetic.

Among them is John Shirreffs. One of the most respected trainers in the

sport, he is astute and level-headed, and his opinions matter. Shirreffs is as anti-synthetic as a trainer can be.

"My biggest problem with synthetic racing surfaces is that they are very difficult on young horses," he said. "It seems like until a horse turns three they don't do well on synthetic surfaces. There's a certain fatigue factor. Usually when you train on a traditional surface and put a good foundation on them, you get that feeling

"I think the problem starts with what the expectations were and the promises that were made."

-Darrell Vienna

they're getting bigger and stronger and taking all the right steps. With synthetics, the horses just seem tired. They don't come out of it bigger or stronger or faster."

Shirreffs said he's never had more problems keeping his horses healthy.

"I find the attrition rate is very high on synthetics," he said. "There are a lot of injuries in the mornings and those horses don't even reach the races in the afternoons. It seems the problem is always the hind end. It's very difficult because on a dirt track, if you're diligent and paying attention to your horses, you'll find a little heat or filling. You can adjust the area right away. On a synthetic track, you don't get that heat or filling. By the time the horse is noticeably off, it's a much greater problem than it would have been had you found out earlier."

Dr. Foster Northrup, a prominent veterinarian who works the Kentucky circuit, where horses race on both dirt and Polytrack, said that he does in fact see different injuries on dirt and synthetic tracks.

"In my experience, with the synthetic tracks, we're seeing a lot more soft tissue injuries," he said. "These are injuries that are probably related to the foot not being able to slide as it was designed to do in nature. You're seeing fewer true concussiontype injuries, but I'm seeing a lot more suspensory and tendon problems. There are a lot of variables and we're still plugging our way through this, but you definitely see different types of injuries between Churchill and Keeneland."

But the key question is not whether synthetic tracks are producing new injuries, but if these new injuries are so rampant and serious that they outweigh whatever positive impact synthetic tracks have had on the overall well-being of the Thoroughbred. That's exactly the question Dr. Jeff Blea, president of the Southern California Equine Foundation, is trying to answer. Dr. Blea is in the midst of a detailed one-year study of injuries

1987

British equestrian and entrepreneur Martin Collins installs the first Polytrack surface at the yard of English trainer Richard Hannon.

1988

Remington Park installs Equitrack. It is removed and replaced with a traditional dirt surface in 1991.

1989

The era of flat racing over all-weather tracks begins in England as Lingfield hosts Europe's first race over a synthetic surface. The first races are run over Equitrack, but Lingfield eventually switches to Polytrack.

olytrack Layers



Loose Polytrack (about 3 inches)

Compact Polytrack (about 7 inches)

Porous Macadam (asphalt)

Clean Stone

Dense Grade Aggregate

Perforated Drainage Pipes

The engineered synthetic top layer is composed of recycled polypropylene fibers, recycled rubber and silica sand. All of the components are carefully weighed, mixed and thoroughly coated with wax. The wax coating prevents moisture absorption, allowing water to flow quickly through the top surface into the vertical drainage system. The vertical drainage system is comprised of a layer of porous macadam, drainage stone and a system of drainage pipes that carry water away from underneath the track.

2004

2005

2006

Keeneland, eager to usher in a synthetic surface training track to Polytrack.

The first synthetic surface race in the U.S. since era in the U.S., converts its five-eighths-of-a-mile 1991 is held as the Turfway Park fall meet kicks off over a Polytrack surface.

Keeneland converts its main track to Polytrack, and the fall meet is conducted over a synthetic

Woodbine Racecourse debuts its Polytrack surface in August.

at the Southern California tracks. He has enlisted several on-track veterinarians, who are providing him with the records of their clients' horses.

The study will be concluded May 1, 2010 and the data will then be sent to an epidemiologist. In the meantime, Dr. Blea has begun to form some opinions.

He agrees that synthetics are causing an increase in soft tissue injuries, like suspensory problems. Yet, Dr. Blea believes the bottom line is that synthetic tracks are indeed helping to keep Southern California's horse population healthier.

These synthetic surfaces, when they are good, they are very, very good," he said. "Bottom line, I do think they are safer, when they are good. That's the caveat. They have to be in good shape and properly maintained.

"Catastrophic deaths are down, and that's important. Looking at the different types of injuries versus what we used to see on dirt, I do think synthetic tracks are safe because I don't think the injuries we have now are as devastating or create as many career-ending scenarios as what we had in the past."

The numbers regarding field size seem to back up Blea's findings. At all four California tracks where synthetic surfaces were installed, average field sizes are larger now than they were at the final meets run over dirt surfaces.

In 2005, the last year where every California race meet was run over dirt, average field size statewide at the major California tracks was 7.5 starters per race. In 2008, the most recent



Santa Anita's Cushion Track was replaced by Pro-Ride after disastrous drainage problems surfaced.

year for which complete statistics are available, the average combined field size at the same tracks was 8.0. Larger average field size would seem to indicate a sounder horse population.

Dickinson, whose Tapeta surface was installed at Presque Isle Downs in 2008, said that he surveyed the 20 top trainers after the initial meeting and they reported no suspensory injuries or bowed tendons. In 2009, he said, "the top 10 trainers reported one tendon among them."

"I have also heard about soft tissue injuries at some tracks, and it is often a maintenance issue." Dickinson said. "As a trainer, I found that a few horses suffered from minor muscular soreness in the hind end, but after a massage, hot towels and ice, these aches disappeared in a few days. The trainers who complain most about soft tissue have been known to be obsessed with toe-grabs. Dr. Sue Stover of U.C.-Davis reports that toe-grabs

are 17 times more likely to cause a suspensory injury. Even though the trainers have been warned of this, they still insist on using toe-grabs."

Presque Isle reported a breakdown rate of four horses from 5,677 starters, or .07 percent, in 2008, one of the lowest in the country.

Nowhere is the anti-synthetic sentiment stronger than it is in California, which is understandable considering what has happened at Santa Anita.

Cushion Track, a synthetic surface manufactured by an English company, was first installed at Hollywood Park and got through the first meet there without any significant problems. Encouraged by what they saw at Hollywood, Santa Anita officials decided to go with Cushion Track when it came to pick a synthetic surface manufacturer. Cushion Track made its Santa Anita debut Sept. 26, 2007. It passed its first few tests, but

2006

2008

2009

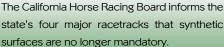
The California Horse Racing Board makes it mandatory for all major tracks in the state to install a synthetic surface by Jan. 1

Hollywood Park becomes the first California track to convert to a synthetic surface, installing a product called Cushion Track

Santa Anita's Cushion Track is inundated by several days of rain and does not drain properly. The problems lead Santa Anita to cancel

11 days of racing.







Where the Turf Meets the Surf



2010 Dates – July 21-September 8

Racing Daily Except Monday & Tuesday (Open Labor Day)

858-755-1141 delmarracing.com



The 2006 Winter/Spring meet at Turfway, its first on Polytrack, produced no fatal injuries.

disaster was not far away.

Synthetic surfaces are supposed to be impervious to water, which was among their main selling points. But the Santa Anita Cushion Track deteriorated in early 2008 to a point where it wouldn't drain. Heavy rains left standing water on the racetrack, and the track was deemed unsafe. Santa Anita had to cancel 11 days of racing in January and February of 2008 because of track-related problems.

Those few weeks represented a nadir for synthetic surfaces. Track management had been told that they would hold up to any weather conditions, and, suddenly, there was a synthetic track that had to be completely shut down because it couldn't handle a rainy stretch.

(Santa Anita President Ron Charles declined to talk to the Thoroughbred Daily News for this story).

Santa Anita was left with no choice but to tear out the Cushion Track, which had cost about \$10 million to put in in the first place. Santa Anita called in still another manufacturer, the Pro-Ride company. Eventually, Cushion Track was replaced with the Pro-Ride surface, which had not experienced any extraordinary problems until torrential rains caused yet another cancellation in January, 2010, prompting ownership to ponder a return to dirt.

Santa Anita hosted the Breeders' Cup in 2008 and 2009. Though both editions of the Breeders' Cup concluded without any injuries or reported problems, the critics found new reason to fault synthetic tracks. Both years, the non-turf races were dominated by horses that had had some success on synthetic tracks, while the horses who had been racing on dirt were more or less non-factors. These were championship races, yet they seemed to be won not by the best horses, but by the horses who handled the track the best.

In 2008 and 2009, not one horse who last raced on the dirt won a Breeders' Cup synthetic surface race. In future Breeders' Cups run on synthetic surfaces, Jess Jackson may not be the only horseman taking a pass.

"We have less of a presence in California than we would if they still had dirt tracks," trainer Todd Pletcher said. "The Breeders' Cup is a unique situation. It's hard to pass those races just because of the surface. But the synthetic tracks certainly affect your confidence, especially with the horses who have never been on it."

In 2008 and 2009, Pletcher, whose

horses primarily prep in the fall on the dirt, started a combined 10 horses in non-turf races in the Breeders' Cup. None won and only one (Ready's Echo, the 2nd-place finisher in the 2009 Dirt Mile) finished better than fifth.

The issue that could potentially do the most damage to the reputation of synthetic surfaces is not what harm they may or may not cause horses, but how safe they are for jockeys. That was never an issue until the 2009 Arlington meet. Jockeys Rene Douglas and Michael Straight were both paralyzed during the meet after falling and hitting the Polytrack surface.

That two jockeys were paralyzed within a short period of time at one track may be nothing more than a tragic coincidence. Or it could be a direct result of the racing surface. Which was it? It's a question jockeys everywhere are starting to ask.

"I do know for a fact that when you fall on it, it's a lot harder on you," said jockey Richard Migliore. "It seems like when you fall on dirt or turf, you hit and then bounce and roll. It kind of disperses the energy a little bit. I fell on this track [at Santa Anita] about a year ago, and I got planted. I didn't get hurt, but I

was sore for a month. You see more blunt force kind of trauma. There have been some catastrophic injuries with riders, as we know, though I don't know if it would have been different on dirt. Jockeys are definitely starting to wonder. There's no doubt about that."

Woodbine jockey Chad Beckon and Keeneland rider Julia Brimo also suffered serious injuries in 2009 as the result of spills on synthetic surfaces, in both cases Polytrack tracks.

Jockeys' Guild President John Velazquez admitted his organization is concerned about the recent rash of serious injuries on synthetic tracks and will continue to monitor the situation.

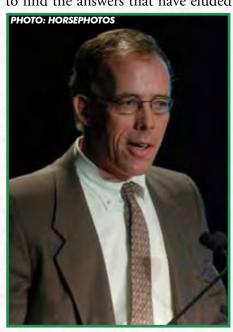
"It's definitely something we have to keep our eye on and ask questions to see if it is safe for jockeys or not," Velazquez said. "A lot of people like it and a lot of people hate it. Hopefully, there won't be any more accidents. The riders are definitely concerned, especially the people who are riding on those racetracks all the time. They are definitely worried and definitely thinking, 'If I fall, will this happen to me?"

Mick Peterson had heard all of the complaints about synthetic surfaces, and hopes to solve all of the valid ones. As for those which are are baseless, he would like to debunk the myths.

In a garage behind a modest white house in Orono, Maine, about 250 miles from the nearest Thoroughbred racetrack, Peterson is studying racing surfaces. A professor with a Ph.D. in Theoretical and Applied Mechanics, he looks, acts and talks just like you'd expect of a professor with a Ph.D. in Theoretical and Applied Mechanics. He's a very smart guy.

With machines, laboratory glassware and other gadgets everywhere, he is studying a number of racetracks, looking into such things as triaxial shear strength, sieve separation, microscopy and other components of track surfaces that are well beyond the grasp of most of us.

What's the best possible racing surface? Synthetic? Dirt? What kind of synthetic? What mixture of dirt? He's hoping to figure that out. He wants to find the answers that have eluded



"No matter how much people may complain, the numbers we have seen so far all indicate that synthetic tracks are safer."

- Mick Peterson

the industry for more than a century and come up with the perfect racing surface-or the surface that comes closest to being perfect.

This is his job, his passion and his mission. Peterson, on sabbatical from his teaching job at the University of Maine and now the head of the industry-funded Racing Surfaces Testing Laboratory, probably knows more about racing surfaces than anyone in the world. (The funding primarily comes not from syntheticsurface manufacturers, but from industry giants like Churchill Downs, The Jockey Club, the NTRA, NYRA, Oak Tree, and the California Association of Racing Fairs.)

An industry that had always seemed content to work in the dark has begun to embrace science, particularly when it comes to anything that might reduce injuries and breakdowns. The impetus may have been the fatal, high-profile injuries suffered by Barbaro and Eight Belles. It may have taken a public outcry for the industry to finally become proactive, but it is now clearly interested in tackling its safety issues. Peterson's role will be an important one.

He chooses his words carefully and he says that, with further study, there's no reason why dirt racetracks can't become much safer than they are, but he sees a lot of potential in synthetic surfaces.

'The biggest thing that was driving most people was that [synthetic tracks] were supposed to be safer, and we are seeing that," Peterson said. "No matter how much people may complain, the numbers we have seen so far all indicate that synthetic tracks are safer. They may not be producing the 95-percent reduction in fatalities that we saw the first year at Del Mar, but people have short memories. Everyone thought Del Mar was so awful this year, but it was still better than it was during the dirt years."

Peterson believes that the main reason synthetic tracks are safer is because they are uniform. Dirt tracks, he said, tend to be uneven, with some areas harder than others, some deeper than others, some wetter than others.

"A horse can adapt to a hard track, a soft track, a cuppy track--really, any kind of surface," he said. "If you tell me that one stride to another is going to be different, then the horse doesn't have a chance. We're seeing less variation on synthetic tracks."

Yet Peterson admits that synthetic tracks can be better than they are.



"I don't know that we're ever going to get a dirt track to be any better than the type of tracks we have always had. This is our chance to get out of the dungeon and see some light when it comes to the future."

- Richard Mandella

Considering they have been around for only a short period of time, and that manufacturers, track superintendents and scientists are still learning what works and what doesn't, he is optimistic that, given time, synthetic tracks may advance to a point where they are much safer than anything else horses might run over.

Hall of Fame trainer Richard Mandella believes in their potential as well, which is why he says he is a synthetic surface proponent.

"My enthusiasm and support is based on the thought that, if we get the kinks out of them, then maybe we're going to have something better than we've ever had," Mandella said. "With the synthetics here in California, we've had times when they're better than anything we've ever seen. There have been times when there have been mistakes and troubles with maintenance and the make-up of the material. But when that happened, they were no worse than the dirt tracks we used to have.

"There is still learning going on, and there is a window of opportunity where you might end up with something that is consistently really good. I think we worked the dirt all we could. I don't know that we're ever going to get a dirt track to be any better than the type of tracks we

have always had. This is our chance to get out of the dungeon and see some light when it comes to the future.

Mandella is placing his faith in people like Peterson, who is inching a little closer to the answers every

He is currently working on how to deal with fluctuations in temperature, which he says is the most vexing problem that synthetic surfaces face. All synthetic tracks have wax in them, and the composition of wax changes as the temperatures rise and fall. There have also been problems with some of the oils that are in synthetic tracks. The same oils that are liquid at room temperature will freeze at about 21 degrees Fahrenheit. Frozen oils and melting waxes cause inconsistencies in the tracks and other problems that track superintendents have yet to get a handle

"I think we will incrementally improve and we are already incrementally improving," Peterson said. "In three to five years, there will be noticeable improvement with all tracks. The tracks have already made a lot of advancements when it comes to maintenance. The person who has figured this out more than anyone else is Dennis Moore at Hollywood

Park. He's got this maintenance protocol that he has put together where he uses a power harrow at certain temperatures, and when it gets a little bit warmer, he goes back to the gallop master. Then he has a deeper tool that he uses at other temperatures. We have this magical thing called water; when the track gets too hot, just dump water on it."

Peterson is encouraged by the progress one of his colleagues has made experimenting with a particular kind of oil that can be added to synthetic tracks. He has discovered that the oils in synthetic tracks tend to seep into the base of the surface over time, which he believes may explain why some artificial tracks have not performed as well in their third or fourth years as they did in their first years. The solution appears to be finding new, inexpensive oils that can be reapplied to the track every other year.

"New oil chosen for Hollywood Park' may not be a headline, but I think you'll see the effects of this," he said. "You'll see it in the injury data and in the consistency of the racing, which will make the handicappers happy. I think we're going to end up with a magic juice that can be put on the tracks every few years."

Peterson is also working on ways

to make synthetic tracks more giving when it comes to the hoof hitting the surface. Veterinarians believe that one of the reasons synthetic surfaces may be causing injuries that weren't necessarily seen on dirt tracks is that the hoof tends to hit the surface and spring right back up. Ideally, the hoof should be allowed to slide some, and the track should have some give to it.

"Too little slide is what they're starting to see with synthetic tracks," Peterson said. "It's grabby. You can see it in the hoof print. There is no elongation of the hoof print on the surface of the track. What you really need is some slide, but not too much

"We're already seeing improvements in this area. Turfway and Hollywood seem to have a little more slide than some of the other tracks. Nobody knows yet how much slide is enough, but there is a little more slide on some of these tracks and that's a step in the right direction. There is going to be the ability to fine tune these tracks. Toward the end of the 2009 meet at Arlington, we made a lot of progress there, too, on the slide issue. A lot of that had to do with maintenance tools and loosening up the surface."

At the University of California-Davis, Dr. Sue Stover heads a group that is doing another study that will likely lead to improvements in track surfaces. Various types of surfaces have been duplicated in small 4 by 4 by 4 boxes, an easy and cost-effective way to study racing surfaces.

"Our interest is in determining mechanical behaviors of surfaces that optimize horse locomotion and prevent injury," Dr. Stover said.

Stover believes that her group can find the optimal qualities among a variety of different racing surfaces, particularly when it comes to what properties seem to put horses at the greatest risks. By doing so, she believes she can come up with a recipe of sorts, one that will create the best racing surface possible. Will that be a synthetic track or at least a track that

borrows many of its components from the artificial surfaces? Stover isn't sure, but she tends to believe that synthetic tracks have more pluses than minuses.

"The synthetic surfaces that we have seen have potential because, with them, we've measured smaller peak loads on the horse's limbs," she said. "We've measured lower acceleration, so it's less jarring to the bones of the limb. But, we have a long way to go. Since Henry Ford built the Model T, the auto industry has come a long

To fully understand why so many people so dislike something that has apparently saved the lives of a lot of horses may require an advanced degree in psychology.

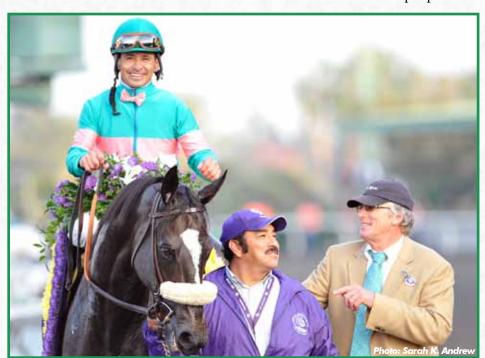
way. Track surfaces will continue to evolve. With that in mind, should we continue on with synthetic surfaces? The answer is definitely yes."

Will anything convert the unconverted or stop the incendiary rhetoric from critics like Jess Jackson? There are a lot of people out there who not only dislike synthetic tracks, but are intent on ridding the sport of this perceived menace. These are not people likely to change their minds.

"I am sure that we will return to dirt in California," Shirreffs said. "The industry is going to demand it. Among owners and trainers, there aren't many out here who are happy with the way the surfaces are now."

Shirreffs, at least, is able to articulate why he dislikes synthetic tracks and has a credible reason for his desire to return to dirt. Ask others why they dislike synthetic tracks so much and their answers are usually along the lines of this: "I just do."

To fully understand why so many people so dislike something that has apparently saved the lives of a lot horses may require an advanced degree in psychology, but the answer has to start with this: synthetic tracks are different and a lot of people don't



Despite Zenyatta's 13 wins on synthetic surfaces, trainer John Shirreffs is not a fan.

A Royal Achievement!



MONARCHOS sired major stakes winners on every surface in 2009:
G1 winner on synthetic – INFORMED DECISION
Grade 2 winner on dirt – WIN WILLY
Multiple SW on turf – BINGHAM
Multiple SW on dirt – RAPPER S S

His Crowning Achievement is Millionaire Champion INFORMED DECISION, winner 11 times in 14 career starts, including 7-for-7 on synthetic surfaces.

Make an Informed Breeding Decision in 2010

Still...the Fastest Living Derby Winner

| Control | Con

Maria's Mon - Regal Band, by Dixieland Band **\$6,000** Live Foal



"The synthetic tracks have been blamed for everything from the Lindbergh baby on. The one thing synthetic surface critics have done well is manage to get themselves heard. They are opinionated, impassioned, loud and relentless.

-Joe Harper

like different.

Be it at a racetrack or anywhere else, people are often uncomfortable with anything new. They cling to what they know and what they understand, even if that means acting and thinking irrationally and ignoring the type of injury data that leaves no doubt that synthetic tracks are safer.

Disliking synthetic tracks is not only easy, it's convenient. For owners, trainers, breeders and gamblers, there has never been a better excuse than synthetic tracks. Why blame yourself or your horses when there is such a readily available scapegoat out there?

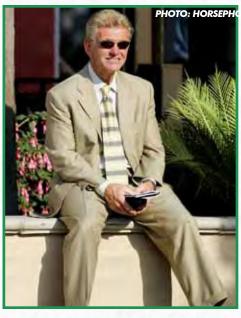
Why did the horse run so badly? It must be the synthetic track.

Why am I 0-for-29 at the meet? Because I'm forced to run over this rotten surface.

Why haven't I picked a winner in three days and have lost \$500 at Keeneland? Because those idiots put in Polytrack. Who can handicap races run over this stuff?

Why didn't Curlin win the 2008 Breeders' Cup? Plastic.

"The synthetic tracks have been blamed for everything from the Lindbergh baby on," said Del Mar President and CEO Joe Harper. The one thing synthetic surface critics have done well is manage to get



themselves heard. They are opinionated, impassioned, loud and relentless.

"I don't know what's going to happen here in the future, but the loudest-mouthed trainers right now would prefer dirt," said California Thoroughbred Trainers President Jim Cassidy. "There are a lot of people who like [synthetics] and have had decent luck with it, but they're not saying anything."

Being quiet doesn't win a public relations war, which is what is going on within the industry, particularly in California. Many among the prosynthetic forces have come to realize that the problem isn't necessarily with synthetic tracks, but how the tracks have been perceived. If perception is reality, then reality doesn't matter.

"From a safety standpoint, yes, these tracks have been successful," said Jim Pendergast, the general manager of Polytrack's U.S division. "From a public relations standpoint, no, we haven't been successful at all."

Even the media, whether intentionally or not, has played a role in unfairly fanning the flames against synthetic surfaces.

A March, 2008 article in the Daily Racing Form reported that data collected during the first six months of 2007 showed that there was no significant difference between fatality rates on dirt and synthetic tracks. The article

was not correct; the data showed that synthetic tracks were, in fact, safer. The problem occurred because a presenter at The Jockey Club's Welfare and Safety of the Racehorse summit misinterpreted some of the available information and made some errors during her talk.

An August 2009 report in the Los Angeles Times featured the head-line "Thoroughbreds suffer a higher number of fatal injuries on synthetic surfaces than dirt." It included the information that there were 19 deaths in 2008 at California tracks on synthetics that were directly related to hind-end injuries, and just one death on dirt surfaces related to a hind-end injury. That led the reporter to conclude that when it came to hind-end injuries, synthetic surfaces were much more dangerous than dirt.

What the reporter apparently didn't understand was that the vast majority of all main track races in California are run on synthetic tracks. With only Fairplex and the Northern California fair tracks still racing on the dirt, it was hardly a surprise that synthetic surfaces produced more fatal hind end injuries than dirt surfaces. The entire article was based on a badly flawed premise.

"It's not clear whether or not there are more hind-end injuries on synthetics," said Dr. Arthur. "The press grossly overstated it and took it out of context."

Those were just two examples of where a media report shed an unfavorable light on synthetic tracks. Sometimes it seems that any breakdown on a synthetic track creates a stir that winds up reported somewhere.

"There are prominent people in the industry who have said we are seeing just as many injuries as before," Pendergast said. "But they don't have statistics to back that up. Anybody can say whatever they want to. Once it gets in the press, it becomes gospel. What you have is a snowball effect.

People don't see the real numbers, and there have been incidents where the numbers have been skewed. We keep getting hit with that, and it's really hard for us to make a case for ourselves when numbers come out that aren't accurate or are taken out of context."

Had the expectation levels for synthetic tracks not been so high at the outset, perhaps people would now feel differently about them. They came around at a time when



Keeneland joined forces with Martin Collins in 2004 to distribute Polytrack.

the U.S. racing industry was looking for something to save it from itself. The breakdowns of Barbaro, George Washington and Eight Belles had produced a public relations nightmare. The average field size at virtually every U.S. track was dropping sharply every year. So was the number of career starts made by the average horse.

Were synthetic surfaces the answer everyone was searching for? It was everyone's hope that they were.

When the first U.S. synthetic surface debuted at Turfway Park Sept. 7, 2005, the first night of racing at the Northern Kentucky track was treated as the beginning of a new, better era in Thoroughbred racing. That the first few Turfway meets went so well only raised expectations. There had been six fatal accidents during racing at the 2004 Turfway fall meet and none at the



Nick Peterson, the executive director of the /ENTIONAL industry-funded Racing Surfaces Testing Laboratory, isn't just interested in synthetic surfaces. His goal to is find formulas that can improve all racing surfaces.

Peterson said that moisture content is the primary problem

for most dirt tracks. When they get wet, they can become uneven and unsafe. Because synthetic tracks drain vertically and are designed to dry out almost immediately, they are not affected by moisture. "If we could ever control moisture content really closely on a dirt track I think we'd be there," he said. "You look at the dirt tracks that are the safest and part of it is climate. The dirt tracks that have always struggled are the ones that have to deal with things like the San Gabriel winds. In California, it's always been a struggle out there with moisture content. They'll get just about all the rain they're going to get for the whole year in 72 hours, and then they'll have drying winds week after

"We can help make them better. We may not make them as good as a very good synthetic surface when it comes to safety, but I think we can get them to the point where they are 90 percent as good."

week where you cannot put enough water on the track to keep up. The water is an overwhelming challenge for dirt tracks and if we can improve that, I think we can bring dirt tracks really close to synthetic surfaces."

Another challenge on dirt tracks is the base. That the bases at all synthetic tracks redone could have something to do with why they appear to be safer than dirt

tracks. "Base maintenance is still what I consider the biggest issue on a lot of the dirt tracks," he said. "There are dirt tracks where the base is fine, like Churchill Downs. There's nothing wrong with the base. The thing is rock solid all the way around. There are other dirt tracks that struggle with their base, where the base is a mess."

The answer to making better dirt tracks, Peterson believes, is research. In his lab in Orono, Maine, he continues to test every aspect of dirt tracks, from their composition to what is needed to make a perfect base to how to make them uniform to how various types of weather affect the tracks.

He's already come to the conclusion that some tracks and areas of the country are better suited for synthetic tracks, while some are a better fit for dirt. "Turfway was a beautiful choice to put down a synthetic track," he said. "Would I switch Fair Grounds to it? That would be foolish. That's a track that has had a great history when it comes to safety with dirt. You think about winter in New Orleans, that's not the same thing as winter in Cincinnati or Northern Kentucky. Those differences matter."

ypes and Locations

Tapeta Footings



Designed and owned by former trainer Michael Dickinson.

Golden Gate Fields Presque Isle Downs Meydan Racecourse

<u>Polytrack</u>



In July 2004, Keeneland and Martin Collins International created Martin Collins Surfaces and Footings to distribute Polytrack surfaces in North America and South America.

Arlington Park Del Mar Keeneland Turfway Park Woodbine Kempton Park Lingfield Park Wolverhampton Great Leighs

Dundalk Stadium Kranji Racecourse Cagnes Sur Mer Istanbul Marseille

Cushion Track



Part of a group of companies formed in the United Kingdom over 20 years ago.

Hollywood Park Racetrack Sunshine Coast Turf Club Toowoomba Turf Club

Pro-Ride



An Australian-based company, Pro-Ride established a North American presence when it was chosen to refurbish and eventually replace Cushion Track at Santa Anita in 2008.

Morphetville Racecourse Broadmeadow Racecourse Gosford Race Club Santa Anita

corresponding meet a year later. In subsequent meets at Turfway, the results were much the same-the number of fatalities was down dramati-

"A lot of this came about when Keeneland went with Polytrack and they put it in at Turfway," said Dr. Arthur. "They immediately saw an 85-percent reduction in racing fatalities. It looked like a very simple solution."

It turns out that synthetic tracks do not cause an 85-percent reduction in injuries, or anything close to it. When the actual numbers started coming in at 30 to 40 percent, they seemed disappointing.

"It's the same thing with any new technology," Peterson said. "If you oversell it and your expectations are too high, there's going to be a problem. You can see why trainers, especially ones in California, are frustrated. They are isolated out there and a lot of them are struggling to keep their gig together. I think that's why a lot of them get so emotional about this. They were told this was going to solve all their problems. Take the guy with a small stable who has two or three horses and they get hurt over a synthetic track. That person, after what they were led to believe, isn't going to have a very balanced opinion about synthetic tracks."



Rick Arthur is exasperated. He's respected, accessible, knowledgeable and has the ear of California regulators. That's the problem. His position has placed him in the middle of the California's heated synthetic surface debate. Have a beef about synthetic surfaces? Go see Dr. Arthur.

"I'll be honest with you. I'm tired of the animosity and nastiness over synthetic surfaces," he said. "It's exhausted all of us out here in California."

Dr. Arthur said synthetic surfaces have become California racing's version of Proposition 8. Some are for

them, some are against them, both sides are passionate, and they don't like one another. The debate has gotten so heated that it has gone well beyond constructive.

"It's no longer what's right and what's wrong," said Mandella. "It just became one side versus the other. It's come to a point where we're really hurting racing by all the hatred and fighting."

That's not what anybody expected or wanted when the Shapiro-led California Horse Racing Board mandated that the state's major tracks go synthetic. Rather, Shapiro believed that he was doing what horsemen

"You kept looking up and kept seeing the increasing number of fatalities in horses, which was very troubling to me," Shapiro said. "One day I'm at Clockers' Corner at Santa Anita and Bob Baffert comes up to me. I think Bob is a great guy and I like Bob very much, but he is outspoken. He says to me, 'Richard, you need to do something. We can't get any owners from the East to send their horses out here. We're going to die out here unless we fix these track

"You can see why trainers, especially ones in California, are frustrated. They are isolated out there and a lot of them are struggling to keep their gig together. I think that's why a lot of them get so emotional about this."

-Mick Peterson

surfaces. They are too hard and too many horses are getting hurt.' I told Bob I'd be more than happy to look into it."

Synthetic surfaces got off to a reasonably good start in California. Field sizes immediately increased and injury rates fell noticeably. Between training and racing, there were 14 fatalities at Del Mar over the dirt surface in 2006, and Del Mar was forced to deal with an overwhelming amount of negative publicity. In 2007, with a Polytrack surface in place, the number of catastrophic breakdowns was down to six, with just two of them happening in the

"The first year of the Polytrack at Del Mar, the times were very slow and the horses didn't look like they were racing," Arthur said. "But it was the safest track I have ever seen. Even some of the people who hated it will agree with that."

The synthetic surface era seemed to be getting off to a good start in California. Shapiro was among those heralding the synthetic surface mandate as an unqualified success.

In late 2007, he told the Blood-Horse he was "ecstatic" with the results of the mandate.

"Just look at the results," he told the magazine. "Field sizes are up. Wagering, especially from out of state, has increased dramatically. We have hundreds more horses coming into the state from everywhere."

He was particularly encouraged by the apparent decline in injuries.

"No surface is going to be 100-percent perfect for animals as powerful as thoroughbreds running on ankles little bigger than your wrist," he remarked. "But injuries are way down at each of the tracks with synthetic tracks. So, overall, I'm ecstatic. I couldn't be more pleased with the results."

But it didn't take long for sentiment to change.

Though the 2007 meet at Del Mar got good marks when it came

WHEN IT COMES TO LEADERSHIP IN OUR SPORT, YOU CAN ALWAYS COUNT ON TVG.

With over 150 tracks worldwide, unrivaled television programming and innovative wagering systems, TVG is horse racing's most complete wagering company.

Only TVG offers four ways to wager: online, mobile, phone and remote control. And TVG.com is the #1 legal wagering website in the USA, providing our loyal customers with safe wagering platforms, secured deposit options and funds that are 100% insured.

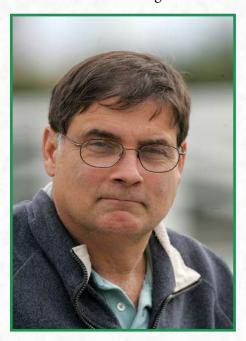
We're proud to be a part of the beautiful sport of horse racing and that's why, among Advanced Deposit Wagering companies, TVG is proud to contribute the most dollars back to the industry.

FOR THOSE DEDICATED TO HORSE RACING, TVG IS A SURE THING.





to safety, some horsemen weren't happy with how the track played. It was among the slowest surfaces in the nation, which was never more evident than when the mile-and-a-quarter GI Pacific Classic was run in 2:07.29. Horses with early speed seemed to be at such a disadvantage that owner Ahmed Zayat decided Del Mar was no longer the place for him. After a heated argument with



Joe Harper, he sent his horses to Saratoga and its more speed-favoring surface.

About five months after the Del Mar meet, Santa Anita's synthetic track became nothing short of a disaster. Whatever good will synthetic tracks had accumulated in Southern California was largely washed away when Santa Anita's Cushion Track wouldn't drain and 11 days of racing had to be scrapped.

Just as California led the way in the synthetic surface revolution, some California horsemen are now hoping their state will lead a counterrevolution that will spark the end of synthetic tracks everywhere.

"Synthetic surfaces are an idea that was before its time and now belongs after its time," Vienna said.

Vienna is among those leading the charge to have Southern California's three major tracks go back to dirt. But, considering the realities of Southern California racing, which has problems that go well beyond synthetic surfaces, pulling the plug on the artificial tracks won't be easy.

"With what's going on out here, these tracks aren't going anywhere," said trainer Eoin Harty, a synthetic surface fan. "All we can do is do the

"People talk about going back to dirt, and that could happen. What are they going to do if they go back to dirt and the 40 percent decrease we've seen in racing fatalities dissapears?"

-Rick Arthur

best we can with what we have."

Hollywood Park is owned by a company that intends to raze the track and develop the property, and will likely do so once the real estate market turns around. It wouldn't make any sense for them to invest the millions it would take to tear out their Cushion Track and replace it with dirt.

Santa Anita remains in the hands of Magna Entertainment Corporation, which has filed for bankruptcy. Magna would seem to be in no position to undertake the type of major expense ripping out the Pro-Ride surface would entail.

Del Mar's facilities are owned by the state of California, which, like virtually every other state in the country, is having fiscal problems. In the midst of a recession, Del Mar and the state would have a hard time justifying the expense of replacing its track. Besides, Del Mar officials still believe in Polytrack.

"I don't think any of us are at the point where we're ready to say, 'Boy, this was a huge mistake,'" Harper said. "It can't just be, well, four horses died on the track this summer, so our track isn't any good. The raw numbers tell you that the synthetic track at Del Mar is better than the dirt track was. I've seen and heard things about different injuries, but are there more? Right now, from the veterinarian reports we see, there don't appear to be."

Dr. Arthur doesn't believe the California Horse Racing Board should have forced tracks to switch to synthetic surfaces. Even Shapiro admits, "Maybe we shouldn't have mandated it." But he did, and that decision changed California racing forever. At least for the short term, and, maybe, for the foreseeable future, California horsemen have little choice but to adapt and learn to deal with synthetic surfaces. Arthur doesn't think that's such a bad thing.

"I'm not sure synthetic tracks were ready for prime time, but I consider them very promising," he said. "There are problems, but they are solvable. I just hope the critics will give us time. People talk about going back to dirt, and that could happen. Even that will be a problem. What are they going to do if they go back to dirt and the 40 percent decrease we've seen in racing fatalities disappears?"

Synthetic surfaces have saved the lives of hundreds of horses and have done so at a time when the industry desperately needed to alter the perception that the sport was cruel to animals. Can whatever problems they may be causing possibly be more important than this? Synthetic supporters argue that the safety of the horse is vital to the self-interests of this sport.

"Every statistic that comes out

"Every statistic that comes out says that these tracks are safer. This sport can't say our No. 1 priority is the safety of our horses and our riders and ignore these statistics."

-Nick Nicholson

says that these tracks are safer," said Nick Nicholson, the president and chief executive officer of Keeneland, a part-owner of the company that manufactures Polytrack. "They're just safer, and you can't throw that fact out. You can't hide from that fact. This sport can't say our No. 1 priority is the safety of our horses and our riders and ignore these statistics."

There are nine North American racetracks with synthetic tracks, but no others are ready to join the list, for reasons that include the expense, the Santa Anita Cushion Track debacle and the negative publicity synthetic tracks have received. But Nicholson believes the tide will turn, that the safety issue will lead racing leaders to reconsider their decisions to stay with dirt.

"Look at what happened with NASCAR after Dale Earnhardt died," Nicholson said. "They went back and questioned all of their basic premises and they made changes. You cannot be a sport that involves inherent danger like horse racing



After putting Polytrack down on the training track in 2004, Keeneland converted its main track in 2006

and auto racing do and not have a deep and honest commitment to safety-not in the society we live in today. You will be called out and spotted for what you are. That's what I think will determine the future."

The people who send hate mail to Richard Shapiro won't like hearing that, nor is it likely to calm their vitriol. Shapiro is tired of hearing from them. During a difficult time in his life, he doesn't need this.

"I'm extremely disappointed that people have lost sight of what my intentions were," Shapiro said. "Is it hurtful? Yes, it is hurtful. I honestly don't understand why people are so hate-filled, and that part is something that has left a very bad taste in my mouth about this industry.

"I look at this industry, which I grew up in, which has been a passion of mine my entire life, and I see it dying before my own eyes. Horse racing is dying. It is going to die. It has lost its fan base and will not get it back they way things are going.

"I was like the guy in the movie

'Network.' I was mad as hell and wasn't going to take it anymore. Breakdowns turn people away every day. I will tell you, it makes me sick. It repulses me. All we were trying to do was help fix a very serious problem."

Shapiro's financial world came crashing down when it was discovered that Bernard Madoff had stolen his money. Shapiro, who invested his life savings with Madoff, says that he was left virtually penniless due to the scam. He's also been in trouble with the legal system, having been charged with one felony count of vandalism after being caught keying the car of owner Jerry Jamgotchian, an unrelenting critic of Shapiro and synthetic tracks.

Shapiro doesn't try to hide the fact that he has been through hell.

Sometimes that's what happens when you try to make a difference and the results aren't exactly perfect. But did Shapiro fail? He helped make the sport safer and has, statistically, saved the lives of hundreds of horses. That has to count for something.

FROM THE HORSE'S MOUTH HORSEMEN ON THE SYNTHETIC SURFACES



Barclay Tagg: "I don't care what anyone says, there are a lot of quirks with the synthetic tracks. It's just one more thing we have to deal with. I'm not sure if it is good or bad, but I have had horses break down on it."



Roger Attfield: "I like synthetic tracks. l've only had experience with them at Woodbine, but I prefer that surface to the alternatives. In my experience, I have fewer problems with them, though I know not everyone shares that opinion. They are more consistent. I never have to worry about it the control of the contro

raining or altering my schedules. That makes it much easier to plan.



Wayne Catalano: "I like them, but most Chicago trainers would disagree with me. They don't like them and I dont' think they adjusted to them all that well. All of it depends on how well you're doing. If you're at Keeneland and haven't won a race then, of

course, you're going to say you hate them. It's an adjustment. We managed to adjust.



Bob Baffert: "I've always been against them. One day they're good, the next day they're not. They don't know how to deal with them. I don't like how they take something away from horses with speed. I'm not in favor of anything that takes away from a horse's brilliance. I decided to quit knocking them. I

knew I had to deal with them, so I adapted. They can put down anything they want here; I'll adapt."



Ken McPeek: "I like racing on synthetics, but I don't particularly like training on them as much. They get a lot more out of and build up more muscle training over sand or conventional dirt or even hills on grass. The synthetics don't pull on them hard

enough. They just don't get a lot out of it. You have to gallop a horse further over the synthetics than you would over dirt. For racing, I like them. I've had a lot of success with them, like winning the training title in the fall at Keeneland.



Jerry Hollendorfer: "A lot depends on how they take care of them and how they adjust to it on a day-to-day basis. The track at Hollywood was great for that last meet there. Up at Golden Gate on the Tapeta, sometimes we have a lot of problems and sometimes

we don't have any. I don't think they've been around long enough to make a firm judgment. I will say that people forget how many horses used to break down on the dirt tracks. We broke plenty of horses down in California on the dirt tracks. Sometimes people just want to make changes for no reason other than to make a change.



Graham Motion: "Synthetic tracks are getting a bad rap. All of a sudden, everyone is panicking and saying we should get rid of them. You need to look at the big picture. Training on it day in and day out, my horses are definitely healthier. I'm much more comfortable training on it."



Mike Mitchell: "I liked them when they put them in, but I don't like them now. The tracks change. They're not the same tracks as when they put them in. They're very expensive to keep up and resurface and I'm getting a lot of hind-end injuries that I never had before. I've had more injuries on these tracks than I had on dirt. I'm all for going back to dirt tracks here." back to dirt tracks here.



Maggi Moss: "I prefer dirt over synthetic. Dirt is a surface that I can get a much better read on when it comes to my horses, and I feel the betting public can handicap with some reasoning and patterns that are more consistent. As an owner, I will always try to find dirt tracks over synthetic because most all of my horses perform better on it and I find there are fewer

injuries or problems with dirt. From my own experiences and from talking to owners throughout the country, there are actually fewer injuries training and running on dirt than synthetics."



Mark Frostad: "It's a different deal all together. The injuries are back-end related. There's no slide to the synthetics, so you end up getting a lot of jarring. I wouldn't say my horses are healthier now. With the old injuries, I was getting fractures and chips and now I'm getting stress fractures and torque injuries."



Chris Block: "I like synthetic tracks that are the proper type of synthetic tracks. What I mean by that is one that is properly maintained and has the right mix with the ingredients in it that it is supposed to have. They change over time and the racetracks have to adjust. I'm not sure they all know how to yet. My experiences have been with Arlington and Keeneland. I

like both racetracks. They're safe surfaces. You still have your problems, whether it's bucked shins with 2-year-olds or ankles that flare. You're going to have problems on any surfaces, but synthetics lessen the chances of catastrophic injuries. I think everybody thought there wouldn't be any problems. But that was never going to happen, no matter the surface.



Ken Ramsey: "I've got mixed feelings. From a gamblers' standpoint, and you know I like to play the ponies, I prefer dirt. I did much better when I could handicap for slop and mud. I did real well

could handicap for slop and mud. I did real well making adjustments. As a breeder, since I have the champion Kitten's Joy, who was a distance turf horse, I like it. Turf pedigrees do well on synthetic tracks. With Kitten's Joy's offspring, I have a lot of new options and am going to send a lot of them to race at Woodbine and Arlington. As far as the safety of the horses is concerned, I have a health concern. At Turfway, that track is so dry and, with the kickback, I think the jockeys should be wearing surgical masks. That can't be healthy for them or the horses. I grew up in coal mining territory and a lot of men who worked in the mines got black lung. I worry that something similar could happen to the horses and jockeys."