

BARNEY LOPAS USES CREATIVITY AND ELBOW GREASE TO PRESENT A WORLD-CLASS PLAYING SURFACE

Editor's note: This article was supplied by Adam Slick, Jacobsen's public relations & communications manager.

AS THE HOME BALLPARK OF MAJOR LEAGUE BASEBALL'S LOS ANGELES ANGELS OF ANAHEIM, Angel Stadium, built in 1966, is one of the most storied and beloved sports venues in America. Famous milestones attained at the park include Mickey Mantle's last game-winning home run, Nolan Ryan's nine straight strikeouts against the Boston Red Sox and Reggie Jackson's 500th career home run. The ballpark has also served as the backdrop for several motion pictures including "The Naked Gun," "Angels in the Outfield" and "The Fan."

Today, Angel Stadium continues its historic lineage as the home field for baseball superstar Albert Pujols, who is starting his second season with the Angels as first baseman. Upon his arrival in Anaheim, Pujols asked Head Groundskeeper Barney Lopas to remove some turf in front of first base.

"He prefers to have more dirt in front of him so throws from third base get a hard bounce off dirt instead of grass," said Lopas. "It wasn't really a big deal and I enjoyed doing it for him because he's such a nice guy."

Lopas is quite the baseball veteran himself, currently in his 16th season at Angel Stadium. He

followed in his brother's footsteps through turf-grass management, starting in Wisconsin, then working for the Houston Astros training facility in Florida, the Florida Marlins, and Richmond Braves before starting with the Angels in 1996.

Lopas' famous field of Tifway 419 bermuda-grass has the unfortunate distinction of being the only major professional sports field—baseball, football and soccer included—that sits on native soil without any drainage.

"It makes it really hard for us, but we deal with it," said Lopas. "We have to be careful not to overwater. Because the water has nowhere to go, we can easily get root rot and black layer. So we do quite a bit of hand watering. We also aerify twice a month to get the water and nutrients down into the soil."

Lopas will aerate before every home stand, and occasionally uses deep tines, going deeper as the season progresses. His infield mix comes from Stabilizer in Phoenix and is approximately 50% silt clay and 50% sand. He'll nail drag 100 bags of calcite clay into the top ½ inch of mix before the season starts. Lopas will also steam-roll before every home stand and roll first base every day with a 2.5 ton roller.

"After 16 years, I pretty much have it down to a science. In fact, my buddies tell me I'd screw up a sand-based field. They're probably right," said Lopas with a laugh.

In addition to a very comprehensive soil management strategy, Lopas has also developed some very innovative mowing patterns over the years. After 9/11, Lopas mowed a giant "USA" pattern into the outfield, using riding mowers and brooms to push the grass away from home plate inside the letters and his walk mowers going the other way for the outline.

"We've been using Jacobsen equipment for almost a decade," said Lopas. "They're the best machines I've ever used and the service we get from Jacobsen West is top notch. If we give them a call, they're out here the same day."

Lopas also uses his Jacobsen machines for some very strategic outfield mowing patterns. "To reduce lateral movement of balls moving through the grass [known as snaking], I only cross-cut behind the short stop and second baseman, leaving the areas in front of our outfielders with grass going in just two directions rather than four [see photo]. This gives the outfielders confidence knowing that bouncing balls coming their way will not snake."

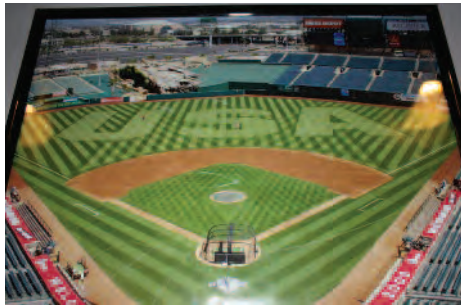
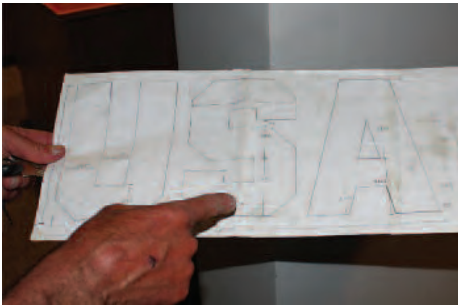
The strategy has been such a success that several other Major League teams have started using the same pattern.

Angels Owner Arte Moreno has also taken notice of Lopas' work and occasionally stops by to chat with the maintenance crew. During a post-game visit a few years ago, Moreno asked to

▼ **BARNEY LOPAS** operating a Jacobsen ECLIPSE 322 riding mower in the outfield.



◀ **BARNEY LOPAS**, Head Groundskeeper for the Anaheim Angels.



▲ **AFTER 9/11**, Lopas and his team mowed a giant USA in the outfield (top). The pattern started on a letter-sized template (bottom) he created to establish the dimensions. He mowed away from home plate inside the letters for the contrasting color, using a walk mower on the outlines.

use the non-existent restroom. One of the maintenance crew members replied that not only was there no bathroom, the crew didn't even have a sink. Moreno was incredulous.

"Arte is a great, great owner and a wonderful guy," said Lopas. "He took me aside and said 'blow this place up and make it how you want it.'"

And that's exactly what Lopas did.

Half sports bar and half clubhouse, Lopas' maintenance office is an incredibly unique space. The main room is lined with authentic clubhouse lockers, complete with nameplate and number (year started) for each crew member. When the game is on, the guys watch the action from leather recliners perched in front of a huge flat-screen television.

But the creature comforts of home are important for Lopas because time off at this level just isn't an option. "I typically get here about 9 am and leave around 11 pm. My next day off will be in October. When you're grilling dogs on the Fourth of July or sleeping late on a Sunday morning, I'll be here," he said.

The grind of 81 home games provides all kinds of challenges for Lopas and his team. But like so many other turfgrass managers around the country, it's a vocation that's in his blood. Each day is another opportunity to prepare a world-class playing surface for the Angels.

A small red and dusty iron sign that hangs in the maintenance office sums it all up in just five words: "Rake like a champion today." ■

▼ **WHEN ALBERT PUJOLS** arrived in Anaheim last year, his one request of Lopas was to remove some grass in front of first base so that throws from the third baseman would bounce on dirt instead of grass. Lopas was happy to oblige the superstar, who he calls a "really nice guy."



▼ **A FEW YEARS AGO**, Lopas created a mowing pattern that reduces ball snaking in the outfield. By cross-cutting the only areas behind the short stop and second baseman (where very few balls sneak through), it allows him to mow the outfielder areas in just two directions – thus reducing the chance a bouncing ball will move laterally on its way to an outfielder.



WHAT YOU NEED TO KNOW ABOUT HIGHER ETHANOL FUEL AND YOUR EQUIPMENT FLEET

By Kris Kiser

TURF AND FIELD MANAGERS must operate and maintain a host of outdoor power and small engine equipment, from mowers and blowers to utility vehicles, generators and trimmers. Along with safety and reliability, managers want equipment to enjoy a long product lifecycle. Through regular maintenance, one expects that equipment lasts long enough to more than payback on the original investment.

However, in the coming year, a new higher ethanol fuel, called Ethanol 15 (E15), will likely appear in gas stations across the country. Although mandated by law, when used in turf and grounds equipment, E15 can cause engine failure and damage product[DASH HERE]bringing your product lifecycle to an abrupt halt.

WHY HIGHER ETHANOL FUEL?

Energy independence and domestic security gave rise to fuels legislation. Signed into law in 2007, Renewable Fuel Standard (RFS) program regulations were developed in collaboration

with refiners, renewable fuel producers, and many other stakeholders. Created under the Energy Policy Act (EPA), EPA was tasked with reaching the RFS requirement of 7.5 billion gallons of renewable-fuel to be blended into gasoline by 2012 and growing to 15 billion gallons of ethanol. As a result, ethanol use has been mandated by law.

The challenge has been that the underlying assumptions used to develop the RFS were not met.

For example, many believed that an E85 auto fleet and E85 infrastructure would expand and gasoline use would continue to climb and that E85 would absorb the mandated ethanol. Yet, E85 demand and availability remains low.

Further assumptions that have fallen short are:

- Flex fuel vehicles that use E85 have not expanded rapidly enough
- E85 use is not expanding
- Gasoline consumption peaked in 2007

and continues to fall, and

- Advanced and cellulosic fuels (non corn ethanol) are not available.

So why are you hearing that there will be 15% ethanol on the market although we know that it can damage outdoor power equipment used by your grounds crews?

THE BACK AND FORTH ON ETHANOL 15

In 2009, Growth Energy, an ethanol industry trade group, petitioned the EPA to raise the limit on ethanol in gasoline from 10 to 15%. Since gas consumption was falling and E85 was not taking hold, they wanted to increase the allowable level of ethanol to create more demand in the marketplace and to meet ever increasing ethanol mandates.

Understanding the corrosive effects of higher levels of ethanol, several engine product and auto manufacturers, including the outdoor power equipment, motorcycle and boating industry, urged EPA to be deliberative in its review process, and assure, with thorough