**Organic Golf**
Judge rules Suffolk County, N.Y., must take 'hard look' at building chem-free course

**No Mas, No Mess**
Border collies have changed the face of golf course geese problems

---

**Ojai reclaims one of world's best par-3s**

OJAI, Calif. — An ambitious project to renovate Ojai Valley Inn & Spa's George C. Thomas-designed course will return two signature holes that have been “lost” for over a half-century, including one which was hailed as one of the world’s best par-3s.

“We have an extraordinary opportunity to preserve a piece of history,” said the inn’s director of golf, Mark Greenslit. “Our classic course is reclaiming two of its most unique and beautiful holes.”

The terrain of these two holes is so spectacular that PGA Tour great, historian and course designer Ben Crenshaw said, “This shot is going to be once again one of the best shots in golf.”

Continued on page 37

---

**SunCor on fire in the Southwest**

By PETER BLAIS

PHOENIX — Things are heating up here in the Valley of the Sun for SunCor Resort & Golf Management Inc.

The Phoenix-based subsidiary of SunCor Development Co. is building 45 holes of golf in the Phoenix area, 18 in St. George, Utah, and operating another 108 holes scattered between four greater Phoenix-area properties.

Among the properties under construction are:

- A Hale Irwin-designed 18-hole executive course called The Lakes Course and a nine-hole pitch 'n putt layout across Litchfield Road from the Art Hills-designed Palm Valley Golf Club, which SunCor

Continued on page 46

---

**Fully autonomous, 'intelligent' mower tackles turf in Fla.**

By ANDREW OVERBECK

JACKSONVILLE, Fla. — Engineers at the University of Florida’s Mechanical Engineering School have developed a fully automated robotic fairway mower that may very well revolutionize golf course maintenance. The unit, which utilizes a Global Positioning System (GPS), sonar sensors and five onboard pentium computers is truly a “smart mower,” according to engineer David Armstrong.

“This has a large platform with a lot of intelligence,” said Armstrong. “I’ve taken it out and let it run for three or four hours and it stays within an inch or two of where we want it to be.”

Continued on page 49
The robotic mower can be used in two ways. The superintendent first drives the unit around the perimeter of a fairway to record the corner points. From there, on-board computers automatically generate a sweep pattern to cover the area. The superintendent can then specify the spacing of the rows and the mower will “remember” the settings and follow the exact path each time. The unit can also be programmed in a more specified manner. A superintendent can mow an entire fairway and program the mower to remember and follow his exact path from then on.

The system’s five computers run a number of different functions allowing for a high degree of autonomy. One computer controls the motor, steering, throttle, brake and shifter. The second controls the GPS system which is integrated with an inertial navigation system allowing it to maintain a high degree of autonomy.

Armstrong’s next move is to attract companies like Toro and John Deere to integrate the robotic systems with existing fairway mower models. Armstrong’s next move is to attract companies like Toro and John Deere to integrate the robotic systems with existing fairway mower models. We envision a club that would have an automated team of these mowers that could go out at 4 a.m. and mow the whole golf course. With a fully functional prototype (above), Armstrong’s next move is to attract companies like Toro and John Deere to integrate the robotic systems with existing fairway mower models.

We envision a club that would have an automated team of these mowers that could go out at 4 a.m. and mow the whole golf course. —David Armstrong

The SolarCady provides three distinct advantages. First, the car has increased range. While a standard electric car can maybe go for two rounds, the SolarCady can go for three and perhaps four rounds depending on the level of sunlight. "It’s phenomenal," said Neil "Buster" Bustermante, general manager at the Mauna Lani Resort. "There are days where we will rent the car out and it will go for four rounds without using the battery at all. Furthermore, re-charge times are cut in half, minimizing re-charge costs. The SolarCady also doubles the car’s battery life. "Most courses rotate their cars every five years, but they wind up having to buy a battery after just two or three years," said Shugar. "With the SolarCady, they never have to buy new batteries.

At an average cost of $400 per battery, that would save Mauna Lani around $72,000 over a five year period. For that reason, Mauna Lani and PowerLight are currently working on a lease agreement to retro-fit all 180 of the resort’s cars. While PowerLight is working with golf car manufacturers to integrate SolarCady, it is currently installing the system strictly as a retro-fit option. The company leases the SolarCady for $14 to $24 a month.

PowerLight plans to install SolarCady in golf cars at a number of clubs across the U.S. by the end of the year.