## **Alternative** product research

he USGA is conducting research projects about the effectiveness of new and alternative products for golf course construction, including testing bunker sand, bunker liners and sand erosion products, according to Jim Moore, director of construction education for the USGA Green Section. Here's what he had to say about some of them:

- 1. Flat pipe in green construction. "It's another option that works. It's cost effective and practical, but you need to use fittings that are designed for the flat pipe."
- 2. Alternatives to gravel, such as plastic or geotextiles. "Geotextiles were never accepted by the USGA. I think they're acceptable, but I need to convince others in the USGA in order to put them in the USGA guidelines."
- 3. Alternative seeding processes. "For example, BlueYellow's product is difficult to apply because it's lightweight. It's like spreading Kleenex on the ground."
- 4. Inline filters for drainage. "We need to be more prudent with grow-ins. We're putting down too much nitrogen, and it's running into bodies of water. We need to filter the water as it comes through a green. These filters won't be installed on every green, rather in certain environmentally sensitive
- 5. Wireless sensors in greens. "These will help the superintendent know if there's a perched water table."
- 6. Subsurface drip irrigation. "This will most likely take off in tees. You need water to move upward so you should use dirty sand with silt and clay because with 100-percent sand, water will drain more quickly."

## How are we doing?

he growth or health of the industry is measured in several ways. Two of those are rounds played and golf course construction. The charts below provide a glimse of each. Overall, growth remains fairly stagnant.

## **National rounds played**

Percent change in rounds, 2007 vs. 2006										
	Jan	Feb	Mar	Apr	May	Jun	YTD			
Total U.S. facilities	-20.6%	-10.6%	11.3%	-15.1%	5.4%	3.4%	-1.8%			
Private clubs	-18.3%	-6.1%	6.0%	-15.4%	4.5%	2.9%	-2.7%			
Public courses	-21.3%	-12.1%	12.6%	-15.0%	5.6%	3.6%	-1.6%			
Premium	-8.7%	-3.3%	6.4%	-7.5%	1.6%	4.6%	-0.4%			
Standard	-15.8%	-8.1%	7.8%	-15.6%	6.7%	5.0%	-0.9%			
Value	-27.2%	-16.9%	16.2%	-15.9%	5.6%	2.9%	-2.1%			

Figures represent facilities that have submitted rounds data for both time periods. Source: National Golf Foundation, as of 8/15/07

## **Construction report**

as of 8/14/2007										
Туре	Und	er construc	Completed*							
	9-hole	18-hole	Total	9-hole	18-hole	Total				
New facilities		THE PROPERTY.		Innih i						
Daily fee	27	118	145	10	26	36				
Municipal	10	7	17	2	4	6				
Private	8	69	77	6	17	23				
Total	45	194	239	18	47	65				
Additions		- Ipho		Hillian	The Th					
Daily fee	89	5	94	13	3	16				
Municipal	4	1	5	1	0	1				
Private	9	5	14	9	3	12				
Total	102	11	113	23	6	29				
Grand total	147	205	352	41	53	94				

• Figures don't include courses classified as reconstructions. (57) nine-hole and (90) 18-hole reconstructed courses were under construction and (16) 9-hole and (31) 18-hole reconstructed courses opened. • Source: National Golf Foundation