Globetrotting consulting agronomist Terry Buchen visits many golf courses annually with his digital camera in hand. He shares helpful ideas relating to maintenance equipment from the golf course superintendents he visits— as well as a few ideas of his own—with timely photos and captions that explore the changing world of golf course management.

**BALL MARK REPAIR TOOLS**

The fork on the right was made using used flat steel as the base and \(\frac{3}{8}\)-inch diameter concrete nails welded in place. The other two forks were made using used greens mower bed knives with the forks cut out with a metal jigsaw. The Narrow's aerifier tines are \(\frac{5}{64}\)-inch and \(\frac{5}{32}\)-inch diameter, respectively, and are welded to the forks with \(\frac{3}{4}\)-inch diameter rounded steel. Two coats of water-soluble acrylic resin coating spray is then applied. These ball-mark tools are placed on the back of the walk-behind greens mower handle and the ball marks are repaired daily prior to mowing. All of the materials were recycled parts in inventory and it took about 30 minutes to make each one. Masaru Shimizu, manager, (chief greenskeeper), at the C.J.P. Kasumigaseki Country Club in Saitama Prefecture, Japan, conceived this great idea. Shimizu's 36-hole club, founded in 1929, is in the planning stages to host the golf competitions for the 2020 Olympics, where Tokyo is a candidate city. The club has previously hosted the Japan Open in 1933, 1956, 1995 and 2006; The World Cup in 1957; the Japan Women's Open in 1999 and the Asian Amateur Championship in 2010.

**GOLF CART SPRAYER**

This 2001 Yamaha gas-engined golf cart was transformed into a versatile sprayer used for miscellaneous spot spraying of the club property. The rear bumper was extended outwards using 2-inch angle iron and 2-inch square tubing that was also used to make the metal floor. The golf bag rack was removed and a 26-gallon fiberglass tank was mounted with a 2-inch angle-iron frame. A 4.3-hp Kubota gasoline engine powered sprayer (up to 217 psi) was mounted on the rear flooring. A self-contained manually operated hose reel and frame manufactured by Maruyama holding approximately 164 feet of \(\frac{7}{64}\)-inch diameter high-pressure hose was bolted/welded to the bumper frame and windshield mounting. The high-pressure hose from the sprayer to the hose reel is attached with zip strips along the roof frame. A portable marking paint gun is mounted on the rear and safety equipment is easily stored in the front compartments. The parts cost about $1,000 and it took about 16 hours to complete the project. Masaru Shimizu, Manager, (chief greenskeeper), at the C.J.P. Kasumigaseki Country Club in Saitama Prefecture, Japan, conceived this great idea.