IN THIS ISSUE

COLUMNS

18  Outside the ropes
    Tim Moraghan: Have You Hugged Your Golf Pro Today?

26  Irrigation issues
    Brian Vinchesi: Irrigation The Hard Way

36  Design Concepts
    Jeffrey D. Brauer: Allowances and Contingencies

48  Game plan
    Henry DeLozier: Building With The Housing Market

60  Parting shots
    Pat Jones: Tim The Tweetman

DEPARTMENTS

4  Teeing off
6  The Whiteboard
57  Travels with Terry
59  Classifieds
59  Ad index

FEATURES

Cover Story
8  SHARPEN YOUR APP-TITUDE
13 mobile apps you can't live without. GCI's Bill Brown breaks 'em down so you can load 'em up to your mobile device.

Mowing
20  ROUGHING IT
Keeping rough looking healthy and uniform can be challenging, especially with limited resources.

Plant Health
28  SEPARATED AT BIRTH
Sometimes it's hard to tell one weed from another. 5 commonly misidentified weeds and the telltale signs to ID them right the first time.

Water Management
38  TINY BUBBLES
Aeration can help you find a clear solution to your pond problems.

Research
44  GRINDING THE DATA
GCI takes a deeper look at its reel and blade maintenance research.

Management
50  MAKING A PRIVATE CLUB SUCCESSFUL
Nine key factors that push clubs forward and enable them to weather hardships.

Real Science
53  A WITCH'S BREW OF TROUBLES WITH THE BERMDAGRASS MITE
Bermudagrass stunt mites are an increasing turfgrass problem at golf facilities with Bermudagrass fairways and roughs.