

The Anatomy of a Golf Course Irrigation System

by Doug Macdonald

Have you ever been out on your course all by yourself (maybe early in the morning before your crew gets in, or late at night after the last group has holed out) and just listened to the sounds it makes? You recognize that unmistakable muffled yawn followed by the steady hum of your pump station as it wakes up and comes to life. And there's the quiet hiss or consistent clap of your sprinklers as they let water escape the confines of your pipe network. Ain't life grand!?

Or...

Have you ever been sitting down to a nice dinner with your family when the phone rings and you answer a frantic call from your assistant because the main line between 13 green and 14 tee just blew out of the ground? By the time you get to the course the greenside bunker has washed out onto the putting surface and nobody can fine the right isolation valves to shut down the system. Ain't life a pain!?

Like it or not, your golf course is a living thing. It breathes and it bleeds. Whether it thrives or dies depends on how you and your crew can respond to its needs. One of the most important things that you are responsible for providing to your course is its life blood, water. Because of this, it is important for you to have a functional system of distributing water to each area of the course that you want to keep alive. Your irrigation system can be thought of as the cardiovascular and nervous system of your golf course - all you have to do is provide the brainwork to operate it.

The "heart" of your irrigation system usually consists of your source of water and your pump station. The "veins and arteries" that keep your golf course alive are made up of the pressure pipe network, and the drainage system.

But the heart won't beat, and the "blood" won't flow, until the brain says go. The brain indicates to the nervous system what function should be occurring at any given time and the brain is made up of only one component - you. Fortunately, technology has developed some pretty good tools that make up the "nervous system" of most golf courses; sprinkler heads, control valves and automatic control systems.

In the next few months we'll take a closer look at the purpose and function of the various "parts" that make up the "body" of a typical golf course irrigation system.

Doug Macdonald is an associate design consultant with Russell D. Mitchell & Associates, Inc., an irrigation system design and consultation firm in Walnut Creek, California.

This is the first of articles that will appear in "Thru the Green". These articles are intended to provide general information about the irrigation of a typical golf course in Northern California. We would be happy to address specific topics regarding irrigation systems, components, water management, etc., in upcoming newsletters. Please contact Jean LaDuc at (408) 374-7697 or Doug MacDonald at (415) 939-3985 with requests for specific topics to be dealt with in future articles.

OUR HOST AND HIS COURSE FOR OCTOBER

Born and raised on the Sonoma Coast, Chester Manni was a self-employed dairyman for 25 years before he joined the grounds crew at Bodega Harbour Golf Course in 1975. Working for the company before the first nine holes were completed and in play Chester saw this cow pasture transformed into the challenging and spectacular course it is today.

Working his way "up the ladder" he became Greens Superintendent in 2 1/2 years, a position he still holds. He attributes much of his initial knowledge of greens maintenance to his former Superintendent Ron Roth. He also praises his crew and has an excellent camaraderie with them as he's not above rolling up his sleeves and joining them in the trenches.

Besides golfing, which he doesn't seem to get enough time to enjoy, Chester is also an avid hunter and fisherman, enjoying outdoors.

Bodega Harbour Golf Course is an 18 hole Scottish Links Style Course designed by Robert Trent Jones, Sr. and Robert Trent Jones, Jr. The front 9 was constructed in 1985, and the back 9 in 1974. It is a par 70, 6220 yards in length, course rating 71.9/130 slope. Extensive use of natural terrain incorporating hills, rock outcroppings, ravines and a large environmentally protected fresh water marsh into the total design concept. Total annual rounds played approximately 31,000+.



PUMP REPAIR SERVICE CO.

SALES • SERVICE • REPAIRS
ALL PUMPING SYSTEMS

Representative for:

SYNCRIFLO PACKAGE PUMPING SYSTEMS

405 ALLAN STREET
P.O. BOX 34327
SAN FRANCISCO, CA 94134

Dave Archer
(415) 467-2150

AUTOMATIC RAIN COMPANY
Landscape and Irrigation Supplies

CONCORD (415) 825-3344	MENLO PARK (415) 323-5161	PLEASANTON (415) 484-1170	SAN JOSE (408) 287-7882
SALINAS (408) 757-1045	VACAVILLE (707) 447-7773	SANTA ROSA (707) 584-7272	NAPA (707) 255-7575
MERCED (209) 363-3330	FRESNO (209) 431-8007	SAN RAFAEL (415) 454-4313	

HIGH TECHNOLOGY PESTICIDE APPLICATION EQUIPMENT
INDUSTRIAL CLEANING SYSTEMS AND PRESSURE WASHERS
SALES, SERVICE, PARTS AND DESIGN

CAREY KREFFT

NSTC
NEW SPRAYER TECHNOLOGY COMPANY
1950 BURROUGHS ST.
SAN LEANDRO, CA 94577

510/483-7394
800/327-6832
FAX: 510/483-5080