ROANOKE

Roanoke College Magazine

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Shelley Olds '03

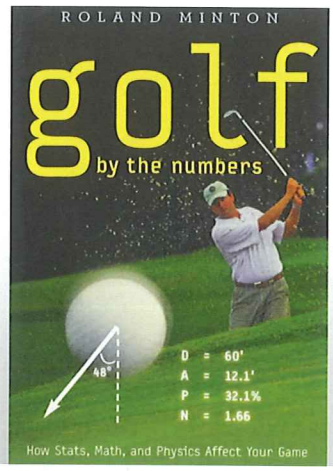
OLYMPIC DREAMS

THREE MAROONS SHARE THEIR QUESTS FOR ATHLETIC GLORY

Providing opportunity: The impact of student scholarships | Wildly wonderful Rocketbuster Boots

Golf by the Numbers

By Dr. Roland B. Minton

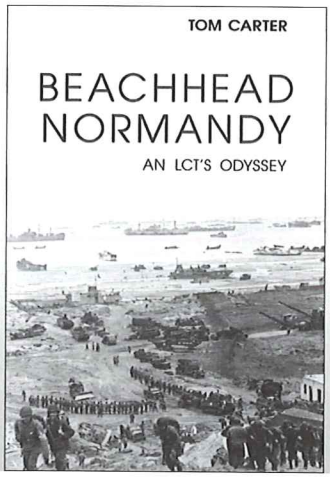


From the publisher: How do the world's greatest golfers improve their game? Practice, sure, but Roland Minton says mathematics and statistics are also key to their success. "Golf by the Numbers" analyzes the mathematical strategies behind the sport, giving fans a behind-the-scenes look at how numbers drive the game. Computers, GPS trackers, swing simulators and high-speed cameras have introduced new and exciting ways of seeing and understanding the complicated and endlessly fascinating game of golf. Players like Phil Mickelson are so good because they review the results of every swing they take. Minton's comprehensive analysis of statistics taken from the PGA Tour's ShotLink system walks readers through the mountains of data that pros use to inform and refine their play. The result is an insider's perspective of how the world's greatest golfers apply mathematics to the sport. Minton discusses randomness in golf (especially how much luck is involved in putting) as well as aggressive and cautious strategies both on and off the greens, and he explains, by the numbers, just how Tiger Woods was so dominant from 2004 to 2009. Here is a book that tells some truly engaging stories of modern golf, featuring famous players and memorable tournaments, all through the lens of elementary probability theory. Minton's informal style and clear and direct explanations make even the most detailed discussions accessible to all curious-minded golfers. His mathematical morsels are not only enjoyable to read — they may even help you improve your game.

From Dr. Roland Minton, Capp-Whitehead Professor of Mathematics: "This book combines two of my passions, mathematics and golf. I have played golf since I was 10, and have persistently slipped golf-related problems into my mathematics courses and calculus books. The time required to do the research for the book came from a sabbatical, for which I thank Roanoke College. My greatest pleasure working on the book was a round at Oakhurst Links, the first golf course in the United States, where the game is played with authentic 1880s equipment. My biggest surprise was the level of cooperation of the PGA Tour. They gave me access to the ShotLink data set, which for a golf fan is the ultimate toy store. ShotLink records information, including ball location to the inch, on essentially every shot taken on the PGA Tour. A little over half the book consists of some of the interesting statistical relationships I found while data mining ShotLink. My fantasy was that I was channeling Bill James. While that truly is a fantasy, it is great fun doing research that brings Moneyball-like principles to golf, and may lead to a greater understanding of the professional game."

Beachhead Normandy: An LCT's Odyssey

By Dr. Thomas Carter



From the publisher: World War II naval history has been discussed and examined from almost every possible angle. One story that has never been told in detail, however, is that of the U.S. Navy's vessel designated the Landing Craft, Tank (LCT). Even though they are known for ferrying troops and supplies to the beaches of Normandy, LCTs were more than mere transports. In fact, the little craft had permanently assigned crews and participated in nearly all forms of naval warfare. "Beachhead Normandy" combines the history of LCT operations with a detailed look at a specific ship, the LCT 614, which landed at Omaha Beach under heavy fire. Tom Carter has gathered material from the U.S. Navy's archives, the National Archives, and personal stories from several members of the 614's crew, including the ship's skipper and second officer, to give readers a clear picture of the LCT's role in one of World War II's pivotal moments. He also analyzes the role of LCTs in the Pacific theater, including the 614's participation in the occupation of China while supporting the Marines' famed First Division. Drawing on both technical analyses and personal accounts by the actual participants, including the author's father, "Beachhead Normandy" is a rich and varied history of the key services these ships performed during and after World War II.

From Dr. Thomas Carter, associate professor of English: "The book really got its start almost 20 years ago. My two brothers and I were planning a trip to Normandy for the 50th anniversary of the D-Day landings to honor our Dad (who died in 1984). He was a gunner on a Landing Craft, Tank (LCT) that came ashore in the middle of Omaha Beach in the first hour of the landings. As we prepared, though, we began to realize how little we knew about what Dad's ship really did. Published histories were no good – they offered plenty of pictures of LCTs, but no real information about the craft themselves. So I began the task of gathering information from government archives, and I was also fortunate enough to find several of Dad's former shipmates. What emerged was not the story of one ship in one battle, but the story of how a ship and a crew come together to live, play, work and fight their way through World War II. It's also a story that touches on many of the background elements of the war's history: the slap-dash training, late-war convoys, the months-long supply effort on the beaches after D-Day, and finally ending in the Pacific supporting the Marine's occupation of Japanese-held China. The project may have started as a "what my daddy did in the war" account, but the book ended up being a representative history of the Navy's unsung LCTs."

ROANOKE VALLEY REEF

When art and science collide

THE ROANOKE VALLEY REEF, a yearlong project inspired by the nationally celebrated Hyperbolic Crochet Coral Reef, will be exhibited in Olin Galleries in January 2013.

The Roanoke Valley Reef is a satellite reef of the Hyperbolic Crochet Coral Reef, a project of the Institute For Figuring in Los Angeles that has been exhibited in museums and art galleries around the world, including the Smithsonian's National Museum of Natural History. The project is a unique combination of mathematics, the arts, environmental science and other disciplines.

Jan Minton, a Roanoke College mathematics professor, visited the Smithsonian exhibit and was inspired to establish what is now Virginia's only official "satellite reef."

"It had so many things that I was interested in," she said. "It's mathematical, it uses the craft of crochets, it's artistic, and it has the science aspects...One of the great things about the exhibit is that everywhere it goes, people from the community come together to make their own reefs to contribute. I immediately thought, 'Roanoke College should do this!'"

That was more than a year ago. Since then, a number of experienced and novice crocheters from the College and surrounding communities have knitted and/or crocheted colorful sea life such as coral, anemone, starfish and sea urchins for the project.

Talia Logan, director of Olin Gallery; Colleen Smith, a project participant and wife of Dr. Richard Smith, vice president and dean of the College; Jan Minton, Mathematics teaching associate; and Dr. Jack Steehler, director of institutional research, get an up-close view of the Roanoke Valley Reef, a satellite reef of the Hyperbolic Crochet Coral Reef, during Family Weekend 2012.

"I can't think of anything else quite like it, and Roanoke College is making it happen," Minton said of the project.

In January 2013, the reef pieces will be assembled and exhibited in Roanoke College's Olin Galleries. Two reefs will be assembled — one a multicolored coral reef, containing pieces of all color and sizes, and another reef consisting of corals created with white and cream-colored yarns and materials to symbolize the problem of coral bleaching, which can occur when corals are stressed by changes in temperature, light or nutrients.

An opening reception is scheduled for Jan. 25 in Olin Gallery, with a lecture by American artist and Fulbright Fellow Craig Voligny. Voligny received a Fulbright Fellowship in 2010 to work on a painting/installation exhibition sourced from the ecological situation of the Kenting Reef in Taiwan.

GIVING BACK

Roanoke Fund participation increases

ALUMNI ARE GIVING BACK — and enthusiastically!

At the end of the 2011-12 fiscal year, alumni participation jumped by 6 percent, with most gifts directed toward the Roanoke Fund.

Gifts received through this annual fundraising initiative strengthen academic programs and enhance student life by providing resources for the College's most critical needs – from the maintenance of the campus infrastructure to scholarships for students and student research projects.

"The Roanoke Fund allows things to happen at Roanoke that otherwise would not," said Laura Rawlings, director of the Roanoke Fund. Rawlings said she was excited about the fund's growth in 2012.

Kacy Spence '14, a history major in her first year at Roanoke after transferring from community college, is an example of how the Roanoke Fund greatly benefits students. As a single mother of two daughters, Spence's ability to pay tuition is limited.

"I received a lot of grants and scholarships that came from the Roanoke Fund," Spence said. "It's given me the chance to have the education I always dreamed of having. It's a privilege to be a part of this institution."

Kacy Spence '14, with her daughters Elizabeth, left, and Emma, right.

Spence spends time working with the Roanoke Fund phonathon, during which current students telephone alumni, parents and friends of the College to ask for their financial support. Spence said she plans to give back to the College once she graduates. And as a recipient of Roanoke Fund grants and scholarships, she said she knows the importance of alumni support.

Roanoke's growing recognition has prompted alumni to donate like never before, Rawlings said. New initiatives such as the Young Associates program, developed to generate giving among graduates of the last decade, and the Maroon Club, an annual membership program for fans of intercollegiate, intramural and club sports, are providing alumni with new ways to direct their giving.

"The Roanoke Fund is going to become increasingly vital in the coming years," said Rawlings. "The increase in gifts last year clearly demonstrates that our alumni care about Roanoke and want to make sure that students like Kacy have the assistance they need to fulfill their dreams." — *Megan Semmelman '11*

For more information about the Roanoke Fund, visit http://tinyurl.com/bqezcaz