THE MASTERS ATHLETE SERIES

# MASTERING CYCLING

# JOHN HOWARD

Legendary cyclist and coach



Your guide for cycling stronger, longer, and faster

# Mastering Cycling

John Howard

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Mastering cycling

自行车训练大全



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In memory of Bill Edwards. He was the spark that lit my coaching career.

## **Foreword**

ohn Howard is one of those special people who can be classified as a pioneer among the field of outstanding American cyclists. Revered among fellow U.S. Bicycling Hall of Famers, John has been on the forefront of innovation on the American and world cycling scene for most of his life. He has never been afraid to try out new ideas, to identify and embrace unique challenges, or to think outside the box.

Ever since his beginnings in Springfield, Missouri, John Howard has been a man ahead of his time. This can be both a blessing and a source of frustration because the process of getting others to understand and accept new concepts can take a long time. John has developed many ideas for training, racing, and nutrition, including his unique bike-fitting protocol. However, it has often taken some time for the American cycling community to accept the product of his genius. Always the perfect gentleman, he never gives up moving forward, and that is the sign of a true winner.

Part of being a pioneer in sport is being able to sort out the good ideas from the garbage. Over the past 60 years, a lot of bad science has been published in the cycling literature. John's judgment in weeding out the good from the bad has been superb. For example, physiology pundits used to believe that after the age of 30, a person's athletic performance would begin to steadily decline, and there was nothing that could be done about it. Obviously, John never accepted this pronouncement, and he simply continued to achieve new personal records and set new absolute records. It has since been proven repeatedly that an athlete's performance does not have to deteriorate if certain key adjustments are made to the training protocol. It now is widely accepted that we don't just get older; we can continue to get better with age. All it takes is attention to details such as those that are presented in this book.

At age 62, John continues to maintain an extremely high level of fitness, and he remains on the cutting edge of training technology. UCLA basketball coach John Wooden, one of the greatest coaches of all time, defined success as peace of mind, which is the result of knowing in your heart that you have done everything possible to become the very best that you are capable of becoming. John Howard is one of those men who definitely meets John Wooden's criterion for success. He is one of the finest, most accomplished, and most humble gentlemen in the sport.

John's feats as a sportsman are legendary: three-time Olympian, four-time U.S. national road race champion, gold medalist in the Pan American Games, 24-hour world record holder (593 miles), second-place finisher in the inaugural

Race Across America (RAAM), Hawaiian Ironman champion, holder of the land-speed record on a bicycle (over 152 mph), and much more. What is truly amazing is the broad range of his cycling achievements.

John's new PowerFitte bike-fitting technology is just the most recent example of his position at the forefront of new techniques for the cycling community. His systematic protocol has made many of his clients more powerful, more comfortable, faster, and happier on their bikes.

Fortunately for the cycling community, and most especially for the masters cycling community, John has assembled all of his experience and wisdom into this book. Many of the training methods that are aimed at improving the performance of masters cyclists appear nowhere else in the coaching literature.

Bill Edwards, PhD www.PerformanceEdge-R.com

## **Preface**

lbert Einstein once said, "There are only two ways to live your life. One is as though nothing is a miracle. The other is as though everything is a miracle." I vastly prefer the latter to the former. Life in itself is a miracle, and I have found cycling to be a great way to enjoy the many miracles of living life on this planet. Ever since I first discovered cycling, I have loved feeling my heart pumping energy into my limbs and covering mile after mile by my own power. I began by pedaling through the beautiful Ozark Mountains and rural countryside near Springfield, Missouri, and now I frequent the sunlit coastal beauty of southern California.

I have had a lifelong love affair with the bicycle. In spite of my interest in fast machines and my desire to ride bikes with the latest technology in frames and components, I maintain a deep appreciation for bikes of all ages. I like to ride on bikes that were built 50 to 60 years ago when milk was delivered to your door by men in starched white uniforms. Those relics of the past recall simpler times, when bikes crafted from steel by artisans were thought to be as light as spiders. However, as Lance Armstrong titled his book, it's not about the bike; any bike will do. For me, it's about feeling the joy of being alive and living life to its fullest.

Some of us ride to save money, some want to lose weight, and others want to define themselves in competition with displays of hard-earned athleticism. Some cycle to deny their advancing years. Whatever the reason for training, riding, and competing, age is the great equalizer. Enthusiasm for the sport is a positive attribute, but I can't help but wonder how Lance Armstrong will deal with the inevitable onset of years. Although their hearts were still passionately involved with the sport, Greg LeMond and others before him have had to confront the issues of aging.

I have gone from being the big dog on the block to matching strokes with professionals who are 35 years younger. At times, this has made me hit the wall. Recently, I was climbing a hill on Del Dios Highway above Lake Hodges in northern San Diego County. While pressing the flesh and reaching deep for the reserve of energy that had seldom failed me, I realized in a single, gasping, heart-governed instant that I wasn't going to find it this time. I was forced to forget the pace I had desired to maintain and to find a level of effort that my body could accommodate. It was then that I remembered why I ride in the first place: for the love of the experience. Love it! This sport is about life, *yours!* 

# **Acknowledgments**

would like to thank Rene Maurer for her tireless contributions to clarify my well-meaning, but often times disconnected, thoughts. Without Rene, *Mastering Cycling* simply could not have been written, so the first toast to the success of this book is to her. Many thanks to Laura Floch for her invaluable suggestions and patience during the editing process. I would also like to give credit to FiTTE co-founder, Dr. Ernie Ferrel, whose knowledge of human anatomy and his clarification of how muscles work on the bike was essential. I also want to thank the C.H.E.K. Institute, Paul Chek, and Chris Mound for setting me on the correct course for cycling-related flexibility and strength training. Thanks to all the cyclists I interviewed and those who contributed photographs, as well as the models who dedicated their time and energy, all of whom helped us capture the spirit of this book.

### **Credits**

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#### Introduction

SA Cycling, the organization that governs bicycle racing in America, defines a Masters cyclist as thirty and older. In terms of participation, this means that racing in the U.S. is essentially a master's sport. Whether you are a competitive or recreational cyclist, I want your passion for riding bicycles to preserve your life's balance. This book will explore cycling as a body-friendly exercise that can enhance the substance and improve the longevity of your life. As a masters cyclist, I view the aging process as a personal challenge to recreate a broader variety of techniques that contribute to a healthy lifestyle. It doesn't matter if you are a spin-class aficionado, a weekend warrior, or a seasoned competitor; I am committed to helping you scale the rungs of the cycling performance ladder.

You will learn how the sport can help you sort out the priorities of work and family commitments and relieve the associated stress. My approach is to use the bike as both a reward for a job well done and as a stimulus to fire the momentum that drives your life. This mind/body stimulation is a critical, but often forgotten, element of exercise. The beauty of cycling is that it blends a utilitarian element to this self-improvement formula. *Mastering Cycling* will increase your efficiency on and off the bike, regardless of your age or level of experience.

Power, comfort, and safety are the components that I consider to be priorities for an enjoyable cycling experience. I will explain the mechanical and biomechanical elements of an effective setup that can be tailored to your individual requirements. I will tell you how to increase your flexibility and strengthen the primary support muscles of the knees and core, accompanied by an array of photographs that illustrate the correct form. Another component that is needed to build an efficient power base is the improvement of pedaling efficiency. I use a variety of old and new technologies to improve your skill level in order to get you up to speed and on the road. As I have done with amateurs and pros alike, I will explain how you can greatly improve your bike handling skills to gain more confidence while riding in the pack and in traffic.

In my mind, the term "training" really means "playing," and the actual process is broken out into blocks of play. The performance concepts explained here are innovative, and you may find that my priorities differ from those of other coaches. These ideas represent the views of several respected coaches who specialize in masters cyclists. These principles are the basis of our collective wisdom, illustrated and supported by interviews with some of the multiple world champions we have coached. The competitive ground in cycling is as fertile as any sport on the planet, and bike choices reflect this diversity. I will

discuss the types of bikes available that can enhance your enjoyment of this specialty-driven sport.

I will also delve into the menagerie of competitive and non-competitive events available to masters. We will look at the strategies associated with each type of race and the sport-specific training for each. I will also cover injuries and age-related issues that masters cyclists typically encounter. Masters cyclists are not "over the hill." Regardless of their ages, they ride "over the hill," again and again, finding fun events in which to participate and races in which to compete. They also find comradery and lasting friendships as they ride the roads and trails to better fitness, health, and enjoyment.

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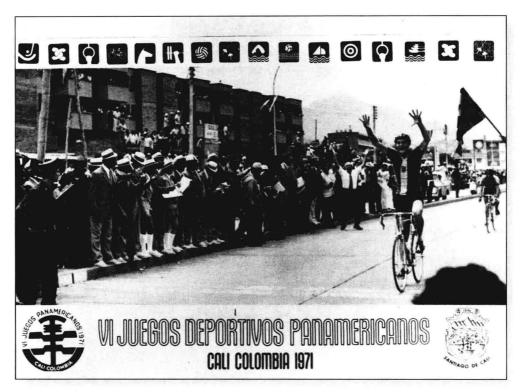
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started riding seriously after reading *The Big Loop*, a 1955 novel by Claire Huchet Bishop. It was about a French boy, Andre, who beat incredible odds to achieve his dream of racing in the Tour de France. The wonderful pencil sketches of the riders with their spare tires slung about their shoulders really captured my imagination and inspired me to be a cyclist.

My first serious bike was a Schwinn Continental. I rode it hard for several years until I was T-boned by a car pulling out of a local drive-in restaurant. I upgraded to a Schwinn Sierra with a triple-chain ring. Before my first race, at age 19, I purchased the flagship of the Schwinn line, a \$195 state-of-the-art Paramount. The 1966 event was a 105-mile (169 km) road race, and I rode that canary-yellow bike to a gold medal in the 1971 Pan American Games in Cali, Colombia.

Remember the defining events that knit together the fabric of your cycling experience: your first bike, your first significant ride, the first big terrain hurdle you conquered, and many other nostalgic details. A pleasurable bike ride or a particularly satisfying race gives you the desire to get back out there and recapture that experience. As you grow older, your specific cycling goals may change, but the general desire to feel good persists. Whether you are a serious racer, an endurance athlete, or a weekend cruiser, continue to ride as long as cycling satisfies whatever desire it creates in you.



John Howard winning the 1971 Pan American road race in Cali, Colombia.

#### WHO ARE MASTERS CYCLISTS?

Masters cyclists do not adhere to a textbook definition—they come from diverse backgrounds and in all shapes, sizes, and ages. Categories for racing depend on the promoters or sponsors, but generally, masters cyclists are men and women over the age of 30 who have a passion for cycling. Some are former professional or amateur cyclists who raced; others never seriously rode a bicycle until they were in their 30s, 40s, or older. They can be young adults with or without families, middle-aged enthusiasts, retirees, or grandparents. They can be teachers, mechanics, or neurosurgeons. Some enjoy weekend jaunts, and others ride 100 miles (161 km) or more per week. Some tour across a nation on their bicycles, while others simply ride to have breakfast with friends. Some are professional cyclists, and others are novices in the sport. They all share one commonality: They love to ride.

As a cycling and multisport coach, I most commonly see recreational enthusiasts who begin their training with the caveat that they are not athletes and have no desire to compete. After developing their cycling skills and receiving encouragement from their peers, they often become competitive. With proper training and effective conditioning, focused athletes can be as powerful in their

#### Cycling for Life

#### **Jerry and Sarah**

My friend Jerry has been cycling since he was a teenager. For most of his 72 years, he has lived to ride his bike. Jerry raced bicycles in the late 1950s, when the U.S. Cycling Federation was known as the Amateur Bicycle League of America. During those days, cycling was a littleknown, subcultural activity. Jerry was also a successful middle-distance runner who played mean games of tennis, handball, and tournament pool. While raising his children, he regarded cycling as fresh-air and blue-sky therapy, but as he grew older, his competitive spirit began to reemerge. Jerry attended our San Diego racing camp in 1997, and bicycle racing became his compulsion once again.

Recently, Jerry told me that after more than half a century of cycling with only a few minor mishaps, he had missed the last step while walking down the stairs to his basement. That misstep cost Jerry his mobility and freedom. Just after having surgery to repair severely damaged quadriceps, he asked for my counsel. Regaining his physical health and taking his body to a higher level of cycling fitness are Jerry's fervent goals.

Sarah, another friend of mine, is 42, a wife, the mother of a toddler, a university professor, and the most humble and accomplished amateur athlete I know. She practices yoga and both downhill and cross-country skiing. She is also a high-ranking age-group Ironman triathlete, and



Jerry Murray on his steel racer in 1957.



Jerry Murray at the national championships in 2007 on a carbon-fiber bike.

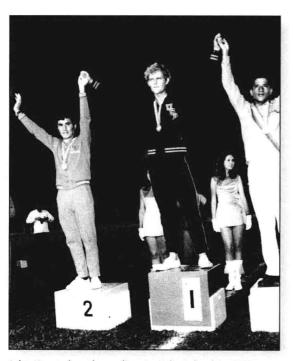
was the overall female winner of the 2007 Carlsbad Marathon. Sarah's model on balancing the essential elements of training with a busy life is a valuable lesson in time management.

40s and 50s as in their teens and 20s. Most masters would agree that cycling is a sport for life since it offers so many opportunities for self-discovery, healthful longevity, and raising environmental consciousness.

#### WHY CYCLING?

The sport of masters cycling is growing quickly. In *Masters Cycling*, JoAnne Klimovich Harrop says that masters cyclists are now more secure financially, more able to travel to nonlocal cycling events, and more interested in staying physically fit. Cycling gives them the opportunity to train or simply to ride with their spouses or friends. Aging cyclists can celebrate landmark birthdays by competing in a race or completing an endurance ride. The National Off-Road Biking Association (NORBA) and the United States Cycling Federation (USCF) enjoyed a combined membership increase of 8 percent for cyclists aged 35 and older between July 2005 and June 2006. Cyclists between the ages of 35 and 44 make up the largest contingent in both organizations at 33 percent and 36 percent, respectively. *Cycling South Australia*, a Web site for competitive masters cyclists, states that masters cyclists represent the strongest segment of growth in cycling across the country "down under." Masters cycling organizations have popped up in many countries all over the globe for recreational riders and serious competitors.

I am impressed by the homemakers, the corporate warriors who work 40 to 60 hours per week, and the busy professionals who never ventured into



John Howard on the podium in Cali, Colombia, 1971.

anything athletic before discovering cycling. Many masters are empty nesters hoping to reclaim their youthful vigor (and physiques) and look to cycling as a new frontier. I am gratified by the steady flow of people I have had the privilege of advising over the years. They discover or rediscover cycling for a variety of reasons, and many come to the sport in their later years. Ultimately, the reasons for becoming a masters cyclist are as diverse as the personalities and histories of the participants.

In the United States, there are more cyclists than skiers, golfers, and tennis players combined. According to a 2008 survey that was conducted by