# SPARIS REGENTATION DISABILITY



Michael J. Paciorek Jeffery A. Jones

# SPORTS AND RECREATION FOR THE DISABLED

### 2nd Edition

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The compilation of up-to-date information on adapted equipment and suppliers resulted from the efforts of the companies listed in this text. Many of these companies responded to our continuous inquiries. Our appreciation is extended to all who responded.

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## **DEDICATION**

For our wives MaryBeth Jones and Karen Menke Paciorek, and our children, Kristyn and Benjamin Jones, and Clark and Clay Paciorek. Without your continual support, this project would never have been completed. Thank you for being there.

"Having a physical disability is not the same as being disabled. Failing to make that distinction, we leave out the most important ingredient in human achievement, the desire in each of us to strive for the best we can be. Everyone lives in an age of opportunities and technological advances and yet, our most marvelous and moving experiences are still those victories of will and spirit against seemingly insurmountable odds."

Jean-Michel Cousteau Freedom in Depth Handicapped Scuba Association, 1985

## **FOREWORD**

Sports and Recreation for the Disabled is a book designed to make dreams come true . . . to actualize the right of all individuals to sport . . . to empower active, healthy leisure practices throughout life. More than 50 sports and recreation activities are fully described, creating a broad spectrum of choices for individuals with disabilities, their family members, and the professionals who work with them. Organized alphabetically, the book begins with all-terrain vehicles and ends with wilderness experiences. In between, sports for all seasons and all references (individual, dual, team) are covered with hundreds of photographs and diagrams and clearly written, simple-to-understand text.

The phenomenal success of the Paralympic Games, Special Olympics, World Games for the Deaf, and other international and national sport events has documented, beyond doubt, the ability of persons with disabilities to be elite athletes who train and compete as hard as their nondisabled peers. Wheelchair basketball, team handball, and quad rugby are illustrative of sports that attract large numbers of spectators. But more and more, we are seeing people in wheelchairs on tennis courts, crutches lining the decks of public swimming pools, and people who are blind cycling and running with guides. Clearly persons with disabilities have the same sport and recreation aspirations as nondisabled individuals and derive the same benefits. Some use sport as exercise for fitness and weight control, while others perceive sport as a means of socializing, fun, and recreation. For a few athletes, however, sport is life, and self-actualization comes only through achieving personal bests and, whenever possible, bringing home the golds.

Today's emphasis on ethics encourages all university professors to consider ways they can teach both undergraduate and graduate students to help everyone achieve a high quality of life. This resource book should be mandatory for all coaching and athletic training courses and for all physical education and recreation skills, methods, pedagogy, programming, and administration courses. The need for content on sport and disability extends beyond adapted physical activity and therapeutic recreation learning experiences to the universal content required by all professionals.

No adapted physical activity, therapeutic recreation, or physical therapy university training program is complete without courses on sport, leisure, and disability. This content is essential to knowing how to socialize children and youth into sport, how to help people make the transition from school and rehabilitation-oriented sport into community-based activities, and how to empower families and neighborhoods to support and advance active, healthy lifestyles for all. Sports and Recreation for the Disabled is

unique in that it towers above all available resources! It is more inclusive, more accurate, more future-oriented, more on the cutting edge. And it's fun to read and translate into action!

The excellence of any book depends on the knowledge, experience, and philosophy of its authors. The Mike Paciorek-Jeff Jones team cannot be surpassed. Each has a strong foundation in sport, physical education, and recreation. Each is a scholar as well as a practitioner. Each is singularly dedicated to the vision of sport for all and has devoted much of his own leisure time to volunteer coaching, teaching, administration, research, and writing. Some authors paraphrase what other books present. Paciorek and Jones write what they have lived. They are indeed two of the world's most knowledgeable experts on sport, recreation, and disability.

The Americans With Disabilities Act (1990) and the Individuals With Disabilities Education Act (1990), as well as Developmental Disabilities legislation, mandate equal access to a balanced life of work and leisure. Since the 1970s, the Amateur Sports Act has encouraged competition for individuals with disabilities and provided support under the United States Olympic Committee. Nevertheless, many professionals remain ignorant of legal and moral responsibility to provide equitable programs. Sports and Recreation for the Disabled makes responsibility clear and provides the knowledge necessary to adapt equipment, facilities, and rules to meet the needs of persons with all kinds of conditions (amputations, deafness, dwarf stature, mental impairment, spinal cord injuries, blindness, cerebral palsy, traumatic brain injury, and les autres).

Professionals in a variety of settings (community recreation centers, schools, hospitals, sport clubs, rehabilitation facilities, and private health fitness enterprises) will find this book an indispensable resource. Application of the information herein will not only reduce the likelihood of lawsuits but enhance fiscal accountability and profit. Extending services to all citizens results in many benefits to the community. Improved mental and physical fitness is generally associated with high rates of employment and productivity.

The 1990s represent a time to appreciate diversity. Sports and Recreation for the Disabled enables every professional to find the sport and the sport organization that is right for his or her client or student. It also guides the general public, voters, decision-makers, administrators, and business leaders to support deserving sport organizations and events and to maintain an environment in which sport for all is advanced.

It is exciting to envision persons with disabilities leafing through this book, seeing the many role models featured, and thinking, "I can do that!" Woven into each chapter are organizations to contact for rules, equipment, and other information. This book creates options: to try sport on one's own, with a nondisabled friend or family member, or to join a disabled sports organization (DSO). Addresses are given for both nondisabled and disabled national governing bodies (NGBs), in recognition of the growing cooperation between mainstream and separate organizations. Today's emphasis on self-determination among people with disabilities means that regular physical educators, coaches, and recreators more and more will be challenged to provide high quality programs for all of their constituents. No one with this book in hand can say, "I don't know how."

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In years to come, I hope this book is in every office, school, home, and library. I recommend that fund-raisers carry it when they approach business and industry for support. I anticipate its widespread use by the following persons:

- 1. people with disabilities
- 2. occupational therapists
- 3. physical therapists
- 4. special educators
- 5. physical educators
- 6. adapted physical educators
- 7. therapeutic recreation professionals
- 8. recreation professionals
- 9. coaches and athletic trainers
- 10. medical doctors
- 11. counselors and others who work in rehabilitation settings
- 12. parents of individuals with disabilities
- 13. university professors
- 14. community, hospital, and school administrators

Sports and Recreation for the Disabled will make a difference in many lives! I am proud to recommend it.

Claudine Sherrill, Professor Texas Women's University at Denton May, 1993

## **PREFACE**

The second edition of *Sports and Recreation for the Disabled* represents the most comprehensive resource manual of its kind to date. With the impressive growth and many changes that continue to occur in athletics for individuals with disabilities, a revision of the first edition was needed. The book is written for professionals who serve people with disabilities, and for people with disabilities who are interested in leading active and more exciting lives.

The book was developed under the premise that participation in athletic and recreational activities is the right of every individual, and is an integral part of leading a meaningful, balanced life. The value and power of physical activity is well documented. Many individuals with disabilities and their families have found sports and recreation to be a release from everyday tensions, as well as an effective tool in the rehabilitative process. The central theme of this book centers on introducing ways in which individuals with disabilities can access sport and recreational opportunities from which they have traditionally been excluded. Chapters are organized alphabetically and start with All-Terrain Vehicles and end with Wilderness Experiences. Since many limits to sports participation are physical in nature, what better way to begin than to discuss some physical means that can be used to access a wide range of activities? By ending with Wilderness Experiences and the vastness they entail, we want readers to be left with a feeling that no activity is off-limits to a person with a disability and that opportunities are as never-ending as the wilderness itself. In between, readers will be introduced to 51 additional activities, each documented by stories of success (Figure Pre.1).

The book is geared for physical educators, adapted physical educators, special educators, students in professional preparation programs, therapeutic recreators, occupational and physical therapists, athletes with disabilities, coaches, sports medicine personnel, athletic administrators, and directors of intramural sports. It will serve as a valuable resource to those who work with people who have disabilities, those who participate in sports, or those who wish to stay current in the field of sports for people with disabilities. It provides an excellent supplement to an adapted physical education class, where time may not be available to discuss modification of activities in-depth. It should serve as the primary text in classes dealing solely with sports and recreation for the disabled.

The motivation for this book comes from the authors' feeling that sports and recreation are meant for all individuals and not just elite athletes. It is the right of all people to have access to opportunities for physical activity. The compilation of information for this edition was just as



**Figure Pre.1.** Wilderness Inquiry conducting a Learn to Canoe workshop in Chicago. (Courtesy of Oscar Izquierdo and Rehabilitation Institute of Chicago's Wirtz Sports Program)

joyful as it was for the first edition. Making contact with hundreds of resource individuals made it evident that, in the four years since the first edition, the scope of sports and recreation for individuals with disabilities had grown tremendously. There are opportunities being presented by thousands of unselfish individuals dedicated by the love of physical activity and the understanding of its power. Certainly without their help, this text would not have been possible.

PURPOSE OF THE MANUAL

Sports and Recreation for the Disabled takes a cross-disability view of sporting and recreational opportunities for individuals with disabilities. The framework of this text features eight key organizations. Each of these organizations provides services in more than one sport to a target population based specifically on disability or group of disabilities. The U.S. Olympic Committee officially recognizes these organizations as Disabled Sports Organizations (DSOs). These DSOs include the following: the American Athletic Association of the Deaf (AAAD); the Dwarf Athletic Association of America (DAAA); National Handicapped Sports (NHS); the National Wheelchair Athletic Association (NWAA); Special Olympics International (SOI); the United States Association for Blind Athletes (USABA); the United States Cerebral Palsy Athletic Association (USCPAA); and the United States Les Autres Sports Association (USLASA). The United States Amputee Athletic Association (USAAA), featured in the first edition, is no longer in operation. Responsibility for sports programming for amputees has been assumed by NHS. Each of these organizations is discussed in more detail within the introduction to this text. In addition to these eight, more than 200 national and local organizations and programs provide sports and recreation opportunities for individuals with disabilities, and are referenced within these pages. The text is designed to provide resource information on 53 sports and recreational activities for individuals who exhibit a wide range of abilities.

#### CHAPTER ORGANIZATION

Each of the 53 activity chapters is organized in the following manner to provide the most current information possible, and to allow an individual with a disability to access opportunities.

#### Nondisabled National Governing Body (NGB)

Where applicable, the national and international nondisabled NGBs are listed. In most cases, specific information on rules can be received by contacting the nondisabled NGB. It is not the intent of this text to provide a thorough description of rules, only various modifications to rules. Most of the competition offered by the disabled sports organizations is conducted under the NGB rules, usually with only slight modifications. Each of the nondisabled NGBs provides information to promote the growth and enjoyment of its sport. The most up-to-date sport specific information may be obtained from these organizations, and one's level of ability matters little. It is up to the user to seek further information from the references listed.

#### Disabled National Governing Body (NGB)

In many cases, NGBs exist for sports or activities open to individuals with disabilities. They function in much the same capacity as nondisabled NGBs, to oversee the development and conduct of their sports (Figure Pre.2). Where applicable, names and addresses have been provided. Some may find it surprising that some sports, such as wheelchair tennis, are not listed as official sports of the National Wheelchair Athletic Association, since wheelchair tennis is a very visible and popular sport. The NWAA however, does not offer tennis as an official event. Tennis is offered under the auspices of the National Foundation of Wheelchair Tennis (NFWT), an entirely separate disabled NGB. This is true for the sports of wheelchair bowling, as well as activities such as horseback riding and scuba, to name a few.



Figure Pre.2. The North American Riding for the Handicapped Association (NARHA) is the disabled NGB for equestrian in the United States. (Photo by Oscar Izquierdo)

#### Official Sport Listing

For competitive events, the disabled sports organizations that offer the activity as an official or demonstration sport are identified. Do not assume that a sport is not possible for a person with a disability just because it is not offered as an official or demonstration sport. Organizations continue to expand their offerings as resources become available or interest demands.

#### **Primary Disability**

In most cases, participation in any of the activities is not restricted by disabling condition. In other cases however, activities have been developed for specific disabilities such as goal ball for the blind, power soccer and blowdarts for those who use power wheelchairs, and quad rugby for quadriplegics. We have attempted to match disabilities with the most suitable activities.

#### Sport Overview

A brief description provides general information and rationale for offering this activity to individuals with disabilities. Discussion throughout the text will focus on how activities are similar to and different from non-disabled sports. Descriptions of program offerings by the eight major disabled sports organizations will be included, as well as references to more than 200 other sports and recreation organizations. A quick reference, sport-by-sport listing of major organizations can be found in Appendix C.

#### Adapted Equipment

Although in most cases, individuals with disabilities will be able to enjoy physical activities with little if any equipment modifications, a thorough review of the literature has discovered many unique sources and types of equipment that will allow a person with a disability to access sport and recreation opportunities. The use of these devices is documented in this portion of each chapter. Approximately 350 photographs and illustrations are included as well.

#### **Equipment Suppliers and Manufacturers**

It is of little use to be aware of an adaptation but not know where to obtain one. These sections collectively list more than 250 equipment manufacturers and suppliers that market adapted equipment for people with disabilities. This in itself should provide a valuable resource to therapists, professionals, athletes with disabilities, coaches, and others with an interest in this area. All of these manufacturers and suppliers will provide further information on products upon request. Listing of a manufacturer or supplier in this text does not constitute an endorsement by the authors, but is provided as reference information only. It is the responsibility of the user to be a smart consumer by analyzing how the product would meet his or her needs. Names of manufacturers and suppliers are listed in each chapter, while addresses may be obtained within Appendix A.

#### Additional Resources

This section provides a variety of references to enable the person with a disability to access sports and recreational opportunities. It includes more than 200 sports and recreation associations (many that cater only to

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athletes with disabilities), contact people, means to access the outdoors, training information, and videotapes geared to those with disabilities.

#### References and Bibliography

Each chapter contains references and additional readings to allow one to go beyond the scope of this manual. Our thanks go to all those people who have taken the time to document success stories, adapted equipment, and sports and recreation opportunities through their writings.

#### **Appendices**

Quick reference information is included on sport wheelchair manufacturers and other organizations to assist one in becoming more physically active.

The sole purpose of this text is to provide information on how individuals with disabilities can access sports and recreation opportunities. It is not intended to be a coffee table book, but is designed to be used on a daily basis. The book was organized to be user-friendly with information at your fingertips. Feel free to send us your ideas, program information, and suggestions. We hope the book will be used by people with and without disabilities, will provide an insight into sports programs for people with disabilities, and encourage you to seek additional information. Lastly, we hope that this book inspires people with disabilities and those who work with them. We wish to remind everyone that there is little a person with a disability cannot do with desire, determination, motivation, and opportunity. Stay active, stay healthy, and have fun.

Michael J. Paciorek Jeffery A. Jones

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## INTRODUCTION

#### MEANING OF SPORTS FOR INDIVIDUALS WITH DISABILITIES

Athletic competition has been an important component of human existence for thousands of years. Only within the last 50 years has athletic competition opened up to some individuals with physical disabilities. In the past two decades or so, sports participation has become possible for individuals with developmental disabilities, cerebral palsy, dwarfism, visual impairments, and les autres conditions. The importance of competition for athletes with disabilities is just as keen as it is for nondisabled athletes, if not greater.

Athletes with disabilities participate in sport and recreation for the same reasons as nondisabled individuals. Physical and health benefits have been well documented. In the past, limited opportunities for athletic activity forced many individuals with disabilities to lead sedentary lives, resulting in the accumulation of health risk factors. With health care reform receiving much attention at the national level, many disabled individuals seek to maintain appropriate levels of fitness through physical activity to reduce health risk factors.

The psychological benefits of physical activity are also well documented. If an individual finds that participation in sports is still possible despite a congenital or acquired disability, then self-motivation often leads to other accomplishments. Issues of family, independent living, employment, and community participation are frequently addressed with a renewed perspective.

Individuals with disabilities have overcome many discriminatory barriers in recent years. The Americans with Disabilities Act (1990) helps people of all abilities to work together to solve problems. The perception of the general public towards individuals with disabilities has changed dramatically as opportunities for athletic participation have increased. Road races in every community now include individuals with disabilities. Blind cyclists with tandem bikes are not an unusual sight. Wheelchair tennis players are everywhere. As the general public becomes accustomed to seeing people with disabilities participating on an equal basis, perceptions can be formed or changed. If people with disabilities can be successful in sports, then maybe they can be successful in other facets of life as well.

The importance of sports and recreation for individuals with disabilities is also evident in universities, public schools, rehabilitation centers, and recreation programs. Most professional physical education and recreation training programs within universities now offer at least one course in sports for individuals with disabilities. If they are not, their curricula should be modified to include such instruction. Many universities are also



**Figure 1.** An increasing number of rehabilitation centers are offering strength and conditioning programs as part of outpatient or sports and recreation programming. (Courtesy of Oscar Izquierdo and Rehabilitation Institute of Chicago's Wirtz Sports Program)

offering health-related activity courses for their students with disabilities. Others, such as The University of Illinois, offer intercollegiate athletics and scholarships for athletes with disabilities.

Although the potential of sport in the rehabilitation process has been well known, it has only been recently that programs of high quality are being offered in rehabilitation centers. Examples of successful programs include the Wirtz Sports Program at the Rehabilitation Institute of Chicago, the Shepard Spinal Cord Center in Atlanta, and Craig Rehabilitation Hospital in Denver. Many rehab centers offer programs that serve individuals with a variety of disabilities who have completed therapy at their centers, in addition to other individuals with disabilities who are general members of the community.

This book is dedicated to all individuals who have disabilities, or who work in the field and who are interested in encouraging healthy and active lifestyles. The success stories of individuals and organizations who have triumphed offer clear testimony that individuals with disabilities will no longer accept passivity. Participation in activities leading to healthy lifestyles is a right of all individuals, and opportunities must be developed by professionals in the field. Although much has been accomplished in recent years, many challenges are ahead. Some of these challenges may never be solved, but through the work of dedicated individuals, they can be minimized.

CHALLENGES FACING SPORTS FOR INDIVIDUALS WITH DISABILITIES

Many of the challenges discussed in the first edition of this text still exist. Progress has been made in some areas, but additional challenges have surfaced. The following discussion addresses some of the most important challenges facing sports and recreation programs for those with