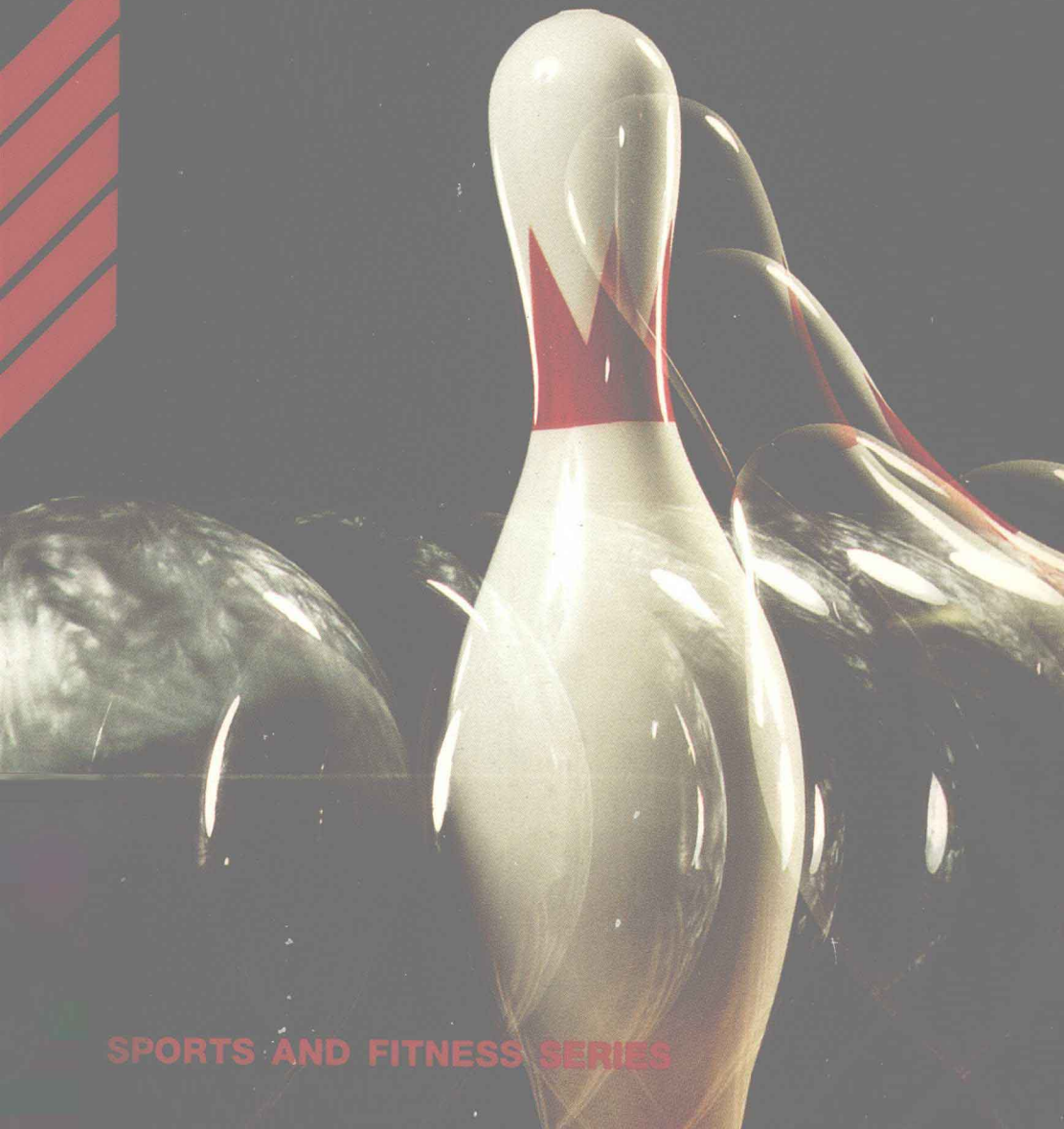


# **BOWLING**

**Seventh Edition**

**Martin/Tandy/Agne-Traub**



**SPORTS AND FITNESS SERIES**

# **BOWLING**

**Seventh Edition**

**Joan L. Martin**

Los Angeles, California

**Ruth E. Tandy**

Denton, Texas

**Charlene Agne-Traub**

Washington, D.C.

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# **BOWLING**

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## About the Authors

Joan Martin taught bowling at the University of Wisconsin and at the University of California at Los Angeles for over twenty years. She has been a league bowler and has participated as a special lecturer, not only in various bowling clinics sponsored by Lifetime Sports, but also in many school clinics in the Los Angeles area. Besides having been a successful coach of this universally popular activity, she has contributed to the literature in the *Research Quarterly* of the American Alliance of Health, Physical Education, Recreation and Dance, and the *Journal of Sports Medicine*. Joan Martin was the original author of this book.

Ruth Tandy first taught bowling in an antiquated facility with “grooved” lanes and no pinsetters. Since then she has taught bowling at the Ohio State University lanes and at the Texas Woman’s University where she coached the bowling team. She teaches at both the undergraduate and graduate levels and specializes in the sociology of sport. She has published several sport psychology and sport sociology articles in professional journals. She is active in the National Association for Girls and Women in Sports and in sports officiating, and has served on the national rules committees of several sport activities.

Charlene Agne-Traub has taught bowling in five states over the past twenty-one years and has coached both men’s and women’s teams at the collegiate level. One of her bowlers won the Illinois-Indiana collegiate regional singles competition and bowled at the WIBC tournament in Las Vegas. An avid bowler, she currently participates in three leagues and carries an average that ranges between 176 and 185. She competed in the open division of the WIBC national tournaments in St. Louis in 1982 and Lansing, Michigan in 1992. Her doubles team placed ninth in St. Louis and fiftieth in Lansing, averaging 189 for the nine tournament games. She is a member of the National, Virginia, and Washington D.C. 600 clubs and a past member of the Virginia Bowling Queens. Charlene is a certified health education specialist with bachelor’s and master’s degrees in physical education and a doctoral degree in health education. Most recently, she has taught bowling at Howard University in Washington, D.C. Her published work includes professional journal articles in the fields of health, physical education, and leisure studies and a book on the history of volkssporting in the United States. Charlene Agne-Traub has been solely responsible for revisions for both the fifth, sixth, and seventh editions of this highly popular book on bowling.

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# Preface

The seventh edition provides up-to-date and expanded information on the sport of bowling. Twenty new photos either replace previous ones or are added in an effort to illustrate the text material. Information has been reorganized where appropriate; for example, historical information once presented in the league bowling chapter is now part of the first chapter on bowling history. Additional information on bowling for the disabled and on bowling equipment is provided. The language of bowling chapter is now located at the end of the text to make it easier to find and refer to terms. The rules section is completely revamped and expanded. The entire text, including references, is updated to provide the most current information. The book will serve the needs of beginners and seasoned bowlers in instructional, recreational or league environments.

Bowling is rapidly becoming the leading participating sport for Americans of all ages: children, teenagers, college students, family groups, and senior citizens. This book is designed to assist all eager enthusiasts in learning the basic skills that lead to optimum bowling performance and pleasure.

There is no substitute for good instruction, but good instruction also profits from reinforcement by the written word and by visual cues. Most people seek and appreciate opportunities to find out more about what they are attempting to learn or do. They require an explanation of the “why” and the “when” as well as the “how to.”

The material presented delves into all aspects of the game including history, popularity, basic and advanced techniques, official rules and scoring, etiquette, bowling language, equipment, and facilities. Both the novice and the experienced bowler will discover many helpful hints to assist them in correcting faults in their approach or delivery and adjusting to differences in lane conditions, with some thoughts on strategies and points of concentration for competitive bowling. The sequencing of chapters is not meant to be a concrete format; rather, flexibility allows the reader to pick and choose the order of interest.

Self-evaluation and competency-based questions are distributed throughout this book. These afford the reader typical examples of the kinds of understanding and levels of skill that should be acquired as progress is made toward proficiency in bowling. The player should not only answer the printed questions but should pose additional ones as a self-check on learning. In some instances you may find that you cannot respond fully and accurately to a question until you have read more extensively or have gained more playing experience. From time to time you should return to troublesome questions until you are sure of the answers or have developed the necessary skills.

Many generous friends, colleagues, and students assisted in the preparation of the manuscript, photographs, and illustrations. The late Ruth Abernathy assisted with the first edition along with Jeff Must, Peggy Iden, Ann Stutts, and Don Sawyer. Our appreciation was extended to Iris Kimura and Charlene Agne for assistance with the fourth edition. Charlene Agne-Traub solely revised the fifth, sixth and seventh editions. We are also indebted to the American Bowling Congress, the Women’s International Bowling Congress, American Machine and Foundry, Brunswick Corporation, the National Bowling Council, and the National Bowling Hall of Fame and Museum for supplying us with pertinent information and materials. The past curator, Mr. Bruce Pluckhahn, and the current curator, Mr. John Dalzell, of the Bowling Hall of Fame and Museum in St. Louis, Missouri, were especially helpful. Thanks to the Howard University bowling students of Dr. Agne-Traub for their cooperation with the sixth edition. The assistance of Gary Traub, husband of Dr. Agne-Traub and a bowler as well, was essential in the preparation of the sixth and seventh editions.

Joan Martin  
Ruth E. Tandy  
Charlene E. Agne-Traub

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# The Beginning of Bowling

# 1

The term *bowl* is thought to be derived from the Saxon *bolla* and the Danish *bolle*, both meaning, in the literal sense, "bubble." The word later referred to any round or spherical object. Some authorities trace the word to the Latin *bull*a or round ball, and others prefer the French derivation *boule*, meaning "ball."

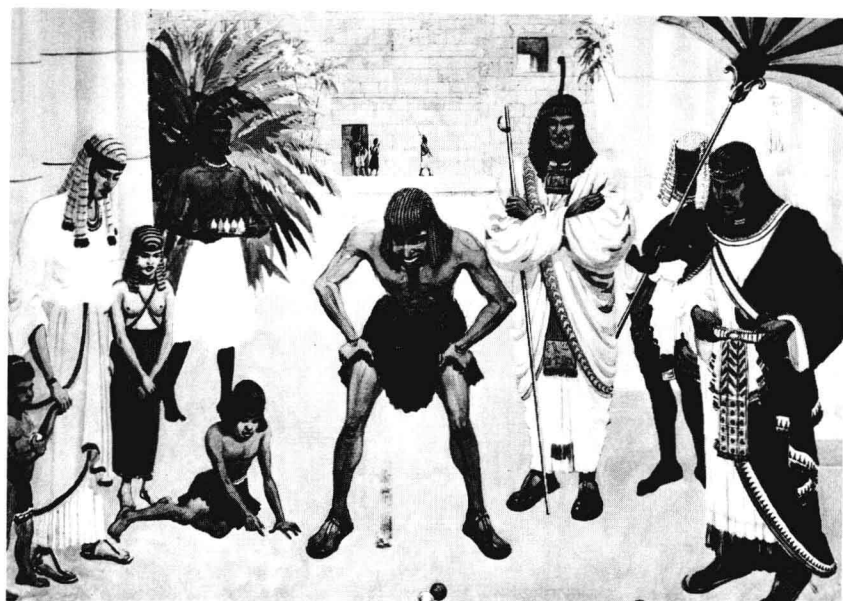
Throwing, pitching, or rolling objects at targets has for centuries fulfilled an innate urge in man, and the earliest records of such activity used as a game were discovered by an English Egyptologist, Sir Flinders Petrie. While examining the contents of an Egyptian child's grave, the burial date placed at 3200 B.C., he discovered implements and objects for playing a game very similar to our tenpins of today (fig. 1.1).

In other studies by Dr. Malcolm Rogers, curator of the San Diego Museum, an ancient bowling game as performed by the Polynesians was found in which small elliptical balls and round, flat discs of stone, about four inches in diameter were used. The game was called "Ula Maika" and consisted of bowling or rolling the stones a distance of sixty feet, the length of our hardwood lanes today.

Bowling's place of origin in Europe appears to have been in what is now Northern Italy, where as early as 50 B.C. the Helvetii played "Boccie," a game similar to modern Italian bowling.

These ancient forms of bowling were outdoor activities resembling the game of lawn bowling. Lawn bowling takes place on a grassy area, known as a green, where a ball is rolled at other objects, usually another ball. Bowling at pins actually originated as a religious ceremony in the cloisters of cathedrals in Germany as early as the third or fourth centuries A.D. It was then the custom for the canons to test the faith of their parishioners by having them place their pins at one end of the cloister and from the opposite end throw a ball at the pins which represented the *Heide* or heathen. If a hit was scored this meant the parishioner was leading a pure and clean life and would be able to slay the heathen; if unsuccessful at hitting the pins the parishioner's aim could be improved by more faithful attendance at church services. Those who were successful were called "keglers" and were honored and toasted at a dinner given at the conclusion of the tests.

The game ceased to be a religious endeavor and developed into a sport when the canons became intrigued and began "kegling" with their cathedral students. The game changed to include as many pins as there were keglers.



**Figure 1.1**

Early Egyptians bowling. (Courtesy of American Bowling Congress)

The first indoor bowling lanes are believed to have originated in England where, because of bad weather conditions, bowling on the open green (lawn bowling) was difficult. During the Middle Ages, to insure year around activity, the wealthy enthusiasts of the game constructed bowling annexes to their residences.

On the continent, bowling, or ninepins, soon became a universal pastime (fig. 1.2). In Germany, as few as three pins and as many as seventeen were used until Martin Luther established nine as the ideal number. Luther was an enthusiastic bowler and built a bowling lane for his family. The French had a game called "Carreau" which was played long before the reign of Charlemagne. The Dutch Pins version resembled skittles but with taller and narrower pins, especially the middle pin which was higher than the rest and called the kingpin. Curling, another adaptation of the ancient game of bowls, was introduced into Scotland by the Flemish in the sixteenth century. Bowling on ice, curling, became very popular in countries with severe winters and is still played today in Scotland, Canada, and some northern states of the United States.

In America, the early Dutch settlers brought the game of ninepins to Manhattan Island in 1626. Three citizens leased a plot formerly used as a parade ground or marketplace; this area was located at what is now the foot of Broadway in New York City. They enclosed it for a bowling green and the little park still bears its original name of Peppercorn. Farther south in Virginia, the English settlers introduced lawn bowling.



**Figure 1.2**  
Ninepin bowling in Europe. (Courtesy of  
National Bowling Hall of Fame and Museum)

Washington Irving, in “Rip Van Winkle” (1819), made one of the earliest references to pin bowling when he mentioned the thunder of the ball colliding with pins. The early game probably reached the height of popularity in the 1840s in New York where bowling lanes were found on nearly every block on Broadway and in various parts of the Bowery. Most of the matches were rigged, and this led to the abolition of bowling in New York, Connecticut, and Massachusetts when a law in 1841 declared it a gambling game. By 1850 gamblers and swindlers had complete control of the game of ninepins.

The game of ninepins, which had the pins set in a diamond formation, had been condemned by the Puritans two hundred years earlier because men were devoting time to playing that could have been better spent in work. However, neither condemnation nor legislation could abolish enthusiasm for the game. Thus, ninepins at that time had to be played on the sly. Many a bowler sat in the stocks or in prison for defying the law. An ingenious hero, noting that the long-standing law prohibited “bowling at nine pins,” added a tenth pin and a triangle formation to replace the diamond shape in which the pins were previously arranged, which not only circumvented the law but improved the game, and its growth began. By 1875 the game became well enough established that a “National Bowling Association” was formed to revise the rules and standardize the equipment. Although great credit is due this early association, it failed to survive and the American Amateur Bowling Union replaced it in 1890. It, too, disintegrated due to its limitations, giving way in 1895 to the American Bowling Congress (ABC), whose objective was to help promote and elevate the game. As a result of insight, purposeful planning, and principles this organization is today the largest sports membership organization in the world. During the 1990–1991 season a total of 6.7 million bowlers were members of organized leagues. The ABC had over 2.9 million members, the Women’s International Bowling Congress (WIBC) more than 2.8 million members, and the Young American Bowling Alliance (YABA) had over 1.0 million members.

The Women’s National Bowling Association was established on November 28, 1916 with some forty members. This organization defines the rules for women’s tenpin bowling in America. Before that time ladies generally did not frequent bowling alleys or they did so at the risk of their reputations. They were allowed to bowl only when the men were not using the alleys or they bowled behind curtains where they could not be seen. The game, however, was appealing to females and became more so as their wearing apparel became less restrictive. By 1908 they had national tournament competition and, less than ten years later could claim their own international organization. After the WNBA’s eighth annual tournament in 1925 (fig. 1.3) the name was changed to the Women’s International Bowling Congress (WIBC).

In 1941 the American Junior Bowling Congress was organized. Since 1982 the Young American Bowling Alliance (YABA) is the youth organization that governs the competition and supervises the instruction of boys and girls. In 1943, the National Bowling Council (NBC) was formed to coordinate all phases of bowling in the World War II effort. Today this organization serves as the national coordinator for the sport. The NBC acts as the marketing arm for bowling and is also a clearinghouse for informational material, competitive news, and instructional clinics. It was not until 1966 that the American Bowling Congress began to promote competitive collegiate bowling in order to bridge the gap between junior and adult bowling. The national intercollegiate tournament is sponsored by the Association of College Unions International.

**Eighth Annual**

# BOWLING

# TOURNAMENT

OF THE

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Incorporated

Commencing

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### \$3.00

a Person Each Event

Entries Close

### APRIL 4, 1925



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**Figure 1.3**

WNBA (now known as WIBC). (Courtesy of National Bowling Hall of Fame and Museum)



## Popularity

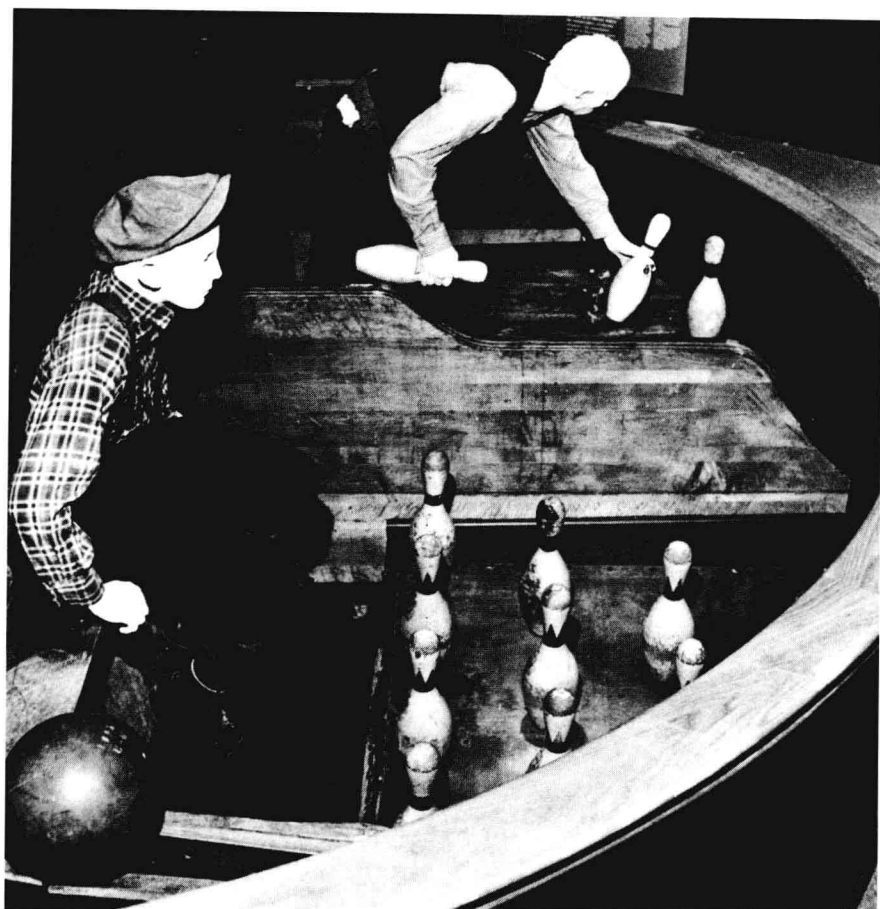
The popularity of bowling took a dramatic upswing with the introduction of automatic pinsetting devices in 1952 (fig. 2.1). With the construction of large bowling centers complete with lounges, dining rooms, and even nurseries, bowling lost its unsavory “pool hall” association to become one of the largest participation sports and one of the most popular forms of family recreation in the United States. From the fall of 1990 to the spring of 1991 more than 82 million people in the U.S. bowled at least one game, and another 6.7 million adults bowled in weekly leagues. Thirty-six per cent of bowlers are adult women, 34 per cent are adult men, and 30 per cent are youth between the ages of 5 to 17.

The skills needed to achieve an average performance in bowling and to enjoy taking part in the game are relatively easy to acquire. Less preparation and participation time is required for bowling than for many other sports. Because time is such a limiting factor, given the tempo of modern living, bowling is an excellent activity for a busy family get-together.

The informal nature of the game allows for socializing and chitchat between turns; in addition, league bowling affords an opportunity to make many new friends and acquaintances as teams meet different opponents each week. The time between turns that permits relaxation and socializing is balanced by the need for concentration and mental alertness in order to judge pin formations and choose strategies of the game. Bowling offers a constant challenge, and watching one’s own ball control and average improve can be highly satisfying, whether you are bowling informally with family or friends or are involved in a highly competitive league.

As a service to increase the awareness of bowling as a sport and leisure time activity and to promote youth fitness in physical education classes, the National Bowling Council and the Young America Bowling Alliance have developed an In-School Bowling Program. The kit contains four rubber balls, four sets of pins, an instruction video, lesson plans, activity sheets, a supplemental math kit, and tote bags. Some establishments provide assistance to young children by placing bumpers, made of rubber or styrofoam, in the channels (gutters) to ensure that the ball moves down the lane and hits the pins (fig. 2.2). On the college scene, many student union buildings include bowling facilities to provide recreation and league competition for students, faculty, and employees (fig. 2.3).





**Figure 2.1**

A look back in time—one of the unique exhibits at the National Bowling Hall of Fame and Museum features the lost art of pinsetting. Pinboys, such as the two featured in the exhibit, were a common sight at bowling centers from the late 1800s until the development of automatic pinsetters in the 1950s. (Courtesy of National Bowling Hall of Fame and Museum)

The American Bowling Congress (ABC), the Women's International Bowling Congress (WIBC), and the Young American Bowling Alliance (YABA), (formerly the American Junior Bowling Congress) have stimulated interest in bowling by offering competitive events and free instruction for men, women, and young bowlers. Volunteer workers from these organizations donate their time to teach bowling and to organize and conduct leagues. Television has encouraged thousands of viewers to learn the game, greatly supplementing the promotional efforts of the ABC and WIBC.

*Take an informal survey of your community. How many bowling facilities are in operation and which ones are open to you?*