

# Badminton



## I. Introduction

Badminton, game for two or four players using lightweight rackets and a shuttlecock, a cork ball fitted with stabilizing feathers. Players hit the shuttlecock back and forth over a net, trying to keep it from hitting the ground. Some people play badminton outdoors on a level grassy area or beach. However, tournament-level badminton is played indoors on a specially marked court.

Badminton's governing body, the International Badminton Federation (IBF), has about 140 member nations. The IBF estimates that about 200 million people play the game worldwide and that more than 1,000 players participate in international competition. Badminton's growth accelerated after the game's debut as a medal sport during the 1992 Summer Olympic Games. China, Denmark, Indonesia, Japan, Malaysia, and South Korea are just a few of the countries where badminton is popular.

## II. Playing Area

International rules state that an indoor badminton court must be rectangular, with white lines marked on a level wooden floor or on a special mat that is rolled onto a level playing surface. A singles court is 44 ft (13.41 m) long and 17 ft (5.18 m) wide. For doubles, alleys 1 ft 6 in (0.46 m) wide along the two longer sides of the court come into play, making the court 20 ft (6.10 m) wide. Because many shots fly high into the air, there must be clearance of at least 30 ft (9.14 m) above the court. A net stretched across the middle of the court has a top edge set to a height of 5 ft (1.52 m) at the center and 5 ft 1 in (1.55 m) at the posts.

## III. Equipment

Badminton rackets weigh between 3.5 and 5 oz (99 and 141 g) and consist of a leather or terrycloth handle; a long, thin shaft; and a stringed area called the head. Official rules limit the total length of a racket to 26.75 in (67.95 cm). The head of a racket measures 11 in (28 cm) in length and 8.6 in (21.8 cm) in width and is strung with synthetic nylon or gut at between 25 and 35 lb (11.3 and 15.9 kg) of tension. Early rackets were made of wood, but badminton rackets are now commonly made of aluminum, boron, graphite, and titanium.

Tournament-quality shuttlecocks, also called shuttles or birdies, weigh 0.2 oz (5.7 gm) and consist of 16 goose feathers that protrude from one side of a ball-shaped cork base. Most shuttles used by casual players are plastic and have synthetic feathers. Both types of shuttles are 2.5 in (6.4 cm) long. When the shuttlecock is in the air, its aerodynamics cause it to spin so that when players hit it, they almost always strike the cork, not the feathers.

## IV. Service and Play

Play begins with a serve from a service area on the right-hand side of the court to a receiver in a diagonally opposite service area across the net. To serve, the server stands behind the service line and strikes the cork base of the shuttle in an underhand motion. The receiver must then return the shuttle before it hits the ground, and the players hit the shuttle back and forth until one side fails to return it.

Play ends when the shuttle hits the ground on one side of the court or when one player makes a fault, or error, such as hitting the shuttle into the net or out of bounds. Specific faults for servers include striking the feathers of the shuttle first or serving overhand. The receiver can be faulted for not being within the service court, for not having both feet on the floor when receiving, and for moving before the serve is made.

During play, faults include hitting the shuttle into the roof or lights, hitting it through the net, double-hitting or slinging a shot, touching the net, playing a shot by reaching over the net, and allowing the shuttle to hit the player's body. Unsportsmanlike conduct—such as intentionally distracting an opponent—will also earn a player a fault.

## V. Scoring and Officials

Points are scored when the opponent fails to return the shuttle, hits it out of bounds, or earns a fault. Points only count for the server (or serving side in doubles), so keeping the service privilege is an important part of the game. If the server loses a rally or makes a fault, the service privilege passes to the opponent. In doubles, this immediate loss of service occurs only at the start of the game. After this first loss of service, each team receives two chances to hold serve. When the first teammate loses serve, the partner serves. If the partner loses serve, the opposing team takes over.

In February 2006 a new experimental scoring system was introduced. Matches are now won by the first player or team to reach 21 points. Once a score reaches 20-all, the game continues until one player or side has a 2-point advantage; if 29-29 is reached, the winner then becomes the first to gain 30 points. Additional rule changes concerned rallies; every winning rally now gains a

point, so the receiver in addition to the server can win points. In doubles play each player now has only one serve before the service advantage passes to the other team. Each badminton match is a best-of-three-games contest. Professional matches can last more than 2 hours.

Prior to February 2006 badminton's scoring system for men's singles, men's doubles, women's doubles, and mixed doubles awarded victory to the first side to score 15 points. Women's singles games were played to 11 points. If the score was tied at 14-14 (or 10-10 in women's singles) a system called *setting* settled the outcome. The first side that reached 14 (or 10) elected either to *play through*, meaning that the next side to win a point won the game, or to *set* the game to three additional points, meaning that the first side to reach 17 points (or 13 in women's singles) won the game.

Badminton tournaments involve a number of officials. A referee supervises the tournament organization while an umpire controls each match. Aided by a service judge, the umpire keeps score and rules on faults during play. Up to ten line judges rule on whether particular shots have landed in or out of the court.

## VI. Skills and Strokes

Badminton requires speed, strength, power, agility, and nerve. Players must move quickly from side to side and back and forth, and stamina is important.

There are six key badminton strokes: the serve, drive, net shot, smash, lift (or lob), and clear. To hit these strokes, players use either a forehand or a backhand grip, depending on court positioning. On the forehand the forefinger acts as a lever and creates power and direction for the stroke. For the backhand the thumb creates this power and direction while placed along the back of the handle.

Many players aim the serve toward the centerline of the opposite service box. This technique limits the angle of the opponent's return shot. Sometimes players use long, high serves to force opponents to the back of the court. Players also make specialty serves, such as flick serves that barely clear the net or drive serves that are hit down the sideline of the service area, to catch opponents out of position.

Once play has started, players tend to hit straight, low-flying shots called drives. When the shuttle remains close to the center of the court, net shots can be a good option. Net shots can be hard-hit or delicate. They are aimed at the front area of the opponent's court, forcing the opponent to play the shot close to the net.

If the opponent manages to return a net shot, the return must be hit high to clear the net. This gives the player a chance for a smash—the deadliest attacking stroke in badminton. A smash is hit to the floor so forcefully that the opponent has no chance to return the shuttle before it hits the ground. The hardest smash has been recorded at more than 200 mph (320 km/h).

Players also use two looping strokes that knock the shuttle high and deep. The lift, or lob, is an offensive stroke made from the middle or front of the court. This shot sends the shuttle in a high arc above the opponent's reach, forcing the opponent to the back of the court. The clear is a similar stroke, but it is used for defensive purposes when players find themselves out of position. The high arc gives players time to return to the middle of the court and to prepare for another rally.

## VII. Competition

Many badminton enthusiasts play in clubs or at local and regional levels. Top players compete in the World Grand Prix series, an international circuit of tournaments sanctioned by the IBF.

The world championships are badminton's biggest event and are held every two years. The tournament features five competitions: men's and women's singles, men's and women's doubles, and mixed doubles. The world championships are always preceded the previous week at the same venue by the Sudirman Cup world mixed team championships, where contests between nations are decided by five matches: men's and women's singles, men's and women's doubles, and mixed doubles.

Two of badminton's most exciting events are the men's Thomas Cup and the women's Uber Cup. These world team championships, which take place every two years side by side at the same time and at the same venue, have continental qualifying rounds. Contests are staged in a round-robin format with knockout finals at both the qualifying stages in February and the grand finals in May. Thomas Cup and Uber Cup contests consist of three singles and two doubles matches.

Other major events are the European championships, held every two years, and the Olympic Games and the Commonwealth Games, both held every four years.

The IBF, located in Cheltenham, England, regulates all these events and is the sport's governing body. Representatives from Canada, Denmark, England, France, Ireland, The Netherlands, New Zealand, Scotland, and Wales founded the organization in 1934. Today the IBF has about 140 member nations.

## VIII. History

Badminton traces its beginnings to a game played thousands of years ago in Asia. The modern form of the sport was refined in Britain, but it is popular in countries all over the world.

### A. Beginnings

Badminton evolved from a Chinese game of the 5th century BC called *ti jian zi* that involved kicking the shuttle. A later version of the sport was played in ancient Greece and India with rackets rather than with feet. A similar game called shuttlecock, or *jeu de volant*, appeared in Europe during the 1600s.

British army officers brought a revised version of the game back to Britain from India in the mid-19th century. In 1873 the duke of Beaufort introduced the game to royalty at his country estate, Badminton House, and the sport became known as badminton. Four years later the Bath Badminton Club was founded. The version played by its members forms the basis for today's game.

### B. Growth in Popularity

Badminton soon spread beyond Britain to the rest of Europe and to countries throughout the world. It became especially popular in Asia and North America. The only major change through the years was in playing equipment, as lightweight rackets made of aluminum, boron, graphite, and titanium gradually replaced wooden models.

During and after World War II (1939-1945), American badminton players came to prominence in international play. In the 1940s David Freeman was recognized as the world's best player. He won seven United States singles titles (1939-1942, 1947, 1948, 1953) and the All-England singles title (1949). He remained unbeaten in singles competition from the age of 19 until he retired at age 33. American-born player Judy Devlin Hashman dominated the women's game during the 1950s and 1960s; she became a naturalized citizen of Britain in 1970. England's Gillian Gilks dominated women's singles, women's doubles, and mixed doubles play during the early 1970s.

Badminton's first world championships were held in 1977. Denmark's Flemming Delfs and Lene Koppen won the men's and women's singles titles, respectively. Since then, East Asian nations—primarily China and Indonesia—have dominated professional badminton. In both countries, badminton is as popular as basketball is in the United States or soccer is in Britain. Spectators at matches typically sing, chant, and cheer for their favorite players or teams.

### C. Recent Development

Badminton was played as a demonstration sport at the 1972 and 1988 Olympic Games and became a medal sport in 1992; all the champions that year were from Indonesia or South Korea. Since then the game has seen the emergence of players from China, with three of the five gold medals at the 2004 Olympics in Athens, Greece, going to Chinese competitors.

Individuals from China and Indonesia have won numerous world championship titles. In the late 20th century men's singles world champions included Rudy Hartono (1980) of Indonesia and Yang Yang (1987, 1989), Zhao Jianhua (1991), and Sun Jun (1999) of China. Women's world champions included Indonesia's Susi Susanti (1993) and China's Ye Zhaoying (1995, 1997).

One of the most noted doubles player was South Korean men's star Park Joo Bong, who won an Olympic gold medal in men's doubles in 1992 and a silver medal in mixed doubles in 1996.

Denmark was also a badminton powerhouse, with players such as 1996 men's Olympic gold medalist Poul-Erik Hoyer-Larsen, 1997 men's world champion Peter Rasmussen, and 1999 women's world champion Camilla Martin.

As the 21st century began, players from China and Indonesia continued to excel. Among the men's singles champions were Hendrawan (2001) and Taufik Hidayat (2005) of Indonesia and Xia Xuanze (2003) and Lin Dan (2006, 2007) of China. China has dominated the women's singles championships since 2001 with such stars as Xie Xingfang (2005, 2006) and Lin Zhu (2007). The United States broke through to win the men's doubles competition in 2005 with the combination of Howard Bach and Tony Gunawan. Indonesia returned to form in 2007 in world doubles competition, winning both the men's and mixed doubles. Chinese women continued to dominate the women's doubles competition, having won every world championship since 1997 and featuring such star combinations as Huang Sui and Gao Ling (2001, 2003, and 2006).