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About the Tutorial

Water-ski is an extreme water sport that deals with skimming on the water surface on a pair of boards by tying yourself with a rope on the back side of the boat. The game sounds interesting but carries with it a great risk. Therefore one should be through with the basics before actually going for water skiing.

This tutorial will help you to understand the fundamental information about water skiing. You can also learn how to play the sport and basic rules of the sport.

Audience

This tutorial is aimed at giving an overall information to a person interested in performing a successful water-ski. For all the enthusiastic readers who want to learn water skiing, this tutorial is a good learning resource.

Prerequisites

We assume you can swim and you are interested in knowing basics of the water skiing sport. We also assume you are adventurous person having inclination towards extreme water sports.

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Water Skiing

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1. Water Skiing – Overview

Water Ski is one of the extreme water sports played on the surface of water. It demands physical power, endurance, and careful attention of the skier. It is not a sport that you will learn in a few minutes and will jump to the water the next moment. Rigorous practice and training is required before you get a grip on the game.

Water Skiing – A Little History

Ralph Samuelson is regarded as the inventor of Water Ski. He first performed skiing on the Pepin Lake in Minnesota. Back then, the water bodies were mainly used for commutation and transportation. Ralph kept on trying various positions for various days.

Ralph also noticed that leaning slightly backward while skiing can give his ski's tip an upward movement and keeping the ski's tip out of the water was good. With his brother Ben, Ralph successfully achieved the speed of 32 kmph.

The American Water Ski Association formally acknowledged Samuelson in 1966 as the first recorded water skier in history.

Pope Dick Sr., the father and promoter of water skiing, attracted international attention towards this extreme sport during 1940 to 1950. He also competed first jump of 25 feet on water skis.

During those times, the ski ropes were made up of long window sash. World's first patent ski was made by Fred Waller in 1925, marked as **Dolphin Akwa Skees**. A finless shorter water ski was patented for the first time in 1940 by Jack Andresen.

Water Skiing - Objectives

The objective here is to ski on a water surface with the help of water skis. The skier holds the handle of the rope that is fixed on the backside of a boat.

The driver of the motorboat accelerates the boat into water while the skier has to hold balance on the water surface by standing on the skis. The observer sitting as a co-driver keeps watch on potential dangers and progress of the game. This sport is played in coordination of the skier, the boat driver, and the observer.





Water Skiing - Regulating Bodies

A regulating body named The International Water ski and Wakeboard Federation (IWWF) organizes Water Skiing game competitions worldwide. It is also recognized as the official partner in Water Skiing by the Olympic committee.

American Water Ski Association (AWSA) was formed and organized the first U.S. national water-ski championships. Later, AWSA changed its name to USA Water Ski when the organization became a member of the U.S. Olympic Committee.

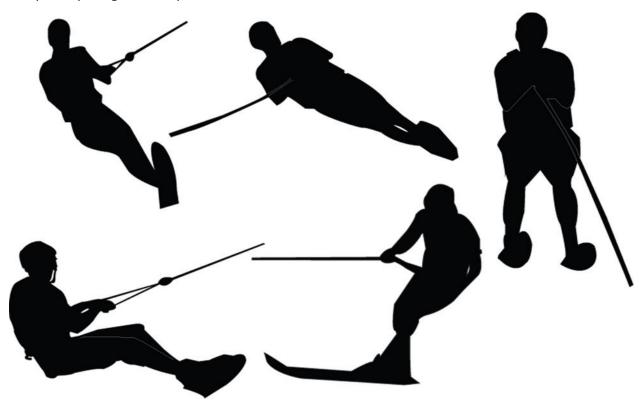
Yet another regulating body from Australia, The Western Australian Water Ski Association (WAWSA) works to promote water skiing sport, to increase the number of water skiing areas, and to promote the various divisions of Water Skiing - Barefoot, Disabled, Tournament, Show Skiing, and Wakeboarding.



2. Water Skiing – Participating Countries

Water skiing is acknowledged as a sport of challenge, competition, and adventure, as well as a recreational activity. Due to its immense popularity, game is played in many countries. Many Asian and Non-Asian countries have their active participation.

During the period of 1940 to 1950, Water Skiing spread all over the world. First Water Skiing Championship tournament was held in France in year 1949. Today, more and more countries are participating in this sport.



Some dominating countries participating in Water Skiing are:

- France
- United states
- Mexico
- Switzerland
- Austria
- Italy
- Luxemburg
- Spain
- Australia
- Venezuela



3. Water Skiing – Equipment

Water Skiing is the sport of adventure, strength, and competition. To play it safely and correctly, the skier needs adequate equipment. Apart from skier's physical and moral strength, the equipment contribute major role in the skier's performance.

Let us see the equipment used in Water Skiing:

Water Skiing - The Skis

The skis are primary equipment of the sport. In older times they were made of wood. Contemporary skis are made up of various types of material such as fiber glass or a hybrid of fiberglass and graphite, which make them light weight but costly. Contemporary boards are extremely light and are made of carbon fiber.



While buying a ski, make sure it is strong, durable, and can take the skier's weight.

Water Skiing - Binding

Another important equipment of Water Skiing is its binding. Binding not only gives physical support but also makes the skier comfortable while riding the ski over water.





Materials used for the construction of this type are endless but among all, gum rubber of $\frac{1}{4}$ inch thickness is an ideal fit. Its metal parts may rust with the passage of time. So make sure that the metallic part is made up of non-rusting material like aluminum and should easily fit on any kind of foot.

Water Skiing - Flotation Device

Although the rider is proficient at swimming, a floatation device is required for the safety purpose, the construction of which is a jacket type. It is made up of unicellular foams upon which nylon straps are reinforced.





There is also an additional coating of vinyl is provided upon the straps. High impact plastics are used for the construction of the fasteners to make them rust proof.

Water Skiing - Tow Ropes

Construction of an idle tow rope is made up of a single handle of 75 feet. The construction material should be polyethylene or poly propylene with an aim to float on water.

The gripping materials used for the handle can be made up of aluminum or also can be in the form of unpainted wood. The rope tied to it should be in such a manner that it should be eye spliced at the handle and lock spliced at the joints.



Water Skiing - Towing Boats

It is not necessary that for water skiing, you will need a boat of higher horse power always. Generally people competing for tournaments use that type of boats. However; if you are playing it for your personal pleasure, a small horsepower engine is also sufficient.



The length of the boats that are used for this purpose usually ranges from 14 feet to 20 feet long. The speed with which you want to drive it solely depends upon the capacity of the skier. Usually an average speed of 20-25 mph is sufficient for a normal adult and a speed of 15-20 mph for small children.

A tow bar or pylon should be employed such that the rider will remain away from the boat engine and propeller.



Here is a list of some safety equipment that must be carried on a tow boat are:

- First aid kit
- Fire extinguisher
- Keys and key chain float
- Two paddles
- A bar or pylon for the purpose of attaching the ski line
- Bail or pump
- Life preservers approved by DOT
- Boarding ladder



4. Water Skiing – Playing Environment

As water skiing is an extreme water sport that involves towing of the skier behind a running motorboat, it requires large and safe waterbodies. Since this sport is played in competition as well as recreational activity, it is played in lakes, rivers, water parks, and on sea shores.

In moderns days, there are specially built water parks for conducting tournaments.

Cable Water Skiing

It is just same as regular water skiing with one difference: In cable water skiing, the skier is not pulled by a motorboat. Instead, a system of overhead cables is used to pull the skier.



A cable water park includes a lake or river being surrounded by masts which hold an overhead cable. The cable rotates in counter clockwise direction around the lake or straight across the river and has number of carriers. The skiers get pulled by ropes attached to these carriers.



5. Water Skiing – Important Terms

Extreme water sports involve some specific terms pertaining to their nautical nature. For a beginner it is very important to understand these terms before learning the sport.

Here are some of the fundamental terms used in water skiing:

- Bevel: It is the area on the water ski that is between the side and the bottom of the ski. The rounder the bevel, the deeper the ski will sink in the water, which makes it hard to control.
- **Bindings:** They are the part on a water ski which keep the skier's feet and the ski itself together. They are made of rubber, and usually are adjustable.
- **Bridle:** It is the Y shaped part of the rope that connects the handle to the rest of the rope.
- **Buoy:** Floating markers on the surface of the water to indicate path to the skiers.
- **Cut:** It is shortening of the rope length in a water ski competition.
- **Deep Water Start:** It is a common method where a skier starts the competition while being in water.
- **Dock Start:** A dock start is the opposite of a deep water start, where a skier begins the competition by standing on a dock or dry ground. The skier is then pulled into the water by the boat.
- Flex: It is the flexibility of the ski.
- **Jump Water Ski:** It is one of three different types of water skiing competitions, and involves the skier going over a ramp to cover a greater height and distance.
- **Observer:** He is a person who sits behind the boat driver and passes on any signals that the skier might produce, as well as notifies other water skiers if a skier has gone under water.



6. Water Skiing – How to Play?

Water skiing is extreme sport that needs knowledge of the sport followed by regular practice. Apart from the knowledge of the game and self-paced practice, one needs a professional trainer to get a grip on this sport. Let us see in brief, how it is played:

Water Skiing – Two Skis

Two skis is one of the most basic forms of water skiing. Here is how to play it:

- Position yourself with a straight head and back.
- Tuck the knees into your chest up to 6 inches apart.
- Wrap your hands around them so that they are stable.
- Wait for the boat to pull you up.
- Once you are coming above the water level, position yourself above the skies with slightly bent knees by keeping your hands straight and head up.
- Once you position and stabilize yourself, it is the time to cross the wake. Put your weight on the side of the ski that you want to turn over.
- Flex your knees at this position. It helps absorbing the unwanted shocks with more ease.
- Try to cross a wake at right angle.
- In case you want to return back to your previous position behind the boat, just do vice versa.



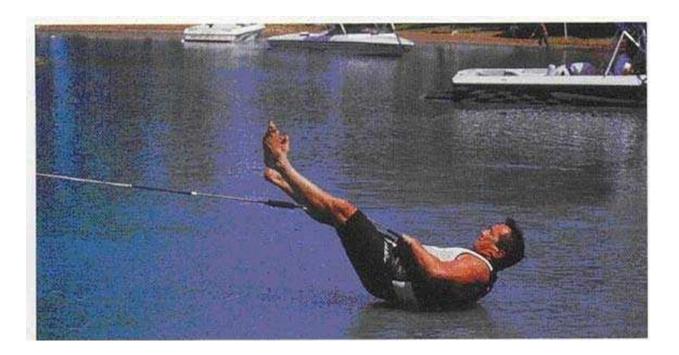


Water Skiing - Dock Start

Dock start is another popular method of doing the two skis. Before staring, a rope of of 5-10 feet length should be placed on the dock.

- Position yourself on the edge of the ski in such a manner that the tip of it points up and legs are slightly bent.
- Hold the handle.
- Put your back straight and arms slightly bent while the butt is pulling away from the dock.
- On the skier's command only the driver will "hit it" as soon as the rope goes taut.
- If you want to sail smoothly from dock to water, then just lean backward with a proper skiing position.





Water Skiing - Two Ski Side Slide Trick

This is the most basic trick that every beginner should know. Here are the steps for side-slide left:

- Position your body vertical crouch like with your head up and your knees and arms being slightly in bent position.
- If you want to side-slide to left position then just do a little bouncing action.
- Let go the handle this time with your left hand.
- As you see yourself gradually moving aside, keep a reasonable space between both skies and try not to catch the edge of the boat.
- Use your free hand (in this case left hand) for balancing and point your head towards the boat.
- If you want to side slide to the right, then just follow the above steps with right hand.



Water Skiing – 180 Degree Turn

Here is how you do 180° from front to back side turn while water skiing:

- Hold the handle very close to your body.
- Position your skies with a minimum foot distance.
- Now with a gentle bounce, turn towards left with your head being in up position.
- Release your left hand.
- Slowly pull the handle towards the right hip with the help of the right hand.
- Now turn by staying low.
- Pull the handle towards your back in such a manner that your free hand can easily find it.
- As soon as you find the handle at your back, press the tow bar immediately.
- Slightly pull yourself out from the boat by keeping your knees in bent position.
- If you want to make a front turn, then just repeat above steps in other direction.





Water Skiing – 360 Degree Turn

This is nothing but a combination of two types of turning. One is from front to back and other is from back to front in the opposite direction. Follow these steps:

- Maintain a low profile being in a vertical crouch position.
- Now without fumbling, pass the handle from hand to hand smoothly by keeping it close.
- By combining both front to back and back to front turns, do it in a slow manner first.
 If you are finding yourself in difficulty at the middle of any stage then do not hesitate
 to pause for some time. With a regular practice you can perfectly make a 360° turn
 without pausing anymore.



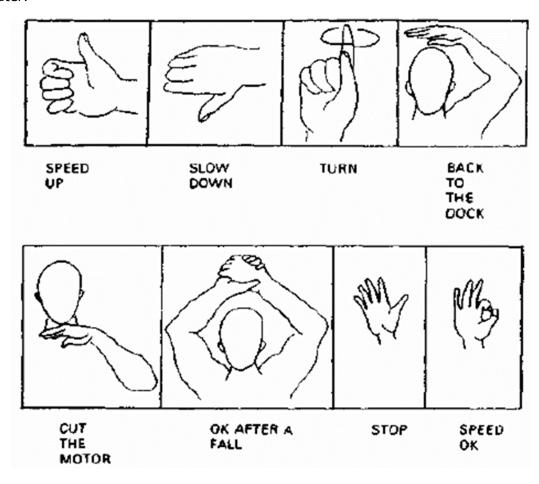
7. Water Skiing – Driving the Boat

Water Ski is a game that is full of adventures but it does carry potential dangers with it that should be taken care of well in advance. In Water Skiing, the boat driver plays a very important role and synchronizes his actions in order to help the skier perform better. In this chapter, we will discuss the role of the boat driver and his responsibilities.

Water Skiing – Non-verbal Communication

While driving it is almost impossible between the rider and the skier to communicate between each other. For that, they use a set of non-verbal communication sets.

One should learn the following set of non-verbal communications first, before jumping into the water.





Here are some non-verbal signals exchanged among the skier, the boat driver, and the observer:

Non-verbal symbols	Meaning
Continuous patting motion on the top of the head	Back to the dock
Making an 'O' symbol with the help of finger and thumb	Speed okay
Moving of the extended fingers across the throat in a cutting action	Cut motor
Clasping of two hand over the head	The person is okay after the fall
With your thumb in up position, close your fist and sweep your arm upwards	Speed up
With your thumb in down position, close your fist and sweep your arm downwards	Speed down
Give a quick circular motion with your extended finger by pointing in a particular direction.	To turn

Water Skiing – Characteristics of an Ideal Driver

Driver is the central part of this game. 90% of the accidents that happen in this game are due to poor driving or carelessness of the driver only. Therefore, if you are playing for a tournament then it is important that you should employ a good and experienced motorboat driver.

The driver should be careful about the following points. While driving he should:

- Not go nearby anything that can cause some potential hazard.
- Drive within the comfortable zone of the skier.
- Drive parallel to the shore and dock far enough so that the skier cannot reach the dock while returning to the starting point.
- Slow down the speed of the boat while reaching near the shore so that the skier can sink down into the water easily.



Not take any chance with the person in tow.

Water Skiing – Boat Driver's Responsibilities

As Water Skiing is becoming popular, more and more people are participating in it. Therefore the need of a good driver is essential who can make through a definite path of travel for his fellow skier. Here are some important roles and responsibilities of a driver. The driver should:

- Check for the traffic in the water long before the take-off.
- Observe the position of the skier during the every moment of drive.
- Look ahead for the possible potential danger.
- Watch over the skier until the observer resumes his duty of looking back. After that the driver can look forward and drive.
- Keep the tow line, the skier, and the boat in a straight line to make the journey less strenuous.
- Always carry a life jacket that is light weight, durable, reliable, and less resistive.
- Prior to the ride, check tow line and handle.
- Replace any worn tow line or defective handle immediately.
- It is not always possible on the part of the driver to look after the skier. Therefore a proficient person must be there as an observer who will communicate the signal of the skier to the driver and vice versa.
- Keep the boat speed 15 to 20 kmph.
- Avoid the heavy traffic areas or area having other activities like swimming, fishing, scuba diving, etc.
- Not compete with the skier to boast proficiency.
- After a harmless fall, the skier must indicate that he is okay by clapping both of his hand overhead. This will ensure the driver and observer that the skier is okay.
- Avoid dry landing on solid objects like rock or dock.
- Turn off the motor during the skier boards the tow boat from the water.



8. Water Skiing – Champions

Under the guidance of International Water-ski and Wakeboard Federations, many championships are organized throughout the calendar. Given below is a list of some important and popular tournaments for Water Skiing:

- World Water-Skiing Racing Championships
- Disabled Water Skiing Championships
- European Water Ski Championships
- British Water Ski Championships
- Arizona Open 2 Championships





Water Skiing - Hall of Fame

Water skiers are extremely prepared and are ready to do extraordinary things on the water. Let us have a brief synopsis of some of the iconic sportsperson in Water Skiing:

Nate Smith

He is a young and promising American Water Skier from McCordsville, Indiana. He has won World Champion, U.S. Masters, Malibu Open, MasterCraft Shootout, Moomba Masters, California ProAm, U.S. Open, Jack's Splash for Cash, and PanAm Champion, not just once or twice but multiple times.

He won every major event he participated in. He is the youngest skier in Indiana who started skiing at the

age of two. He is known for being the most laid back skier at the tournaments. He introduces himself as easy going and a low key person.



Adam Pickos

He is an American Water Ski player with a number of prestigious achievements on his name. He is ranked 2nd place in Masters Water Ski Tournament in year 2015, a gold medal in Pan American Championship in year 2014.

Pickos studied psychology and does photography when he is not water skiing. He is a skier with strength and great spatial awareness.



Brian Detrick

He is an American Water skier from California. He was trained by his own parents for this extreme sport since he was two. At the age of four, he could perform a jump smoothly.

Brian won his first tournament at the age of four in year 1994 and by the time he was nine years old, he had won more than 30 tournaments and was ranked #1 in the country.



Regina Jaquess

She is an American water skier born in Atlanta. She had won awards in the sport when she was 13 and won medals in Water skiing at the 2003 Pan American Games. In that same year, she won the Water Ski World Championship.

Regina won gold medal in Water skiing at the Pan American Games in year 2011. She took 2015 women's Slalom World Title and won the title of female skier of the year for 2013.



