



Topic 1

# Race with World Sailing!

World Sailing Sustainability  
Education Programme

Supported by





# Welcome to the World Sailing Sustainability Education Programme!

World Sailing started in 1907 in Paris and is the world governing body for the sport of sailing. The organisation promotes sailing internationally, manages the sailing at the Olympics and Paralympics, develops the racing rules of sailing, and supports sailors from all over the world.

World Sailing is formed of national authorities in 145 countries as well as 115 classes of boat. World Sailing wants its sailors to share their love of sailing, while working together to protect the waters of the world. Sailing is part of a global movement to create change and positive impact, and you can be a part of this through your actions, on and off the water.

To help sailors do this, there is a plan, called World Sailing's Sustainability Agenda 2030. This plan describes changes within sailing that will help achieve 12 of the United Nations Sustainable Development Goals and maximise the positive effect that sailors can have on the environment.

The agenda was put together by a sustainability commission made up of experts and after lots of feedback it was adopted in May 2018 by all 145 member national authorities. There are 56 separate targets grouped under 6 recommendations. This education programme contributes to the recommendation to 'Deliver Sustainability through Training'.

The United Nations Sustainable Development Goals were published in 2015 to end extreme poverty, fight inequality and injustice and combat climate change by 2030. There are 17 goals that 193 countries have committed to. In **Topic 1: Race with World Sailing!**, you will work with the following goals:

You can access World Sailing's Sustainability Agenda 2030 at the following link: [bit.ly/2sjGrKZ](https://bit.ly/2sjGrKZ)



# World Sailing's Sustainability Agenda 2030 is aligned with the 5 focus areas of the IOC's Sustainability Strategy



Infrastructure and natural sites



Sourcing and resource management



Workforce



Mobility



Climate

## Topics

In Topic 1, you will be introduced to:

- **Some of the top sailing races in the world**
- **The type of boats that are raced in these events**
- **The skills you need to be a top sustainable sailor and race all over the world!**

There are 6 topics in the Sustainability Education Programme.

Topic 1	Race with World Sailing!
Topic 2	Resources & Climate Change
Topic 3	Navigating Wildlife & Biodiversity
Topic 4	Reducing Waste
Topic 5	Oil & Fuel
Topic 6	Boat Cleaning & Maintenance



# Glossary



## Sustainability

The concept that we could keep using or doing something for a long time without running out or damaging the environment.



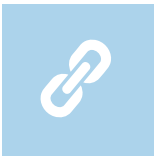
## Perseverance

To keep trying to do something, even though it is difficult.



## Courage

Trying to do something even though it scares you.



## Resilience

Being strong on the inside, trying your best and getting through difficult times.



## Single-handed

To do something alone, without help.



## Algae

A group of organisms (like seaweed) that usually grow in water.



## Stewardship

To supervise and take care of something.



## Let's get under way!



# Where can I race?



## Olympic Summer Games

**Year established:** 1894 (debuted 1900)

**Boat:** The types of boats are updated sometimes. The 2021 Olympics includes: Finn, Laser, Laser Radial, 49er, 49erFX and Nacra 17. In the 2024 Games the iQFOIL will debut.

There are 10 sailing events where Olympic medals are up for grabs!

**Next event:** 2021 (Summer Olympics take place every 4 years)

**Distance / Duration:** Regattas will be held over 10 days at the 2021 Games.

**COOL FACT!**

The number of places for male and female athletes in sailing at the 2021 Olympics is equal.

**Did you know?...** Beijing had to remove over 1 million tonnes of algae from the Olympic race course a month before the 2008 Games after a giant bloom left huge areas covered in a green film, which the boats would not have been able to sail through. <sup>(1)</sup>



## America's Cup

**Year established:** 1851

**Boat:** Foiling Monohull (AC75)

**Next event:** 2021 (There is no regular schedule. The race is run when a qualified yacht club challenges the club holding the Cup)

**Distance / Duration:** 15 days (2021 race)

**COOL FACT!**

The United States defended the Cup for 132 years!

**Did you know?...** The Land Rover BAR team, now called INEOS Team UK, is working with a carbon fibre company to process waste parts from the 2017 Cup and turn them into plastic compounds and matting that will be used in the manufacturing of new structures for the 36th America's Cup, which will take place in 2021. <sup>(2)</sup>

As a top sailor, you can race all over the world with World Sailing competitions and Special Events. Check out some of the top races!

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## The Ocean Race

(formerly known as the Volvo Ocean Race)

Year established: 1973

Boat: Monohulls (VO65) & IMOCA 60 (2 classes)

Next event: 2021-2022 (held every 3-4 years)

Distance / Duration: 40,000 miles, approx 9 months

COOL  
FACT!

This race is the longest and toughest professional sporting event in the world.

Did you know?... 388,207 plastic bottles were avoided by using water refill stations at all stopovers for the race during the 2017-18 edition. <sup>(3)</sup>

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## SAILGP SailGP

Year established: 2018

Boat: F50 (foiling catamaran)

Next event: 2020 (held yearly)

Distance / Duration: 6 events per season

COOL  
FACT!

SailGP's F50 catamaran is the first boat to sail at over 50 knots in a sailing race!

Did you know?... SailGP uses recycled carbon and recycled plastic bottles in the tooling of its existing boats and plans to recycle all boat components into new products. <sup>(4)</sup>



## Para World Sailing

**Year established:** 1990

**Boat:** Currently, the boats used in The World Championships are the 2.4mR, Hansa 303 and RS Venture Connect.

**Next event:** 2021

**Distance / Duration:** 5 to 7 day regatta, depending on the event

**COOL  
FACT!**

Sailing is 1 of very few sports in which people with or without a disability can participate on equal terms. Almost any boat can be sailed by people with disabilities.

*Did you know?...* In the International 2.4mR World Championships since 2000, 4 World Championships have been won, and 35% of podium places claimed, by para sailors.



## Not near a sailing club?

### Participate in World Sailing's eSailing World Championship!

A new set of World Sailing regulations were created to allow the Racing Rules of Sailing to be adapted to the virtual world. In partnership with Virtual Regatta, the eSailing World Championship was launched in 2018, and will be held every year. In the first year, there were 170,000 players from 74 countries! It is aimed at everyone from expert sailors to sport gamers and you are able to compete in as many races as you want, online, for free. These regattas will allow you to accumulate points to establish the eSailing World Rankings.

For more information, visit [esailing-wc.com/](https://esailing-wc.com/)



# All aboard!

There are so many different types of boats that sailors race in. Let's take a look at some of them!



## Laser

### Centreboard boat

Hull length: 4.23 m

Beam length: 1.37 m

Mainsail area: 7.06 m<sup>2</sup>

Hull material: GRP (glass-reinforced plastic)

Top speed: 16.8 knots



## Finn

### Centreboard boat

Overall length: 4.5 m

Beam length: 1.47 m

Mainsail area: 10.6 m<sup>2</sup>

Hull material: GRP (glass-reinforced plastic)

Top speed: 15 knots



## Laser Radial

### Centreboard boat

Hull length: 4.23 m

Beam length: 1.37 m

Mainsail area: 5.76 m<sup>2</sup>

Hull material: GRP (glass-reinforced plastic)

Top speed: 16.8 knots



## 49er (skiff)

### Centreboard boat

Hull length: 4.99 m

Beam length: 2.9 m

Mainsail area: 16.1 m<sup>2</sup>

Headsail area: 5.1 m<sup>2</sup>

Spinnaker area: 38 m<sup>2</sup>

Hull material: fibreglass and carbon fibre

Top speed: 25 knots



## 49er FX (skiff)

### Centreboard boat

Hull length: 4.99 m

Beam length: 2.9 m

Mainsail area: 13.8 m<sup>2</sup>

Headsail area: 5.8 m<sup>2</sup>

Spinnaker area: 25.1 m<sup>2</sup>

Hull material: fibreglass and carbon fibre

Top speed: 25 knots



## iQFOIL

Length: 2.2 m

Material: carbon fibre and expanded polystyrene

Top speed: 35 knots

Cool fact: for every board sold, a mangrove will be planted, which absorbs CO<sub>2</sub>. The plastic footprint of the board is offset with the weight of the board in plastic being removed from the ocean.



## Nacra 17

### Multihull

Hull length: 5.25 m

Beam length: 2.59 m

Mainsail area: 14.45 m<sup>2</sup>

Headsail area: 4.0 m<sup>2</sup>

Spinnaker area: 18.5 m<sup>2</sup>

Top speed: 25+ knots



## VO65

### Monohull

Hull length: 20.40 m

Beam length: 5.60 m

Mainsail area: 163 m<sup>2</sup>

Headsail area: 135 m<sup>2</sup>

Downward sail area: 578 m<sup>2</sup>

Material: carbon fibre

Top speed: 39 knots

Cool fact: some of the boats are fitted with scientific equipment to sample microplastic and CO<sub>2</sub> levels in the ocean.



## IMOCA 60

### Monohull

Hull length: 18.28 m

Beam length: 5.85 m

Sail area: 591 m<sup>2</sup>

Material: carbon fibre

Top speed: 40 knots

Cool fact: many IMOCA's have solar panels to generate electricity to power equipment in the boat.



## Formula Kite

Front wing: 550 cm<sup>2</sup>

Tail wing: 330 cm<sup>2</sup>

Fuselage: 75 cm

Mast: 95-100 cm

Material: carbon fibre

Top speed: 45 knots



## F50 (foiling catamaran)

### Wingsail catamaran

Hull length: 15 m

Beam length: 8.8 m

Wing height: 18 m heavy air wing / 28 m light air wing

Hull material: carbon fibre

Top speed: 53 knots

# Sailor profiles

## Dee Caffari

Dee Caffari has sailed around the world 6 times. She is the first woman to have sailed single-handed and non-stop around the world in both directions, and the only woman to have sailed non-stop around the world a total of 3 times. She skippered the 'Turn The Tide on Plastic' yacht in the 2017-18 edition of The Ocean Race to a sixth place finish, sharing a message of sustainability and the importance of reducing plastic to improve ocean health. She was a Physical Education teacher before changing careers to become a sailor. After completing her qualifications at UKSA she started working with top sailors on a variety of yachts, learning all the time and gaining experience. She asked lots of questions and spent time practising to improve her skills. Racing around the world requires a great deal of resilience and the ability to communicate clearly, being open and honest to get the best out of the team sailing around you. Dee has developed these skills over the course of her sailing career.



## Yago Lange

Yago Lange is an Olympic sailor in the skiff (49er) class, placing 7th in his first Olympics in 2016, alongside his brother. He is 1 of the leaders in the Olympic boat class park and an environmental activist who focusses on protecting our ocean from plastic pollution. He highlights positive, sustainable action happening amongst the sailing community, but isn't afraid to bring attention to races and events where he sees too much plastic being used.

Check out Topics 2-6 to learn more about becoming a top sustainable sailor!



# Bibliography

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eSailing

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Dee Caffari

[www.deecaffari.co.uk](http://www.deecaffari.co.uk)

Yago Lange

[@yagolange](https://twitter.com/yagolange)

## Cool facts

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4. [www.sailgp.com/](http://www.sailgp.com/)

## Photos

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World Sailing  
20 Eastbourne Terrace  
London W2 6LG

Tel: +44 (0)2039 404 888

[www.sailing.org](http://www.sailing.org)

