



Educational Activities at Jubail Mangrove Park

Nature Wave offers a programme of exciting activities designed to enrich learning through the unique environment of the mangroves. This guide introduces the range of experiences available and highlights the skills and knowledge pupils will explore.

To book, please contact
connect@nature-wave.org

Contents

Lights, Camera, Mangroves!

Bioblitz Challenge (Year 9+)

Escape the Boardwalk!

Mangrove Guardians

Nature Wave guide



Lights, Camera, Mangroves!

Mini Documentary Challenge

Nature Wave invites schools to take part in an exciting filmmaking experience set in the heart of Jubail Mangrove Park. Students will explore this unique ecosystem, develop essential videography skills, and create their own short documentary with a strong sustainability message. The short films will not only highlight the importance of protecting the mangroves but will also act as a powerful tool to persuasively promote the nature reserve, inspiring more people to visit the incredible nature reserve and connect meaningfully with its unique environment.

Suggested Activity Time:

2 hours on-site at Jubail Mangrove Park (+ pre/post sessions)

How it works

Stage 1 – Building skills and anticipation

Four fully resourced pre-learning sessions are provided – *these can be delivered in school time, through after-school clubs, or set as homework.*

1. **Camera Shots & Angles** – learn professional videography techniques and try them out.
2. **Storyboarding** – understand the power of storyboarding in film and practise planning sequences.
3. **Mangrove Knowledge** – discover the ecology, importance, and mystery of mangrove forests and select key information.
4. **Creating** – storyboard and script a short mangrove documentary.

Stage 2 – On-Site Experience at Jubail Mangrove Park

Students film their documentaries on location at the nature reserve, guided by Nature Wave Leaders, applying the skills they have developed.

Stage 3 – The Cut Room

After visiting the mangroves, students edit their footage using recommended free editing apps to produce their final documentaries.

Stage 4 – Competition & Celebration

Schools are encouraged to host a screening event (e.g. a movie afternoon) before submitting their selected best entries to us. A Nature Wave panel then selects the top three entries from each school, with winners progressing to the annual UAE-wide final.

Why take part?

- ✓ Hands-on environmental learning
- ✓ Inspires teamwork and creativity
- ✓ Builds awareness of local ecosystems
- ✓ Encourages sustainability advocacy

Curriculum links

- ✓ English (writing, speaking & listening)
- ✓ Geography
- ✓ Environmental Education
- ✓ STEAM & Computing

Two female students in light blue school uniforms are looking at a tablet computer. The tablet screen shows a map of a mangrove area with various colored regions. They are standing outdoors in front of a dense mangrove forest. The background is slightly blurred, showing the green foliage of the trees.

Bioblitz Challenge

A Citizen Science Race Against Time (Year 9+)

Nature Wave invites schools to take part in a fast-paced survey to discover and record as many species as possible within Jubail Mangrove Park, combining A.I. tools, teamwork, and expert guidance.

Suggested Activity Time:

2 hours on-site at Jubail Mangrove Park (+ pre/post sessions)

How it works

Stage 1 – Building skills and anticipation

An introduction to modern-day citizen science methods, connectedness to nature and responsible wildlife photography - *this can be delivered in school time, through after-school clubs, or set as homework.*

Stage 2 – On-Site Experience at Jubail Mangrove Park

Students work with an expert guide to record species across the reserve. Observations are identified using A.I.-powered apps. A friendly competition can be organised between groups, classes, or schools. Certificates are awarded for ‘Discovery of the Day’ and ‘Biodiversity Hero’.

Stage 3 – Post-Learning

Creative follow-up sessions extend the learning - *these can be delivered in school time, through after-school clubs, or set as homework, examples include:*

1. **Maths in the Mangroves** - using real citizen science data collected in the park, solve puzzles and tasks.
2. **Mangrove Top Trumps** – design trading cards with photos, facts, and “power stats” for species recorded.
3. **Mangrove Adventures** – write imaginative stories featuring species discovered.
4. **Mangrove Music** – compose songs or raps highlighting mangrove biodiversity.

Stage 4 – Competition & Celebration

Schools’ observations contribute to Nature Wave’s ongoing biodiversity monitoring of Jubail Mangrove Park. Schools stats and stand out wildlife photos will be shared on official social media channels.

Why take part?

- ✓ Authentic citizen science with ecological impact
- ✓ Cross-curricular creativity and research skills
- ✓ Builds teamwork and communication
- ✓ Opportunities for local and national recognition

Curriculum links

- ✓ Science & Geography
- ✓ English (creative writing, speaking & listening)
- ✓ Art & Design
- ✓ Music
- ✓ Digital Literacy

Escape the Boardwalk!

Mangrove Puzzle Adventure

Take part in the Escape the Boardwalk Challenge, an escape room style interactive adventure set along the Jubail Mangrove Boardwalk. Students will use maps, solve puzzles, and crack codes while discovering the vital role mangroves play in protecting our planet.

Suggested Activity Time:

2 hours on-site at Jubail Mangrove Park

How it works

Stage 1 – On-Site Experience at Jubail Mangrove Park

Students set out on the mangrove boardwalk with a map of clue points. At each station, they explore the marvels of mangrove ecology and linked sustainability behaviours in a fun, hands-on way. Learning stations include;

1. **Live Scientist Station** – learn how mangroves excrete salt.
2. **Jigsaw Puzzle** – piece together an image to reveal hidden information.
3. **Mystery Box** – apply reasoning and teamwork to unlock a secret treasure.
4. **Treasure Hunt Stop** – follow hints to uncover vital facts.

Each correct solution earns a letter; once all letters are collected, teams solve a final anagram to ‘escape’ the boardwalk!

Back at the visitor centre, an interactive *Climate Change Workshop* links local learning to global sustainability issues before students make pledges as Nature Wave Climate Ambassadors. Creating – storyboard and script a short mangrove documentary.

Why take part?

- ✓ Engaging, puzzle-based learning
- ✓ Builds resilience, collaboration, and critical thinking
- ✓ Links local ecosystems to climate change awareness
- ✓ Provides a memorable outdoor learning experience

Curriculum links

- ✓ Geography & Environmental Education
- ✓ Science (biodiversity and ecosystems)
- ✓ English (communication)
- ✓ STEAM (creativity and inquiry)
- ✓ Problem Solving & Teamwork

Mangrove Guardians

Wildlife Stewardship & Photography Project

Nature Wave invites schools to take part in *Mangrove Guardians*, a creative project where students learn to identify intertidal species, develop wildlife photography and enhance design skills with real purpose. This culminates in an opportunity to create personal, inspiring wildlife games to engage the wider community with the incredible biodiversity of Jubail Mangrove Park.

Suggested Activity Time:

2 hours on-site at Jubail Mangrove Park (+ pre/post sessions)

How it works

Stage 1 – Building skills and anticipation

One fully resourced pre-learning session – *this can be delivered in school time, through after-school clubs, or set as homework.*

- **Connection & Wildlife Photography** – students learn key wildlife photography skills and real life citizen science methods, including identifying living things through A.I.

Stage 2 – On-Site Experience at Jubail Mangrove Park

Children begin with a unique mangrove wildlife bingo game, discovering how play can spark powerful connections with nature. They then capture their own wildlife photographs, identify the species they find, and finally step into the role of game designers themselves.

Stage 3 – Post-Learning

This can be delivered in school time, through after-school clubs, or set as homework.

- **Design Time** – A session guiding students in how to design engaging wildlife bingo games in their new role as local wildlife ambassadors.

Stage 4 – Recognition & Celebration

- Schools can submit stand-out completed wildlife bingo games, some of which will be selected for future park visitors to learn from and enjoy.
- Students could also come back to the park, in the role of ambassadors, to inspire family and friends with the wildlife bingo games they designed!

Why take part?

- ✓ Inspires environmental citizenship
- ✓ Develops photography and creative design skills
- ✓ Connects school learning with the wider community
- ✓ Provides recognition and tangible rewards

Curriculum links

- ✓ Science & Geography
- ✓ English & Media (communication, design, and audience awareness)
- ✓ STEAM & Digital Literacy
- ✓ Citizenship & Environmental Education

A photograph of four young women in school uniforms standing on a wooden boardwalk in a mangrove park. They are holding up certificates titled 'MANGROVE CLIMATE PLEDGE' from 'Nature Wave' and 'JUBAIL'. The certificates also mention 'JUBAIL MANGROVES ESCAPE ROOM'. The names on the certificates are Cassie Samra, Scarlett Bove, Claire Spack, and Taya River. The background shows lush green mangrove trees and a wooden structure with a hanging light fixture.

Nature Wave guide

Student-Led Guided Tours

Nature Wave invites schools to take part in Jubail Rangers, where students become tour leaders, uncovering the ecology and history of the mangroves and guiding visitors through the park.

Suggested Activity Time:

60–90 minutes on-site

How it works

Stage 1 – Building skills and anticipation

Students prepare through resources including maps, videos, drone footage, and ecology/heritage guides. In groups, they design tour routes and scripts, practising presentation and teamwork.

Stage 2 – On-Site Experience at Jubail Mangrove Park

Students step into the role of Rangers, leading guided tours for adults in small groups. They share facts, ecological insights, and stories, developing public speaking and leadership skills.

Stage 3 – Post-Learning

Reflection and feedback to strengthen communication, confidence, and stewardship.

Stage 4 – Recognition & Celebration

Students are acknowledged as **youth ambassadors for nature**, building pride and leadership experience.

Why take part?

- ✓ Hands-on learning with real-world impact
- ✓ Builds public speaking and leadership skills
- ✓ Inspires environmental responsibility
- ✓ Creates memorable experiences as youth ambassadors

Curriculum links

- ✓ Geography & Environmental Education
- ✓ History & Local Heritage
- ✓ Science (adaptation and biodiversity)
- ✓ English (presentation and storytelling)
- ✓ Leadership & Citizenship