



Annual Report Water Research and Learning Programme

Wadi Wurayah National Park
Fielding Season 2015-2016

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PROJECT PARTNERS

HSBC Bank Middle East Ltd.

One of the largest international banks in the Middle East and a key financial partner and supporter of Wadi Wurayah National Park since 2006. HSBC Bank Middle East Ltd. established the Water Research and Learning Programme as part of its Global Water Programme.

Fujairah Municipality

Strategic partner and driver of Wadi Wurayah National Park development. The mission of Fujairah Municipality is to provide advanced infrastructure, a sustainable environment, and excellence in services to the people of Fujairah.

Emirates Wildlife Society-WWF

Emirates Wildlife Society-WWF is a UAE environmental nongovernmental organisation established under the patronage of H. H. Sheikh Hamdan bin Zayed Al Nahyan, ruler's representative in the western region and chairman of Environmental Agency Abu Dhabi. Since its establishment, Emirates Wildlife Society has been working in association with WWF, one of the largest and most respected independent global conservation organisations, to initiate and implement environmental conservation and education projects in the region. EWS-WWF has been active in the UAE since 2001, and its mission is to work with people and institutions within the UAE and the region to conserve biodiversity and tackle climate change through education, awareness, policy, and science-based conservation initiatives.

Earthwatch Institute

Earthwatch Institute is a leading global nongovernmental organisation operating from offices in the United States, the United Kingdom, India, Hong Kong, Japan, Australia, and Brazil. The Earthwatch Institute engages communities in environmental projects in more than 40 countries worldwide. Scientists, educators, students, corporations, and the general public are engaged in initiatives to promote the understanding of and actions necessary for a sustainable environment.



ANNUAL REPORT WATER RESEARCH AND LEARNING PROGRAMME

Wadi Wurayah National Park
Fielding Season 2015–2016

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Figure 1: View in the wadi.

1. EXECUTIVE SUMMARY

FIELDING
SEASON 3
HOSTED
22 TEAMS
TOTTALLING
235 HSBC
PARTICIPANTS

THE WRLP
CONDUCTS FIELD
RESEARCH AND
EDUCATIONAL
ACTIVITIES
THAT SUPPORT
THE ONGOING
CONSERVATION
ACTIVITIES
WITHIN WADI
WURAYAH
NATIONAL PARK

This annual report summarises the activities of Fielding Season 3 (October 2015–April 2016) of the Water Research and Learning Programme in Wadi Wurayah National Park, Fujairah, United Arab Emirates.

The Water Research and Learning Programme (WRLP), implemented in the Wadi Wurayah National Park, is a 5-year programme designed by Earthwatch Institute UK and implemented by EWS-WWF. The programme is funded by HSBC Bank Middle East as part of its Global Water Programme. This programme is facilitated through the strategic partnership and support of Fujairah Municipality. The WRLP is hosted by the Water Research Centre (WRC), located at the entrance of Wadi Wurayah National Park in Fujairah, which offers comfortable and convenient facilities for participants during their 5-day module.

The WRLP's goal is to educate and raise awareness on freshwater issues and resources among residents and citizens of the Middle East region, as well as to encourage the wise use of water resources, provide practical ways for individuals to reduce their water footprints, conduct freshwater ecological research, and develop policies and regulations for the national park, based on relevant scientific knowledge.

The WRLP conducts field research and educational activities that support the ongoing conservation activities within Wadi Wurayah National Park and offers participants an opportunity to contribute to important freshwater and conservation research.

During Fielding Season 3 (October 2014–April 2015), the programme hosted 22 teams totalling 235 HSBC participants from 7 different countries across the Middle East and North Africa. This included a team of students and teachers from the two winning schools of the Eco-Schools microproject challenge competition and an external team consisting of participants from various companies and organizations around the MENA region. An additional programme developed by Earthwatch, the Sustainability Leadership Programme (SLP), was also hosted during the fielding season.

Participants not only learned about the freshwater resources, flora, and fauna of Wadi Wurayah National Park but also conducted research and contributed significant data that will be used in future conservation work for the Wadi. Participants surveyed 30 sample plots of vegetation, tagged 15 rodents, performed over 1536 water quality tests on 18 different water variables, helped tag 61 dragonflies, performed over 165 freshwater watch tests, and measured 354 toads. These significant efforts have provided invaluable data that our scientists would not otherwise have had the capacity to collect, leading to the creation of a unique database of great scientific value.



Figure 2: The majlis tent.



Figure 3: View of the wadi.

2. WADI WURAYAH NATIONAL PARK

**IN 2009
WADI WURAYAH
WAS DECLARED
THE UAE'S FIRST
MOUNTAIN
PROTECTED
AREA**

**IN 2010
WADI WURAYAH
BECAME A
RAMSAR
SITE OF
INTERNATIONAL
IMPORTANCE**

Wadi Wurayah is located in the Al Hajar Mountains in the Emirate of Fujairah.

This exceptional location—known for its rich flora, fauna, and freshwater resources that are rare and permanent—was identified as a significant ecosystem for preservation. In 2006, the Fujairah Municipality, the Government of Fujairah, and EWS-WWF joined forces to assess the biodiversity of the Wadi and its merit for conservation. This important step was funded by HSBC Bank Middle East Ltd. and supported by other partners.

The fragile ecosystem was found to be extremely important for conservation, and in March 2009, Wadi Wurayah was declared the UAE's first Mountain Protected Area by Decree No. 2, signed by H. H. Sheikh Hamad bin Mohammad Al Sharqi, supreme council member and ruler of Fujairah. The Mountain Protected Area covers a 129 sq km area between the towns of Khor Fakkan, Bidiyah, and Masafi.

Sheltering a rich diversity of rare, endangered mountain and freshwater habitats and species, as well as providing opportunities for the sustenance and revival of local livelihoods, Wadi Wurayah is a critical area for environmental and cultural preservation. In 2010, Wadi Wurayah National Park officially joined the list of over 2,000 wetlands around the world declared to be of international importance by the Ramsar Secretariat.¹ It is the second Ramsar site in the UAE (site number 1,932) after Ras al Khor Wildlife Sanctuary.

This successful partnership, featuring entities from the public, private, and nonprofit sectors, continued working together in Wadi Wurayah on research, and in 2013 the government of Fujairah appointed EWS-WWF to help develop and establish Wadi Wurayah as the first national park in the UAE. Since then, EWS-WWF has developed a strategic plan in partnership with the Fujairah Municipality, who now solely manages the national park and continues to implement key research activities in the wadi.

Currently, Wadi Wurayah National Park is closed to visitors to preserve its fragile natural ecosystems. However, it is home to the Water Research Centre and hosts the Water Research and Learning Programme.

¹The Ramsar Convention is an intergovernmental treaty signed by the UAE in 2007 that provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.

3. THE WATER RESEARCH CENTRE (WRC)

The Water Research Centre (WRC) opened in 2013 and is home to the Water Research and Learning Programme, as well as additional programmes developed by Earthwatch. Its objective is to provide a venue for training and research activities that aim to advance awareness and scientific knowledge of freshwater resources in Wadi Wurayah National Park. This centre was launched at Wadi Wurayah National Park in the Emirate of Fujairah under a partnership among EWS-WWF, HSBC Bank Middle East Ltd., Earthwatch, and the Fujairah Municipality, with funding from HSBC Bank Middle East Ltd. The centre consists of a village of portable cabins located at the entrance of Wadi Wurayah National Park. This village includes staff and volunteer accommodations, a learning room, an outdoor classroom, an environmental lab, and offices, as well as common living areas, such as a dining room, a kitchen, and a mosque. An onsite majlis (an Arabic term meaning “a place to sit or gather”) offers participants a place to relax while sharing stories, playing games, and discussing the day's events.

Surrounding this village is a large expanse of land, protected by a fence and offering an unobstructed view of the mountains. In their free time, participants can explore this area and observe local species, including the indigenous trees *Ziziphus spina-christi* (Sidr tree) and *Acacia tortilis* (Samar), which surround the area and provide shelter for various species of insects, reptiles, and amphibians, among other organisms.

The WRC aspires to be the premier water research and learning centre in the Middle East; it hopes to inspire local and regional communities to preserve freshwater resources and ecosystems for current and future use.



Figure 4: A views of the cabins.

3.1 RESEARCH AT THE WATER RESEARCH CENTRE

Research at the WRC is coordinated by EWS-WWF for the Wadi Wurayah park management and contributes to helping the park establish an effective conservation strategy for local habitats. The WRC invites researchers from around the world. Every week, volunteers join the research staff and assist in conducting field research aimed to further comprehend the anthropogenic effects on the habitat; moreover, this weekly gathering aims to preserve and secure water pools and streams that are vital lifelines to an entire ecosystem of plants, insects, and animals.

The main objectives of the scientific research conducted at the WRC are as follows:

- Monitor the population of key species and invasive species**
 By being aware of population trends of plant and animal species, the park management can adopt appropriate conservation and management measures to safeguard the protected area.
- Conduct ecological studies, including those on exotic species**
 Some of the basic information on important species—such as breeding season, activity rhythms, habitat and food preferences, temperature range, productivity, and survival rate—is still unknown. Such information is needed for future conservation plans.
- Conduct hydrological surveys and monitoring on both ground and surface water to determine the best habitat for water-dependent organisms**
 Undertaking this activity over several years will identify water flow and the locations of springs and pools that hold water for long periods. It will help create a picture of the dynamics of watercourses, a key area to understand given that many fauna are largely dependent on surface water for survival.
- Identify threats and take actions**
 The national park is now closed to the public. However, prior to this, the Wadi saw a large volume of visitors every year. This placed the park under severe strain, as the protected area was subject to a variety of threats posed by the visitors, such as littering and graffiti. In addition, the park's biodiversity faces many other threats, such as overgrazing, disease, invasive species, climate change, poaching, and harvesting of vegetation.

Assessing these threats and understanding how they impact the Wadi's natural systems are the ultimate objectives of research conducted at the WRC.



Figure 5: Volunteers identifying freshwater invertebrates.



Figure 6: Toad tagging.

4. THE WATER RESEARCH AND LEARNING PROGRAMME (WRLP)

OVER
1,000
INDIVIDUALS
WILL BE
ENGAGED
TO SPREAD
AWARENESS OF
FRESHWATER
ISSUES
TO WIDER
AUDIENCES

The WRLP was launched in 2013 concurrently with the WRC. This 5-year programme, unprecedented in the Middle East and North Africa, is unique for the region in the field of environmental education and citizen science. This programme inspires local and regional communities to preserve freshwater resources and ecosystems and to develop an appreciation for nature and its surroundings.

This programme, which is funded by HSBC Bank Middle East Ltd., hosts participants who serve as invaluable resources by supplying time and energy for scientific data collection. Such data gathering is a crucial contribution to the development of conservation strategies aimed at preserving the biodiversity and freshwater resources of the Wadi, thus contributing to the long-term conservation of the national park.

Data collected at the WRC through the WRLP contributes to the overall scientific research in Wadi Wurayah National Park. Furthermore, it contributes to the Earthwatch Freshwater Watch Programme, which aims to assess water quality at more than 35,000 locations around the world and involve over 100,000 people in a programme to learn about and safeguard the quality and supply of freshwater in the future.

The first three years of the programme have hosted primarily HSBC employees, but subsequent years will host an increasing number of volunteers from other corporate sponsors. Over the span of five years, over 1,000 individuals will be engaged to spread awareness of freshwater issues to wider audiences.

CITIZEN SCIENCE CONTRIBUTES TO
WATER QUALITY DATA COLLECTED
FROM OVER 35,000
LOCATIONS WORLDWIDE

4.1 GOALS AND OBJECTIVES

Sustaining fresh water is a critical issue. This programme aims to bring into the spotlight this important resource, upon which all species depend. The programme provides an understanding of the unique challenges faced in this region of the world and provides a perspective on how fresh water does and will affect our lives, the lives of others, and businesses. Participants also connect to broader environmental issues that relate to water through the fieldwork they support. This research is vital for the development of policies and regulations based on relevant scientific knowledge.

The programme's key objectives are as follows:

- Provide a broad education, both globally and regionally, on key environmental issues connected to fresh water.
- Deliver important research data for a global freshwater programme (the HSBC Water Programme) and contribute to water and ecosystems research inside Wadi Wurayah National Park.
- Explore water-related risks and opportunities for businesses in the Middle East and their connection to HSBC Bank Middle East Ltd.
- Motivate and enable participants to inspire others around water issues as Citizen Science Leaders.



Figure 7: Volunteers performing Freshwater Watch.

4.2 STRUCTURE

Each fielding session comprises a 5-day module consisting of both field research and in-class theoretical lectures. Each fielding season comprises weekly fielding sessions that are delivered over the cooler months of September through April. Three fielding seasons of the WRLP have been completed so far.

The indoor-learning component is designed by Earthwatch and delivered by EWS-WWF. These sessions aim to educate and raise awareness on freshwater issues in the Middle East. Meanwhile, the outdoor field research, led by EWS-WWF, directly relates to freshwater and conservation research necessary for the long-term management of Wadi Wurayah National Park.

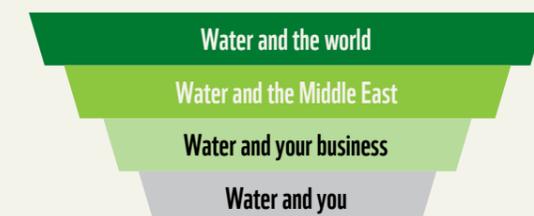
Participants who successfully complete the programme become certified as Citizen Science Leaders (CSLs) as part of the wider HSBC Water Programme. Each CSL is required to continue his or her work after leaving the WRC by engaging a minimum of 50 people around water and environmental issues. In addition, CSLs leave with a feeling of accomplishment, knowing that their contributions towards the research has played a vital role in helping scientists reach their objectives. They also leave trained and equipped to continue their own field research as part of Earthwatch's Freshwater Watch Programme, which aims to provide data on freshwater from around the world.

4.3 INDOOR-LEARNING ACTIVITIES

Indoor-learning sessions supplement the field research by informing participants of critical global and regional freshwater issues. While field research focuses more on species within the Wadi, indoor sessions focus more on human use of freshwater resources. Water scarcity, excessive withdrawal from aquifers, desalination, and other issues are identified and discussed. Once an overall picture of water resources is painted, participants focus on critical freshwater issues in the Middle East.

Participants are given the opportunity to reflect on their roles in water conservation by calculating their own water footprint and coming up with solutions, especially those that can be supported by the participants' business. Throughout the learning journey, they develop an understanding of how these issues can affect their business and the global economy. By the end of the journey, the combination of theoretical learning and time in nature leaves them with personal purpose and vision for changing habits and raising awareness.

One of the requirements of CSLs is to spread awareness about water issues to 50 people in their respective communities, which means that, as a result of this fielding season, over 13,000 people will be exposed to the pressing issues surrounding freshwater in the Middle East and beyond.



4.4 RESEARCH ACTIVITIES

During each fielding session, participants are trained to conduct field research that contributes to the Wadi's overall conservation. These activities include participating in Freshwater Watch (a global citizen science programme), monitoring water-quality parameters, performing point-counts, and tagging of dragonflies, toads, and small rodents.

Also, participants are engaged in environmental lab activities, such as water-quality testing, aquatic and terrestrial invertebrate identification, and zooplankton counting and identification. All data collected during the fielding session contribute to painting a fuller picture of the Wadi's natural system, the state of its health, and the health of its wild inhabitants.

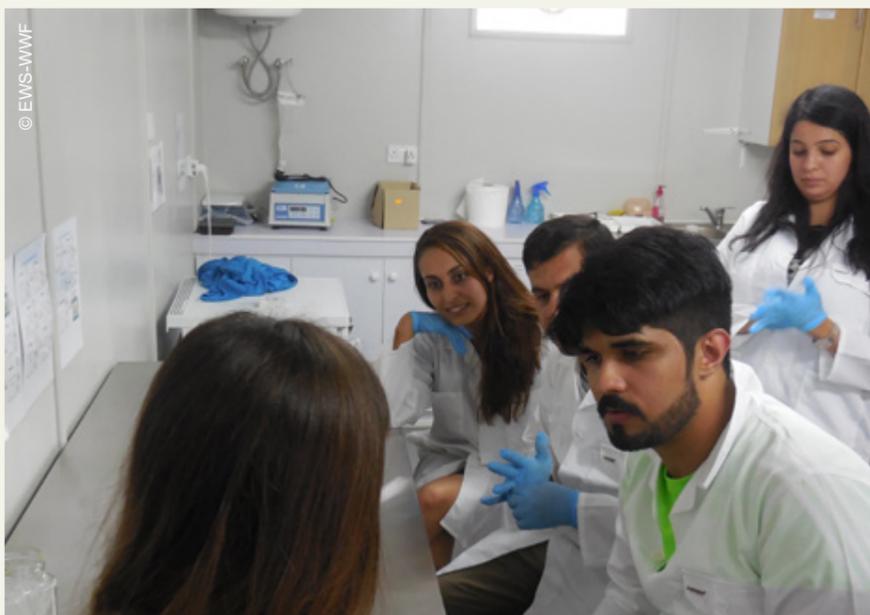


Figure 8: Volunteers performing water quality tests in the lab.

4.5 MAIN OUTCOMES

At the end of each fielding session, the programme does the following:

- Encourages a deeper sense of connection to water issues in Wadi Wurayah National Park
- Increases scientific understanding of Wadi Wurayah National Park
- Offers a first-hand experience of field research and science
- Increases the understanding of the importance of water in the Middle East and how the issues relate to various business activities and the supply chain
- Builds a network of CSLs interested in sustainability and water issues
- Increases confidence to inspire others to conserve water
- Instils a sense of purpose and commitment to water issues

5. THE WRLP FIELDING SEASON 3 (OCTOBER 2015–APRIL 2016)



PARTICIPANTS PERFORMED OVER 1,536 TESTS ON 18 DIFFERENT WATER VARIABLES AND HELPED TAG AROUND 61 DRAGONFLIES.

5.1 OVERVIEW OF FIELDING SEASON 3

The Water Research and Learning Programme boasted another successful fielding season in its third year. Twenty-two teams participated in Fielding Season 3 (October 2015–April 2016), completing the Water Research and Learning Programme and becoming CSLs. HSBC employees and their families, as well as some students, participated this year. The feedback from these participants was exceptionally positive and inspiring.

Participants spent a significant number of hours collecting data within the Wadi for research. They surveyed 30 sample plots of vegetation, tagged 15 rodents, performed over 1,536 tests on 18 different water variables, helped tag 61 dragonflies and 78 toads, performed over 165 freshwater watch tests, and measured 354 toads.

The details of this research can be found in the Water Research and Learning Programme Scientific Report for Fielding Season 3. This report is available on demand.

The enthusiasm of the CSLs continued after leaving the programme. Participants arranged school presentations, environmental clean-ups, and water-footprint-reduction campaigns and initiatives, as well as other activities. Fielding Season 3 was truly successful in reaching the objectives of the programme.



PARTICIPANTS PERFORMED 165 FRESHWATER WATCH TESTS, MEASURED 354 TOADS, AND TAGGED 78 TOADS AND 15 RODENTS.



Figure 9: Sinai Agama (*Pseudotrapelus sinaitus*).



Figure 10: Red-veined dropwing (*Trithemis arteriosa*).



Figure 11: Arabian toad (*Scelerophrys arabica*).

DRAGONFLY TAGGING

Dragonflies are captured with butterfly nets and then pinned down to a magnetic board without harming them. Once a dragonfly is pinned, a number is written on its upper right wing. Tagged dragonfly sightings are also recorded to understand dragonfly movement and life expectancy.



TOAD CAPTURING AND TAGGING

Toads are usually found within a 10-meter radius of streams. After capturing a toad, researchers measure the rear leg length and full body length, and the toad's weight is recorded, as well. Toads bigger than 40mm are tagged using PIT (passive integrated transponder) tags, before being released. This research helps build morphometric data for future analysis and helps us to further comprehend the ecology of the species. Monitoring toad populations can also provide good indications of water quality.



ODONATA POINT COUNTS

During an Odonata point count, the presence and behaviour of all Odonata species within an area are recorded.



SMALL MAMMAL TRAPPING

Rodents are captured in safe, harmless traps to gain vital measurements and information, such as weight and gender, to further comprehend the wadi's ecosystem. These mammals are tagged and then released.



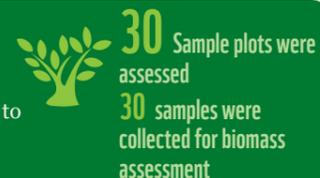
FRESHWATER WATCH

Nitrate and phosphate levels and turbidity in water bodies are tested by standard methods. Tests were repeated at regular intervals to monitor trends. These data contribute to establishing a water-quality database for park records.



VEGETATION SURVEY

A vegetation survey was carried out to estimate the density of the most abundant species. Species assessed during the season were *Tephrosia apollinea*. Also, a biomass measurement for the same species was carried out. The biomass measurement is carried out to understand the carrying capacity of the national park, which is to be used in future reintroduction programmes of ungulates.



WATER QUALITY TESTING

Two new parameters were measured this season: biological oxygen demand (BOD) and the redox potential (ORP). This will help us to further understand the water chemistry.



STUDY OF BIODIVERSITY COMPONENTS

1,420 freshwater invertebrates collected, identified, and released. Freshwater invertebrate will provide important information about the health of the water bodies in Wadi Wurayah. They are commonly used as indicators of changes in water quality.

103 of two species of zooplankton collected and identified. One is a new record for the park.

510 exuviae collected and identified

5.2 ADDITIONAL PROGRAMMES HOSTED DURING SEASON 3

The Water Research Centre had the privilege of hosting an additional Earthwatch programme during the third fielding season. After much success during the second fielding season, the Sustainability Leadership Programme (SLP) returned to the WRC.

Similar to the WRLP, this programme aims to understand and advance our knowledge on climate change and its linkages with freshwater sources, ecosystems, and the species dependent on them in Wadi Wurayah National Park. Earthwatch staff visited from abroad to deliver these programmes to HSBC employees from around the MENA region.

The SLP took place in early February, comprising facilitated sessions focusing on climate change and the environment, as well as HSBC policy and commitments to sustainability. The programme was designed to empower executives with sustainability issues in their workplaces.

A few special teams, sponsored by HSBC, participated in the WRLP. Team 54 was a very special team, comprising employees from various companies and ministries around the Middle East. Representatives from Pepsi Co., DP World, and the Ministry of Environment-Syria (amongst others) were present for the 5-day programme. This programme included additional sessions on marine conservation and climate change, highlighting both topics' links to freshwater issues. The programme also highlighted EWS's strategy towards these topics in the UAE.

Two winners of the Eco-Schools microproject challenge were given the opportunity to participate in the WRLP in November 2015 at Wadi Wurayah National Park. Team 56 consisted of **Our Own English High school** (Sharjah) and **The Central School** (Dubai). The microproject this year focused on conservation of biodiversity in the UAE, in which students created short documentaries highlighting a specific site in the UAE and its importance to conservation. The students' enthusiasm, knowledge, and proactive approach really showed through their contributions to the WRLP.



Figure 12: SLP team

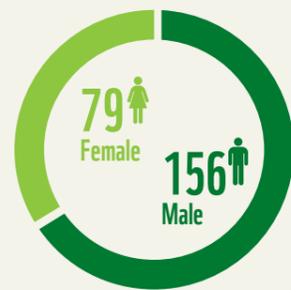
5.3 TIMELINE OF EVENTS

- Oct.**
3 October
 The arrival of Team 50, the first team of Fielding Season 3.
- Nov.**
7 November
 The external team (Team 54) arrives at the WRC. Decision makers from various companies around the MENA region participate in the WRLP.
28 November
 The student team (Team 56) arrives at the WRC.
- Jan.**
30 January
 The SLP team arrived at the centre for their 4-day programme.
- Feb.**
16 February
 An intense flash flood hits the wadi, with a total of 30.6 mm of rainfall.
- Mar.**
3 March
 A big storm hits Fujairah.
8-9 March
 An epic storm hit the entire UAE, providing a whopping 54.6 mm of total precipitation to the wadi in just one week.
- Apr.**
13 April
 The last WRLP team of Fielding Season 3, Team 71, left the Centre.

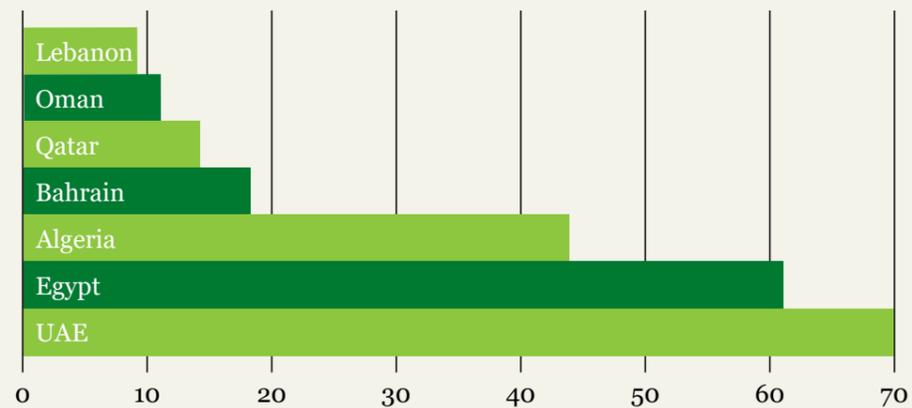
5.4 PARTICIPANT PROFILES

WRLP hosts participants that represent most countries across the MENA region. Fielding Season 3 enjoyed a great variety of age groups and nationalities. Like fielding season 2, the majority of participants came from the UAE, with participants from Egypt coming in second. Fielding season 3 also enjoyed the largest number of participants from Algeria, in all three years. Like the previous fielding season, the majority of participants were male, ages 26 to 35.

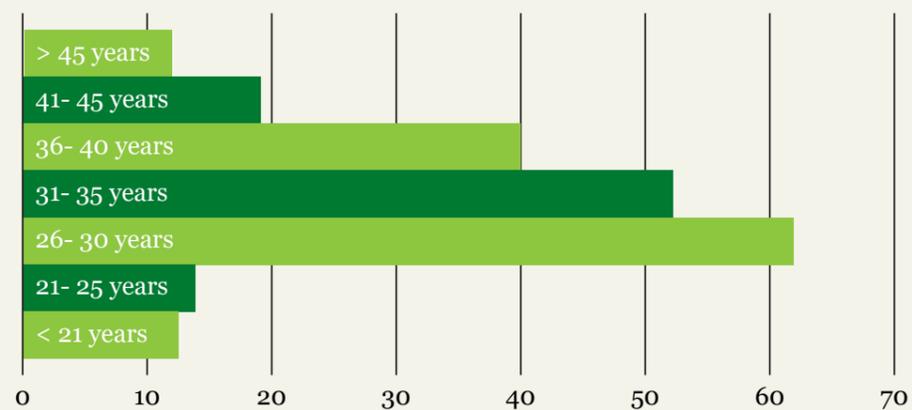
Gender



Country



Age

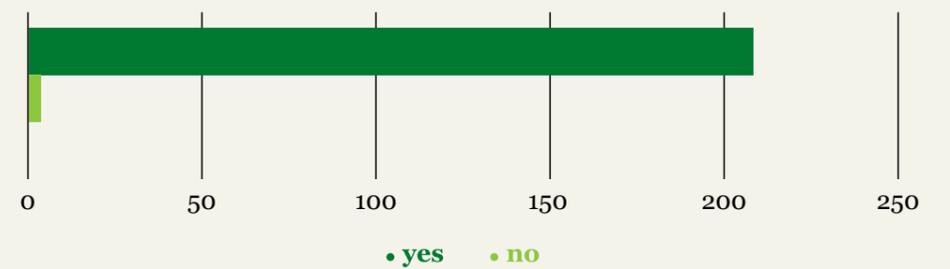


5.5 PROGRAMME EVALUATION AND PARTICIPANT FEEDBACK

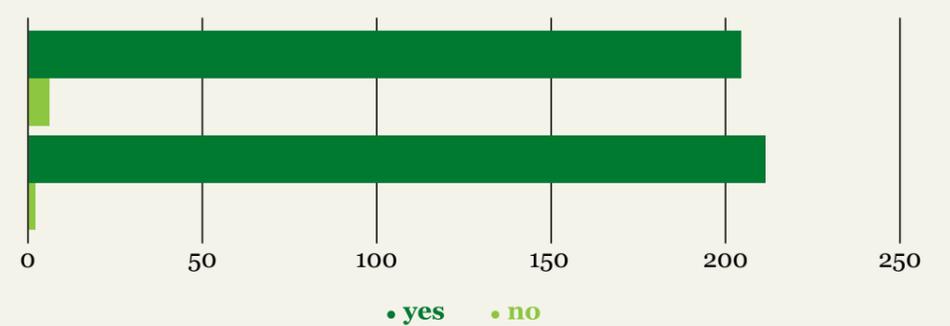
The WRLP aims for continuous improvement to deliver a unique and memorable experience to its participants. This requires close monitoring and continuous evaluation of the programme and its components. At the end of each fielding session, participants submit an evaluation form through an online system to describe their level of satisfaction with the programme. This form asks a variety of questions aimed at assessing the efficacy of the programme's design and delivery. The form asks a variety of questions aimed at evaluating the programme's success in reaching its objectives.

Feedback from Fielding Season 3 remained extremely positive after the first two fielding seasons. The continual changes and improvements applied to the learning sessions and research activities were very well received. Ninety-seven percent of all participants believed that the programme was beneficial to them both personally and professionally, while 99 percent of participants would highly recommend this programme to others.

Participant responses on whether they would highly recommend this programme to others



Participant responses on personal and professional benefits from the programme



Participants also felt that the programme had successfully increased their understanding of freshwater issues globally and locally. Moreover, participants found the programme to have been useful in increasing their understanding of ecological research, its relevance to freshwater conservation, and the importance of ecological data collection.

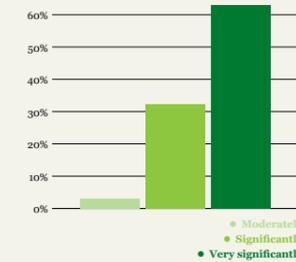
The feedback received on different modules and learning sessions remained highly positive. All modules and sessions were rated between 4.5 and 5 on a scale from 1 to 5, with 1 being poor and 5 being excellent

Rating of modules by programme participants



5.6 SNAPSHOTS FROM THE FEEDBACK SURVEYS

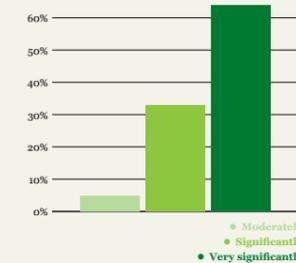
To what extent did the programme increase your sense of personal connection to the natural world?



“This is one of the most value-adding programmes I have ever attended in my life. It is one of the platforms that holistically change individuals’ views towards Mother Nature, and it teaches how responsible we have to be in order to save natural resources for future generations.”

Anup Chettri, Team 50

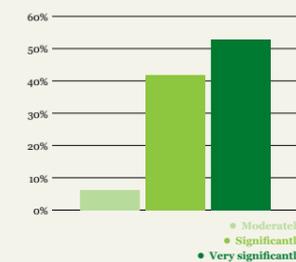
To what extent did the programme increase your understanding of freshwater issues globally and locally?



“Definitely a worthwhile programme that gives the basis to understand the various issues and implications of water, not just on humans and animals, but also on businesses and economies of scale and geopolitics.”

Prabash Hettiarachchi, Team 61

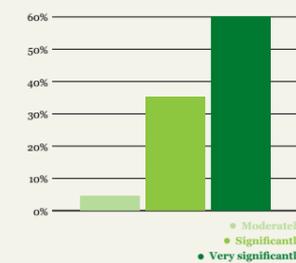
To what extent did the programme increase your confidence in your ability to make a difference towards a sustainable environment?



“It [the programme] encourages confidence in understanding what water is and how to talk and understand the importance of water. I started the week believing water was beautiful and peaceful and have ended the week thinking how sacred water is and how it is to be shared by so many. We all have a responsibility to look after it, for each other and generations to come.”

Laura Smith, Team 62

To what extent did the programme increase your commitment to inspiring and engaging others around water issues?



“The programme had instructors that were very passionate about their work, the environment, and the participants were all interested in making a difference—this combination really helped inspire us to not only learn but support each other and also have a lot of fun. I look forward to implementing actual strategies to help save this beautiful planet we all live on (we have no other place to go!!!).”

Asad Ul-Haq, Team 57

5.7 MEET THE TEAMS OF FIELDING SEASON 3



“Every day was a learning experience for me personally to discover and learn more about water (our main natural resource), my role to conserve, and the different species that can survive in this habitat.” **Andrea Afonso, Team 50**



“The programme is one of the best training sessions I have attended. It made us feel important to contribute to the planet, to make a difference, to critically think, to work as a team, and to increase our knowledge.” **Labib Al-Mawali, Team 51**



“Highly recommended! I personally like that the programme is concisely designed and effectively delivered to staff to grasp water-related challenges in the easiest possible manner. It has awakened a spark in me to go back and make a difference in my community.” **Sybil Lasrado, Team 52**



“I loved everything about the programme, the facilitators, colleagues; even the cook Wasantha is great and doing a great job. The knowledge I received from the programme is great as well.” **Ali Mahmoud, Team 53**



“Informative, enriching, and fun!” **Ali Abbas, Team 54**



“I should convince my colleagues to attend this programme, no matter how busy their schedules are. There are a lot of takeaways from this programme. Last but not the least, the staff were really friendly and supportive. Looking forward to keeping in touch with them.”
Shaheen Abdulla, Team 55



“This programme is very interesting. It makes us review our relationship with nature. It increases our sense of personal connection to the natural world and provides an opportunity to make a meaningful contribution to improving the state of the planet.”
Amina Khodja, Team 58



“The programme is doing an amazing job by raising awareness and motivating people. In other words, this turns a normal human being into a nature lover. The programme gives a chance for people to live a life as a researcher and experience everything they do in everyday life. I just loved the days spent here.”
Mohammed Aqsam, Team 56



“I am really glad and honoured to have had this chance; my experience will stay with me for a long time, and I would like to thank all of the team members—Alex, Patricia, Shirine, and Rizwan—for their effort and knowledge they shared. And, of course, thank you HSBC for the opportunity to get involved in such a programme.”
Nada Al Wadi, Team 59



“Awesome! It is very inspiring because it provides practical information that can be used when we get back home. Thank you to HSBC, Earthwatch, Fujairah government, and the Emirates Wildlife Society for this amazing opportunity.”
Mohamad Lasfer, Team 57



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“I would highly recommend the programme for its continuation. It is very well structured and informative. It has a good balance between practical aspects and theory. Lots of opportunities to get involved and participate.” **Steve Willmott, Team 60**



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“The wadi made me fall in love with nature again—something that I had long forgotten about.” **Mohammad Khan, Team 61**



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“The programme is one of a kind because it really benefits all living organisms around the globe. It not only fulfilled my expectations but also exceeded them. Facilitators made it knowledgeable and fun at the same time. So we got the max out of this programme. Thank you for this!” **Yasmine El Etreby, Team 62**



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“This is the best initiative from HSBC ever!!! I am lucky to have had the opportunity to take part in it! The programme has changed the way I look at the world and its resources, and I am determined to spread awareness and CHANGE to the best of my ability!” **Shalini Monteiro, Team 63**



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“It’s very good, an eye-opener, informative, and knowledgeable. After gaining awareness about the current status and availability of existing resources, we now perceive history trends, which in turn make us aware about the future.” **Ketan Patkar, Team 64**



“Brilliant programme! The researchers are doing an amazing job—hats off to their dedicated efforts: week after week, they work with volunteers, taking them into the wadi to conduct the various tests. It’s not an easy job, but they do it with a smile.” **Deann Lobo, Team 65**



“It is an inspirational way to learn about something important to everyone, but it is also pleasing to know that the work we do is actually used and is not just a controlled environment with ‘known’ outcomes.” **Katherine Gilluley, Team 68**



“Overall, a very rewarding experience, headed by dedicated scientists, that brings attendees in close contact with a natural environment of unparalleled beauty (at least in the Middle East). I would strongly encourage everyone to get involved, especially any HSBC colleague with a role to play in facilities management.” **Eleftherios Fountis, Team 66**



“It’s fantastic and should be communicated and practiced by all HSBC members. What’s more, people all over the world should be informed of this programme’s main purpose and opportunity; doing so would, in the long run, teach people how to manage our most valuable natural resources.” **Sameh El-Shaikh, Team 69**



“I believe that this programme is beneficial because it relies on physical practice and theory at the same time—that is, you get to do field trips and have educational sessions during the day. You also get knowledge of the ecosystem; in particular, you learn how it functions and how small changes can have big consequences.” **Fadi Khater, Team 67**



“It’s just amazing being part of this programme, amazing to walk in this calm and serene environment, while learning about ecology, water, and nature.”
–Yara Waked, Team 70



“It’s an amazing experience: this important programme, in only a short period of time, has revealed to me things that had never crossed my mind.”
–Amir Hanafy, Team 71

6. WHAT’S IN THE PIPELINE FOR SEASON 4?

After the successful completion of Fielding Season 3, the team is very excited, and the planning for Fielding Season 4 has already started. Some of the key highlights for the next fielding season are as follows:

- Revision and update of the learning material and curriculum in consultation with Earthwatch.
- Preparation of in-house marketing strategies in collaboration with EWS-WWF’s business development team to promote the programme to other stakeholders.
- Additional programs in leadership and climate change to be developed for the Water Research Centre.
- Review and update of existing research activities and introduction of new research activities, including (but not limited to):
 - Toads tagging
 - Rodents tagging
 - Odonata population monitoring by record of presence/absence, and collection of exuviae
 - Monitoring of water-quality parameters, including bacteriological investigations (E. coli)
 - Monitoring of freshwater populations of invertebrates
 - Monitoring of zooplankton diversity and abundance
 - Biomass assessment of various species of common plants
 - In the lab, experiments will focus on continuing the study of tadpoles’ growth (from eggs to adults) and the growth of Odonata larvae under different controlled conditions. This experiment is related to the assessment of the effects of climate change on the freshwater ecosystem

7. ACKNOWLEDGEMENTS

We largely owe the success of the Water Research and Learning Programme to HSBC Bank Middle East Ltd., a long-time partner of EWS-WWF, which generously financed the development and operation of this project.

We are also grateful to the Fujairah Municipality and to the Fujairah Government for providing all necessary support to make the programme happen.

Special thanks go to our partner, Earthwatch Institute UK, for creating a curriculum that enabled participants to start a learning journey about freshwater resources and to start conservations; what's more, our partner contributed much "know how" that helped us develop our environmental and educational programme.

We would also like to express sincere thanks towards all HSBC volunteers and CSLs, all of whom devoted their time and knowledge to obtain valuable data about the national park, which will contribute in shaping future conservation strategies.

Finally, we would like to express gratitude to all EWS-WWF staff members who devoted their time and contributed their knowledge to make the WRLP one of the highest-ranking programmes in the HSBC Global Water Programme.



Established in 2001 under the patronage of HH Sheikh Hamdan bin Zayed Al Nahyan, Ruler's Representative in the Western Region, EWS-WWF's mission is to conserve nature and reduce the most pressing threats to the environment by working with people and institutions in the UAE and region to implement conservation solutions through science, research, policy, education and awareness.

For more information about EWS-WWF please visit: uae.panda.org