



# Annual Report 2012



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His Majesty Sultan Qaboos bin Said





"Take only photographs, leave only footprints",  
Yifti, Talal Al Abdelsalam



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# Message from the President

This past year was filled with continued research, regional and international conferences, community outreach activities, competitions and much more, all of which is detailed in our Annual Report.

There has been a huge focus on capacity building over the past year; many of our projects have begun on a secondary phase that involves training of local communities for the purpose of increasing awareness and educating the young and old in the inevitable role they play in the environment. Our goal has been to spread a better understanding of what NGO's and civil societies do. By raising awareness and involving the communities we hope to highlight the role civil societies play in the country's progress whilst simultaneously collecting data and sharing the process with those involved.

I would like to recognise the companies who continue to believe in our cause and have partnered with us over the years. Our annual report is a testament to what your funds have enabled us to achieve. The continued strengthening of our relationship with the private sector, the government and the public is critical to our future success.

We would like to take the opportunity to thank our supporters who have played a vital role in helping ESO grow into a significant stakeholder in the conservation of Oman's natural heritage.

I'd like to extend special thanks and appreciation to all the individual members, volunteers and board members who give so much time to ESO, and without whom we would not be where we are today.

**Tania S Al Said**  
**President**



# Introduction

2012 has been a big year for the Environment Society of Oman (ESO). We have begun our capacity building program and training of Omani Graduates in the field of environmental conservation and have reached new heights in our community outreach work, volunteer programs and scientific research.

We have seen the beginnings of annual events, such as the Inter College Environmental Public Speaking Competition, that we hope to continue in the coming years and are very proud to announce that our Nizwa Team won the Regional Competition in Dubai!

Our scientific projects continue with new discoveries and findings being made, especially in the area of whale and dolphin work, where we are focusing our efforts on the research of the genetically unique population of Humpback Whale which is not known to breed or feed outside of Omani waters. Egyptian Vulture research began in 2012 and a much larger number of breeding pairs were found than expected. In addition to this we were able to incorporate a socio economic aspect to the project in collaboration with the Oman Women's Association, which was a huge success!

Phase 2 of ESO's Women's Empowerment and Environmental Education Project focused on Sur, Khasab, Ibri and Yankul and we were very happy to see more women participate and gain the support of the Majlis A'Shura once again. Our annual Masirah Turtle Festival was much larger this year and Earth Hour saw the Royal Opera House Muscat, The Grand Mosque and Sultan Qaboos University partnering with us and turning off all non-essential lighting! ESO's tree planting campaign in Dhofar this year would not have been possible were it not for our Dhofar members bringing colleges, school children, corporates and volunteers together and enabling us to plant hundreds of native saplings.

2012 has seen seven of our Omani staff being trained in field research, data entry and analysis, dolphin rescues, project management, administrative work and some have even traveled as far as Japan and the USA for training programs. This has all been made possible through our partnership with Oman LNG LLC and we will continue to ensure that Omanis (both graduates and non) are given the necessary skills to work in the field of environmental conservation over the coming years.

This year ESO attended conferences, workshops and meetings all over the world including Panama, Japan, USA, UAE, Jordan, Lebanon, Egypt and Brazil. We have earned the title of Best Civil Institution of 2012 by Tawasul's Riyadh Awards and we have raised the bar for 2013!

I would like to take this opportunity to thank the ESO Staff, Board Members and Volunteers for all the time and energy they put into making ESO a success. Enjoy the 2012 Annual Report and thank you for taking the time to read about our work and achievements.

Best Wishes

**Lamees Daar**  
**Executive Director**





# ESO Board

The following Board Members were elected in March 2012 for a two year duration:

## President

**HH Sayyida Tania bint Shabib Al Said** holds a BS degree in Marine and Freshwater Biology and a Diploma in Early Childhood Education. She is a founding member of ESO and has served as the President of the Board of Directors of ESO since its establishment. Sayyida Tania initiated the "Say No to Plastic Bags" campaign, organizes the annual fundraising ball of ESO, and regularly appears in the media representing ESO. She won the GCC Award for the best environmental personality in the Arabian Gulf Region in 2009.

## Vice President

**Dr. Mehdi Jaafar** is a founding member of ESO and has been Vice President of the society since its establishment. He worked in the field of human resources development before moving into nature conservation, environmental education awareness and international relations. He helped launch Oman's 1st National Strategy on Conservation and draft the 2nd National Biodiversity Strategy and the National Action Plan. Dr Mehdi co-chaired CESAR/SQU's organising committee to the International Conference on the Conservation of Mountains where Al Jabal Al Akhdhar Conservation Research project was showcased. He is a member of many national committees addressing a myriad of environmental issues and is on numerous judging panels including The Ford Regional Conservation Fund and The Regional Colleges & Universities Environmental Public Speaking Competition. He was an elected representative of West Asia Environmental NGOs UNEP Governing Council & Major Groups and Stakeholders Annual Conferences in 2010, 2011 and 2012. He was an elected representative of the International Environmental Advisory Group from 2010-2012. Dr Mehdi is a regular speaker, writer and panelist on a number of environmental and sustainable development matters.

## Executive Director

**Ms. Lamees Daar** is a founding board member of ESO and has been on the Executive Board since its establishment and voluntarily manages the organisation. She represented ESO at most regional UNEP meetings in the Societies early years and holds a BSc in Environmental Sciences. She previously worked as an environmental consultant for environmental engineering firms and was seconded to Petroleum Development of Oman to monitor ISO 14000 practices. Lamees has been responsible for the overall managing of all ESO projects and staff, securing numerous funding opportunities and sponsorships for ESO, writing proposals for current projects, chairing the Ras al Jinz Turtle Center Steering Committee, co-managing the anti plastic bag campaign, writing regular press releases, and managing a comprehensive overhaul of the ESO website. She is also responsible for the increase in capacity at ESO and putting training programs in place for the new graduate program.

## Community Outreach Officer

**Mr. Nasser Al Maskari** currently works as an environmental expert at Occidental Oman (OXY). He has a BSc in Fisheries Science and an MSc in Marine Sciences and Environmental Studies. He has worked as a Nature Reserve Specialist, Head of Permits and Head of Projects Evaluation Section at the Ministry of Environment and Water Resources (MRMEWR). He was also Director of Planning for Nature Conservation at MRMEWR. Nasser has been a Social Responsibility advisor at OXY since 2009 and is a member of the Arabian Oryx Sanctuary Committee and Member of the National Committee for IUCN. He was a member of the national committee for selecting world heritage and natural sites in Oman and the Oman Marine Biodiversity Committee. He was a founding member of ESO and a board member for 2 years from 2004-2006, at which time he was also head of the ESO Terrestrial Group.

## Treasurer

**Mr. Yasser Macki** works as a System Engineer with Hill International. He holds a BA in Management Information Systems and has been an ESO member since 2004 as well as ESO's Treasurer on the current board. During his tenure as treasurer, Yasser has been responsible for managing ESO's overall as well as specific project budgets. He has also implemented ESO's accounting system. Yasser is very active in a voluntary capacity and has organised and managed the majority of ESO clean ups over the years.

## Public Relations Officer

**Ms. Dana Sarhan** is the PR and Communications Advisor at the Ras Al Hamra Development Project, PDO. She has worked as Corporate Social Responsibility and Marketing Manager at Omran. Prior to working at Omran she was Corporate Affairs and Marketing Officer at HSBC, the Public Relations Manager and Brand Ambassador at the Al Bustan Palace Hotel. Dana holds a BA in International Hospitality and Tourism Management and a postgraduate diploma in Responsible Tourism Management from Leeds Metropolitan University, UK. Dana serves on the current board of the Association of Intervention for Children with Special Needs and has been an active member of ESO since its establishment.

## Secretary

**Mr. Raed Dawood** is currently working with Nawras as Business Development Director and has a wide range of private sector experience with more than 15 years work experience in the several fields including Telecom, Banking, Investments, and Audit. Raed is a founding member of ESO and the creator of the ESO brand and logo. Raed holds an HE diploma and a Bachelor Degree in Business Administration with a minor in marketing. Raed is an active member of ESO and regularly volunteers his time to help with matters concerning HR, design and artwork.

## Board Member

**Dr. Mohsen Al Amri** holds a PhD in Biology Science, Ecology and Soil Sciences. His research interests lie in environmental pollution by wastewater and plant ecology. He has 13 scientific publications and has been an active member of ESO for 4 years as well as serving on the ESO board for 3 years. He leads the ESO Frankincense Project in Dhofar to monitor the health of frankincense trees and determine the number times a tree can be harvested before permanent damage occurs. This project was recently featured on a French documentary aired in 2012. Dr Mohsen has also been instrumental in furthering ESO's outreach and tree planting projects in Dhofar both with schools and government. He regularly meets and interacts with volunteers in Southern Oman on behalf of ESO and travels to Muscat every month to attend ESO Board meetings.

## Board Member

**Mr. Amor Al Mataani** holds a BEng Hon and an MBA. After graduating from Teesside University, UK, as an Instrumentation and Control Engineer he joined Petroleum Development Oman in upstream operations and commissioning. In 1993 he moved to the Ministry of Health where he was Deputy Director General for Administration and Finance at the Royal Hospital. He completed his MBA (Newcastle) in 1997 before being appointed Director General for Sur Industrial Estate in the Public Establishment of Industrial Estates (PEIE). He joined Oman LNG in 2002 as Deputy CEO and occupies the position to date. He has a keen interest in education and he is member on a number of university and technical colleges' boards and Chairman of the Board of Trustees for OLANG's HAS school. He is also the Chairman of OLANG's Tender Board and an active board member in the Oman Road Safety Association as well.

## Board Member

**Dr. Nadiya Al-Saady** as a PhD from the University of Minnesota, USA, in the area of plant genetics. She is currently the Director of the Animal and Plant Genetic Resources Center of the Research Council. Dr. Nadiya was formally a faculty member in the Department of Crop Sciences, College of Agricultural & Marine Sciences (CAMS), at Sultan Qaboos University. Her research interests are in the areas of genetic diversity and biotechnology. She has supervised numerous BSc and MSc students and is currently supervising a PhD student. She has published scientific papers in international refereed journals in the areas of genetic engineering, disease diagnosis and genetic diversity. She is a member of numerous national and international committees on plant genetic resources.

# Marine Conservation Projects



ESO team conducting whale and dolphin boat surveys, Masirah

The marine environment in Oman is of significant importance to the people of the Sultanate, for the biodiversity it harbors and the ecological functions it supports. However, from a scientific perspective, Oman's marine environment is still relatively unexplored and has many conservation challenges.

As a consequence, there is a constant need for additional resources, effort and funding to help improve our awareness, understanding and ability to conserve the wealth of natural and cultural heritage of our seas and coasts.

Through its marine projects, ESO continues to cooperate with the Omani Government in order to help further common goals, through regular meetings as well as research and advice in specific areas, such as:

- Contribution of information on marine wildlife to the National Report for the Convention on Biological Diversity (CBD) for the Ministry of Environment and Climate Affairs (MECA)
- Cooperation and data sharing on whale and dolphin reports and preparation of scientific papers with the Ministry of Agriculture and Fisheries (MoAF).
- Participation in the National Cetacean Stranding Committee Meetings under UNEP's Regional Organisation for the Protection of the Marine Environment (ROPME) hosted by MECA.
- Provision of information on marine species to MECA and the Royal Omani Police for new legislation related to the Convention on International Trade in Endangered Species (CITES).
- Participation in MECA Diving Committee for protection of coral reefs from diving, fishing activities, and other human activities.

ESO marine projects rely heavily on funding from third parties raised through the submission of proposals to international, regional and local funding agencies as well as the private sector.

## Turtle Research and Conservation

The global importance of Oman to the survival of turtles – where all species are classified under 'endangered' or 'critically endangered' status listings throughout the world – has been definitively established through surveys and research conducted within the Sultanate over the past 35 years. In the last 6 years, ESO, in collaboration with The Ministry of Environment and Climate Affairs and senior international scientists, has played the lead research role on turtles in the Sultanate. We have accelerated our knowledge and understanding of turtle biology, ecology and conservation needs, as well as raised the international profile of Oman's turtle resources. Through grants and long-term support, especially from the **US Marine Turtle Conservation Fund (MTCF)**, ESO has been able to work towards the conservation of turtles through continued monitoring and research efforts, enhancement of resource capacity and management activities, and engagement of local communities.

The project is mainly centered at Masirah Island focusing on Loggerhead turtles, although the team also undertakes visits to the Damaniyat Islands for monitoring of annual Hawksbill nesting.

The project's long-term aims are:

- To implement research to guide conservation management of turtles, especially the globally important Loggerhead turtle population at Masirah Island
- To study the migration and nesting frequency of turtles and understand potential interaction with human activities
- To research and assess population trends of turtles nesting in Oman
- To identify, assess and help mitigate threats to turtles through conservation management recommendations
- To build capacity of local communities and institutions to be able to contribute to research and conservation of turtles
- To inform and educate local communities and the general public about the value and importance of turtles as essential components of a healthy environment.



Masirah Island is unsurpassed by any comparable nesting location in the world, with an estimated nesting population of 10,000-30,000 Loggerhead females, accounting for up to 40% of the global population





ESO Field Assistants, Masirah Island, Natasa Silec. Oman hosts nesting turtles on at least 350 beaches along its coastline and it is thought that coastal waters support feeding Green and Hawksbill turtles in their tens of thousands.

### Nesting Beach Assessments

Now in the 5th year, the nesting beach surveys for 2012 continued at Masirah with the same primary research objectives of producing track counts from nesting beaches for assessment of nesting population trend analysis. Additional secondary monitoring activities are included in the scope of work to generate ratios of nesting success and hatching success as a means of qualifying the reproductive output of different beaches.

The fieldwork is undertaken by ESO's local field assistants and scientific support staff in cooperation with the MECA ranger's office on the island. As a major research milestone, the data collected on this program over the last five years, together with data originating from initial surveys in 1977 are now being worked up with collaborating scientists in Florida for a publication to evaluate the trend of the nesting population over the last 35 years.

### National Turtle Conservation Strategy

ESO research over the last 6 years has confirmed that Oman has among the largest and most important populations of turtles in the world and that they are genetically isolated. The work has also shown that turtles are under increasing pressure and that population decline already detected in some populations is likely to worsen in the future. A strategy to effectively conserve Oman's turtles is urgently needed.

Although our research will continue, over the next few years ESO will be increasing efforts through the development of a National Turtle Conservation Strategy. The strategy will involve a wide range of stakeholders, central among whom will be the Omani government and local communities, assisted by an international team of leading turtle scientists. It is anticipated that this strategy will be keenly watched by the global turtle conservation community, tourism companies and foreign governments, all of whom have an interest to see Oman's huge turtle populations better protected.

The main project activities in the past year can be summarised as follows:

#### Recruitment and Training

In order to assist in research on Masirah Island, ESO has hired and trained three full time local field assistants (FAs). These FAs work on ESO turtle projects during the nesting season and assist in both the Renaissance Whale and Dolphin project as well as ESO's Egyptian Vulture project during the off-season. In order to ensure sustainability of this training ESO has set up a permanent office in Masirah which the FAs work from. Training is ongoing in the form of computer and language courses, and in-house as well as in-field training.

#### Satellite Tracking, Flipper Tagging and DNA Sampling

This year 12 satellite tags were fitted onto female Loggerhead turtles. As with the 2010 and 2011 tagging seasons, the data collection strategy is again aimed at deriving the nesting frequencies of turtles from location information generated by GPS enabled transmitters whenever the individuals made landfall. In parallel with the satellite tagging exercise, turtles were also fitted with two flipper tags and tissue samples were taken for archiving and future DNA sequencing.

ESO also supported **EWS/WWF (Emirates Wildlife Society)** Gulf Tracking project to ensure they had the necessary logistical arrangements in place for the tagging of Hawksbills at the Damaniyat Islands and Masirah Island. Preliminary analysis to derive nesting frequency statistics from 34 tags deployed on Masirah during 2010-2012 show Loggerheads tagged at the start of the nesting season nested an average of 5.5 times. This is a significant departure from the previous accepted figure that was used for this species (4 nests per annum) and a higher nesting frequency means a lower number of turtles. These results are in line with similar studies conducted in Florida, making conservation more urgent than ever due to the possibility that the nesting populations are significantly smaller than previously estimated.



Ghasi Al Farsi returns Loggerhead turtle to the water, Masirah Island



## Renaissance Whale and Dolphin Project

Thanks to the generous support of **Renaissance Services SAOG**, Oman's whales are now famous! They have appeared on both national and international TV, newspapers, magazines, web sites and other media and are the subject of intense discussion among the international scientific and conservation community. Most recently, the BBC filmed the rare Arabian Sea Humpback whales in Dhofar, which will appear on primetime **BBC (Wild Arabia)** in March 2013.

Apart from the world's rarest Humpback whales, Oman also hosts the mighty Blue whale, deep diving Sperm whales, Killer whales and many more, as well as a variety of smaller dolphins some of which occur only in Oman and neighbouring waters.

Oman's whales and dolphins feature as some of the most impressive of the country's marine natural resources and careful planning and management are needed to ensure that development does not have a lasting negative impact. Increased fishing and shipping traffic, new ports, harbours, tourism, pollution, underwater noise and other threats, challenge the lives of Oman's whales and dolphins, and in some cases, threaten them with extinction.

In order to plan effective conservation strategies, decision makers require rigorous scientific information on the habitats and populations they are trying to protect. For this reason, ESO is using a variety of methods to learn more about the distribution, abundance, habitat use, population characteristics, and potential threats to whales and dolphins throughout the Sultanate of Oman.

The ESO team operates with the formal approval of the Ministry of Environment and Climate Affairs (MECA) and also collaborates with the Ministry of Fisheries Wealth (MFW), the Ministry of Tourism and the Oman Natural History Museum (ONHM) of the Ministry of Heritage and Culture (MHC).



The International Union for the Conservation of Nature (IUCN) has assigned Oman's Arabian Sea Humpback Whale 'Endangered' status in their Red List of Endangered species

### Is Oman Home to The World's Rarest Whale?

Humpback whales are world famous for undertaking long seasonal migrations between polar feeding areas and tropical breeding areas. Our research has shown Oman's Humpback whales to be the only known population in the world not to migrate, but rather to breed and feed in the same geographic area. This makes them truly Arabian whales! Not only are these whales distinct in this regard, but our recent research also indicates they are one of the smallest and potentially most vulnerable whale populations in the world, numbering fewer than 100 individuals in Oman.

In June 2012, in response to reports on ESO research, the International Whaling Commission (IWC) raised further concerns over the status of this population and has formally promoted it as a top priority of the Commission. This has placed Oman's Humpback whales firmly on the world map and the world is watching what will happen next.

## Other Giants

Apart from Humpback whales, three other giants have been confirmed to regularly occur off Oman's Coast, including the mighty Blue, the deep-diving Sperm whale, and the Bryde's whale. We have studied the latter using similar research techniques as for the Humpback whale; this has raised interesting questions mostly through study of genetics. We now know that these whales mix with others as far away as Bangladesh. Our work is making an important contribution towards understanding the taxonomy of this little known species, which feeds and breeds in Oman's waters.

## Smaller Whales and Dolphins

The remaining whales and dolphins that we encounter in Oman are all small to medium sized whales and dolphins, taking the total confirmed number of species in Oman up to 20. Highlights of our work on these species include uncovering details of some of their distribution and habitat use, their genetic make-up and their behaviour. Recent research by a PhD student, assisting in ESO work, has provided essential information on behaviour related to interactions with dolphin watching tours. We now know that Spinner dolphins, the usual target of tourism vessels, rest, nurse their young and socialise during the mornings closer to shore and move seaward later in the afternoon to commence night-time feeding at the edge of the continental shelf. It is during mornings that the dolphins are most sensitive, and it is then too that vessels bring people to see them. This demonstrates the importance of understanding dolphin behaviour to be able to plan a sustainable dolphin watching industry, which we have begun under the Renaissance Project.

## Tourism Potential

With tourism come environmental threats and impacts, but also potential opportunities. Managed sustainably, tourism can benefit the environment and marine species, giving them an economic value and prompting greater conservation by both local people and government offices. Our research has already fuelled many aspects of the growing tourism business surrounding whales and dolphins and continues to inform its progress and provide information for its sustainable management. We have recently compiled a set of specific guidelines to help the tourist industry maximize its opportunities for whale watching whilst minimizing disturbance or harm to these enigmatic marine mammals.

## Public Awareness and Volunteerism

ESO continues to create and promote community outreach programs engaging fishermen, university students, school children, shipping companies and the general public. In order to strengthen the local training component of the project, 2013 will see the introduction of a specific program that caters to university graduates. By providing support to graduates and coordinating with universities to encourage internships with ESO, we hope to enhance the capacity of Omani nationals in field research techniques as well as data analysis.



Bottlenose dolphins put on a feeding show for the BBC Wild Arabia film crew off the coast of Dhofar



## Threats and Conservation

Our research has revealed that Oman's whales, including the rare Humpback whales, are threatened by entanglement in fishing gear, pollution, loss of near-shore habitat (due to port, harbor and other coastal development) collisions with ships, disturbance from noise, and many other dangers. In the mid 1960s, illegal Soviet whalers hunted Oman's whales almost to extinction for their meat, oil, bone and other products. This has reduced the populations here to a fraction of their original size, and forced related animals to interbreed. In the case of Oman's Humpback whale, a "genetic bottleneck" has resulted, reducing the genetic variability of the population, and potentially making it more vulnerable to disease, and reducing the reproductive rate. The chances of recovery of this population from such low numbers seem very remote and only dedicated conservation efforts, coupled with increased awareness among fishermen, other seafarers and coastal developers will help to save these unique whales from extinction.

More survey effort is essential in order to more accurately understand the distribution, range and habitat needs of whales in Oman so that we know how, where and when to implement protection measures, and can then monitor the effectiveness of these measures over time. This, coupled with our awareness-raising among schools, the general public and the private sector, and our involvement of Omani students, may be the key to their survival.



ESO gets up close and personal with a Blue whale



# Terrestrial Conservation Projects



Juma Al Humaidi, ESO Field Assistant, with Egyptian vulture



Field assistants survey Masirah Island for signs of the Egyptian vulture



Bird expert Mike McGrady training ESO Field Assistants

## Egyptian Vulture Research

The Egyptian vulture (*Neophron percnopterus*) is globally endangered and in 2011, ESO secured support from the **Hima Fund** to undertake preliminary work on researching this species. Masirah Island is designated an Important Bird Area (IBA), and for many years it was thought to hold about 12 pairs of breeding Egyptian vultures. Field research consisted of two phases: one that focused on determining the number of breeding Egyptian vultures on Masirah and their productivity, and one to survey rubbish dump sites in Oman to gather initial data on numbers of vultures that use these sites and their distribution. The work aimed to collect data and provide training on bird research and ringing to ESO field assistants on Masirah. ESO also engaged the local **Omani Women Association (OWA)** on the Island and produced handicrafts with the image of the vulture in order to raise awareness of the bird and dispel negative perceptions of the vulture.

In the spring of 2012, field work in the first phase of this study estimated that the number of breeding pairs of Egyptian vultures on Masirah to be 65 – 80; far more than the previous estimate of 12 pairs. It is estimated that at least 200 individual vultures reside on the island, which is more than four times the estimate from previous studies conducted in the 1980s. This apparent increase in the vulture population is most probably due to both better survey methods as well as increase in the food availability for vultures. The increase in human population on the island since the last survey has more than doubled and fishing activity has increased, resulting in more waste (fish and domestic stock) upon which vultures can feed. Field training was provided in identification and age determination of vultures, and collection of vulture breeding information (i.e. occupancy and productivity). These results have been submitted to the peer-reviewed journal, *Sandgrouse*.

A field survey was conducted in October 2012 to gather initial data on scavenger presence at dumpsites, as not much had previously been known about avian scavengers use of dumpsites in Oman. The aim of the survey was to document the population and age structure of vultures across different dumpsites in Oman. Nineteen visits were made to 10 dumpsites including: Barka, Fanja, Izki, Jebel Akhdar, Manah, Masirah, Al Amerat, Nizwa, Quriyat and Samail. The findings show use of dumpsites to be quite variable with some hosting over 200 vultures whereas others hosted none despite food availability. ESO's field assistants have now been trained to contribute to surveys, continue to conduct monthly monitoring of dumpsites, on their own, and vulture trapping and handling techniques including safely measuring, ringing and collecting blood samples. A manuscript reporting results of the survey of Egyptian vultures on dumpsites in Oman has been accepted for publication in the regional ornithological newsletter, *Phoenix*, with one of ESO's fresh graduate employees as the first author and the Field Assistants as co-authors.



Masirah Island hosts an estimated 200 endangered Egyptian vultures (*Neophron percnopterus*)



Dr Mohsen Al Amri, ESO Board Member and Head Researcher of The Frankincense Project has published the first year results in the peer reviewed Journal of Life Sciences



## Frankincense Research

Frankincense has played an integral part in the Omani heritage and culture and has been the main source of income for the Dhofari people for centuries. Frankincense trees have also played important environmental roles: they grow on marginal land not suitable for ordinary agriculture, protect the soil from erosion, produce good biomass and provide shade. Few people know that frankincense is harvested by tapping the trunk and branches of the *Boswellia sacra* tree. In the past few years and after close monitoring of the growth patterns of the frankincense trees, researchers noticed that the tapping has been harsh often leading to the degradation of the tree beyond repair. Changes in the climate over the past few years might have also had an impact on the growth of frankincense trees. Accordingly, it was important to monitor these two factors and record their impacts on the sustainability of frankincense farming in Dhofar.

Sponsored by **HSBC**, this long-term research project aims to determine the right frequency of cutting to get a good yield without adversely harming the trees. Additionally, by monitoring the meteorological data in three different locations, the project aims to set a baseline for weather data that can be used in the future to monitor impacts as a result of climate change and the effects in the growth patterns of frankincense trees. An indirect objective of the project is also to attempt to encourage the old frankincense harvesters who are currently quitting the business and moving to the big cities, to believe in the viability of this business again and re-grow frankincense trees but this time to harvest them at sustainable levels.



The project has won the attention of international media and was recently featured on French TV, CNN and South Korean TV

The current data shows that the health of some of the trees has deteriorated and some have even died. A statistical analysis will be conducted to determine whether the deterioration and death can directly be attributed to the cuttings or to other factors including weather, or animals. Data on the yield of each individual tree that is cut is being collected and this data will enable us to provide appropriate maximum sustainable yields for the harvesting of frankincense trees.

There has been successful germination of both the seedlings that had been collected from uncut as well as cut frankincense trees. The differences in the germination rates will be determined using statistical analysis to deduce whether there are significant differences in the rates of germination as a result of harvesting parent trees. This information will determine whether there is a need to conserve some untouched trees for the purpose of future germination and sustainability.

A year's worth of meteorological data has been collected from the three meteorological stations. This one-year data will be considered as the base-year of the project, which represents a starting point to compare fluctuations of weather data over the next three years. The weather stations have been recording the following indicators: air temperature, relative humidity, wind (direction, gust and speed), solar radiation and rainfall.

Over the remaining 2 years of the project, data will continue to be collected and analyzed to determine whether the changes in frankincense health and death of certain trees can truly be attributed to the rates of cuttings or other factors. Also based on the data collected from harvesting the trees a maximum sustainable yield for harvesting the frankincense tree will be calculated. This information will then be disseminated among the Ministry of Agriculture and Fisheries as well as frankincense harvesters to support more sustainable practices of this ancient tradition.

*Boswellia Sacra* flower





# Community Outreach Projects

Our community outreach initiatives range from raising awareness of environmental issues in schools and the public arena, as well as targeting higher education students. 2012 has seen ESO increase tree planting activities and initiating the first annual environmental public speaking competition. Earth Hour was celebrated on a large scale and targeted schools, colleges, companies, the government and the public! ESO has strived to actively involve volunteers in community outreach projects and will be focusing more effort in this area in the future.

## 3rd Annual Masirah Turtle Festival

Funded by the **Marine Turtle Conservation Fund (MTCF)**, ESO's Third Annual Masirah Turtle Festival took place in May 2012 during which a one-week sea turtle awareness program was organised for the local community. ESO designed the awareness programs on Masirah Island targeting both local environmental issues and focusing on marine biodiversity.

### Training University Students

ESO has a successful history in engaging higher education institutions and involving them in community outreach work. In particular, **Sultan Qaboos University (SQU)** students have been actively involved in the Masirah Festival over the last 3 years.

This year, six students from the Marine Science and Fisheries Department volunteered to assist ESO with its activities on Masirah. The students participated in their first field experience with ESO's research experts, where they learned and participated in field observation and satellite tagging techniques.

### School Activities

ESO designed several outdoor and classroom educational activities for different age groups based on participant feedback from 2011 and targeted mainly 4th, 8th and 11th grade students. With the assistance of the SQU students, the ESO team was able to use the information collected from this pilot exercise to provide guidance on the training needs and requirements for the development of a larger-scale program targeting other areas of Oman.

### Turtle Football League

A football league of eighty players was formed and ESO held a four-day tournament, attracting local spectators. This was the perfect opportunity for ESO to interact with the Masirah community and give out information on research findings and general environmental awareness. Each team was given the name of a sea turtle that nests in Oman. The football competition was taken very seriously by the participants and was a resounding success. Pitch-side commentary by a local community member included the rather unusual addition of information about turtle conservation as the teams battled it out on the pitch!



This year 12 satellite tags were fitted onto female Loggerhead turtles with the help of SQU students and Masirah residents



SQU Students and ESO's Omar Al Riyami teaching children about the global importance of Masirah's Loggerhead turtles

## Clean Up Activities

ESO organized several beach clean-up activities for different age groups along with the Omani Women's Association (OWA), providing safety kits, collection bags and weighing tools. These activities were also supported by local mosques and volunteers gave explanations of the detrimental environmental effects of littering.



## Publications

Ministry of Education supervisors attended ESO's 3rd Annual Masirah Festival and asked that a sea turtle education kit be provided for future use in schools. These kits have now been completed and will soon be given to the Ministry for distribution.

ESO has also developed and produced a set of awareness publications about sea turtle species in Oman. These include educational posters and signs detailing Masirah's biodiversity and sensitive habitat areas as well as educational booklets about five sea turtles species (Loggerhead, Green, Hawksbill, Olive Ridley and Leatherback), with important tips on environmentally friendly behaviour on nesting beaches.





Women’s Empowerment and Environmental Education (Phase 2)

Following the success of the first phase of this project targeting Muscat, Nizwa, Sohar and Salalah, the second phase of the Women’s Empowerment and Environmental Education Project commenced in 2011 and was funded by the **US Department of Interior (DOI)**. Again the project was implemented in collaboration with the **Majlis Ash’shura** and the **Omani Women’s Association (OWA)** and the main focus of the project was to give women the opportunity to voice environmental concerns affecting their local communities, and share mitigation measures with decision-makers. In addition, the project aimed to equip women with the necessary communication skills to advocate for environmental issues among their communities and with the higher authorities. Phase 2 targeted Sur, Khasab, Ibri and Yankul.

A total of 60 women participated and training workshops in each region were given by ESO along with the Nizwa winner from Phase 1, Thikra Al Moselhi, on conducting background research, gathering data and finally writing a research report on an existing environmental concern in their region and how best to address the problem.

The winning essays were:

- Sheikha Al Salti – Pollution of Drinking Water in the Villages of Wadi Bani Jaber (Sur)
- Mona and Safiyya Al Shehi – Burning of Domestic Waste in the Coastal Villages of Khasab
- Athra Al Shikeli – Drought and the Drying of the Falaj System in Ibri
- Buthaina Al Alawi – The Health and Environmental Impacts of the Gold Mine in Yankul

In April 2012, ESO arranged for meetings with the newly elected Majlis Ash’Shura Chairman and representatives of the four regions to present and discuss their research reports. The women were warmly welcomed and the Majlis was so impressed by the project and topics that a further meeting was arranged with the Health and Social Committee of Majlis Ash’Shura which tackles the environmental issues in the Sultanate in order to take the mitigation measures a step further.

The third phase of this project will tackle two environmental issues raised in the past Phases. The aim is to implement two interventions in collaboration with relevant stakeholders in each region in order to improve the environmental situation and enhance the public health conditions of selected regions which took part in Phases I and II.



A closing ceremony recognising the combined efforts of the individuals and organisations involved took place in May 2012, under the patronage of ESO’s Patron, His Highness Sayyid Tarik bin Shabib Al Said

“Let’s Plant One” Native Tree Planting Campaign

In April 2012, ESO initiated a Native Tree Planting Campaign “Let’s Plant One” in Dhofar between 2012 and 2014 during which more than 12,000 trees will be planted!

This year efforts were focused on creating and maintaining relationships with the local Dhofari community, officials and volunteers. Gatherings, meetings, awareness and tree planting activities were held in different areas to introduce the campaign; stressing on the urgent need to act quickly in order to protect the local ecosystem in Dhofar, reduce desertification and emphasise the importance of planting native species.

During April 2012, ESO board members conducted several meetings and visits with Dhofar based government agencies: Municipality, Ministry of Agriculture & Fisheries, and Ministry of Environment and Climate Affairs. Meetings were also held with **Port of Salalah** and Dhofar based ESO volunteers, helping provide the needed technical and in-kind support to plant trees and prepare awareness lectures in different areas in Dhofar.

Later that week 200 local volunteers as well as volunteers from the **Port of Salalah** and ESO participated in planting 300 frankincense trees in the fenced-in Frankincense Park in Adunab, where irrigation and maintenance will be arranged by the Municipality. Engaging ESO volunteers and investing in their environmental interest to spread knowledge amongst different areas in Oman was one of the biggest successes in this campaign and we would like to acknowledge Majed Akak (winner of ESO’s Volunteer of the Year Award 2012), who took the lead in mobilizing 40 volunteers outside of Salalah to engage communities in the Western areas of Dhofar, namely Thalkut, Rakhuit and Maziunah.

With Ministry of Education collaboration, awareness lectures were given in seven different schools during which over 4000 students attended and 250 students from different age groups participated in planting trees in their areas.

Lead by ESO Board Member Dr Mohsin Al Amri, this campaign will continue throughout 2013 and 2014 during which the remaining 12,000 native trees will be planted in the Dhofar region. We would like to thank the Dhofar Municipality and Ministry of Agriculture and Fisheries for their independent pledge to plant native species in the region and for their help and support in this campaign.



The campaign was opened at the Applied Sciences College in Salalah under the patronage of Sheikh Salem Bin Ali Al Kathiri on “Earth Day” 22nd April, 2012 with guests from the Ministry of Defense, Dhofar Municipality, local community members, and 120 students and lecturers who planted 80 native trees on the college premises that day.



## Socioeconomic Training of Omani Women on Handicraft Techniques

Masirah Island was identified as an Important Bird Area (IBA) in 2001 and is the second biggest nesting area in the world for Loggerhead turtles. It is also home to four other turtle species and its waters host to endangered whales as well as dolphins. This makes the Island rich in biodiversity and the project gave ESO the opportunity to show the locals that they can benefit financially from the conservation of these important species.

### Working with The Oman Women's Association

In December 2012, and as part of the Egyptian Vulture Project sponsored by **The Hima Fund**, ESO aimed to target the women of Masirah to raise awareness on biodiversity as well as provide the women with training that could lead to business prospects for the women of the island.

For this specific project ESO aimed to:

- Develop a relationship between the local community and their surrounding environment by creating positive interactions
- Develop the potential for a sustainable income generating project for the local community, where they can improve their livelihoods while working towards protection of their local environmental resources
- Develop Omani women's vocational skills in the local community to reach certain level of proficiency.

This community based incentive links conservation to livelihoods development by recognizing the role and values of women in environmental conservation. The results include an increase of their local knowledge and a reinforcement of their traditional practices.

The Royal Society for the Conservation of Nature (RSCN) is considered to be a pioneer in the field of environmental socioeconomic projects in the region and in December 2012, ESO in collaboration with RSCN and the Masirah-based Oman Women's Association (OWA), designed and developed two vocational training programs for the women of Masirah:

- Recycling paper and packaging: for the first time in Oman the trainees used handmade recycling techniques with environmentally friendly materials to produce paper and developed different products using materials locally available on the Island
- Silkscreen printing: trainees used handmade printing techniques to print on the recycled paper and other surfaces.



### Training Program

Attendance at the 2-week training program exceeded expectations and, although the training program initially had 17 women registered, by the second day of the training program there were a total of 23 trainees.

Having worked in similar socioeconomic projects, the RSCN trainers were well equipped to successfully lead the training program and keep the trainees motivated throughout. In addition to the printing and recycling skills earned, the women benefited from obtaining communication and teamwork skills – an added benefit of the program.

During the recycling training, 12 women from OWA in Masirah used waste paper to produce recycled paper and develop various products including; notebooks, pens, greeting cards, frames, 3D moulds and key chains. The trainers took a participatory approach to the planning and received ideas from the women through discussions on their culture and their relationship with their local environment. Through these discussions, henna and squid ink were then used as natural dyes.

During the silkscreen print training, 11 ladies from OWA were trained to print on recycled paper as well as T-shirts, and drinking glasses. The designs used were reflective of their local biodiversity including Egyptian vultures, Loggerhead sea turtles, whales and dolphins.



### A Success Story!

The training programs were complimentary and through both recycling materials and silkscreen printing techniques, the women were successful in developing locally produced products which are marketable and could potentially lead to income generation. Additionally, using species from their local environment gave the women a sense of ownership of their local environment.

The success of the program is attributed to the level of commitment of the trainees and on the last day the women organized a local exhibition of the training to showcase the products that were produced in the attendance of the Wali of Masirah, Al Sheikh Sulaiman bin Salim Al Mahraki, the Royal Flight and the local community.

ESO will continue to work with this group of women to ensure that they are able to market their products to tourists and companies. However, it is hoped that they will continue to use these skills to produce and sell handicrafts independently, making this program a true ESO/OWA socio economic success project!







National Competition winners

## Oman's First Inter College Environmental Public Speaking Competition

As part of ESO's role in supporting youth development in Oman it is our belief that developing effective and unique communicators, able to influence the community will positively to serve the Omani environment. In 2012 ESO joined hands with the Emirates Environmental Group (EEG) to become strategic partners and held the Inter-College Environmental Public Speaking Competition sponsored by Bank Sohar, in November 2012, for the first time in Oman under the patronage of H.H. Sayyida Muna Bint Fahd Al Said. Winners of each category would travel to Dubai for the Regional Speaking Competition organised by EEG.

Through the Inter-College Public Speaking Competition, an open challenge was thrown to the student community. Students were invited to build and present strong cases on contemporary issues and questions relating to the environment. A distinguished panel of experts were invited to evaluate the performances of the participants.

The participants were able to present in either Arabic or English on the following subjects:

- **Role of Social Media in Protection of the Environment:**

Overall Winner: College of Higher Technology (Sulaiman Al Rahbi, Amal Al Mamari, Al Khalil Al Rahbi and Manahel Al Qarneih)

- **My Climate My Responsibility:**

Winner: Sultan Qaboos University, College of Agriculture (Bushra Al Kindi and Aisha Al Shuaibui)

- **Every Drop Matters:**

Winner: Nizwa University (Huda Bakheet Sulayem AlYaqoobi, Maha Al Alawi, Huda Al Hatemi and Zahraa Al Ghaferi)

- **Effects of Consumerism on the Environment:**

Winner: Sultan Qaboos University, College of Science (Ahmed Al Rawahi, AbdulBari Khalfan, Haitham Al Rawahi, Ahmed Al Sudairi and Omar Al Husni)

Following the success of the National Competition, ESO held workshops for the winning teams to enhance their design and presentation skills for the Regional Competition held in Dubai.

The winning teams traveled to Dubai with ESO representatives to participate in the Regional Public Speaking Competition hosted by EEG where they competed again 58 teams from the UAE, Saudi Arabia, Qatar and Bahrain.



HE Mohammed Al Tobī, Minister of Environment and Climate Affairs meets the winning teams



Oman's team from Nizwa University wins the category of 'Every Drop Matters' at the Regional Competition

## Awareness Signs at the Damaniyat Islands

Following the success of the ESO and Oman Sail clean up in 2011 and with the remaining funds raised by Oman Sail staff members, bilingual public awareness signs about the biodiversity and environmental stewardship of the Damaniyat Islands. The Islands are the only Marine Protected Area in the Sultanate and with the approval of the Ministry of Environment and Climate Affairs, 5 awareness signs were placed on Jebel Kabeer, Qismah, Joon and Kharaba.



## Earth Hour 2012

2012 was the third year that ESO joined the global initiative of Earth Hour to demonstrate concerns about the future of our planet by doing something simple, yet remarkable – turning off lights for one hour on the last Saturday in March at 8:30pm. This year, with the slogan "Switch Off to Live On", we were proud to partner with **Sohar Aluminium** (Gold Sponsor), **Towell Engineering** (Silver Sponsor), **National Bank of Oman**, **Petroleum Development of Oman**, and **Muscat Pharmacy** (Bronze Sponsors).

ESO was honored that the **Royal Opera House Muscat**, **Grand Mosque** and **Sultan Qaboos University** also joined in the initiative and turned off all non-essential lighting. Special support was also received from The Crowne Plaza Muscat who held an outdoor event for their hotel guests and ESO sponsors to celebrate Earth Hour.

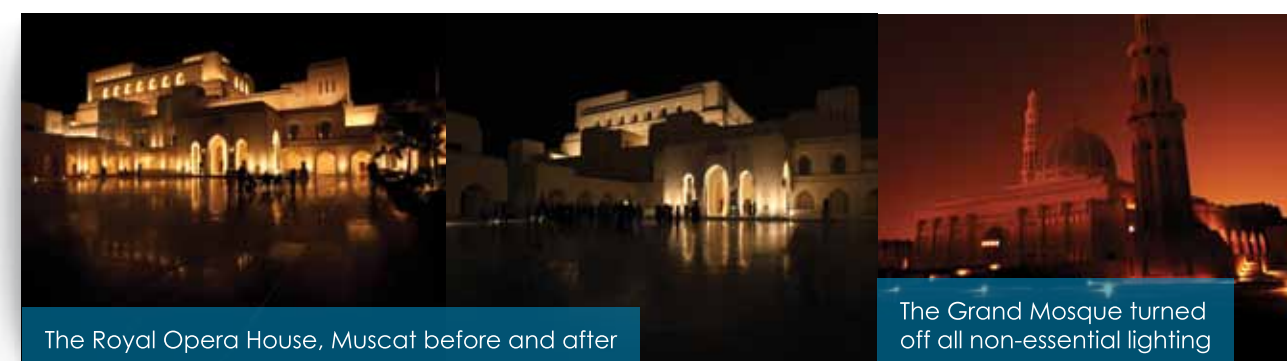


26 Schools participated in ESO's Energy Saving Competition Al Qala'a Elementary School won by saving 48% more electricity in March 2012 compared to March 2011

This year we reached out to 52 schools where more than 10,000 students participated by receiving awareness material and taking part in art competitions. Over 100 pieces of artwork were received and prizes were donated by Mustafa Sultan Enterprises, Photocentre and WH Smith. Winners were Aatika Rashid Al Rawahi (Al Awala for Basic Education), Idrees Khalid Al Sabti (Al Shama'il For Basic Education), Maimona Mustafa (Dorat Al Khaleej Private School) and Turkya Aarif Al Raisi (Dohat Al Adab School).

6 weekly ads were published in Muscat Daily and Al Isbou'a newspapers as well as The Week and 10 different awareness posters were distributed among universities, colleges, companies and government offices. In addition, awareness messages were sent electronically to all staff members to 13 ministries, 10 universities and colleges, and 22 companies. Support was also given by Oman TV and Omantel.

In total, over 120 organisations committed their support to ESO's Earth Hour 2012 and we were able to calculate that during 2012's Earth Hour we saved 53,430 KWh of electricity, an increase of 265% from our 2011 calculations! This is enough power to provide electricity in 1000 homes for one hour.




The Royal Opera House, Muscat before and after


The Grand Mosque turned off all non-essential lighting




# Capacity Building Program



**Shukran for taking part  
in Earth Hour.**






On 31<sup>st</sup> March 2012 we were able to save

# 53,430KWh


in one hour, which is enough power to operate  
over 1,000 houses for five whole days.

**Gold Sponsor:**






SOHAR  
ALUMINIUM

**Silver Sponsor:**





Towell Engineering


**Bronze Sponsor:**







**Media Sponsor:**

**Supported by:**



[www.eso.org.om](http://www.eso.org.om) | [earthhour.org](http://earthhour.org)

## Oman LNG LLC ESO's Capacity Building Partner

ESO has been steadily growing over the last six years and it remains our goal to train Omanis in the field of environmental conservation. Due to natural attrition and as NGO employees are unable to secure bank loans, local employees are often recruited to other organizations seeking to improve their environmental capabilities. In 2011 we found ourselves faced with a major restructuring of staff in order to keep up with the growing responsibilities and projects that ESO has and wants to continue taking on.

It was agreed by the ESO Board that a central part of ESO's mandate would be to train Omani graduates in conservation strategies and NGO and community involvement before joining Oman's workforce and give them an opportunity to pursue a career with ESO. However, there was a shortfall in funding between the administrative costs that are brought in from project funding, and the running costs of the Society.

In March 2012, **Oman LNG LLC** became ESO's Capacity Building Partner in order to help cover this short fall with a five-year commitment to funding, allowing the Society in turn to successfully increase all project capabilities, increase community outreach programs, increase volunteer involvement and start an Omani Graduate Training Program.

Since receiving the **OLNG** funds in April 2012, ESO has speedily been making progress in the area of capacity building. To date seven employees have been hired and trained, giving ESO the much-needed support and administrative assistance it requires, in order to further plans for an increased number of research, community outreach and education projects in Oman. In addition, the funds have enabled ESO to reach out more effectively and engage with the public, as well as the various official bodies.

ESO is very grateful for the **OLNG** support, and eagerly anticipate the upcoming phases of collaboration, which will enable the Society to further establish itself as an effective organisation dedicated to nature conservation and raising awareness in Oman. The ESO/OLNG Capacity Building Partnership is fulfilling our ultimate aim of becoming an independent, self-sustaining organization, run by professional and qualified local citizens, safeguarding Oman's natural heritage.

## Omani Training Program

Although graduates are trained in a specific area of NGO management, each leave the training program with experience in the following areas:

- NGO Management
- Project Management
- Conservation Management
- In-field Research Experience
- Community Outreach
- Awareness Raising
- Volunteer Management





### Omar Al Riyami

Omar graduated from Sultan Qaboos University (SQU) in 2008 with a Bachelor's Degree in Marine Sciences and Fisheries. He joined ESO in 2009 as Marine Projects Assistant at a time when ESO only had 2 staff members and since then has taken over Volunteerism and Membership. However, Omar's passion is working with local communities and schools and he has recently taken over as Community Outreach Manager.

Omar has attended most ESO-Governmental meetings and is well known by the Ministry of Environment and Climate Affairs, Ministry of Education, Ministry of Fisheries and Agricultural Wealth, as well as by government agencies in Sharqiya and Dhofar Regions. He has presented ESO's report on plastic bags to the Muscat Municipality and has led workshops in this area. He has represented ESO on countless occasions and attended training and workshops including a 6-week Parks, Biodiversity and Ecotourism in the United States and the IUCN Red List workshop in Jordan. Most recently Omar was chosen by UNESCO to attend and represent ESO at the 40th Anniversary of the World Heritage Convention in Kyoto, Japan (details on page 39).



### Asma Al Balushi

Asma graduated from Sultan Qaboos University (SQU) in 2011 with a Bachelor's Degree in Marine Science. She was recruited for the position of Projects Management Coordinator and has been with ESO since March 2012, assisting in consultant management, proposal and report writing, securing scientific research permits and liaising between ESO's Muscat and Masirah offices. Asma has proved to be an asset and has represented ESO in many workshops as well as government and scientific committee meetings. A manuscript reporting results of the survey of Egyptian vultures on dumpsites in Oman has been accepted for publication in the regional ornithological newsletter, Phoenix, with Asma as the first author!



### Suleiman Al Salmi

Suleiman graduated from Salalah College of Applied Sciences. He was recruited for the position of Community Outreach and Education Coordinator and worked for ESO for six months before leaving in September to further his studies in Lincolnshire, UK.

In addition to community outreach training, Suleiman also attended a 6-week program in the United States in the summer of 2012. The Acadian Internship in Regional Conservation and Stewardship Program saw Suleiman working hands-on in field assignments working with other international stewards. The program focused on conservation and natural resource management as well as landscape conservation practices. Suleiman learned how to survey and monitor wildlife, record and document flora and fauna, learn about conservation techniques and write management plans.



### Sawsan Al Husaini

Sawsan has been working with ESO for 2 years as a part time Public Relations Officer and Administrative Assistant. ESO has committed to ensuring Sawsan has the necessary training to be able to move to administrative work on a full time basis and she is an asset to the Society.



### Juma Al Araimi, Ghasi Al Farsi and Juma Al Humaidi

Juma, Ghasi and Juma have been working for ESO since 2009 as part time field assistants in Masirah. Although they were initially recruited and trained by ESO to help with field surveys of Loggerhead turtles, their contributions have been unparalleled in terms of creating ties with the local community in Masirah. They were working only part time and on a seasonal basis (May-Sept) during the turtle nesting season and have now been working full time with ESO for a year, assisting in the field with our Turtle Conservation, Renaissance Whale and Dolphin Project and Egyptian Vulture research. They are also co-authors on a manuscript sent to the regional ornithological newsletter, Phoenix, reporting the results of the Egyptian vultures at Oman's dumpsites! Not only have the field assistants been trained in field surveying methods, they have completed computer, English, typing, bird identification and ringing, and whale and dolphin identification courses. They have worked with experts from Bulgaria and the UK and in October accompanied ESO's whale and dolphin research team on their surveys to Hasik and Masirah.





# Other Activities

## ESO Wins Riyada Award for Best Civil Society Institution of the Year 2012



In December, ESO won the Riyada Award for best "Civil Society Institution for the Year 2012." Riyada is an award for Civil Society Leadership to empower Civil Societies in Gulf Countries. The Award was inceptioned nationally in 2009 by Tawasul Global Connections Center (Tawasul) and contributes towards supporting the vision of His Majesty Sultan Qaboos, who emphasized that development is not merely pursuit of wealth but requires active civic participation.

The awarding process was based on both jury evaluation as well as online voting and we would like to thank our members and others who voted for their continued support.

## ECO BOWL 2012

14 corporate teams competed in ESO's 1st annual bowling competition aiming to raise funds for ESO. Taking first place with an unbeaten 1209 points was Sohar Aluminium, second prize went to National Bank of Oman (NBO) with a close 1203 points and third place to Port of Salalah with 1181 points. Prizes were provided courtesy of **Nawras, Al Bustan Palace Hotel, Khimji Ramdas, Sahab Hotel** and **Desert Nights Camp**. We would like to thank all the companies who participated and look forward to the 2013 rematch!



## Volunteer of the Year Award 2012

The ESO Volunteer of the Year Award recognizes and celebrates the outstanding efforts of our volunteers. It's our way of thanking them for their generous hours and services throughout the year. The award of the Volunteer of the Year 2012 went to Antónia Végh in Muscat and to Majed Aakaak in Salalah.

Antonia's contribution in the Tree Planting project and educational booklet, the Earth Hour event, the Public Speaking Competition and the Socio-Economic Training in Masirah were of great help. The impact of her long-term support to the development of these projects was of high quality.

Our 2012 activities and events could not have been a success without Antonia and Majed's contribution and the time, expertise and efforts of all our volunteers and members.



Majed's commitment the Tree Planting in Salalah project essential to make it happen. He recruited and managed volunteers on site, looked after logistic and legal matters necessary to the proper implementation of the project. His dedication and professionalism were outstanding



## ESO Advised Environmental Curriculum Document Approved by Ministry of Education

Since its inception, ESO has strived for environmental education to be considered as part of Oman's national school curriculum. In 2007, and in association with Shell Marketing Oman, ESO provided guidance, advice and expertise on reviewing the current curriculum and identifying environmental education gaps. We are proud to announce that in 2012 this document was approved by the Ministry of Education and was launched officially in December 2012 under the auspices of HE the Minister of Environment and Climate Affairs. The curriculum is considered a landmark achievement of marked prominence on all scales, nationally, regionally and internationally.

It embodies the true spirit of partnership, amongst all sectors, public, private and civic in joining ranks to help address the root causes of environmental degradation and concerns linking it to education at early stages and throughout from Grades 1-12.

The main achievements arrived at by developing this document, are the following:

- The formulation of area specific concepts of environmental education for sustainable development.
- Conducting analytic study of current, different books and curricula relating to the teaching of languages (both Arabic and English), life skills, Religious Education, Social Studies, Math, Science (Chemistry, Physics, and Biology), Science and Technology, and finally Science and Environment.
- A summary of the analytic study for each subject that spells out the recommendations on how to develop the existing curricula so as to enhance the environmental dimension.
- The inclusion of the environmental composition in all curricula within one unified matrix that articulates the vertical oneness in each subject matter and synchronizes with the horizontal build up between the subject matters in each cycle of study.
- Prepares a matrix that explains the degree of proximity for each subject matter to one environmental concept supported by empirical examples.
- Prepares a matrix that explains objectives of each subject within the education material and to all cycles that would eventually help curriculum designers to set their objectives or the needed environmental outputs for inclusion while developing the curricula.
- There are 10 prototype booklets waiting to be printed as supplementary materials for teachers to emulate and replicate. There will also be lesson plans for teachers to use as guidelines.
- There shall be a stage two of capacity building, follow up and teacher training to be organized soon funded by Shell with partnership of ESO as well as MECA.

Although it took some six years for this watershed accomplishment to be launched, but it was all worth the long wait and ESO is certainly insurmountably proud to have been involved and follow through with this partnership.



Awards, Grants and Donations

ESO would like to give special thanks to all those who have helped us achieve our goals in 2012. These donors, sponsors and grant agencies are listed below in order of the date of donations:

- **Ajit Khimji Group LLC** for free office space
- **Oman LNG LLC** for Capacity Building Program
- **Apex Publishing** for their continued support
- **HSBC** for Frankincense Project
- **Hima Fund** for Egyptian Vulture Project
- **Marine Turtle Conservation Fund** for Turtle Conservation Program
- **US Southeast Fisheries Wildlife Service** for turtle conservation
- **Renaissance SAOG** for Renaissance Whale and Dolphin Project
- **International Whaling Commission** for sustainable whale watching
- **Zahara Tours donation**
- **Drums of India Concert** donation
- **Rahul Khimji** donation
- **Becky Evans & Svanika Bala** donation
- **Carillion Alawi and Oman Sail Staff** for installation of Damaniyat Island awareness signs
- **US Department of Interior** for Women's Environmental Education and Empowerment Project
- **Sohar Aluminium, Towell Engineering, Muscat Pharmacy, National Bank of Oman, Petroleum Development of Oman,** and **Crowne Plaza Muscat** for Earth Hour 2012
- **Muscat Daily, Al Isbou'a and The Week (Apex Publishing)** for media support during Earth Hour 2012
- **Merge FM and Wisal FM** for support during Earth Hour 2012
- **Mustafa Sultan Enterprises LLC, Photocentre and WH Smith** for prizes during Earth Hour 2012
- **Port of Salalah** for use of their premises and engagement of volunteers in Tree Planting Campaign
- **LG Electronics** for providing transport during bus tour for Inter College Environmental Public Speaking Competition
- **Bank Sohar** for Inter College Inter College Environmental Public Speaking Competition
- **Nawras, Khimji Ramdas, Desert Nights Camp, Sahab Hotel and Al Bustan Palace Hotel** for ECO BOWL 2012 prizes
- **Riyada Award** for Best Civil Society Institution of the Year

International Conferences Highlights

Rio 20+ Conference, Rio de Janeiro, Brazil (June 2012)

We are proud to announce that ESO was accredited by the UN General Assembly to attend the Rio+20 Conference in Rio de Janeiro and it was attended by ESO's Vice President Dr. Mehdi Jaaffar.



Dr. Mehdi Jaaffar, ESO's Vice President (left) represented ESO at Rio 20+

The conference commemorated the UNSD in Rio in 1992, twenty years ago, and 40 years from the first global UN summit held in Stockholm in 1972. It was the largest of UN organized events with nearly 50 thousand delegates representing States, NGOs, and UN organizations.

The final result declaration of Rio +20 was the negotiated document labelled "The Future We Want" comprising of 89 pages and 253 items addressing Sustainable Development, Green Economy and Environmental Governance.

ESO's general appraisal of the final document is that it in many ways failed to meet world expectations and evaded many of the central issues. The language simply reiterated existing commitments and lacked implementation mechanisms. Many of the issues were referred to the UN General Assembly where little progress is expected. Unfortunately, the issue of biodiversity and sustainable use of high seas was blocked by the US, allied by few other countries and is still open for deliberation.

In short, Rio +20 was another lost opportunity for the Global Community to address and take actions to avert further catastrophic deterioration. However, not all is lost as the march for a breakthrough continues, and many have not given up hope, particularly the Global NGO movement who will continue their fight and struggle for a better world for our generation and the generations to come.

International Whaling Commission, Panama City, Panama (June 2012)

ESO was represented at the Scientific Committee Meeting of the annual International Whaling Commission (IWC) assembly by ESO Member and Volunteer, Robert Baldwin. Oman is the only IWC member country in the Arabian Peninsula and just one of two members (with India) in the Northern Indian Ocean (NIO). Oman also has the most established and intensive cetacean research program in the entire NIO. Indeed, the majority of research ever conducted on cetaceans in this region comes from Oman. Our research continues to reveal that the region hosts a very unusual cetacean fauna, largely due to its geographic position (the northern Indian Ocean is the only ocean basin without a direct link to rich polar feeding regions) and oceanographic conditions (e.g. the annual upwelling associated with the monsoon). There is, therefore, a very strong interest among the international scientific and conservation community about the cetaceans of the region, as well as their habitat.

The IWC has formally recognized the need for a Conservation Management Plan (CMP) for the Arabian Sea Humpback whale with the aim of the CMP being to find ways to enable effective conservation of whales whilst at the same time allowing the continuation of essential activities such as fisheries, shipping and recreation.



ESO was proud to send Omar Al Riyami (back 5th from left) as ESO ambassador to Kyoto

UNESCO World Heritage Youth Program, Kyoto, Japan (November 2012)

As part of the 40th anniversary celebration of the Convention Concerning the Protection of the World Cultural and Natural Heritage, the Ministry of Foreign Affairs of Japan and Ritsumeikan University organized a youth program with the cooperation of UNESCO World Heritage Centre.

The Youth Program was attended by ESO's Omar Al Riyami and aimed to promote youth exchanges among international youth involved in the world heritage, as well as to contribute to the Closing Event of the 40th Anniversary by the World Heritage Convention by providing "Youth Statement" from the future generation.



UN Climate Change Conference – COP18/CMP8 (December 2012)

The United Nations Framework Conventions on Climate Change (UNFCCC) is an international treaty that was ratified in 1992. The Convention established a long-term objective of stabilizing greenhouse gases concentrations below harmful levels and set a voluntary goal for developed countries of reducing emissions to 1990 levels by 2000, but contained no mandatory limits. Recognizing that stronger actions were needed, participating countries negotiated the Kyoto Protocol to the UNFCCC in 1997.

ESO's Vice President, Dr. Mehdi Jaafar, attended the Conference of the Parties (COP) to the UNFCCC which convenes annually to enable environment ministers from around the world to discuss developments in the Convention and coordinate international actions to combat global warming. This year's meeting was the 18th, hosted by Qatar, organized by UNFCCC secretariat between Nov 26th and Dec 7th 2012. Nearly 17,000 participants from more than 190 countries, as well as international institutions, businesses, NGOs and the media were very much present.

Conferences, Lectures and Workshops attended in 2012

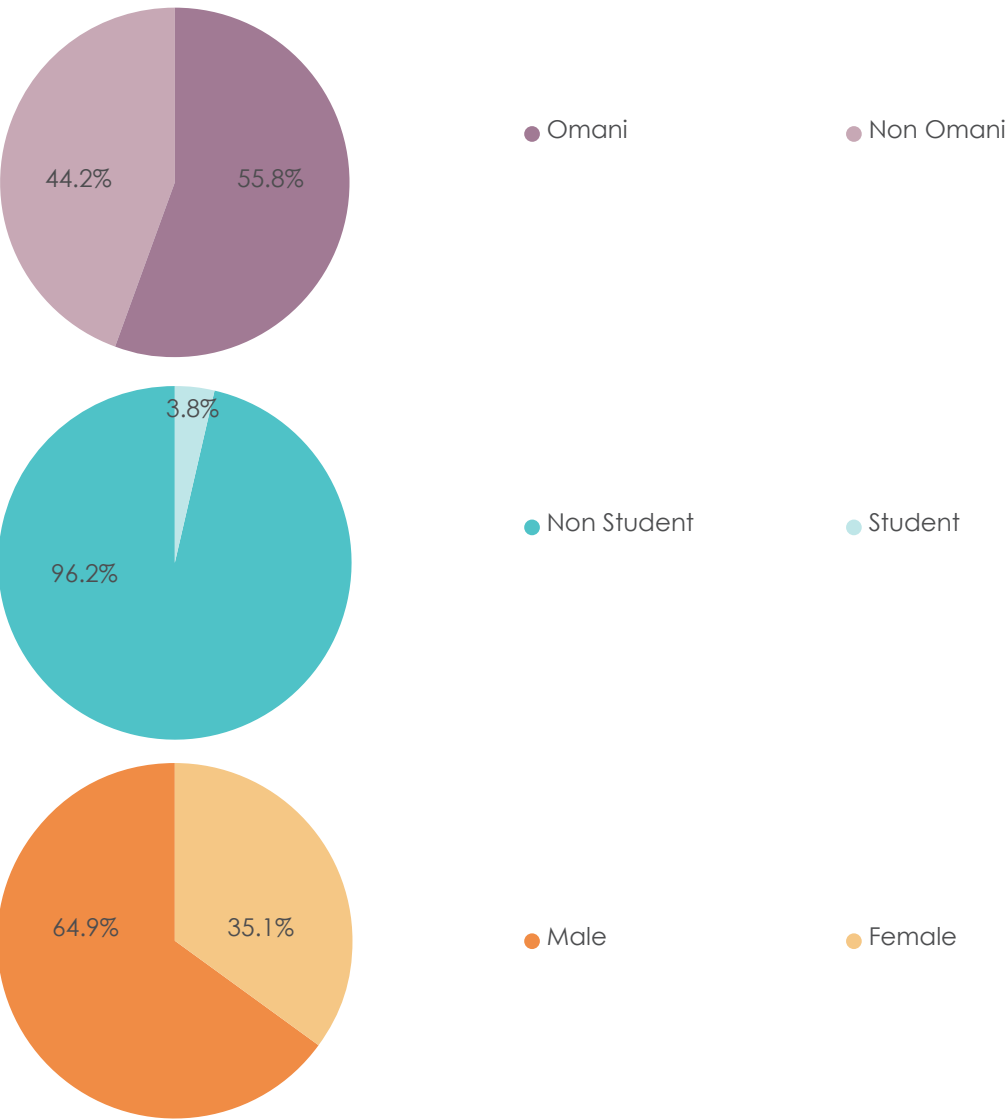
ESO is represented by staff and board members at national, regional and international conferences and workshops. Below is a list of those attended in 2012:

- International Whaling Commission, Scientific Committee meeting, Panama City, Panama
- Regional Technical Workshop for the Local, National and Regional Biodiversity Rapid Assessment Project, Abu Dhabi, UAE
- The United Nations Conference on Sustainable Development: Rio +20, Rio De Janeiro, Brazil
- Climate Change COP 18, Doha, Qatar
- Youth Programme for the Closing Ceremony of 40th Anniversary of World Heritage Convention, Kyoto, Japan
- Arab Expert Meeting on Institutional Development and Environmental Governance, Jeddah, Saudi Arabia
- Arab League & Regional UN Organisation ISKWA, UNESCO, UNEP, UNDP & regional networks and civil societies, Cairo, Egypt
- Civil Societies in the Arab Region for Sustainable Development
- North Africa and MENA Region Civil Societies for Green Economy, Tunisia May
- Shorebird Migration Routes, CESAR, SQU, Muscat, Oman
- Arab Environment Day Conference, CESAR, SQU, Muscat, Oman
- World Environmental Day Conference, CESAR, SQU, Muscat, Oman
- Cultural and Spiritual Rapprochement Week, HM Sultan Qaboos Centre for Islamic Culture (jointly organized with Jordan), Muscat, Oman
- FAO and Arab Society for Nature Workshop on Food Safety and Security, Beirut, Lebanon
- The Kingdom of Netherland's Official Deliberation on Social Economic Common Interests, Muscat, Oman
- Birdlife Middle East Partnership Conference, Kurdistan, Iraq
- Coastal Zone Management Workshop, Muscat, Oman
- MECA Ballast Water Management Workshop, Muscat, Oman
- Ethics and the Environment Lecture, Modern College of Business & Science, Muscat, Oman
- Evaluation and Feedback on Shell Marketing CSR programme, Muscat, Oman
- Sustainability Workshop & Conference, British School Muscat, Muscat, Oman
- Ecological Footprint School Workshop, Buraimi, Oman
- RIMA Petrogas HSE Day, Muscat, Oman
- Sustainable Architecture Lecture, SQU College of Engineering, Muscat, Oman
- Development of Wildlife Rangers (MECA), Muscat, Oman
- Oman Environment Day Exhibition, Oman
- Quriyat Environmental Event, Quriyat, Oman
- World Wetland Day – Mangrove Planting, Qurm, Oman
- Sawt Al Tanmia Group Environmental Event, SQU, A'Sahwa Park, Muscat, Oman
- Sultan School Charity Day, Muscat, Oman
- Oman Women Guild Open Day, Muscat, Oman
- Mangrove Tree Planting for BSM and ABA Scouts, Muscat, Oman
- World Environment Day, SQU, Muscat, Oman
- Mercury Committee Meeting, MECA, Oman
- Plastic Bags Meeting, MECA, Oman
- Waste Management Conference Preparation Team, Muscat Municipality, Oman
- Committee for Usage of Wastewater, Ministry of Regional Municipalities and Water Resources
- Committee for Biotechnology, Research Council, Muscat, Oman
- Planning Team for Terrestrial Mammals Research Project
- Ranger Training Workshop, Sharqiya, Oman

Membership

Individual Membership

As of December 2012 there were a total of 810 ESO individual members. The charts below show percentages of Omanis, students and male vs female members.





## Coporate Membership

ESO is grateful for the support of all our corporate members below (in alphabetical order)

- Ajit Khimji Group of Companies
- Alargan Towell Investment Company
- Al Mashriq International Engineering Consultancy
- Al Reef Real Estate Co. LLC
- Bank Muscat
- Carillion Alawi
- Electricity Holding Company SAOC
- Ernst & Young
- Gulf Triangle Industries LLC
- Haya Water
- Lamor Clean Globe Oman
- Maqshan Oil & Gas Services (SAOC)
- Muriya Tourism Development
- Muscat Electricity Distribution Company
- National Bank of Oman
- Nawras
- Oman Environmental Services Holding Company
- Oman Investment & Finance Company SAOG
- Oman Solar Systems Company LLC
- Omran
- Oman Trading International Ltd.
- Petroleum Development of Oman
- Port of Salalah
- Port of Sohar
- PricewaterhouseCoopers
- Shell Development Oman
- Shell Oman Marketing Services
- Sohar Aluminium
- Towell Auto Center LLC
- WS Atkins International Co. LLC

## Affiliations with International Organisations

- United Nations Environmental Program (UNEP)
- United Nations Educational, Scientific & Cultural Organisation (UNESCO)
- International Union for the Conservation of Nature (IUCN)
- Indian Ocean Research & Conservation Association
- US Fish & Wildlife Service
- Middle East Partnership Initiative
- Wildlife Conservation Society
- Birdlife International
- Bulgarian Society for the Protection of Birds
- Emirates Environmental Group
- Emirates Wildlife Society/WWF
- Ford Foundation
- National Oceanic & Atmospheric Association
- Sackler Institute of Comparative Genomics, American Museum of Natural History
- University of Stokholm
- University of South Wales
- School of Biological Earth and Environmental Sciences
- Durham University



# Acknowledgements

There are many people we wish to thank for their support, hard work and dedication to ESO:

First and foremost special thanks go to ESO Patron, HH Sayyid Tarik bin Shabib Al Said, who has always supported the Society and has been instrumental in its success.

ESO Staff are the backbone of the Society and its work and we thank all that have come and gone over the years. They have all made a lasting difference and will always be remembered. We would especially like to thank Maia Sarrouf who established the position of Projects Manager, Dima Radhwan who worked tirelessly on establishing our community outreach and education projects and Bassma Rasasi who ensured our strategy was moving in the right direction.

The Ministry of Environment and Climate Affairs, Ministry of Agriculture and Fisheries Wealth, the Ministry of Education and Ministry of Social Development have always been staunch supporters of ESO and we thank them for their guidance and understanding of our work.

None of ESO's work would be possible without much needed funding from our Corporate Members, Sponsors and Supporters. We thank all of them and hope that their generosity will continue for years to come.

ESO Members are the Society's ambassadors and we thank every one of our dedicated members for coming to events, dedicating their time and supporting the conservation of Oman's environment.

Oman's media have been extremely supportive in making our efforts public and ESO would like to thank all media houses for their continued coverage of our projects and successes. Special thanks goes to Apex Publishing who have given free advertising space to ESO over the last three years for which we are extremely grateful.

## Volunteer Acknowledgements

Volunteers are a very important part of our research projects. In particular Antonia Vegh who won the ESO Volunteer of the Award and is in the ESO office all day every day helping with research and administration work. Majed Akaak who made the tree planting campaign this year a success and also recipient of the ESO Volunteer of the Year Award. Robert Baldwin, who works tirelessly to ensure our conservation programs for both cetaceans and turtles are of the highest quality and is always at ESO's disposal for advice.

Andy Willson who is in the field most of the year working on marine projects and writes the most amazing Whale Diaries! Corrine de Zeeuw who has helped with establishing work on dolphin watching guidelines; Shaima Al Humaidi for representing ESO in different exhibitions and updated our membership database; Sara Stanton for helping with data entry for our accounts; Sukaina Kazmi for archiving press clippings; Carol-Anne Logan for helping to print membership cards; Sneha Ganjoo for researching and developing educational materials for e-waste; Ruqaya Al Jabri for archiving Earth Hour administrative documents. Antonia Vegh for her wonderful help with Earth Hour, public speaking competition, Masirah socio-economic project, tree planting campaign, and help with project accounting and data entry.

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Last but not least we would like to thank ABA students Rahul Khimji, Becky Evans and Svanika Bala for their donation to ESO through fundraising efforts.

**Thank you to all our volunteers without whom our work would not be possible.**



Arabian Sea Humpback Whale



# Conclusion

The last year has shown ESO to be a professional, hard working organization capable of producing internationally acknowledged research and results.

Local field assistants have been trained to conduct fieldwork within our scientific research programs, ensuring the sustainability of these projects. Oman LNG LLC has partnered with ESO to allow the growth of our organization to include training young Omanis in the field of environmental conservation and civil society management.

Community outreach programs have increased and we have worked with women in advocating for environmental issues, tree planting campaigns, electricity saving awareness, and socio economic programs.

ESO's projects are wide ranging and cover environmental education as well as terrestrial and marine research, making the Society a leading player in Oman's conservation strategy. We continue to advise on matters concerning the environment and sit on both governmental and private steering committees. The Society has also been asked to lead discussions and represent all regional (West Asia) environmental NGOs at United Nations meetings and we are a proud member of the International Union for the Conservation of Nature. In addition, we have attended and been considered a regional leader at international conferences such as Rio+20 and COP.

His Majesty Sultan Qaboos bin Said has always encouraged Oman's leadership in the field of environmental protection. Under his leadership, civil societies in the Sultanate have flourished and our relationship with His Majesty's government, primarily The Ministry of Environment and Climate Affairs, will enable ESO to have a positive impact on Oman's natural heritage.



Wadi Arbiyeen, TS Al Said