The First International AEHMS Conference of

The State of

The Gulf Ecosystem:

Future and Threats

March 5-7, 2006

UAE University
Al Ain
United Arab Emirates

Organized by

The Aquatic Ecosystem Health and Management Society (AEHMS), Canada
&
United Arab Emirates University, Al Ain
Background:
The Gulf is one of the world’s harshest environments. It is a semi-enclosed, shallow body of water located in the midst of the arid landmasses of Iran and Saudi Arabia, Kuwait, Oman, Qatar, and the United Arab Emirates (UAE). With a mean depth of 36 metres, much of its waters are within the photic zone. The turnover or flushing time of all the water in the Gulf is 3 to 5 years. Further natural stress originates from several factors, including normal seepage of underwater oil fields that account for approximately 10% of chronic spillage. Consequently, the Gulf's contained environment makes it a natural repository for pollutants. It has also been subject to a wide range of human perturbations.

The integrity of the Gulf marine ecosystem could be compromised, in particular from the impacts of unprecedented coastal reclamation, oil exploration, production and transportation. The most recent environmental impact arose from the effects of the 1991 Gulf War. An estimated 10.8 million barrels of oil were released into the Gulf environment. Additionally, an estimated 8 million barrels of smoke emitted from over 720 oil well fires in Kuwait dropped into the Gulf, doubling the size of the oil slick.

Moreover, the integrity of the Gulf terrestrial ecosystem faces various challenges such as loss of biodiversity of both faunal and floral, soil degradation, sediment and nutrient loss. The sharp declines in plant life, the encroachment of invasive species and overgrazing are some of challenges that need to be addressed. The stress on the Gulf terrestrial ecosystems is further aggravated due to the harsh environmental conditions facing many parts of the region.

The modern strategic importance of the Gulf originated in the mid-19th century. The Gulf region contains more than 60% of known world oil reserves. Since World War II the area has been developed and modernised. Over the past century the traditional life style of the region has been affected markedly by outside intervention and extremely rapid modernisation processes. In addition to increased prosperity and living standards, this has generated considerable stress on both terrestrial and marine environments of the region.

Therefore, a comprehensive and integrated action plan is needed to minimize the rate of anthropogenic effects on the Gulf ecosystems.

Objectives:
In spite of the strategic importance of the Gulf region in world economy, not much was known about the environmental and ecological habitat of the Gulf and its management. Consequently an international Workshop “The Gulf Ecosystem: Health and Sustainability” was convened, co-sponsored by the Kuwait Institute of Scientific Research and the Aquatic Ecosystem Health and Management Society (AEHMS) in May, 2000. The Workshop resulted in the publication of a peer reviewed book published under the Ecovision World Monograph Series in 2002 by Backhuys Publishers, The Netherlands. The Gulf book was quite useful in increasing the understanding of the resources, systems, ecosystem health, climate and integrated information base of the
Gulf ecosystem for use by the researchers, managers and academia. The published book focused on the data and information collected in the early 80s and 90s. However, more than a decade has passed without any follow up effort to re-assess the rapidly changing ecosystem health of the Gulf in an integrated fashion. Discussions between AEHMS and the UAE-University in Al Ain, represented by Biology Department and Research Affairs Sector, precipitated the initiation and organization of the first International symposium early in 2006. The Al-Ain conference will to focus on the following aspects:

- Enhancement of environmental and ecological awareness of the Gulf in the light of its continued exposure to intensive anthropogenic stresses and exploitation.
- Adoption of integrated, ecosystemic, multi-disciplinary, multi-trophic and holistic approaches in science and management
- Provision of possible remedies for problems associated with oil and gas industry pollution in the air and water
- Prediction of the future threats that the Gulf environment faces by adopting ecosystem, habitat and food web modeling approaches
- Promotion of international and standard monitoring/research programs to generate an environmental data base for the Gulf involving all countries bordering the Gulf
- Education of young researchers and students about the importance of the ecosystem health and ecological heritage of the Gulf region and on their responsibility to conserve it for the future; provision of opportunities to build their capacities and acquire hands-on research experience with current and international techniques and procedures.

**Conference Themes:**

- Human stressors: oil, petroleum, non-oil, power, desalination, and agrochemicals
- Air quality
- Climate change
- Sediment Quality Assessment
- Coastal and desert habitats
- Biodiversity and exotics
- Marine ecology
- Wetland ecology
- Habitat degradation
- Ecosystem health and management
- Restoration and remediation
- Desert ecosystem ecology
- Emerging Issues

**Venue and climate:**

Al Ain is an oasis city, the second largest in the emirate of Abu Dhabi. Having a history dating back to the 4th millennium BC, Sheikh Zayed's vision and commitment has seen Al Ain grow into the modern city (and one of the greenest in Arabia) it is today. Planned as a garden city, the visitor is taken by the multitude of roundabouts, each offering a unique display of
water, landscaping and sculpture. Boulevards are tree lined and there are no high rise buildings.

Al Ain is the home of the UAE University, the country's largest museum and the biggest zoo, parks, gardens and guest houses. It is also one of the nations leading agricultural centers and is now serviced by a new international airport. Al Ain is located at about 160 km east of Abu Dhabi and about 120 Km south-west of Dubai. Al Ain has a sub-tropical, arid climate. Sunny, blue skies can be expected most of the year. Rainfall is infrequent and irregular, falling mainly in winter. Temperatures range from a low of about 20°C in January to a high of about 45°C in June. March is one of the moderate temperature months (23-25°C).

Light summer clothing is suitable for most of the year, but sweaters or jackets may be needed during the winter months. Light jackets may be needed in March at night.

Travel Information:

Visas: All visitors except nationals of Gulf States require visas to enter the UAE although these are issued on arrival to citizens for many European, Far Eastern and North American countries. Participant who are subjected to issue an entrance visa should send a photocopy of their passport main pages as well as recent photograph by email to hhassani@uaeu.ac.ae

Getting to Al Ain: Al Ain international airport is situated 23 km northwest of the city center. There are scheduled flights to other Gulf and Middle East destinations and to the Indian Sub-Continent.

Al Ain is connected to other cities in the UAE by excellent highways. Dubai and Abu Dhabi international airports are within 90 minutes of Al Ain city. Transportation can be arranged upon request. There are also regular bus services and taxis from both cities.

Getting around: Taxis are plentiful and affordable in Al Ain. Car rental are also widely available.

Business Hours: The weekend in the UAE is Thursday and Friday. All governmental offices are closed. The Holy day is Friday. Banks and most other commercial activities close from Thursday afternoon to Saturday morning. Shops operate normally through out the weekend.

Accommodation

The followings are the main hotels recommended. Please make your own reservation. In case you need any help, don't hesitate to contact the conference secretariat at (hhassani@uaeu.ac.ae)

- **Al-Ain Rotana Hotel**
  www.rotana.com/aspx/Hotel.aspx?HotelId=7
  Tel: +97137545111, fax: +97137545444

- **Al Ain Intercontinental Hotel**
  http://al-ain.intercontinental.com/
  Tel: +97137686686, fax: +97137686766

- **Al-Ain Hilton Hotel**
  Tel: +97137686666, fax: +97137687597
Social Program and Conference Tour:
There will be a social program for interested participants and families during and after the conference. Details about the social program will be provided during the conference. The tours’ fees will be charged at the registration desk upon request.

Registration:
- Individual registration fees is US$ 150/participant
- Group and institute registration (for two participants) is US$ 125/participant
- Group and institute registration (for more than two participants) is US$ 100/participant
- Student registration is US$ 75/ participant

A small number of Graduate Students in the gulf may be partially supported by the conference for attendance.

1. Payable Check to:
The State of the Gulf Ecosystem Conference
UAE University, Al-Ain, P.O.Box:17551.
United Arab Emirates
Tel: +97137671925, Fax: +97137671291

2. Cash money is accepted from local participants.

Registration Fees should be paid before February 15th, 2006. Payment after the deadline will be charged an extra US$ 25.

Abstracts:
English is the official conference language. Abstracts must be submitted by email by December 31st, 2005, to: lorimerj@dfo-mpo.gc.ca. Word, WordPerfect or text file are also accepted. A message stating oral or poster presentation preference is to be enclosed with the abstract. Abstracts may also be submitted on disk to AEHMS, Fisheries and Oceans Canada, 867 Lakeshore Road, P.O. Box 5050, Burlington, Ontario, Canada, L7R 4A6. Abstracts have a 300 word limit. Underline the presenting author and include affiliation, address, telephone/fax and email of the presenting author only. Abstracts
should include objectives, methods, results, and conclusions. Authors will be notified of acceptance by January 30, 2006.

AEHMS Publication Plans:
Selected manuscripts originating from the conference will be considered for publication subject to peer review in the journal, *Aquatic Ecosystem Health and Management* and/or *Ecovision World Monograph Series*. Instructions to authors on the preparation of manuscripts can be found on the AEHMS website: [www.aehms.org](http://www.aehms.org). Due to the large number of manuscripts expected the AEHMS has set page limit guidelines as follows: Keynote: 12; Oral: 6; Poster: 4 printed pages including tables and figures (Text: Times New Roman 11 pt, Margins: 2.7 cm (1”), Paper: letter size 21.6x28 cm (8.5x11’’)). For more information please contact Dr. M. Munawar, Chief Editor (munawarm@dfo-mpo.gc.ca).

Mentors:
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Conference Schedule and timetable
Information regarding the conference timetable and lectures’ schedule will be announced on the AEHMS website (www.aehms.org) at least 15 days before the conference.

For any clarifications, details, inquiries, please do not hesitate to contact the conference secretariats through the indicated e-mails.

Co-Sponsored by:
- Environmental Agency Abu-Dhabi (EAAD – ERWDA)
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- Aquatic Ecosystem Health and Management (AEHMS)
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