Environmental Atlas of Abu Dhabi

The Environmental Atlas of Abu Dhabi showcases the remarkable story of the Emirate’s environmental heritage, and highlights its profound influence on the past, present and future of human and cultural development. By informing and educating the reader, it aims to raise awareness and present a call for action to protect the environmental richness and diversity of Abu Dhabi.

Environment Agency-Abu Dhabi (EAD) has embarked on an aggressive program to monitor the health of Abu Dhabi’s natural resources (e.g. water, air quality, wildlife populations, farming and forestry, and soil), which are currently threatened by excessive and rapid development. Over the last decade, the EAD generated a significant amount of data that describes the state of their desert environs. To highlight their monitoring success and depict the current “state of the environment” the EAD tasked Ecosystem Sciences with creating the Cartography section of the Abu Dhabi Environmental Atlas. The Environmental Atlas is a publication that describes the Emirate’s natural resources and highlights the EAD’s accomplishments by presenting their monitoring data in a form understandable to a broad audience. Ecosystem Sciences worked with EAD scientist to develop stories pertaining to their monitoring data and then we created cartographically pleasing and understandable maps that support the scientist’s stories.

Often atlases are predominantly collections of maps or are technical in nature, targeting a narrow subject matter and/or an expert audience. Consequently, the information needs of key users, especially senior decision-makers, business executives, policy-makers and community leaders, are often neglected, as well as the wider public with a growing interest in environmental issues that impact their lives. The Environmental Atlas of Abu Dhabi aims to be different. It has been prepared to address this information gap and embrace a wide constituency of readers in an innovative and compelling manner. The Atlas presents information within a common story and narrative, interwoven with complementary stories, case studies, facts and statistics, illustrative figures, anecdotes, photographs and thematic maps that highlight the most significant environmental aspects of the Emirate. The Atlas is designed to be highly accessible and communicative; presenting concepts and scientific information in a manner that is understandable to a wide audience.

Seeing is believing in this stunning 400-page “Atlas of our Changing Environment: the Arab Region”. Ecosystem Sciences developed this environmental atlas of change for the United Nations Environment Programme (UNEP) and AGEDI (Abu Dhabi Global Environmental Data Initiative). This unique and powerful publication brings to light stories of environmental change at more than 100 locations spread across every country in Arab world (22 nations in all). There are more than 300 satellite images, 300 ground photographs and 150 cartographic maps, along with informative narratives, graphs and charts that give a vivid visual portrayal of North Africa and West Asia and its changing social, demographic and environmental conditions.

Using current and historical satellite images, the Atlas provides scientific evidence of the impact that human and some natural activities have had on the regions’ social and environment systems over the past several decades. The observations and measurements of environmental change illustrated in the Atlas help gauge the extent of progress made by Arab countries towards reaching the United Nation’s Millennium Development Goals. More importantly, this Atlas contributes to the knowledge and understanding that are essential for adaptation and remediation. This publication will be of immense value to all those who want to know more about the Arab world and those who care about the future of this region and are responsible to implement policies and protocol for its future sustainability.


TIM MAGUIRE, BIOGEOGRAPHER

Education
- M.S., Geography, Portland State University
- B.A., Environmental Studies, Gettysburg College

Certifications / Registrations
- Certified ESRI Spatial Hydrologist (GIS)
- Certified GIS Professional

Experience
Tim specializes in GIS, remote sensing, biogeography, landscape ecology, and cartography. With over 17 years of experience, Tim has put his geographic skills to use designing maps that enable a broad audience to understand complex scientific topics. Such maps aided in the implementation of innovative watershed management programs, urban ecology and development applications, and river restoration projects in the U.S. and abroad. Tim has significant experience examining environment and development issues in North and Central America, Africa and Asia.

Tim’s principle expertise and interest lies in Geography and the mapping of vegetation types, species habitat and suitability, and urban infrastructure. With his in background in Geography, Tim understands a broad range of scientific topics ranging from hydrology and species interactions in riverine-riparian systems to urban ecology and the built environment.
Tim manages Ecosystem Sciences GIS databases employing ESRI’s suite of programs, to manage, analyze, and present spatial data at multiple scales. He performs remote sensing using ERDAS Imagine Professional. Tim populates and compiles all of the data needed to display project information, and produces high-quality graphics maps, models. In short, Tim’s GIS expertise enables him to ensure that investigations and management actions are employed at applicable scales and with impressive, professional results.

Short Version:

Tim Maguire, Ecosystem Sciences, will present the Atlas prepared for the Environment Agency-Abu Dhabi. Showing environmental changes in the Arab Region, the Atlas is designed to be highly accessible and communicative and understandable to a wide audience by interweaving information with stories, case studies, facts and statistics, illustrative figures, anecdotes, photographs and thematic maps that highlight the environmental aspects of the UAE.

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