



Press Release

Mangroves among world's most valuable ecosystems

'World Mangrove Atlas' highlights the importance of and threats to mangroves

October 21, 2010 - An unprecedented partnership of organizations – from forestry and conservation sectors and from across the United Nations – have released the first global assessment of the state of mangroves in over a decade with a new and comprehensive map and account of mangrove forests.

Mangroves are trees and shrubs that grow between high and low tide in the world's coastal waters, extending over vast areas of many tropical and subtropical deltas and estuaries. They are home to abundant wildlife, including rare species such as tigers and proboscis monkeys, as well as vast numbers of resident and migratory birds.

These forests that straddle land and sea are found in 123 countries in tropical and subtropical regions. Globally they are rare, covering only 150 000 square kilometers. They are disappearing faster than any other forest type on earth*.



Rhizophora mangle, typical mangroves in North and South America and West Africa which can grow up to 60 m (photo: S. Baba, Brazil)



Local coastal people depend on mangrove ecosystems for their living (photo: S. Baba, Thailand)

“Mangrove forests are the ultimate illustration of why humans need nature,” says Dr. Mark Spalding, lead author of the *World Mangrove Atlas*. In place after place the book details the extraordinary synergies between people and forests. The trees provide hard, rot-resistant timber and make some of the best charcoal in the world. The waters around mangroves foster some of the greatest productivity of fish and shellfish in any coastal waters. What's more, mangrove forests help prevent erosion and mitigate natural hazards from cyclones to tsunamis – these are natural coastal defenses whose importance will only grow as sea level rise becomes a reality around the world.

tremendous – mangrove forests generate US\$2000-9000 per hectare, and go on doing so year after year. Some, like Matang forest, Malaysia, have been managed continuously and sustainably for over a century. Compare this to the values obtained by cutting down mangroves and building shrimp ponds. For a few years profits may be higher, although rarely shared with the local people, but over time the ponds fail and are abandoned as big business moves on.

Various studies have converted the benefits of mangroves into dollar values and the sums are

But mangroves are vulnerable. As the Gulf of Mexico oil spill creeps eastwards and southwards towards the extensive mangroves of central and southern Florida the concerns are clear. Near continuous oil spills on a similar scale to the Gulf of Mexico have beset the vast Niger Delta over a period of 50 years, devastating the lives and economies of nearly 20 million people. Mangrove clearance is even more worrisome. Vast tracts of mangroves have been cleared for shrimp aquaculture,



Shrimp pond conversion in Ecuador. Once converted, it is difficult to revert to healthy mangrove forests. (photo: T. Tsuji)



allowing fast profits but leaving long-term debts and poverty which are hard to reverse.

“This book should change the way we view, and manage, mangroves for the benefit of coastal peoples and biodiversity world-wide” said Achim Steiner, Executive Director of the United Nations Environment Programme (UNEP). In fact the solutions are obvious and there are examples of success from all around the world. Some 1200 protected areas now safeguard about one quarter of all remaining mangroves.

Furthermore, some countries, which have suffered extensive losses and subsequent hardships, have learned about the benefits of mangrove and already begun large-scale restoration projects.

“Given their value, there can be no justification for further mangrove loss. What’s urgently needed is for all those working in fields of forestry, fisheries and the environment to work together and communicate their worth, both to the public and to those with the capacity to make a difference”, said Emmanuel Ze Meka, Executive Director of the International Tropical Timber Organization (ITTO) which provided the bulk of funding for the Atlas. This book goes a considerable way to communicating that message.

“This publication will play a critical role in delivering the message to people worldwide that mangroves are living treasures” emphasized Dr. Shigeyuki Baba, Professor of University of the Ryukyus and Executive Secretary of International Society for Mangrove Ecosystems (ISME), implementing agency of this Atlas project. ISME has been conducting and giving technical supports to a number of projects to restore, rehabilitate and sustainably utilize mangrove ecosystems for the past 20 years in over 10 countries.



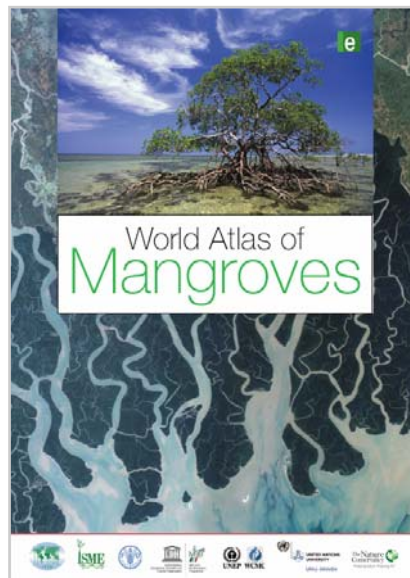
ISME mangrove plantation with school children to form coastal defense in Kiribati (photo: S. Baba)

Editorial information

The World Atlas of Mangroves has been published by Earthscan as an output of a joint project implemented since 2005 by ITTO, the International Society of Mangrove Ecosystems (ISME – project implementing agency), the Food and Agriculture Organization of the United Nations (FAO), UNEP-World Conservation Monitoring Centre (UNEP-WCMC), UNESCO-Man and Biosphere (UNESCO-MAB), UNU-Institute for Water Environment and Health (UNU-INWEH) and The Nature Conservancy (TNC). The Atlas project received majority funding from ITTO through a Japanese Government grant. More than 100 top international mangrove researchers and organizations have provided data, reviews and other input. French and Spanish versions of the Atlas are being prepared.

For further information, please contact ISME at isme@mangrove.or.jp, or visit Earthscan at <http://www.earthscan.co.uk/isbn/9781844076574> (20% discount code: AF20)

Earthscan. 319 pages, 8-1/2 x 11" (A4), over 200 photographs, 50 line illustrations, 129 maps (65 full-page). Hard cover. ISBN: 978-1-84407-657-4.



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The map preparation was lead by FAO and UNEP-WCMC.

Mangroves: fast-facts

- The nations with the largest mangrove areas include Indonesia (with 21% of global mangroves), Brazil (9%), Australia (7%), Mexico (5%), and Nigeria (5%).
- The global area of mangroves – 150 000 square kilometers – is equivalent to the area of one fourth of the area of Japan, or the state of Illinois, or half the area of the Philippines.
- About one fifth of all mangroves are thought to have been lost since 1980, and although loss rates are declining, at 0.7% per year they are still 3 to 4 times higher than average global forest loss estimates.

The scarlet ibis is one of the celebrated birds of the mangroves through South America. Mangrove ecosystems are rich in biodiversity. (photo: S. Baba)

