Atlas of

Cultural and

Environmental Change

in Arid Africa

Edited by

Olaf Bubenzer, Andreas Bolten & Frank Darius

Content

| Rudolph Kuper, Wilhelm Möhlig, Michael Bollig & Olaf Bubenzer Environmental change and cultural history in northeastern and southwestern Africa8 | Stefan Kröpelin The Saharan lakes of Ounianga Serir – a unique hydrological system54 |
|---|---|
| Werner Schuck ACACIA – central administration and coordination12 | Stefan Kröpelin High-resolution climate archives in the Sahara (Ounianga, Chad) |
| Reconstructing environment and human occupation | Stefan Kröpelin Reconnaissance of the Erdi Ma (northeast Chad)58 |
| Olaf Bubenzer & Mathias Ritter From hyperarid to semiarid – actual climatic conditions in northeastern and southwestern Africa18 | Helga Besler, Oliver Bödeker & Olaf Bubenzer Dunes and megadunes in the southern Namib Erg and the southern Great Sand Sea – a transcontinental comparison |
| Andreas Bolten From space to earth – use of satellite data in ACACIA20 | Nadja Pöllath & Joris Peters Holocene climatic change, human adaptation and landscape degradation in arid Africa as |
| Andreas Bolten & Olaf Bubenzer Watershed analysis in the Western Desert of Egypt22 | evidenced by the faunal record64 Ralf Vogelsang & Karl Peter Wendt |
| Rudolph Kuper 'Looking behind the scenes' – archaeological distribution patterns and their meaning24 | Changing settlement patterns in Namibia during the Holocene |
| Karin Kindermann & Olaf Bubenzer Djara – humans and their environment on the Egyptian limestone plateau around 8,000 years ago26 | Tilman Lenssen-Erz Brandberg/Daureb, Namibia – painters of a prehistoric hunter-gatherer world72 |
| Heiko Riemer Mapping the movement of pastro-foragers: the spread of Desert Glass and other objects in the eastern Sahara during the Holocene 'humid phase' | Landscape and land use Olaf Bubenzer & Andreas Bolten Climate, relief, bedrock and substrate — main factors for the soil formation in arid regions |
| Jörg Linstädter Rocky islands within oceans of sand – archaeology of | Frank Darius & Stefanie Nussbaum |
| the Jebel Ouenat / Gilf Kebir region, eastern Sahara34 | In search of the bloom – plants as witnesses to the humid past |
| Stefan Kröpelin The Wadi Howar38 | Stefanie Nussbaum & Frank Darius |
| Stefanie Nussbaum, Stefan Kröpelin & Frank Darius The flora and vegetation of Wadi Howar40 | Vegetation mapping for the evaluation of traditional land use and conservation activities in the northern Richtersveld, Namaqualand (South Africa)82 |
| Friederike Jesse & Birgit Keding Holocene settlement dynamics in the Wadi Howar region (Sudan) and the Ennedi Mountains (Chad)42 | Jochen Richters Biomass production and seasonal ecologic behaviour based on a remote sensing modelling approach86 |
| Birgit Keding & Ursula Eisenhauer Transformations of settlement patterns in the Middle Wadi Howar during the Holocene | Mathias Ritter Geomorphological-climatological interactions in the Dakhla Oasis (Western Desert of Egypt)88 |
| Friederike Jesse, Birgit Keding, Nadja Pöllath, Marianne Bechhaus-Gerst & Tilman Lenssen-Erz | Guido Waldhoff |
| Cattle herding in the southern Libyan Desert46 | Spectral analysis of remote sensing data for geomorphological, geological and geoecological research in arid Africa90 |
| Tilman Lenssen-Erz Ennedi Highlands, Chad – artists and herders in a lifeworld on the margins50 | Mathias Ritter & Tobias Diehl High resolution satellite images and Differential GPS in geomorphological and geoarchaeological research on Boni Island (Fourth Nile Cataract, north Sudan)92 |

| Makked Heb Landscape and logistics – the success of Ancient Egypt | | |
|--|--|---|
| Michael Schnegg & Torsten Welle Inequalities inscribed in landscape | Michael Herb | Gerrit Dimmendaal |
| Michael Schrege & Barber Willel Inequalities insertibed in landscape | Landscape and logistics – the success of Ancient Egypt96 | |
| Inequalities inscribed in landscape | Michael Calmana Co Tamatan Malla | 1 |
| Anje Linstidere & Andreas Bolies Space matters - sustainable range management in a highly variable environment | | archaeological infunigs146 |
| Anja Lankstate & Andrew Bolter Space matters — sustainable range management in a highly variable environment. 104 **Retine Zizes** Northern Namibia — overview of its historiography based on linguistic and extralinguistic evidence | inequalities inscribed in landscape100 | Evant Saidal Eilean Voca & Wilhalm Möhlia |
| Space matters - sustainable range management in a highly variable environment | Ania Linatatar & Andreas Rollon | g · |
| Abighly variable environment | | |
| ### Marc Selfert Natural resource management in a conservancy in northern Namibia | | bused of iniguistic and extraining distile evidence |
| Folktales as a source of investigation of cultural diffusion in Namibia and southern Angola | a fighty variable city itoliticite | Marc Seifert |
| Natural resource management in a conservancy in northern Namibia | Rettina Ziess | |
| In northern Namibia | | |
| Cristine Walle Adaptation strategies on a local scale in the context of Giobal Change? | | |
| Adaptation strategies on a local scale in the context of Global Change? | | Christine Waag |
| Cortrad Baden Mapping culture, representing boundaries and politicising difference - reflections on two San cases in Namibia 112 Laura E. Blackmann 112 Laura E. Blackmann 116 Ute Dischmann 117 Ute Dischmann 118 Ute Dis | Torsten Welle | <u> </u> |
| Control Boden Control Bode | Adaptation strategies on a local scale in the context | • |
| Certral Bodem Mapping culture, representing boundaries and politicising difference - reflections on two San cases in Namibia 112 112 112 112 112 112 112 112 112 113 113 114 115 1 | | |
| Certral Bodem Mapping culture, representing boundaries and politicising difference - reflections on two San cases in Namibia 112 112 112 112 112 112 112 112 112 113 113 114 115 1 | | Economic and demographic change |
| politicising difference – reflections on two San cases in Namibia | Gertrud Boden | 0 1 0 |
| reflections on two San cases in Namibia | | |
| Laura E. Bleckmann Poetry, landscape and the spatialisation of collective memory in Otjiherero praise poems 116 | | |
| Poetry, landscape and the spatialisation of collective memory in Otijherero praise poems | reflections on two San cases in Namibia112 | the Outjo district in northern central Namibia162 |
| Poetry, landscape and the spatialisation of collective memory in Otijherero praise poems | | |
| memory in Otjiherero praise poems | | |
| Rudolph Kuper Desert parks in the eastern Sahara 118 Boreholes = the dynamics of pastoralism in northwestern Namibia 170 Stefan Kröpelin & Sven Oelm 170 Wadi Howar National Park 122 Grit Jungstand (Going to greet the relatives' – household economy, mobility and politics in Dar Zaghawa, NE-Chad 174 100 years of Etosha – an issue of people and parks 124 Babeti Jánszky Settlement patterns in a risky environment – Tama villages in northeastern Chad 178 | | |
| Desert parks in the eastern Sahara | memory in Offiherero praise poems116 | of European farming in northern central Namibia 166 |
| Desert parks in the eastern Sahara | D 111 V | Mid-al Dallia |
| In northwestern Namibia | | |
| Stefan Kröpelin & Sven Oelm Wadi Howar National Park 122 | Desert parks in the eastern Sanara110 | |
| Wadi Howar National Park | Stofan Vranalin & Svan Oahm | III HOLITIWESTEIN IValifibia |
| "Going to greet the relatives" – household economy, mobility and politics in Dar Zaghawa, NE-Chad | Wadi Howar National Park 122 | Grit Iungstand |
| ### Dieckmann 100 years of Etosha – an issue of people and parks | YYAAT 110 YYAT TYATIOTAT TAIK | |
| Routes and trade Frank Förster The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | l Ite Dieckmann | |
| Routes and trade Frank Förster The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | | , |
| Routes and trade Frank Förster The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | | Babett Jánszky |
| The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | | Settlement patterns in a risky environment – |
| The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | Routes and trade | Tama villages in northeastern Chad178 |
| The Abu Ballas Trail: a Pharaonic donkey-caravan route in the Libyan Desert (SW-Egypt) | | |
| route in the Libyan Desert (SW-Egypt) | | |
| Heiko Riemer The archaeology of a desert road – the navigation system of the Abu Ballas Trail | | |
| The archaeology of a desert road – the navigation system of the Abu Ballas Trail | route in the Libyan Desert (SW-Egypt)130 | in the Richtersveld, South Africa182 |
| The archaeology of a desert road – the navigation system of the Abu Ballas Trail | | T. U. D U |
| the navigation system of the Abu Ballas Trail | | |
| Jan Skriwanek Caravan routes – discovered with satellite eyes | | ♣ |
| Caravan routes – discovered with satellite eyes | the navigation system of the Abu Ballas Irail | m fransiontem, northwest Namidia186 |
| Caravan routes – discovered with satellite eyes | Ina Chuinnaach | Certrud Roden |
| Meike Meerpohl Mobile oases in the Libyan Desert | | |
| Meike Meerpohl Mobile oases in the Libyan Desert | Caravan routes – discovered with satellite eyes | |
| Mobile oases in the Libyan Desert | Meike Meernohl | |
| Clemens Greiner The long journey — aspects of labour migration in Kunene South | | |
| Clemens Greiner The long journey – aspects of labour migration in Kunene South | THE DESCRIPTION OF THE PROPERTY OF THE PROPERT | Michael Schnegg & Andreas Bolten |
| The long journey – aspects of labour migration in Kunene South | Clemens Greiner | Sharing space and food in Namibia194 |
| aspects of labour migration in Kunene South | | U 1 |
| Inheritance and maintenance among the Himba of the Kunene region | | Michael Bollig |
| Language and spaceof the Kunene region198Wilhelm Möhlig & Frank SeidelBibliography202Namibian languages146Satellite-image maps214 | 1 | |
| Language and spaceBibliography | | |
| Wilhelm Möhlig & Frank Seidel Bibliography | Language and space | - |
| Namibian languages | One Or a mark man | |
| Namibian languages | | |
| List of abbreviations238 | Namibian languages146 | |
| | | List of abbreviations238 |