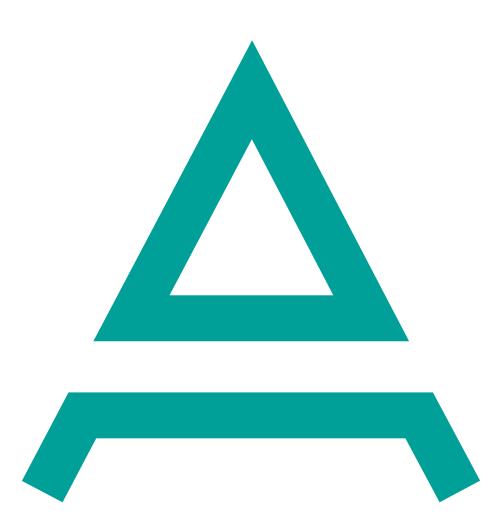


ANNUAL REPORT 2018





Chéri Samba (Congolese, b. 1965, Kinto M'Vuila, lives and works in Kinshasa), Réorganisation (Reorganization). Kinshasa, DRC. June 2002. Oil on canvas. Purchased from Chéri Samba. 2002. HO.0.1.3865. © Chéri Samba.



A look back on 2018 with Guido Gryseels, Director General of the RMCA

The museum has been closed to the public for five years due to the renovation works. What is the major change in the permanent exhibition?

The new permanent exhibition aims to present an image of contemporary Africa. We are no longer a museum of colonial Africa, but the Africa of today and of the future, without overlooking the shared history between Belgium and the countries of Central Africa. We cast a critical eye on our colonial past, and we want to be a kind of *lieu de mémoire*, both for Belgians and the Congolese. We also want to be a forum for debate, in which all opinions can be expressed. We hope that we can be a veritable meeting place and a centre of dialogue for anyone with a genuine interest in Africa.

In what way were Africans themselves involved in creating the new museum?

If you want to create a museum about contemporary Africa, you of course need to involve Africans themselves, both from Africa and the diaspora. From the outset, we tried to develop a close relationship with the members of the diaspora. COMRAF was set up as early as 2004. Initially, this was primarily intended for organising cultural

Important steps have been taken in the way we look at Africa, deal with Africa, and listen to the sensitivities of the African community."



and educational events, but was subsequently also about the renovation and our research. When the final plans for the redevelopment had taken shape, the *Groupe des six* was set up from within COMRAF to provide feedback on the proposals. Despite our sincere intentions, the cooperation with the diaspora did not always go smoothly. So we want to plan and intensify this aspect more effectively in the future. In a European context, we are also working together on projects to involve the diaspora more closely in the work of ethnographic museums.

We have also consulted African museum directors and experts. We have partnerships with the national museums in Rwanda, the Museum of Black Civilisations in Senegal, the Institute of National Museums in Kinshasa, and the national museum in Lubumbashi. A new museum is under construction in Kinshasa, which will open at the end of 2019. We would like to be closely involved in this project, for example for the design of the museum and training for curators and volunteers.

Despite the major impact of the renovation, in which various scientists participated, research at the scientific institute carried on as usual. What are the highlights in your opinion?

Several projects with a strong link to sustainable development stand out for me, such as the research into fruit flies that cause large-scale crop failures in Africa. Through taxonomic research and our own collections, we are improving detection, and are designing effective control programmes along with African institutions. In the light of the current debate on climate change, the research by our wood biologists on carbon storage in small trees, which was published in Nature Plants at the beginning of 2019, is also very important. I also find the research into the link between traditional and contemporary music in Africa innovative. The archaeological research in Congo is also highly relevant, and the link with linguistic research is extremely fascinating. Another highlight is

the research into cobalt mines and the impact on human health, as well as our programme to strengthen the national research capacity in geology, in Rwanda. The programmes on early warning systems for natural risks are particularly relevant, as nicely illustrated in a BBC documentary. Finally, our historians have made important contributions to the debate on the colonial past, restitution, and the political situation in Congo. Our research into the provenance of some of the artefacts in our collection, which originate from looting in the DR Congo, is currently attracting a great deal of international attention.

Not only does the cultural revolution in the museum relate to the narrative in the exhibition, but also the functioning of the scientific institution. Which steps have been taken in that respect?

Important steps have been taken in the way we look at Africa, deal with Africa, and listen to the sensitivities of the African community. This comes across, for example, in the section on biodiversity, which focuses on the interaction between nature and humans. I also see a change in the way we carry out research. We work much more in partnership with African institutions and publish jointly, also in the name of the African partners. Thanks to artist and journalist residency programmes, and soon a scientist residency programme as well, we make our collections much more accessible to people of African origin. How do they interpret it? We will now be investing more in researching the provenance of our collections. I think this is a very important step, as is the fact that our scientific training programmes are increasingly being organised in Africa and no longer exclusively in Tervuren. Finally, we want to make even more efforts to ensure an effective diversity policy, both in terms of personnel and in our governance bodies.



SCSES

The main theme of 2018 was the reopening of the museum.

On 8 December, in a wave of international interest, the museum reopened its doors after being closed for five years.

THE RUN-UP TO THE REOPENING

Completion of the construction works

The construction works were completed on 1 April 2018. Thanks to the renovation, the public space has practically doubled in size, from 6,000 to 11,000 m². The welcome pavilion and the museum building have been made wheelchair-accessible throughout. Large elevators and gentle slopes ensure that everyone can access all floors of both the new and old buildings. The old spiral staircases have been replaced by platform lifts, and the sanitary facilities have also been refurbished. In terms of sustainability, various measures have been taken

Thanks to the renovation, the public space has practically doubled in size, from 6,000 to 11,000 m² to limit energy consumption. The new temporary exhibition rooms are now equipped with climate control systems so that they can house loaned items in the best possible conditions. In addition, a conference centre has been created, with meeting rooms for 24 to 64 people and a brand new auditorium with 224 seats.

On 31 May, the building was unveiled to the press in the presence of State Secretary for Science Policy Zuhal Demir, and the Minister in charge of the Federal Buildings Agency, Jan Jambon. During the unveiling, the opening date of 8 December 2018 was announced. The new website was launched and the new corporate identity was adopted at the same time as the press conference.

Layout of the exhibition

As soon as the building was handed over to the museum, all the preparatory areas in the museum could be put into use. On 3 April, the contract for the individual scenography was assigned to the company Potteau. From then on, the specific work could be done regarding the layout of the museum. Additional staff were recruited in order to complete the job in just eight months. The final

objects were restored, and replicas and models for hands-on installations were produced. From the end of March onwards, work to create the multimedia was in full swing. A team headed to the DR Congo to create a virtual reality experience, and other visual material. The texts for each room were also finalised, checked by external peer reviewers, and translated. All main texts are available in the three national languages and English, while smaller texts are available in Dutch, French, and English.

Although several larger objects had already returned to the museum, re-installing the more than 4,000 objects on display moved up a gear after the summer holidays. Each room was individually fitted out. After the showcases were cleaned, the objects were placed in the display cabinets, and carefully illuminated, with passive humidity control.

Working together with the diaspora

The new permanent exhibition was developed in collaboration with the people from the African diaspora and specialists from Africa. A representative from the African diaspora has been involved since the very first consultation on the renovation in 2002. COMRAF, an institutional consultative body between the RMCA and the African diaspora in Belgium, was set up in 2004. The museum was also one of the founders of the European networks to involve the African diaspora more closely in the operation of museums. Over the past three years, COMRAF has also appointed a Groupe des six to advise the museum regarding the African viewpoint on our renovation, the choice of themes and collections, the commentary on texts, and the development of educational activities. The opinions of the various actors sometimes clashed within the collaboration, but all parties primarily experienced it as the start of a process in which important steps forward were taken.

Memorial of the human zoo in Tervuren

The reopening of the museum naturally makes the past a fiery topical issue once again, including the inhuman history of the human zoo during the Colonial Exhibition in Tervuren park in 1897. At the time, some 267 Congolese were exhibited in four 'authentic' villages. We do not know their exact numbers, nor the names of most of them. Seven of them died during the exhibition. Their graves are situated next to the church of Tervuren and have been restored by the municipality. To mark the reopening, a commemorative plaque was inaugurated on 1 December together with members of the diaspora, in one of the places where the villages were located.

In the museum itself, the Congolese artist Freddy Tsimba created the artwork *Ombres* (Shadows) to pay tribute to these and other Congolese who were exhibited in Belgium or died during their stay in Belgium. By extension, this work is a new and contemporary memorial to all the victims of colonisation.



In the museum, the Congolese artist Freddy Tsimba created the artwork Ombres to pay tribute to the Congolese who were exhibited in Belgium or died during their stay in Belgium in 1897.

Freddy Tsimba, Ombres (Shadows), 2016. RMCA collection, inv. no. 2016.45. © F. Tsimba

Start-up of operations

At the same time as the work to implement the layout of the museum, the operational aspects were initiated. The operation of the museum shop and museum restaurant was awarded to external companies. Security and cleaning services were contracted out, and a pool of 60 independent guides was set up. From April onwards, the new team of guides received a day's training every month. The new ticketing system, which features a booking tool, was also finalised. Seven new staff members were recruited for the events and reception department.

Events

In order to give people the chance to get to know the new building better, and see how it performed in actual operating conditions, a number of public events were organised before the opening. For example, a number of major sponsors could invite their clients to a pre-opening, but the general public could also discover the museum during the dance performance *Banataba* (from 4 to 7 May) by the Congolese choreographer Faustin Lyniekula, as part of the KunstenfestivaldesArts, or a Tourist run (2 September) through the new underground connecting gallery as part of the Gordelfestival.

As part of the NATO summit held in Brussels on 11 and 12 July, the Belgian federal government organised a programme for the partners of the heads of state and government leaders. They visited the museum on Thursday 12 July.

To mark the reopening, the museum, together with the Egmont Royal Institute for International Relations, organised the conference 'Sharing Past and Future: Strengthening African-European Connections', from 17 to 19 September. This three-day conference offered a critical reflection on how Africans and Europeans can work together in a shared and sustainable way in the future. The opening session and press conference were held in the museum. The programme continued in the Royal Library in Brussels.

On 17 October, the new museum restaurant 'Tembo' was opened on the first floor of the new welcome pavilion. This has been a great success from day one.

Exhibitions and activities 'extra muros'

During the closure of the museum, school-based projects continued to run in a number of partner institutions. Most of the workshops came to an end in late 2017; only our activities in BOZAR continued in 2018. The final activity in Studio Congo in Bozar was held on 24 and 25 February. After that, this pop-up also closed its doors.

Prior to the opening, the museum organised one last exhibition in Belgium. *AfricaMuseum@ EgmontPalace* brought pieces from the museum's collection into dialogue with contemporary art.

The participating artists were Sammy Baloji, Chéri Chérin, Iviart Izamba Zi Kianda, Eddy Kamuanga Ilunga, Pauline M'barek, Aimé Mpane, Voania Muba, Aimé Ntakiyica, Chéri Samba, Sarah Vanagt, and Maarten Vanden Eynde. The exhibition gave a glimpse of what the renovated museum might look like. The exhibition was opened by Her Majesty Queen Mathilde on 18 July.



The final pop-up exhibition in Belgium, AfricaMuseum@EgmontPalace, was opened on 18 July 2018 by Her Majesty Queen Mathilde.

The successful exhibition Congo Art Works continued its tour in 2018. From September to January 2019, an adapted version was on display under the title Congo Stars at the KunstHaus in Graz. The curators of this exhibition were Barbara Steiner (Kunsthaus Graz), Günther Holler-Schuster (artist), Fiston Mwanza Mujila (writer), Bambi Ceuppens (RMCA), and Sammy Baloji (artist).

In residence

Since 2008, the RMCA has welcomed Central African artists and cultural actors looking to study and explain the collections in their work. Every year, the museum offers one or more residencies of at least 1 or maximum 3 months, with the support of DGD (Directorate-General for Development Cooperation and Humanitarian Aid).

In 2018, Ganza Buroko (Cultural Centre Yole! Africa, Goma, DR Congo) was in residence at the museum from 1 to 15 August, and from 7 September to 14 October. He scoured the museum archives and collections for information about the city of Goma, with the aim of presenting an

exhibition on the history of this special city at the foot of the still-active Nyiragongo volcano in 2020. This exhibition will be accompanied by a series of debates.

The residency programme was also opened to journalists for the first time in 2018. The aim is to create new discourses on the museum, as well as a broader dialogue between museum representatives and intellectuals with an African background, and participation in the decolonisation process of the museum. Denise Maheho Mwasi, journalist at the Congolese Radio Okapi, was in residence at the museum twice, for two weeks each.

From 10 to 21 September, she studied the various projects of the scientific institution in and together with Congo, and she also attended the conference 'Sharing Past and Future'. Maheho's second period

of residence from 1 to 16 December focused on the reopening of the museum, and more specifically the perception of Congolese and the African diaspora of the museum's new exhibition and philosophy.

Some of Denise Maheho's reports for Radio Okapi (in French):

- Des objets ethnographiques conservés
 dans les musées occidentaux : restitution
 ou partage du patrimoine culturel
- Quel est l'apport du Musée royal de l'Afrique centrale en Belgique sur la vie des Congolais en RDC ?
- Interview avec Didier Reynders,
 le Vice-Premier ministre belge chargé des Affaires étrangères



Journalist in residence Denise Maheho Mwasi (Radio Okapi, DRC) interviewing Ganza Buroko (Yole! Africa, Goma, DRC).

THE REOPENING

For the reopening, the museum adopted its new name: AfricaMuseum. However, the scientific institute retains its title of Royal Museum for Central Africa. At the same time, the Colonial Palace has been renamed the Africa Palace.

Press conferences

The reopening was eagerly anticipated, both at home and abroad. Because of the huge interest, three press events were organised: in Dutch, French and English. The international press conference in English was in collaboration with Toerisme Vlaanderen and Visit Brussels. In total, the museum welcomed 470 journalists from 28 different countries, namely France, the Netherlands, Great Britain, Germany, Luxembourg, Italy, Spain, Portugal, Greece, Finland, Norway, Denmark, Sweden, Poland, Czech Republic, Slovenia, Lithuania, Russia, Congo, Rwanda, Kuwait, USA, Canada, China, Thailand, Dubai, and Japan.

Official opening on 8 December 2018

The official academic session in the morning for around 350 attendees took place in the presence of Deputy Prime Minister and Minister for Development Cooperation Alexander De Croo and various Congolese guests, including Pierre



Official opening of the AfricaMuseum on 8 December 2018.

In total, the museum welcomed

470 journalists



Kompany, the recently elected mayor of Ganshoren, Paul Bakua-Lufu Badibanga, director of the IMNC (Institut des Musées nationaux du Congo), Henri Kalama, Director of the Académie des Beaux-Arts in Kinshasa, and Jacob Sabakinu Kivulu, Professor and Coordinator of international cooperation and relations at UNIKIN.

To mark the reopening, the museum, as an institution, has distanced itself from colonialism as a form of government and recognised the suffering of the victims of colonial violence. The highly topical debate on restitution and the pioneering role played by the museum was also given significant attention. In addition to the Director and Deputy Prime Minister DeCroo, Josette Shaje Tshilula, Professor of art history at the UCL, former president of Africom, former Director General of the Musées nationaux du Congo, and Clémentine Madiya Faïk Nzuji, Professor Emeritus at the UCL, also took the floor.

After the academic session, the Minister, the Director, Bambi Ceuppens, and Billy Kalonji unveiled the text 'Everything passes, except the past' in the underground gallery. The museum choir welcomed the attendees on the staircase to the museum building with the song *Echo*, composed by Marie Daulne, Ronny Mosuse' and Fabrizio Cassol. The song is the museum's way of expressing the grief surrounding the history of colonisation, and commemorates all the Congolese who died in Belgium, and by extension, all the forgotten victims of colonisation.

In the afternoon, there were more speeches for the 1,500 people invited for the opening event. Besides the Director, Billy Kalonji, Chairman of COMRAF, also made an address.

Communication

Bonka Circus developed the opening campaign 'My AfricaMuseum'. Even before the opening, everyone had the opportunity to choose an object from the collection on a website, and share their accompanying personal story via social media. The campaign gave everyone – regardless of their age, colour or origins – the opportunity to express their personal connection with the museum. For example, the campaign played a role in confronting the past and building a narrative for the future. 'Friends of the Museum' Coely, Eric Kabongo, Marie Daulne, Vincent Kompany, Bart Peeters, David Van Reybrouck, Cécile Djunga, Christophe Deborsu, Pierre Kroll, and Ronny Mosuse had already set the example.

Myafricamuseum.be produced hundreds of stories by employees, scientists, partners, young people, and the elderly from all walks of life. Partly thanks to this campaign, the museum ended 2018 with 19,535 followers on all its social media. It managed to add 8,587 new followers, an increase of 78% compared to 2017.

Museum tram/museum bus

Unfortunately, no solution had been found for a dedicated car park by the time the museum reopened. As such, in consultation with Visit Brussels and the Province of Flemish Brabant, efforts were made to organise a pleasant tram or bus ride to Tervuren from Brussels and Leuven. Visit Brussels heavily promoted tram 44 as the 'Africa tram' in which actors narrated stories about the museum throughout the Christmas holidays. From Leuven, the non-profit organisation Toerisme Vlaams-Brabant organised a free shuttle bus to the museum.

THE NEW PERMANENT EXHIBITION

A key theme of the renovation was the process of decolonisation. This is a long-term process that is not yet complete. However, the reopening of the museum is an important step towards a more African approach to collection management and scientific research, and a diversity policy. In that respect, collaboration with the African diaspora was essential.

A new narrative

The new permanent exhibition puts people at the centre, focuses on Central Africa from a contemporary perspective, uses its own collections as the starting point, and is organised thematically.

The new museum is no longer a museum of colonial Africa, but the Africa of today and of the future, without overlooking the shared history between Belgium and the countries of Central Africa. This means that it also addresses contemporary issues such as Belgians of African origin, biodiversity and climate change, daily life, languages and music, and the paradox of Africa's resources. The story of the colonial past is told in a new and critical way. The museum is a kind of lieu de mémoire, both for Belgians and the Congolese. It is also a forum for debate, in which all opinions can be expressed. In this context, an 'Afropea' room has been created, a dynamic room where Belgians of African origin tell their own story. This gallery serves as an exhibition space, meeting place, and documentation centre at the same time. Visitors are invited to suggest improvements and share documents, photos and testimonials, so that the knowledge can be further expanded.

Various interactive exhibits have been integrated into the permanent exhibition. In four spots, in the four corner rooms of the building, the public is invited to interact with the displays.



Contemporary themes are addressed, including biodiversity and climate change.

Exhibited objects

1,843
objects from the Cultural
Anthropology & History
collections

around 865 zoological specimens

around 600 minerals

724 wood samples



The story of the colonial past is told in a new and critical way.



The new scenography combines the original, restored display cases with a new modular system. The collections come into their own in this dynamic set-up.

Integration of contemporary art

In the context of the renovation, the integration of contemporary art into the museum was an important aspect. The museum commissioned artists from Africa or with African roots, including Aimé Mpane, Freddy Tsimba, Michèle Magema, Aimé Ntakiyia, Méga Mingiedi, Bodys Isek Kingelez, Chéri Samba, J-P Mika, Shula, Chéri Benga, Chéri Chérin, Barly Baruti, Iviart Izamba, Thérèse Kirongozi, and Nelson Makengo. Special attention was given to the sections of the museum that exude a distinctly colonial atmosphere. In the rotunda, for example, where there are highly colonial and controversial images including Belgium brings civilisation to the Congo, a work by Aimé Mpane, one of the most important contemporary Congolese artists, engages in dialogue.



The museum commissioned artists from Africa, or with African roots, for the integration of contemporary art in the museum.

Education to facilitate sustainable development

The renovated museum has various educational spaces, which will be operational from 2019 on. With the renovation of the museum and the new permanent exhibition, the educational objectives - and therefore the content of the awareness-raising activities - were also in need of a revamp. In 2018, awareness-raising activities aimed at integrating global citizenship education were in preparation. This programme contributes to the RMCA's mission of sharing knowledge to foster insight into and understanding of the African continent and its place in the world, and to promote cultural and natural diversity for sustainable development. The renovation team, scientists, the education sector,

the African diaspora and partners of the African continent (i.e. the Musée national de Lubumbashi in the DR Congo) were closely involved in developing the activities.

AFRICAMUSEUM RELIED ON THE SUPPORT OF VARIOUS PARTNERS FOR THE REALISATION OF THIS PROJECT

The Federal Buildings Agency covered most of the infrastructure costs (€66.5 million), while the RMCA itself covered all the installation costs (€7 million). A comprehensive fundraising initiative was set up for this purpose. The museum received the largest subsidy from the Belgian National Lottery. The RMCA received a subsidy from Toerisme Vlaanderen to develop tourist facilities. Visit Brussels provided support to strengthen the link with Brussels. The National Bank of Belgium also gave financial support to the project, as did Puilaetco Dewaay, Adecco, Umicor, Texaf, KBC, American Express, Ackermans & Van Haaren, Rotary and Zeb. We could count on *De Standaard*, VRT, *Le Soir* and the RTBF for media support.

SCENOGRAPHY

Niek Kortekaas and Johan Schelfhout CONSTRUCTION

Potteau-Labo NV (lead contractor), Helena.be (graphics), Piet Hoevenaars and XL Digital (graphics, printing, and installation), Étoile mécanique (stands), Lux Lumen (lighting), CR3DO (models and hands-on displays), Sycomore (audio)

MULTIMEDIAS

Anamnesia BV

BUDGET FOR EXHIBITION DESIGN AND MULTIMEDIA

4 million euro including VAT



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The RMCA as a scientific institute: research into the societies, biodiversity, and geology of Africa

The Royal Museum for Central Africa is a research institute with internationally-recognised expertise. More than 80 scientists and around 120 African PhD students and trainees conduct research into past and present societies, biodiversity, and geology of Africa. They rely on the museum's unique collections, fieldwork, and collaborative networks with international, and in particular African, institutions. The RMCA is active in more than 20 African countries and emphasises the exchange of knowledge with its African partners, as well as capacity-building. Contributing to the sustainable development of Africa is a priority in the research programmes, with a significant environmental, social and economic impact.

The RMCA has three research departments >>



1. CULTURAL ANTHROPOLOGY & HISTORY

FOCUS Societies of the past, the colonial past, political systems, cultural expressions, languages and music of peoples in or from Africa.

The Cultural Anthropology and History department covers various disciplines dedicated to African societies of today and the past, in particular how they functioned and what they achieved. The researchers study languages, deep history and archaeology, the (post)colonial past, political systems, cultural expressions, and music of population groups in or from Africa. The fieldwork is done in Africa, but also among the African diaspora.

2. BIOLOGY

FOCUS Biodiversity of animal species and sustainable management of the tropical rainforests in Africa.

The Biology department enhances the knowledge of the biodiversity of animal groups in Africa. The biologists study the taxonomy and phylogeny of different groups of vertebrates and invertebrates. The wood biologists unravel the structure and function of wood, as well as the role of trees and fauna in African ecosystems, and contribute to the sustainable management of the tropical rainforests in Africa. The fieldwork goes hand in hand with the study of the vast and unique collection.

3. EARTH SCIENCES

FOCUS Mineral resources, geodynamics, surface environments and natural hazards in Central Africa.

The scientists in the Earth Sciences department study the geology, geodynamic processes, and natural (mineral) resources in Central Africa with a view to sustainable management and the impact of extraction on human societies. They study volcanoes, seismic events, and landslides for the effective management of these natural hazards. By determining the evolution of soils in Africa, they evaluate the impact of global changes on the natural environment of the continent.

A selection of the most important research activities from 2018 is highlighted.

Unravelling the ingenious architecture of tropical rainforest giants

Trees in a tropical rainforest can reach enormous dimensions. Their impressive size allows them to determine the structure of a forest and completely dominate the ecological cycles in a forest ecosystem. Tree architecture is remarkably ingenious, for example to withstand the strong winds and storms in equatorial Africa. The CIME project, which is part of the FORETS project in Yangambi in the DRC, aims to find out how the giants of the tropical rainforest are constructed. This is vital in understanding how a forest works, and to support sustainable management.

During the research, several trees were selected that germinated a long time ago in a cocoa plantation. Professional tree climbers helped out in taking the required samples of leaves, twigs, branches, and trunk. This was supplemented with material from excavated roots. Everything was carefully stored in the brand new Laboratory for wood biology that the RMCA is constructing in Yangambi in collaboration with CIFOR and R&SD. That way, the material remains available for future research.

It has already been analysed how the cells for sap flow gradually become narrower from the base of the tree to the twigs, and how this relates to the stomata in the leaves that regulate transpiration. We also study the ratios between the thickness of the sapwood (wood just below the bark that still contains living cells and is easily prone to infections) and the total leaf area of a complete tree. It is remarkable how a tree combines mechanical strength with efficient hydraulics and resistance to fungi.



Professional tree climbers helped out in taking the required samples of leaves, twigs, branches, and trunk.

CULTURE AND SOCIETY

Electronification of traditional music

Since 2015, ethnomusicologist Rémy Jadinon has been studying traditional music festivals in Central Africa, to observe how musical practices are transformed. A festival is a particularly illuminating entry point for seeing contextual changes in the representation of traditional music. Dances, which were once the purview of a segment of society or performed during ritual ceremonies, can be seen on concert stages before an audience that is sometimes unaware of the origins of these artistic expressions. Festivals make it possible to conduct research on questions such as the staging and instrumentalisation of traditional heritage in the service of artistic, political, or community-related demands.

In September 2018, as part of fieldwork, Jadinon attended the fourth edition of the Nyege Nyege Festival in Jinja, Uganda, where the performers mainly from East Africa - included groups playing traditional and electro-traditional music and international DJs. Nyege Nyege had five stages, including one dedicated to traditional music, and a boiler room (livestreams of music performances) where traditional and electro-traditional musicians also performed. Nyege Nyege is an international gathering aimed at promoting electronic and traditional artists who want to collaborate musically in both genres. During the study, the researchers conducted surveys on how traditional melodies and rhythms could be composed on music composition software.

www.youtube.com/watch?v=rnZ9T3NK58w

GEODYNAMICS AND MINERAL RESOURCES

Sustainability of artisanal mining of cobalt in DR Congo



Blood is extracted from a worker in the Kimpese artisanal mine (Katanga) in 2016.

In the last 15 years, the demand for cobalt experienced a new boom, as it is an essential component of lithium-ion batteries for electric vehicles. Cobalt mining in the Katanga Copperbelt has been mostly industrial since the 20th century. In contrast, artisanal exploitation increased from 2000 onwards. It is estimated that artisanal mining represents about 20% of the total cobalt exploited today in DRC, which in turn accounts for 60% of global production.

Industrial exploitation did not pay much attention to environmental consequences. Recent artisanal mining further contributed to more dispersion of metals. As a consequence of a century's worth of mining, cobalt load in the environment (notably soils) became extremely high in Katanga. An ongoing research initiative (KUL, UNILU, RMCA, UCL), based on urine and blood analysis, demonstrates that people in Katanga are heavily exposed to cobalt and other potentially toxic metals (including uranium). The impact on public health has not yet been fully assessed, but it is likely that oxidative damage to DNA in children is linked to high exposure to cobalt and could result in future health problems.

As it is a source of potential health problems for future generations, cobalt exploitation is regarded as non-sustainable. Major NGOs are calling for a ban on Congolese cobalt. They are also advocating for substantial R&D investments to produce cobalt-free batteries. Meanwhile, cobalt is indispensable and its exploitation is an important source of jobs for the local population, albeit in controversial conditions. The current challenge is to improve working conditions, reduce the cobalt load in the environment and the exposure of miners and the general population, and meet the needs of our modern societies.



Musicians Leo Palayeng and Otim Alpha, pioneers of the 'Acholitronix' electro-traditional movement, on the Nyege Nyege Festival main stage in Uganda.

GENBAS: towards the genetic basis of how species form and are maintained

How are species formed? This is one of the fundamental questions that preoccupies biologists. Species can emerge when populations are geographically separated for a long time. But even when populations live together in the same environment, species can emerge and continue to exist as separate species.

The RMCA studies four closely related fish species from the genus *Ophthalmotilapia*, a group of perch-like fishes from Lake Tanganyika, to try to get to the heart of the processes in which species are formed. Genetic studies have shown that these four fish species can hybridise under natural conditions. However, very few specimens are found in nature which back this up. This suggests that certain mechanisms ensure that these fish are more likely to mate with conspecifics than with other closely resembling and related species. These mechanisms therefore maintain the species.

To find out why, biologists studied the fish during the first and final stage of the mating process: during the first contact with a potential mate, and after a successful egg laying. During experiments, they compared their behaviour in various conditions and quantified the genes that were activated in different parts of their brain. It was observed that a limited number of genes, often linked to hormone production, were activated differently when females came into contact or mated with males of a different species, than when they interacted with males of their own species. It is therefore possible that these genes are responsible for maintaining the species in nature. The analyses of all the results will provide more clarity.



Ophthalmotilapia heterodonta from Kilima.

NATURAL HAZARDS

How collections can help in assessing environmental changes in Central Africa

The past few centuries saw the substantial conversion of natural lands into human-dominated landscapes, but this transformation dramatically accelerated in the last decades and is expected to continue. The objective of the PAStECA project (Historical Aerial Photographs and Archives to Assess Environmental Changes in Central Africa) is to demonstrate the importance and the added value of aerial photographs (and other archives) from the RMCA collection in obtaining essential information on the state of the environment in Central Africa in the mid-20th century, but also on the way it has evolved to date.

The research is focused on the Lake Kivu region on the east of the DR Congo and the west of Rwanda and Burundi, a highly populated region. The project deals with land occupation and demography, land degradation, slope processes, and geohazard issues, and has three specific objectives:

- to produce geolocalized digital products of the historical photographs and archives that can be used for environmental change studies in general;
- to explore the causes, impacts, scales, and trends of land use and land cover and their changes with the help of these digital products;
- to improve the accessibility of digital products related to historical photographs and archives for both the scientific community and the public at large in order to foster their use.

The PAStECA project (2017-2021) is funded by BELSPO and is a collaboration between RMCA, KU Leuven and ULB.

HERITAGE STUDIES

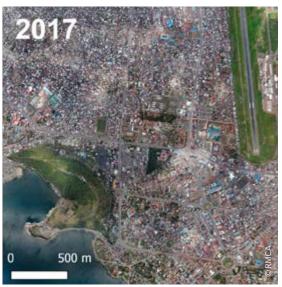
The region of the Pool Malebo: an ancient and rich, but unknown, history



Potsherds from the inner Congo basin, found on the Kingabwa site (Kinshasa) and dated ca. 13-15th century. They are the material evidence that from that period onwards there was long-distance trade between the Pool and the central Congo basin.

Since the 14th century, Pool Malebo, on the Congo River, has been an important region, both politically and economically. It is the border region between the Congo and Teke states, two major political entities of pre-colonial Central Africa, and it is also at the crossroads of major trade routes. However, little is known about its ancient and rich history. When did these major states develop, and on what social and economic basis? In what way did these states influence the Pool region? Historical sources provide information from the end of the 17th century, but archaeological sources that could provide clues about the period before, and as far back as 2,500 years ago, remain highly fragmented. In order to fill the gaps, we decided to explore the archaeology and history of the Pool region. Since the start of the project in 2017, UNIKIN (Université de Kinshasa), together with the IMNC (Institut des Musées nationaux du Congo), has carried out prospecting and test pits in the hills south of Kinshasa, and in the vicinity of Kasangulu (Central Congo), which borders Kinshasa. Comparing pottery from these two regions can provide insight into the evolution of the historical boundaries in the area. The project, partly funded by the RMCA, has enabled Igor Matonda, who was recently appointed professor within UNIKIN's History Department, to continue his post-doctoral research and guide students in the field. The survey and test pits gave positive results and have already provided material for a Master's thesis.





Evolution of the City of Goma (DRC): 1947 (aerial photograph from the RMCA collection) versus 2017.

Supporting young African scientists in research into fruit flies



'Taxonomy of fruit flies in Tanzania' workshop.

Fruit and vegetable cultivation is an important sector for Africa's economic development. However, fruit flies (Diptera, Tephritidae) cause significant damage to these crops. The RMCA has a long tradition of researching fruit flies in Africa, and has set up projects to combat these harmful insects with its African partners. Training young African scientists is one of the priorities of this programme.

Since 2009, the Invertebrates department has organised biannual group traineeships in the taxonomy and ecology of African fruit flies, with financial support from the DGD. Since 2015, this traineeship has been organised in collaboration with Sokoine University of Agriculture in Tanzania, which makes it possible to organise fieldwork.

In order to support former trainees in their research, and give them the opportunity to share it with the international research community, the DGD has made grants available for participation in international conferences. In November 2018, five former trainees from Benin, Burundi, Nigeria, Mozambique, and Tanzania took part in the 9th International Congress of Dipterology in Windhoek, Namibia. This four-yearly conference, attended by more than 300 researchers, was organised for the first time in Africa.

During a session organised by former trainee Dr. Minette Karsten of Stellenbosch University (South Africa), the researchers presented a diverse range of research topics: an overview of applied fruit fly research in Africa in recent decades, an assessment of development methods in biological control in Benin, fluctuations in the populations of fruit flies in relation to biotic and abiotic factors in Mozambique, distribution patterns in different agro-environmental zones in Burundi, and the impact of an exotic fruit fly species on the local fauna and on fruit production in Nigeria.



Dance costume (inv. EO.0.0.33780).

Dance costume restored to its original shape thanks to humidification treatment

Various dance costumes needed to undergo conservation treatment before they could be displayed in the new museum. This was the case for the Tshokwe dance costume in the temporary exhibition *Unrivalled Art*.

The treatment of this fragile costume was a major challenge. The skirt primarily consists of plant fibres, and a very thick twig that functions as a waistband. The skirt had lost its original shape, which could be determined on the basis of archive photographs taken in 1931 by herpetologist and collector Guy De Witte (1897-1980). Due to desiccation over time, the plant fibres and twigs had become brittle and stiff, and consequently could not be handled without breaking.

In order to restore the skirt to its original shape, it first had to be moistened. The skirt was placed in a fully airtight humidity chamber for about six weeks. The conservators constructed this chamber themselves by using a frame of plastic tubes wrapped in plastic film. Subsequently, relative humidity in the tent was gradually increased to 80% by adding ultrasonic cold mist through a small opening. This mist was created using high-frequency underwater vibrations. Thanks to the treatment in a constant, highly humid environment for 6 weeks, the plant fibres and the thick twig slowly regained flexibility. The conservators were then able to attach weighted strings to the skirt to bend the fibres back to their original shape. Once it was back in the original shape, the next major challenge was to work out the most appropriate way to display the skirt and the costume.

INVERTEBRATES

On the lookout for mosquitoes in Belgium and elsewhere

Due to international trade, tourism, and climate/ecological changes, mosquitoes are transported, dispersed, introduced, and sometimes become established in new territories. This is also happening in Belgium. The introduction of potential disease vector species constitutes a threat to human and animal health. MEMO, for 'Monitoring of Exotic MOsquitoes', is an ongoing nationwide three-year monitoring project (2017-2020) funded by the Belgian government and coordinated by the Institute of Tropical Medicine (Antwerp). The joint BopCo (Barcoding Facility of Organisms and Tissues of Policy Concern) unit of the RMCA and the Royal Belgian Institute of Natural Sciences is using DNA-based technologies to validate the morphological identifications of eggs, larvae, and adult mosquitoes collected at various potential points of entry throughout Belgium. Additionally, a DNA sequence reference database and identification workflow is being constructed to assist future research groups in their identification services. Already, this reference database and DNA-based identification expertise is being applied and rendered useful for yet another service that BopCo is providing to the Belgian Defence, i.e. the identification of mosquitoes encountered by Belgian armed forces that are deployed abroad, in order to minimize mosquito-borne disease threats during these deployments.

BopCo is a BELSPO contribution to the European Research Infrastructure LifeWatch.



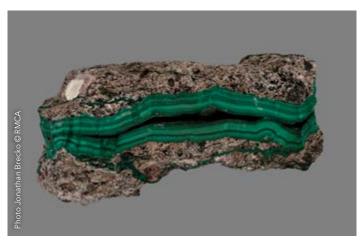
www.africamuseum.be/en/research/discover/news/bopco



Aedes japonicas, an exotic mosquito species that has been found in Belgium since 2002.

Impact of creating the new reference exhibition on the mineral collection

In 2018, about 600 showcase-quality specimens belonging to the mineral collection of the RMCA were used for the installation of the Mineral Cabinet module that is part of the new reference exhibition. This module presents an overview of the mineral resources of Central Africa, focused on the nature of their occurrence and on their origin. The transfer of these specimens to the museum was the culmination of a process that had taken several years, involving the selection of objects from our historical collections and targeted acquisitions of additional specimens. An important acquisition was a large series of specimens received from the Université Libre de Bruxelles, representing a part of the collections of its former Department of Applied Geology. This major donation consists of all its holdings for Central Africa, including important series of samples of tin, tantalum, and tungsten deposits from the Great Lakes region, copper-cobalt deposits from the Katanga Copperbelt, and manganese deposits from southwestern Katanga. These and other additions to the collection, and the creation of the mineral exhibit, have prompted a major reorganization of the reserves, aimed at rationalizing their structure and increasing their accessibility. This involved the creation of some new subdivisions, in a collection that is arranged hierarchically by provenance, as well as an expansion of storage space for several localities, to accommodate new acquisitions as well as transfers from previously unregistered reserves and from an ore geology subcollection.



Specimen with thick laminar malachite coating along opposite sides of a fissure. Lubumbashi area, Haut-Katanga Province, DR Congo (RGM 18292). Specimen donated by the Université Libre de Bruxelles, currently on display as part of the RMCA mineral exhibit.

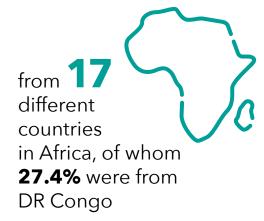
Traineeships and study visits for African researchers

142 people



64% 36%

men women



DEVELOPMENT COOPERATION

142 traineeships and study visits for African researchers with the support of the DGD

Thanks to the financial support of the DGD, the RMCA has been organising a traineeship programme for young African researchers for many years. In 2018, 142 people benefited from this programme, which takes place within the museum and also increasingly in Africa.

Three group courses were organised in Tervuren: a three-month training course for five scientists on the taxonomy of African fish and FishBase, the largest fish database in the world; a two-month training course for four archivists from DR Congo, Burundi or Rwanda; and an intensive two-month training course on historical research and the opportunity for two doctoral students to consult the archives. Of the six individual trainees who spent two months in Tervuren, three of the scholarships were part of an ABIC internship (African Biodiversity Information Center). One of the focuses of this traineeship is sharing biodiversity data with African institutions.

Through the museum's numerous scientific cooperation projects with African institutes or organisations, 31 scientists and staff members came to the RMCA for research or training in the fields of geology, ichthyology, and history. There was also an artist in residence, and for the first time a journalist in residence at the museum. Finally, in the context of the reopening, 21 people were invited from DR Congo.

In order to reach a larger audience, the RMCA is also increasingly organising training courses in Africa. A total of 45 African scientists took part in three group courses. There was an internship in wood biology in Madagascar (18 participants, 14 days) and in the taxonomy of African fruit flies in Tanzania, in collaboration with Sokoine University of Agriculture (12 participants, 10 days). 15 participants followed the training course in the conservation and digitisation of marine zoological museum collections (with a focus on echinoderms and algae) at the University of Antsarinana in Madagascar, lasting 18 days. Finally, a further 27 former trainees attended international congresses on ichthyology in Malawi, or dipterology in Namibia.



Marine zoological museum collections traineeship in Madagascar.

Increasing marine taxonomic knowledge in Mozambique: the case of two neglected taxa (MaTaMo)



More than 480 echinoderm samples were collected during an expedition in spring 2018.

Apart from a few exceptions, research on the marine biodiversity of Mozambique is quite recent. For algae and echinoderm taxonomy in particular, little to no critical research mass exists. In order to achieve solid capacity building in echinoderm and algal taxonomy, the MaTaMo project was initiated in 2018 with the main purpose of maintaining reference collections, to address scientific questions that will aid Mozambique in understanding and managing its marine natural resources sustainably. The project is also aimed at training emerging Mozambican researchers in the collection, preservation, and study of specimens of these two neglected taxa.

A team of researchers from Belgium and Mozambique collected more than 480 echinoderm specimens at several sampling sites in the South of Mozambique during a mission in April and May 2018 for the MaTaMo project. Most of the specimens were sent to Belgium for determination. The collected DNA samples will allow not only better taxonomic identification, but also improved higher-level systematic studies of the seaweeds and echinoderms of Mozambique, and of their relationships to taxa from other parts of the world. Similar studies will be conducted along the coastline of North Mozambique, and detailed records from various sites along the east African coast will bring us closer to finding the 'canary in the coal mine' that could detect effects of climate change as they begin to happen.



www.africamuseum.be/en/research/discover/ news/mozambique2018

HISTORY AND POLITICS

Finding Dr. Livingstone. A history in Documents from the Henry M. Stanley Archive

The Henry M. Stanley archives, part of the collection of the King Baudouin Foundation held in trust at the RMCA, were inventoried and made available to the public in 2005. Until now, these documents were mostly the concern of a circle of international researchers. This co-publication with Ohio University Press (to be released in 2019) focuses on Stanley's 1871-1872 travels through East Africa to meet with Scottish missionary Dr. Livingstone. The volume will bring to a wider audience the story as Stanley himself wrote it. It took two years for Dr. M. Leduc-Grimaldi, in charge of the Henry M. Stanley Archives & collections, and Prof. Emeritus James L. Newman (University of New York, Syracuse) to complete the transcription of all archives pertaining to the expedition. This includes original manuscripts, sometimes in poor condition; seven diaries; hundreds of pages of notebooks and drafts; and scores of letters, completed with essays.

This publication offers several levels of reading: first, the full transcription of two major Stanley diaries - his thoughts, his difficulties, his despondency & illness, and also conversations with Livingstone, and an in-depth reflection on the budding friendship between the old traveler and the young journalist - shows a more genuine adventure than the somewhat contrived famous book by Stanley. Next, Stanley's notebooks are full of observations on natural resources, animals, landscapes, languages, caravanning, local courts and kings, regional wars, and long-distance trade. Finally the context is developed using the correspondence between Stanley, the New York Herald staff, the American and English consuls, and Livingstone's children and friends.

DEVELOPMENT COOPERATION

Strengthening a national digital archive for geological data for Rwanda and geological research

In 2018, the RMCA started a collaboration with the Rwanda Mines, Petroleum and Gas Board (RMB), the Rwandan geological service, to create a digital national archive for (historical) geological and mining data, and to enhance and expand geological and mining research. The RMCA will exchange crucial data, information and knowledge on the geology of Rwanda with the RMB, and will cooperate closely in the area of geological research.

The concrete objectives are:

- to design and implement a centralised geodata information management system (Geo-IMS).
- to transfer essential geodata from the RMCA's Rwandan archives, both digital and paper-based (raw data, shapefiles, geological and mineralogical maps, reports).
- to support the interpretation of the geodata (both existing and newly collected) through joint (field) work and capacity building.

In June and July 2018, Rwandan geologists studied the RMCA's documentation. The existing geological maps have shortcomings and do not always correspond to the actual situation, so they needed to be revised according to current techniques and standards. Joint fieldwork in the Karongi district in August 2018 and January 2019 was a first step towards updating the geological map. During this fieldwork and training seminars in September 2018 and February 2019, early-career Rwandan geologists were trained in geological research themes and techniques, including cartography, sampling and the use of GIS. A set of 25 geological maps (1/50,000) was also supplied to the RMB in 2018, and RMCA data were prepared for transfer to the new Geo-IMS in 2019.

This cooperation, funded by Enabel (the Belgian development agency), is the Belgian contribution to the 'Sustainable Development of Mining in Rwanda' project (SDMR) set up by the UK's Department For International Development (DFID).



Fieldwork in the Karongi district.

2nd edition of the Digital 4 Development (D4D) Prize

On 4 October 2018, the RMCA organized the innovation fair and awarding ceremony for the 2nd edition of the Prize Digital for Development (Prize D4D), which attracted a mix of attendees from NGOs and the public, private, and research sectors. With nearly 200 participants (compared with 144 for the previous edition), the event was a huge success. First organized in 2016, the Prize D4D is a biennial initiative of the RMCA with the support of the Belgian Directorate-General for Development Cooperation and Humanitarian Aid (DGD).

Prize D4D rewards outstanding initiatives that use digitisation as a lever for development. Selected projects and ideas use the potential of (new) technologies in innovative ways to help achieve Sustainable Development Goals (SGDs). The jury, led by the Director General of the RMCA and composed of 18 experts in the field of digitalisation for development, chose awardees for the 'iStandOut' (best practices) and 'iStartUp' (innovative idea) categories. The winner of the third category, 'iChoose', was selected by the public.

The awardees are:

- · 'iStandOut': Access Agriculture Overcoming the language barrier

 Access Agriculture promotes innovations in sustainable agriculture and rural
 enterprises through capacity development and South-South exchange of quality
 farmer-to-farmer training videos in local languages. The awardee received a credit
 line of 10,000 euro to be used for (research) activities and career development
 (participation in conferences, training courses, etc.).
- · 'iStartUp': WisePocket A mobile application for e-learning and wise communication
 The WisePocket application is a spin-off of the VUB and the Universidad de Oriente
 of Santiago de Cuba. This mobile app uses interaction and gamification to make
 healthcare campaigns more effective while allowing their efficiency to be quantified.
 The awardee is offered an internship in a Belgian incubator for a value of 25,000 euro.
- · 'iChoose': EIGHT Unconditional money transfers in Uganda
 EIGHT is an initiative that allows residents of a town in Uganda to become agents of
 change themselves through mobile money transfers without conditions. The awardee
 received a cash prize of 5,000 euro.





Prize D4D innovation fair.



Winners received their awards from Alexander De Croo, Deputy Prime Minister and Minister for Development Cooperation, and Guido Gryseels, Director General of the RMCA.

The Publications service and the renovation

The energies of the Publications service were focused on books and other texts needed for the museum's reopening. With the addition of German to the museum's language offerings, panels in the new permanent exhibition, website texts, and visitor guides are gradually being made available in this language – quite a challenge for the service.

It continued its open access knowledge dissemination activities and reinforced its international visibility through targeted activities within consortiums of editors and institutions. The service also continued to promote its publications through different sales channels, including the museum's new AfricaShop where all 1,800 works published by the RMCA since its inception are made available.



The museum shop's operations were awarded as a 5-year franchise. Merchandising, publications, and gift items make it an AfricaShop worthy of the name

Support for our activities

The partnership with Philippe de Moerloose enabled the publication of *Unrivalled art. Spell-binding Artefacts at the RMCA*, a catalogue of ethnographic masterpieces that accompanies the exhibit of the same name, was inaugurated along with the museum itself.

The Richelieu Charlemagne club (Liège), whose mission is to support cultural initiatives and French-language promotion around the world, assisted the RMCA in meeting a request for book donations to Congo. As such, the Institut supérieur d'Études agronomiques de Mangai (Bandundu province) received a selection of French scientific books on agricultural economics, forestry, agricultural science, tropical wood, and so on, which will be of great use to both students and teachers as references.



Impact factors of our scientific journals

In 2018, the impact factors of our journals made encouraging progress. The *European Journal of Taxonomy* went from 0.649 to 0.872 for 2018-2019. Meanwhile, *Africana Linguistica* received an IF of 0.364 for the same period.

A new *EJT* member and the 400th issue

In February, the European Journal of Taxonomy, published by a European consortium in which the RMCA is an active member, released its 400th issue. Since it was launched in 2011, EJT has published 13,328 pages in which 1,352 new taxa (including 1,231 new species) were described. The EJT Steering Committee unanimously voted for the inclusion of a new member in the consortium: the Zoological Research Museum Alexander Koenig (Forschungs Museum Koenig) in Bonn (Germany).

LIST OF PUBLICATIONS

Social Sciences and Humanities

Ansoms, A., Nyenyezi Bisoka, A. & Vandengiste, S. (eds). 2018. *Conjonctures de l'Afrique centrale 2018*, series 'Cahiers africains' (no. 92). Paris/ Tervuren: L'Harmattan/RMCA & CRE-AC, 363 p. (PR)

Omasombo, J. (ed.) et al. 2018. Haut-Katanga. Lorsque richesses économiques et pouvoirs politiques forcent une identité régionale. Series: 'Monographies des Provinces de la RDC', vol. 11 (2 parts in box). Tervuren: RMCA.

Devos, M., Maniacky, J., Ricquier, B., Güldemann, T. & Nakagawa, H. (éd.). 2018. *Africana Linguistica* 24: 162 p. (PR; IF 0.364)

Series 'Collections of the RMCA'

Volper, J. (ed.). 2018. Art sans pareil. Objets merveilleux du Musée royal de l'Afrique centrale. Kontich/Tervuren: Bai/RMCA with the support of Ph. de Moerloose, 176 p. (Also available in Dutch: Weergaloze Kunst. Betoverende objecten uit het Koninklijk Museum voor Midden-Afrika, in English: Unrivalled Art. Spellbinding Artefacts at the Royal Museum for Central Africa and soon in German.)

Exhibition catalogues and guides

RMCA. 2018. Making of. De renovatie van het Koninklijk Museum voor Midden-Afrika. Kontich/ Tervuren: Bai/RMCA. 160 p. (Also available in French: The Making of. La rénovation du Musée royal de l'Afrique centrale, and in English: The Making of. The renovation of the Royal Museum for Central Africa.)

RMCA. 2018. Koninklijk Museum voor Midden-Afrika. Gids. Kontich/Tervuren: Bai/RMCA, 176 p. (Also available in French: Musée royal de l'Afrique centrale. Guide, and soon in English.)

Volper, J. 2018. *Art sans pareil,* 104 p. Free booklet for the temporary exhibition. Also available in Dutch: *Weergaloze Kunst,* in English: *Unrivalled Art,* and in German: *Unvergleichliche Kunst.*

In partnership

Jadinon, R. (ed.) 2018. Masimba. Gabon -Ngounié - Pays des Tsogo. Music for Tsogo harp. CD with a trilingual booklet. Brussels/Tervuren: Colophon Records/RMCA.

Volper, J., 2018. *Un musée sans pareil/An Unrivaled Museum*. Special issue. Arquennes: Primedia; partnership with the RMCA, 80 p. French-English bilingual edition.

Various

Jaarverslag/Rapport annuel/Annual Report 2017.

Online publications

Nkulikiyinka, J.-B. & Bizimana, S. (Préface de Lame, D.) 2018. Culte de Ryangombe. Series 'Documents on Social Sciences and Humanities', 269 p. Jaarverslag/Rapport annuel/Annual Report 2017, see supra.

Open access

European Journal of Taxonomy, vol. 390 to 490 within some papers by RMCA scientists:

Skelton, P.H., Swartz, E.R. & Vreven, E. 2018. 'The identity of Barbus capensis Smith, 1841 and the generic status of southern African tetraploid cyprinids (Teleostei, Cyprinidae)'. *European Journal of Taxonomy* 410: 1-29. https://doi.org/10.5852/ejt.2018.410 (PR; IF 0.872)

Jocqué, R. & Alderweireldt, M. 2018. 'New Chummidae (Araneae): quadrupling the size of the clade'. European Journal of Taxonomy 412: 1-25. https://doi.org/10.5852/ejt.2018.412 (PR; IF 0.872)

Jocqué, R. & Henrard, A. 2018. 'A revision of the genus Cicynethus Simon, 1910 (Araneae, Zodariidae), a tale of colour patterns'. European Journal of Taxonomy 465: 1-35. https://doi.org/10.5852/ejt.2018.465 (PR; IF 0.872)

Bénichou, L., Gérard, I., Laureys, E. & Price, M.J. 2018. 'Consortium of European Taxonomic Facilities (CETAF) best practices in electronic publishing in taxonomy'. European Journal of Taxonomy 475: 1-37. https://doi.org/10.5852/ejt.2018.475 (PR; IF 0.872)



















THE SCIENTIFIC INSTITUTE IN FIGURES

WHO?

research departments

86 researchers

in more than

15 disciplines

120

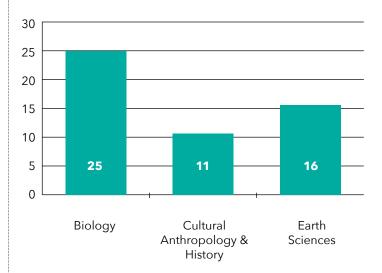
African trainees and doctoral students

of the scientists are financed with external project funding

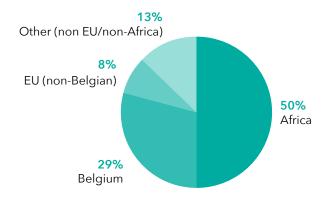
Doctoral research

- 6 doctorates completed in 2018
- **52 doctorates ongoing** in 2018
 - · of which 9 new doctorates were started
 - a total of 50% are African researchers from
 9 African countries
 - · 29% Congolese researchers
 - · 29% Belgian researchers
- · Supervision of **34 Master's students**
- · **32 volunteers** worked in the scientific departments
- **805 researchers visited the RMCA** for research and/or to consult the collections

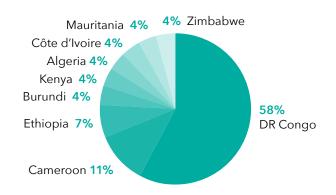
Number of doctorates per department



Origin of doctoral students



Nationality of African doctorate students



WHAT?

In 2018

· 100 ongoing research projects

- of which 57% are in international partnerships and 43% are in collaboration with national partners
- 16 new projects started in 2018

more than 170 presentations at scientific congresses

276 texts published, of which 165 were peer-reviewed

Missions:

- 94 missions to 15 different countries in Africa (this is 48% of all multi-day foreign missions)
- 43% of the missions in Africa took place in DR Congo

- Awards:

- Jacques Kets Zoology award (Public Prize)
 awarded by the Royal Belgian Zoological
 Society to Nathan Vranken's (PhD Student)
 MSc thesis 'The thick-lipped haplochromine
 cichlids of the Lake Edward system:
 a morphometric revision' (under supervision
 of Jos Snoeks)
- Prize for the best MSc thesis (Oversea student) awarded by ULiège to Toussaint Mugaruka Bibentyo (MSc. Student) for his research on 'Landslide spatio-temporal distribution in a changing environment: focus on the Ruzizi gorges at the DR Congo Rwanda border' (under supervision of Olivier Dewitte)
- Best Poster Award awarded to Antoine
 Dille (PhD Student) by the Royal Academy
 for Overseas Sciences of Belgium during
 the Young Researcher Overseas Day 2018
 for a poster entitled 'Questioning causes
 and drivers of slope instability in a tropical
 context insights from the Ikoma Landslide
 (DR Congo)' (under supervision of François
 Kervyn and Olivier Dewitte)



U

Collections and Libraries

The RMCA's international reputation is based on its vast expertise and its unique collections from the humanities and natural sciences from the Central African region. These collections are both valuable heritage and of great scientific value. They form the basis for the large range of research projects. The fact that less than 1% of the collections can be seen in the new permanent exhibition gives an idea of its vast size.

The museum is responsible for the physical management of these diverse and extensive collections, to conserve them and digitise them. It makes its collections available to the public in various ways. The collection is promoted through research, exhibitions, publications, and databases. Collection pieces are loaned out all over the world for exhibitions or scientific research. In addition, researchers can also consult documents or analyse artefacts and specimens on-site. The collection continues to grow. These days, it expands primarily in the context of research projects in collaboration with African universities and museums.

The museum also has a network of libraries, consisting of a central library and more than ten specialised sub-libraries in various disciplines within the humanities and natural sciences. The complete collection of the museum contains more than 130,000 books and several thousand journals, as well as valuable historical works.

In 2018, many of the activities of the Collection Management services were related to the renovation of the museum and the new permanent exhibition.

A SAMPLE FROM THE COLLECTIONS

Cultural Anthropology & History

120,000

ethnographic artefacts

75,000

archaeological artefacts

9.000

musical instruments

3,000

published ancient maps

500,000

historical photographs

20,000

historical objects and Western artworks

3 km

historical archives

650

historical films on the Belgian Congo, Rwanda and Burundi (1940-1960)

Biology

10,000,000

specimens among which:

6,000,000

insects

1,000,000

fishes

500,000

butterflies

300,000

spiders

195,000

amphibians

150,000

birds

135,000

mammals

80,000

wood samples

45,000

reptiles

17,000

snakes

Earth Sciences

180,000

rock samples

200,000

aerial photographs

20,000

geological maps

18,000

palaeontological specimens

17,000

minerals

Safe (return) transport of the collection items to the museum

For the refurbishment of the new AfricaMuseum, the large-scale relocation of the collection items, which were temporarily spread over the various museum depots, was a remarkable organisational achievement. Around 1,850 items from the humanities collections and 2,190 specimens from the natural sciences collections were moved to the museum.

Before being transported to the museum building, several container loads of objects were held in quarantine for 2 weeks, to treat them against insects and fungi, and rule out further contamination. Certain objects needed to be packed with the utmost care prior to transportation. For the humanities collections, the Collection Management service had a total volume of 32 m³ of transport containers at its disposal for moving the items. In addition, 206 customised chests were made to get everything into the museum safely. Other items, including mounted animals, were transported directly to the museum more effectively without the need for special chests. Once in the museum, installing some of the items was still a major challenge. For example, the hippopotamus needed to be hoisted onto its podium with a gantry crane.





The exhibition includes

558 showcases

1,265 pedestals

335 plexi or metal build-ups

637 spotlights

180 objects that underwent conservation treatment

RENOVATION





A sensible layout in the new exhibition

For the layout of the new museum areas, close cooperation between the collection managers, conservators, and mount makers was essential in ensuring that the objects were exhibited sensibly, with the aim of preventive conservation.

One challenge, for instance, was the Kuba mask costume in the *Rituals and Ceremonies* room, which was put together in the museum from no less than twenty separate collection items, based on historical photographs. As the ensemble is so fragile, all the individual parts were equipped with customised supports. A metal frame in the shape of a torso acts as the basic structure to connect the trouser legs, bracelets, belt, bag, mask, feathers, and so on. It is inconspicuous, but no accessory touches the actual costume. As such, strong magnets keep the legs in place, and the cone-shaped hat, which is a replica, is also a base to easily and securely attach the feathers.

There are also thirty pieces of flat textile on display in the museum (for example *kangas* or waxcloths), which were carefully supported before being suspended. Each piece was first sewn by hand onto a support, a labour-intensive and precise job which required several metres of fabric. This support allows the textile to be displayed in various ways. Some items were installed on a roll, such as the *kangas* in the *Languages and Music* room. Other items, such as a skirt in the *Rituals and Ceremonies* room, were suspended with velcro on an acid-free base which was attached to the wall.

The specimens from the natural sciences collection also received the necessary attention in terms of how they were displayed. Indeed, the zoological specimens are presented in a more contemporary way, without glass protection separating the visitor from the animals. The old pedestals were removed from the 74 mounted animals. The heads of the rhinoceros and the wildebeest were suitably reinforced. All the pedestals in the *Landscapes & Biodiversity* room were custom made and adapted to the size, position and shape of the animal. This sometimes required a complex structure, as was the case for the hanging monkeys, who were suspended between the light boxes and exhibition panels. Several animals, including the elephant and the giraffe, had already undergone necessary restoration treatment in 2017.

DIGITISATION

Five-metre-long trap restored to its former glory

Prior to the renovation, three connected giant fishnets were on permanent display in the stairwell of the museum. The thick plant fibres they were made from had become brittle and fragile due to ageing. The loss of flexibility caused the tip of the largest trap to snap when it was removed from the museum and transported to storage. Before it took up a new place in the *Resource Paradox* exhibition zone, the fishnet was given a much-needed conservation treatment.

The trap, which had become soiled after years of being on display, was first mechanically cleaned with a soft brush and a vacuum cleaner. The next challenge was to put the snapped tip back in a straight line with the rest of the more than five-metre-long trap, which weighs over 150 kilograms. The entire conservation team needed to be on hand to get the job done.

The tip was repaired in two stages. The conservator first stabilised the broken plant fibres by temporarily attaching thin bamboo sticks with Teflon tape onto the original plant fibre. The bamboo sticks were matched to the right colour in advance with a conservation-friendly acrylic paint (Golden Fluid Acrylics).

Once all the broken plant fibres had been splinted, the temporary tape was replaced by a permanent adhesive. The bamboo sticks were attached to the original plant fibre using a special binding technique incorporating polyester yarns. Finally, the yarns were attached with a very small amount of acrylic-based glue (Paraloid B72) for extra strength.



Digitisation to enhance the new exhibition

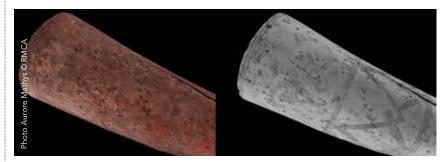
For the new permanent exhibition, various snakes from the biology collection were scanned using the µCT scanners of the Royal Belgian Institute of Natural Sciences. Thanks to these data, it was possible to carry out a digital dissection (segmentation). The skulls were then cast in a 3D model. This model was further processed to create an anatomically correct 3D model in which the snakes' jaws are open: that way, all the characteristics specific to the taxonomic group in question are clearly visible. These digital models were enlarged and printed by the company Materialise, and are on display in the museum. Museum visitors can therefore manipulate the models themselves, and have a close look at the skulls from all sides.





3D model of a snake specimen (Bitis gabonica) from the collection, with the jaws open and closed. The 3D printed model can be viewed in the museum.

Looking through paint layers with 3D multispectral digitisation



Detail of the texture of the 3D models (inv. MO.1967.63.802) in natural light (left) and in infrared (950 nm) (right).

The aim of the 3D spectral project is to develop a method that can combine 3D digitisation with multispectral digitisation and see what the advantages are for digitising the cultural heritage and natural history heritage collections.

As part of this project, an mpungi elephant tusk was digitised in multispectral 3D. Edmond Dartevelle collected this object in Angola's coastal zone in 1938, and it is registered in the RMCA archives as originating from the Solongo tribe. This is a linguistic subgroup of the Congo living in the northwest of Angola, in the region bordering DR Congo. The tusk was smeared with a dark brown-red 'paint', most likely using wood smoke and palm oil. It shows decorative patterns engraved all over the body, linear rings, geometric motifs which are typical of the Congo style, but also a cross, which could indicate European, and even Christian, connections. As the colour is dark, the engraved motifs are difficult to see. 3D multispectral digitisation has made it possible to put this decoration in the spotlight, thanks to the infrared wavelengths. The 'paint' used is invisible under infrared, meaning that the decorative elements form a contrast. Damage, such as cracks on the object, can also be seen. The combination of 3D with multispectral imaging, and specifically with infrared in this case, makes it possible to 'unfold' the decoration, and see it in its entirety.

The 3D spectral project (BR/175/PI/3DSPECTRAL) is a BRAIN pioneer project initiated by the RMCA, in partnership with the KBIN, the University of Bamberg (Germany) and ULiège.





FIGURES: COLLECTIONS, ARCHIVES, AND LIBRARIES

On loan

more than **1,400** biological specimens on loan for research

more than objects from the human sciences on loan for exhibitions



Digitisation

photographs and

3D models, published online on the **DIGIT03** platform

geological specimens digitised

75,000

archival documents scanned from colonial archive funds

ethnographic objects photographed

albums of colonial photography digitised

3,371

digitised publications made available in open access on the Agricultural Research Archive platform

applications for reproduction handled by third parties

Expertise and services

Library

Acquisitions

expert appraisals of ethnographic or archaeological artefacts

visitors for the central and history libraries

more than 1,300 zoological specimens

1,745 wood samples

more than

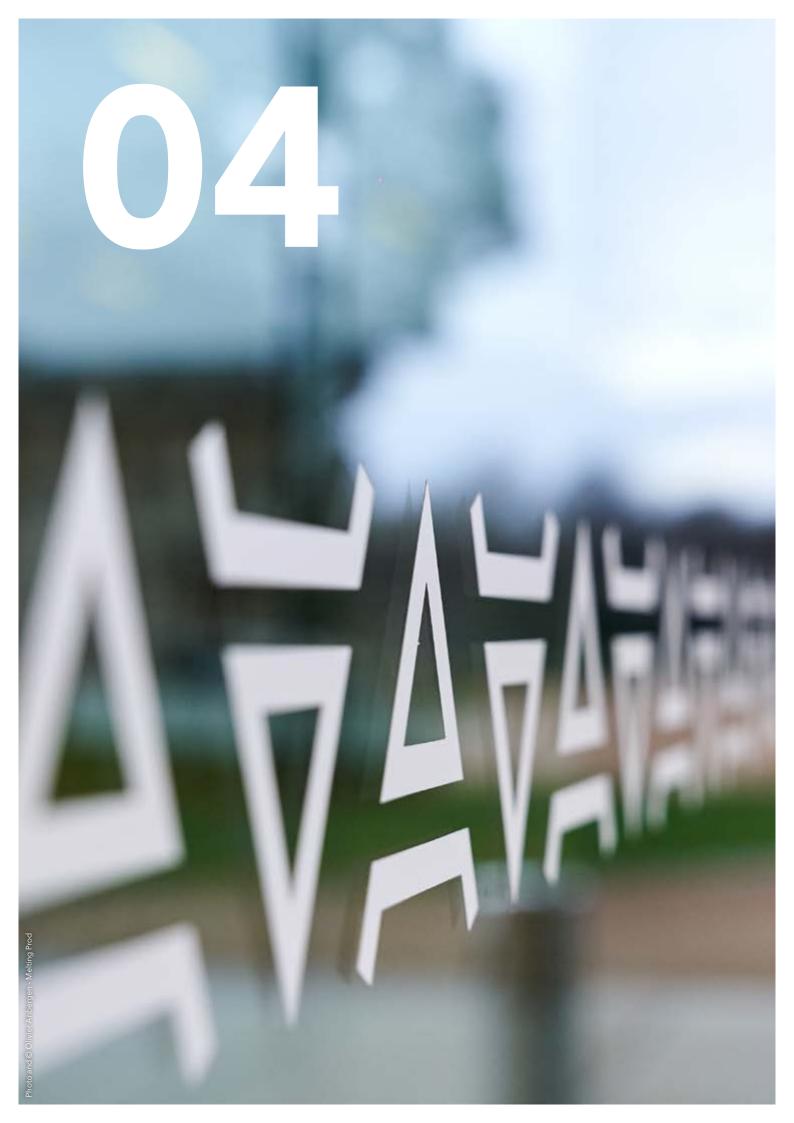
50 objects and

archive funds

1,082 books and journals for the central library

703
analyses in the earth sciences laboratories





TIM SCIES

FINANCIAL REPORT

	2014	2015	2016	2017	2018
Expenses and income (in K€)					
Income	16,354	17,398	15,482	15,070	17,518
Expenses	16,104	15,521	16,249	15,387	20,009
Balance	250	1,877	-767 ⁽¹⁾	-317 ⁽¹⁾	-2,491 ⁽¹⁾
Sources of income					
Human Resources Envelope	6,461	6,431	6,343	6,356	_(2)
Endowment	3,868	4,649	3,491	3,931	10,197
Own income	382	426	389	504	952
Projects	5,016	5,213	4,861	4,010	5,560
Other	627	678	398	269	809
Total	16,354	17,398	15,482	15,070	17,518
Evolution of the expenses per source	e (in K€)				
Staff	11,320	11,454	11,599	11,476	11,294
Human Resources Envelope	6,461	6,431	6,343	6,356	0
Staff own income	4,860	5,023	5,255	5,120	0
Statutory staff			5,230		
Contractual staff			6,063		
General operations	4,187	3,585	3,818	3,242	4,962
Equipment and library	596	482	833	670	3,753
Total	16,104	15,521	16,249	15,387	20,009

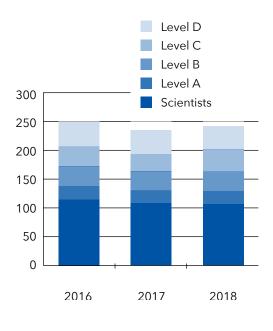
⁽¹⁾ Deficit and derogation from ESA balance with the approval of the Minister for the Budget

⁽²⁾ Since 01.01.2018, endowment and human resources envelope have been merged

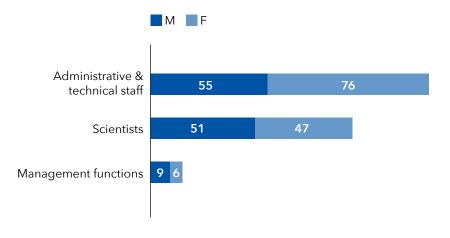
STAFF

Distribution of statutory and contractual staff according to level

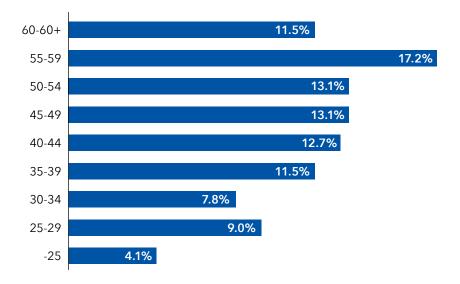
	2016	2017	2018
Scientists	115	108	109
Statutory	34	33	36
Contractual	81	75	73
Level A	23	21	23
Statutory	10	10	13
Contractual	13	11	10
Level B	34	34	33
Statutory	22	24	23
Contractual	12	10	10
Level C	34	30	39
Statutory	20	17	18
Contractual	14	13	21
Level D	34	34	40
Statutory	1	1	1
Contractual	42	40	39
	249	234	244



Distribution according to gender

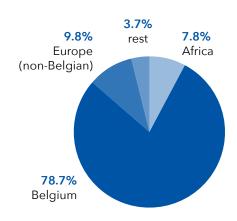


Age pyramid



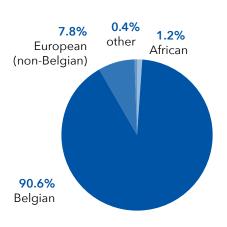
Cultural diversity

Country of origin



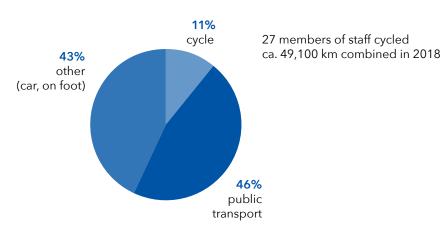
25 different countries of origin: 10 countries in Europe, 9 African countries, 4 countries in Asia, Russia, and the United States

Nationality



12 different nationalities: 8 European nationalities, 3 African nationalities and 1 American nationality

Mobility



PUBLIC SERVICES

Visitors

- \cdot 37,310 visitors to the museum since its reopening on 8 December 2018 until the end of the year
- \cdot 28,941 visitors to the Congo Stars exhibition in KunstHaus in Graz
- · 5,116 visitors to the AfricaMuseum@EgmontPalace exhibition
- · 1,850 people invited to the opening on 8 December

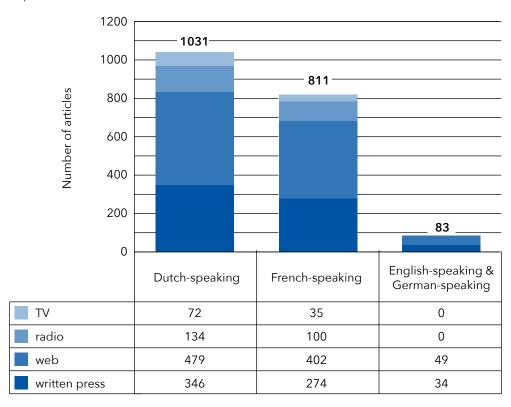
Communication

The museum in the press

Belgian press

Total number of articles: 1,925

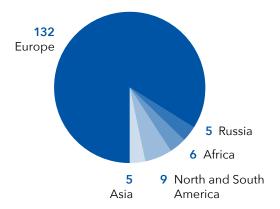
Number of articles per language and per medium



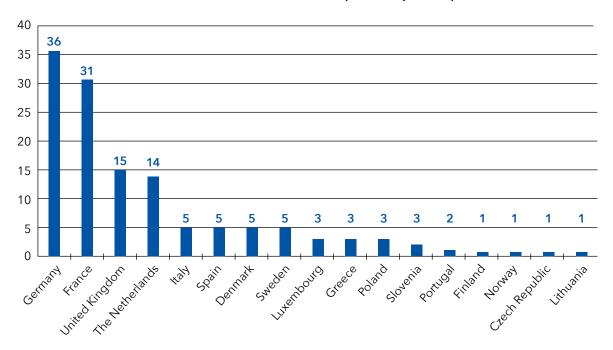
Foreign press

Total number of articles: 157

Number of articles per region in the world



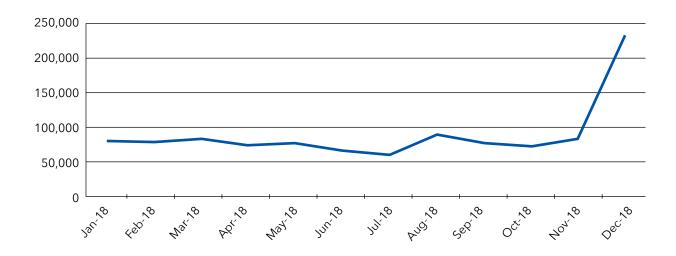
Number of articles per country in Europe



Website

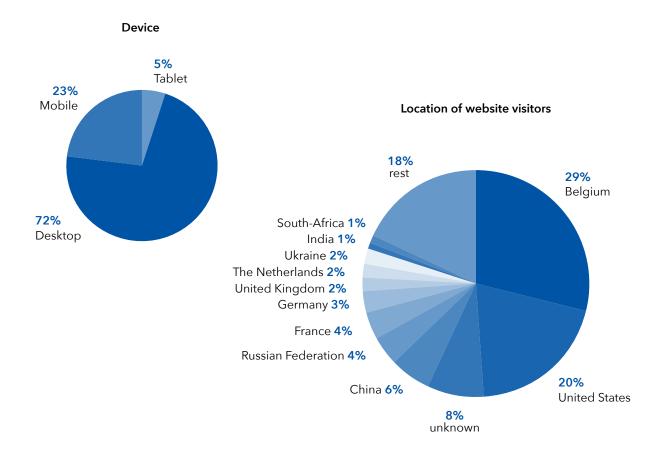
The new website was launched on 31 May and its technology, graphic design and structure were completely revamped in line with the new philosophy of the museum.

- · In 2018, the number of website visits passed the 1 million mark: 1,086,694 visits, an increase of 24% compared to 2017.
- · 21% of all visits were made in December, with the highest number (93,808) in the week just before reopening.



- · The number of unique visitors (IP addresses) similarly increased by 22%, to 487,229.
- · The average number of pages viewed per visit decreased to 3.82.
- · The homepage remains the most popular section: 59% of all visitors (also) visited the homepage.
- 59% of visitors arrive at the website 'directly' or via a search engine, 41% are referred via another website. That is a strong increase compared to 18% in 2017.

- · 72% visited the website from a PC, while 28% from a mobile device (mobile phone or tablet), a significant increase compared to 16% in 2017.
- · 3% of all visitors come from Africa, with the largest group coming from South Africa (1%). 0.3% of the visitors come from DR Congo.



Social media

The museum ended 2018 with 19,535 followers on all its social media.

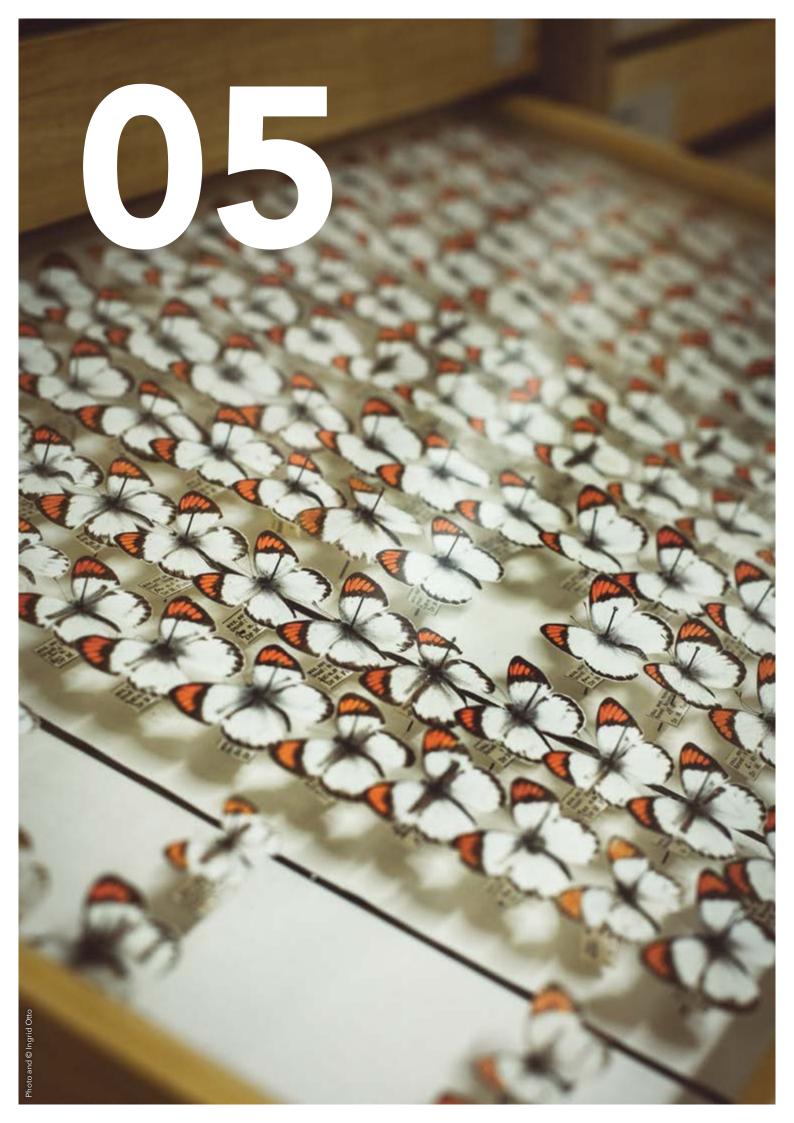
It managed to add 8,587 new followers, an increase of 78% compared to 2017.

- · Facebook page AfricaMuseum EN: 2,748 new followers, a rise of 49%
- · Facebook page AfricaMuseum België: 1,860 new followers, a rise of 890%
- · Facebook page AfricaMuseum Belgique: 1,566 new followers, a rise of 1,520%
- · Instagram page: 1,200 new followers, a rise of 86%
- · Twitter page: 1,213 new followers, a rise of 33%

The opening campaign MyAfricaMuseum, which was launched in mid-November, accounts for part of the sharp rise: it attracted 2,800 new fans to the museum's Facebook pages, and 1,000 new followers on Instagram.

Our top posts reached:

- · 31,400 people on the AfricaMuseum EN Facebook page
- · 11,900 people on the AfricaMuseum België Facebook page
- · 4,000 people on the AfricaMuseum Belgique Facebook page
- · 1,318 views on **Instagram**
- · 3,818 views on Twitter



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Mission statement

The museum must act as a world centre for research and knowledge dissemination on the past and present societies and the natural environments of Africa, in particular of Central Africa, to foster - among the general public and the scientific community - a better understanding of and interest in this field and, through partnerships, to make a substantial contribution towards the sustainable development of Africa. Thus the core tasks of this Africa-oriented institution consist of acquiring and managing collections, conducting scientific research, implementing the results of this research, disseminating knowledge, and presenting to the public a selection from its collections.

Governance and advisory bodies

The RMCA is a federal scientific institution under the aegis of the State Secretary for Science Policy. Administratively speaking, the RMCA is an independently-managed public institution with three governance bodies and one advisory body.

Management Committee

The management committee is responsible for the financial, material and administrative management of the RMCA, and serves the same function for the Royal Belgian Institute of Natural Sciences. Chaired by a representative of the Belgian Federal Science Policy Office, it is made up of four external members (university academics and management experts), the managing directors of each institution, and two representatives of the Belgian Federal Science Policy Office.

Members with a deliberative vote:

- · Frank Monteny, Director General, Belgian Federal Science Policy Office, Chairman
- · Guido Gryseels, Director General RMCA, Vice-Chairman
- · Camille Pisani, Director RBINS, Vice-Chairman
- · Jacques de Gerlache, Communication Manager, SOLVAY S.A.
- François Mairesse, Université Sorbonne Nouvelle - Paris 3
- Ingrid Vanden Berghe, Director General,
 National Geographic Institute of Belgium

 Koen Verhoest, Professor, University of Antwerp - Department of Political Sciences

Members with advisory rights:

- Pierre de Maret, Chairman of the RMCA Scientific Council
- Yves Gobert, Advisor, Belgian Federal Science Policy Office
- · Jacques Lust, Secretary Attaché, Belgian Federal Science Policy Office
- · Erwin Moeyaert, General Finance Inspector
- Marie-Solange Mukarwema, Accountant, RBINS
- Olivier Ninane, Advisor, Belgian Federal Science Policy Office
- Didier Van den Spiegel, Head of Service, RMCA
- · Luc Van Wassenhove, Accountant, RMCA
- Noël Vandenberghe, Chairman of the Scientific Council, RBINS
- Brigitte Lauwaert, Head of Scientific Section, MUMM and RBINS

Non-voting experts:

- Patricia Supply, Director of Support Services, RRINS
- · Tom Aarts, jurist, RBINS
- Laurent Flamend, Advisor, Belgian Federal
 Science Policy Office

Director's advisory committee

Members with voting rights:

- Guido Gryseels, Director General RMCA, Chairman
- · Luc André, Head of Department a.i. Earth Sciences
- · Els Cornelissen, Head of Department a.i. Cultural Anthropology and History
- Marc De Meyer, Head of Department a.i.
 Biology
- · Isabelle Gérard, Head of Publications Service
- Jacky Maniacky, Head of Culture and Society Service
- Didier Van de Spiegel, Head of Biological
 Data and Collection Management Service
- Bruno Verbergt, Operational Director for Public Services

Scientific Council

The Council provides opinions on the quality and relevance of the institution's scientific activities. Half of its members are external experts from Belgian universities and the other half are from the museum's executive scientific staff. The members of the Scientific Council are appointed to a four-year term by the Secretary of State of Belgian Federal Science Policy.

Internal members:

- · Guido Gryseels, Director General
- · Luc André, Head of Department a.i. Earth Sciences
- Els Cornelissen, Head of Department a.i.
 Cultural Anthropology and History
- · Marc De Meyer, Head of Department a.i. Biology
- Jacky Maniacky, Head of Culture and Society Service
- Patricia Van Schuylenbergh, Head of History and Politics Service

External members:

- · Pierre De Maret, Professor, ULB, Chairman
- · Frans Ollevier, Professor, KU Leuven
- · Éric Pirard, Professor, ULiège
- · Camille Pisani, Director, RBINS
- · Noël Vandenberghe, Professor, KU Leuven
- · Koen Vlassenroot, Professor, Ugent

Recruitment and promotion board

The committee is responsible for the selection and promotion of statutory scientific staff. It is chaired by a Federal Science Policy representative and is made up of two external experts from universities and the RMCA's Director-General.

Members:

- · Robert Van De Walle, President, BELSPO
- · Guido Gryseels, General Director, RMCA
- · Sara Geenen, Professor, UAntwerpen
- · Caroline Nieberding, Professor, UCLouvain

Basic Consultative Committee

The Basic Consultative Committee is an advisory body that monitors working conditions and well-being in the workplace. Its members are representatives of personnel and labour unions.

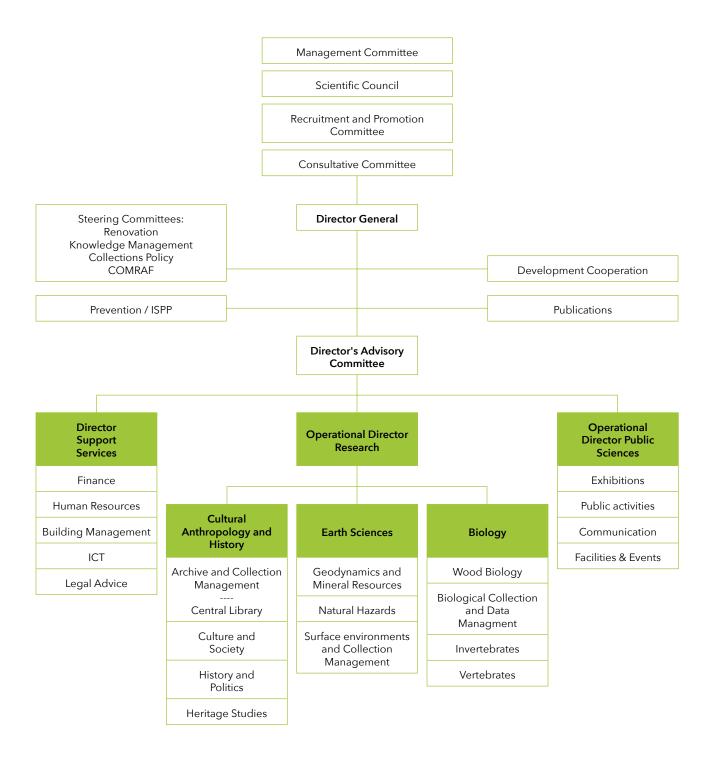
Management delegation:

- · Guido Gryseels, General Director, Chairman
- Bruno Verbergt, Operational Director for Public Services
- · Els Cornelissen, Head of Department a.i. History and Cultural Anthropology
- Marc De Meyer, Head of Department a.i.
 Biology
- · Thierry De Putter, Head of Service
- · Isabelle Gérard, Head of Service
- · François Kervyn de Meerendré, Head of Service
- · Kristien Opstaele, Head of Service
- · Dirk Verbist, Head of Service
- · Mario Thoilants, Prevention advisor
- · Wouter Swalus, Prevention advisor

Union representatives:

- · Valérie Demeulemeester (ACOD/CGSP)
- · Patricia Van Schuylenbergh (ACV/CSC)
- · Geert Dewulf (ACV/CSC)
- · Jean-Christophe Vancoppenolle (ACV/CSC)
- · Martine Renaux (VSOA-Gr II/SLFP-Gr II)
- · Eric Warner (ACOD/CGSP)
- · Dr. Mieke Cogge, occupational physician

Organisation Chart



List of staff

MANAGEMENT

DIRECTOR GENERAL

Gryseels Guido

EXECUTIVE SECRETARIAT

Taekels Veerle

PUBLICATIONS

Gérard Isabelle

Albinovanus Benoît

De Croes Dirk

Debbaut Ann

Divinagracia Maria Fe Emily

Dumortier Mieke

Quadt Michele

Spapen Iris

DEVELOPMENT COOPERATION

November Eva

Andries Nathalie

de Harenne Christina

Kalenga Ndjoli Nadège

Van Nuffel Muriel

INTERNAL PREVENTION AND PROTECTION SERVICE

Swalus Wouter (RBINS/RMCA)

Thoilants Mario

Verbist Dirk (renovation)

SUPPORT SERVICES

FINANCES

Knol Rieneke

Moraux Valérie

ACCOUNTING

Van Wassenhove Luc

Bartholomeus-Lamal Paula

Bruynseels Bianca

Wesse Joy

HUMAN RESOURCES

De Decker Leslie | Spegelaere An

Denis Murielle

Flahou Anic

Herzet Valérie

Tielemans Fabienne

Van Hoey Sonja

ICT

De Mûelenaere André

Bollen Kristof

Du Thanh-Son

Hallaert Bernard

Hardy Benoît

Lagaert Wim

Paesen Roel Theeten Frank

Vignaux Philippe

BUILDINGS

Verbist Dirk

DISPATCHING

Brans Henri

Bruynseels John

Budai Peter

Ouali Abdoullah

Xama Mehdi

GUARDS

Brans Henri

Ali Abraheim

Amzir Jamal

Delhij David

Jadot Rudi

Lienard Jacques

Manuka Rexhep

Moulin Daniëlle

Özcelik Muzaffer

Simon Jerry

Tutenel François

Van Uffelen Rudi

Van Vlasselaer Marc

Wallenus Daniël

Willy Raphaël Baudouin Mérule

Wouters Greta

MAINTENANCE

Nulis Rein | Wauters Jacques

Bah Amadou

Charliers Gisèle

De Coninck Patricia

Decoster Jenny

Kovacs Anne-Marie

Loranc Barbara

Makowska Wieslawa

Ouedraogo Ben Aziz

Rzaca Santos Danuta

Sessou Jéronime

Vanherpe Josyane

TECHNICAL SERVICE

Nulis Rein | Wauters Jacques

Marlaire Stefaan

Putman Patrick

Sorgeloos Guy

Spinnoy Koen

RESEARCH

CULTURAL ANTHROPOLOGY AND HISTORY

Cornelissen Els

HERITAGE STUDIES

Cornelissen Els

Devleeschouwer Nadine

Garenne-Marot Laurence

Ricquier Birgit

Smith Alexandre

Volper Julien

Vral Alexander

CULTURE AND SOCIETY

Maniacky Jacky

Ceuppens Bambi

Bompuku Eyenga-Cornelis Sabine

Devos Maud

Garsou Muriel

Jadinon Rémy

Panella Cristiana

Tonnoeyr Diane

Vanhee Hein

HISTORY AND POLITICS

Van Schuylenbergh Patricia

Cornet Anne

Couttenier Maarten

Di Mauro Lucienne

Etambala Zana Mathieu

Krawczyk Joris

Leduc Mathilde

Léonard Guillaume

Omasombo Tshonda Jean

Stroobant Élodie

Van De Broeck Lore

Vandenbergen Hannelore

ARCHIVES AND COLLECTION MANAGEMENT

Cornelissen Els

RESTORATION WORKSHOP

Genbrugge Siska

De Paepe Anouk Devijver Cindy Keyaerts Stef

van Es Marieke

Vanhauwaert Françoise

Voncken Joy

DIGITISATION & ARCHIVES

Van Hassel Dieter

Adriaens Rosa

Debeer Laurens

Desimpelaere Helena

Guns Lieve

Mom Lachlyta

Morren Tom

Pallemaerts Sara

Peters Anne

Rixhon Florence

Van de Vyver Joris

Van Heymbeeck Eline

Vanderlinden Nancy

Vandyck Jean-Marc

COLLECTION SECRETARIAT

Swinnen Annick

Cardoen An

De Wolf Natalie

Welschen Anne

CENTRAL LIBRARY

Osselaer Brigitte

Thys van den Audenaerde Katrien

BIOLOGY

De Meyer Marc

WOOD BIOLOGY

Beeckman Hans

De Mil Tom

Hubau Wannes

Jacobsen Kim

Liévens Kévin

Nackaerts Annelore

Rousseau Mélissa

BIOLOGICAL COLLECTION AND DATA MANAGEMENT

Van den Spiegel Didier

Allard Christophe

Brecko Jonathan Buset Alice-Marie

Cael Garin

Gilissen Emmanuel

Hanot Stéphane

Henrard Arnaud

Herpers Jean-Marc

Mathys Aurore

Meirte Danny

Parrent Miguel

Smirnova Larissa

INVERTEBRATES

De Meyer Marc

Ashepet Mercy

De Cock Maarten

De Smet Yannick

Huyse Tine

Jordaens Kurt

Meganck Kenny

Merckx Jonas

Mergen Patricia

Mullens Nele

Papadaki Maria

Reigniez Chantal

Smitz Nathalie

Vandenbosch Myriam

Virgilio Massimiliano

VERTEBRATES

Snoeks Jos

Boden Gert

Decru Eva

Dierickx Katrien

Dierickx Ratifieri

Musschoot Tobias

Reygel Alain

Van Steenberge Maarten

Vranken Nathan

Vreven Emmanuel

EARTH SCIENCES

André Luc

SURFACE ENVIRONMENT AND COLLECTION MANAGEMENT

André Luc

Mees Florias Minon Suzanne

Monin Laurence

GEODYNAMICS AND MINERAL

RESOURCES

De Putter Thierry

Baudet Daniel

Boyen René

Delvaux de Fenffe Damien

Dewaele Stijn

Fernandez-Alonso Max

Lahogue Pascale

Liégeois Jean-Paul

Nimpagaritse Gérard

Trefon Théodore

Warner Eric

NATURAL HAZARDS

Kervyn de Meerendré François

Coppens Céline

Dewitte Olivier

Dewitte Olivie

Dille Antoine

Gilles Évelyne

Laghmouch Mohamed

Makanzu Fils

Michellier Caroline

Moussouni Toufik

Nobile Adriano

Norré Magali

Ntezimana Aminata-Noomi

Samyn Denis

Smets Benoît

PUBLIC SERVICES

OPERATIONAL DIRECTOR

Verbergt Bruno

DEPUTY OF THE OPERATIONAL DIRECTOR

Dewulf Katia

EXHIBITIONS

Bluard Christine

Bouillon Sofie

Claessens Koeki

de Ville de Goyet Sophie

Di Nitto Diana

Eelen Sandra

Engels Ludo

Geets Gonda

Hermand Patricia

Kratky Friederike

van der Hoorn Sabine

Verbeke Davy

Wijs Sonja

COMMUNICATIONS

Opstaele Kristien

Bergeys Elke
Hendrickx Colin
Le Grelle Marie-Pascale
Ntumba Primrose
Sciot Eline
Van de Voorde Jonas

PUBLIC ACTIVITIES

Van Loo Isabelle

Adepoju Aisha

Cornet Brigitte

De Meersman Min

Deputter Bart

Deryckere Marijke

Ferrandi Sylvie

Géradin Sara

Labie Emilie

Laes Kathleen

Ntumba Primrose

Poinas Claire

Van Craenenbroeck Katrien

RECEPTION & EVENTS

Katia Dewulf

Deppe Françoise

Labie Emilie

Quix Margot

Stroobants Arno

Borremans Sara-Lola

Rigante Lisa

Vaneyck Nancy

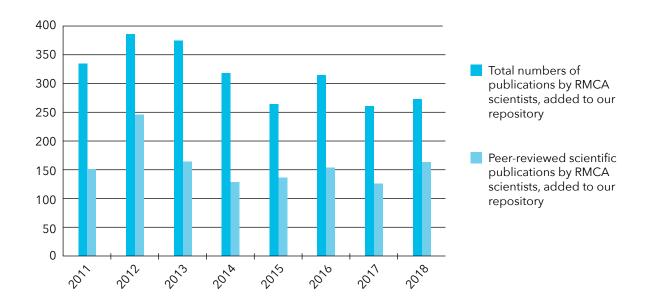




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PUBLICATIONS OF THE SCIENTISTS OF THE RMCA

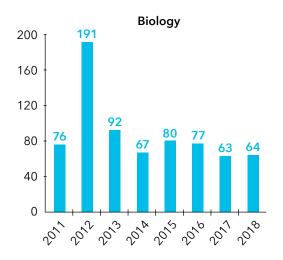
Every year, the researchers of the museum publish articles in scientific journals or books, monographs, etc. with international, highly-regarded publishers. In 2018, they published 276 texts, of which 165 were peer-reviewed.

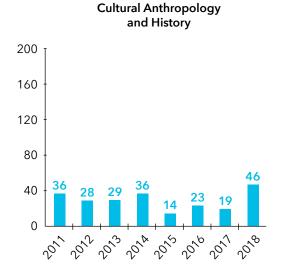


Statistics per discipline and per type in 2018

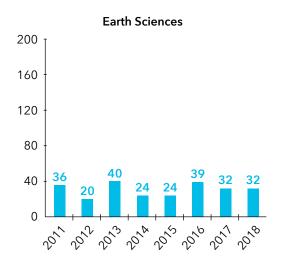
	Earth Sciences	Biology	Cultural Anthropology & History	TOTAL	
Total number of peer-reviewed scientific publications	41	64	46	151	> detail 1
Articles in scientific journals	32	59	2	93	> detail 2
Chapters in a book (with editor)	7	5	42	54	
Books and catalogues (author or editor)	2	0	2	4	
Total number of non-peer- reviewed scientific publications	31	72	14	117	
Articles in journals	13	1	6	20	
Maps	6	0	0	6	
Books/catalogues (with editor)	0	0	1	1	
Chapters in a book (with editor)	0	2	4	6	
Chapters in a catalogue (with editor)	0	0	0	0	
TOTAL	72	136	60		

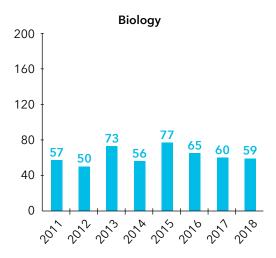
Detail 1: evolution in the number of peer-reviewed scientific publications

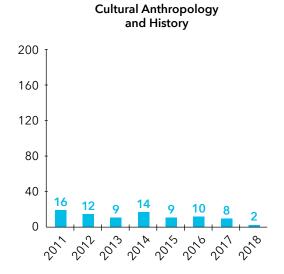




Detail 2: evolution in the number of articles in scientific journals







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https://www.africamuseum.be/en/research/discover/publications/repository

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- Wauthier, C., **Smets, B.**, Hooper, A., **Kervyn, F.** & d'Oreye, N. 2018. 'Identification of subsiding areas undergoing significant magmatic carbon dioxide degassing, along the northern shore of Lake Kivu, East African Rift'. *Journal of Volcanology and Geothermal Research* 363: 40-49. DOI: https://doi.org/10.1016/j.jvolgeores.2018.08.018 (PR; IF 2.368)

Non-peer-reviewed publications

Omasombo Tshonda, J., Kalenga Ngoy, P., Kayamba Badie, M., Krawczyk, J., Laghmouch, M. & Léonard, G. 2018. *Haut-Katanga. Lorsque richesses économiques et pouvoirs politiques forcent une identité régionale.* 2 volumes in a box. Series: 'Monographies des Provinces de la RDC', vol. 11. Tervuren: RMCA.

Others

Kervyn, M., Maes, J., **Jacobs, L.**, Mertens, K., de Hontheim, A., Poesen, J., **Dewitte, O.** & Vranken, L. 2018. *AfReSlide - Landslides in Equatorial Africa: Identifying culturally, technically and economically feasible resilience strategies.* Brussels: Belgian Science Policy Office (BELSPO).

Mertens, K., Jacobs, L., Maes, J., Bih Che, V., Bwambale, B., de Hontheim, A., **Dewitte, O.**, Kabaseke, C., Kagou Dongmo, A., Poesen, J., Vranken, L. & Kervyn, M. 2018. Landslides Policy Briefs. AfReSlide: Landslides in Equatorial Africa: Identifying culturally, technically and economically feasible resilience strategies. Brussels: BELSPO. 12 p. ISBN: 978-9-0903-0817-3. (PR)

Michellier, C., Delvaux, D., d'Oreye, N., Dewitte, O., Havenith, H.-B., Kervyn, M., Poppe, S., Trefon, T., Wolff, E. & Kervyn, F. 2018. Geo-Risk in Central Africa: Integrating Multi-Hazards and Vulnerability to Support Risk Management. Brussels: Belgian Science Policy Office (BELSPO), 125 p.

COMPLETED DOCTORATES

In 2018, the following researchers defended their doctorate, which was supported scientifically and/or logistically by the RMCA:

Earth Sciences

Liesbeth Jacobs

Landslides in the Rwenzori Mountains: field-based characterisation and susceptibility assessments in a data-scarce tropical environment

Vrije Universiteit Brussel

Promotors: Mathieu Kervyn (VUB), Olivier Dewitte (RMCA), Jean Poesen (KU Leuven)

Amel-Zoulikha Benhallou

Contribution à la connaissance du manteau hoggarien, par l'étude des laves alcalines cénozoïques du Massif du Manzaz

Université des Sciences et Techniques Houari Boumediene (Algiers, Algeria)

Promotors: Abla Azzouni-Sekkal (USTHB), Jean-Paul Liégeois (RMCA)

Biology

Laura Jose Canhanga

Improved IPM programme for fruit fly (Diptera: Tephritidae) control in Central Mozambique Sokoine University of Agriculture (Morogoro, Tanzania)

Promotors: Maulid Mwatawala (Sokoine University), Domingos Cugala (Eduardo Mondlane University, Mozambique), Marc De Meyer (RMCA)

Yégor Tarelkin

Périodicité de l'activité cambiale et des microvariations de la densité

Université libre de Bruxelles

Promotors: Charles De Cannière (ULB), Hans Beeckman (RMCA)

Cultural Anthropology & History

Nicolas Nikis

Archéologie des métallurgies anciennes du cuivre dans le bassin du Niari, République du Congo Université libre de Bruxelles

Promotors: Olivier Gosselain (ULB), Alexandre Livingstone Smith (RMCA), Pierre de Maret (ULB)

Manoah-Joël Misago

Les verbes de mouvement et l'expression du lieu en Kirundi (Bantou, JD62) : une étude linguistique basée sur un corpus

Ghent University

Promotors: Koen Bostoen (UGent), Maud Devos (RMCA)

NEW PROJECTS

In 2018, the museum was involved in around a hundred scientific projects, of which 16 started this year:

- · An online digital identification key to the selected number of genera of Afrotropical hoverflies (Diptera, Syrphidae)
- · CEOS-Landslide: Committee on Earth Observation Satellites Landslide Pilot Working group
- · Climate Extremes in the Lake Victoria Basin (ELVIC)
- · Disscofed: Distributed System of Scientific Collections
- · East African Rift: Neotectonics, seismotectonics and stress field constraints in an intraplate setting
- · Identification of disease vectors, focusing on Culicidae
- · Increasing marine taxonomic knowledge in Mozambique: the case of two neglected taxa (MaTaMo)
- L'archéologie et le patrimoine culturel arabo-swahili dans la province du Maniema (RDC) / The Archaeology and Oral History of Slavery in the Maniema Province of the Democratic Republic of the Congo) (PatAr)
- · La neurologie enfouie: évolution des capacités sensorielles et cognitives chez les mammifères souterrains
- · Lithospheric structure and tectonic evolution of intracratonic basins: the Congo basin natural laboratory
- · Prevention and mitigation of urban gullies: lessons learned from failures and successes (PREMITURG)
- · Real-time PCR as discriminating tool between *Culex pipiens* s.l. and *Culex torrentium* (Diptera: Culicidae) species
- · Renforcement des capacités en recherches et expertises au Centre de Recherches géologiques et minières en RDC
- · Study of the impact of habitat degradation on the abundance and diversity of Syrphidae (Insecta: Diptera) in Burundi
- · The evolving surface of the 'stable' African continent (TESSAC)
- · Transfer of geo-data and knowledge in support of a Geo-Information Management System at Rwanda Mines, Petroleum and Gas Board

COLOPHON

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