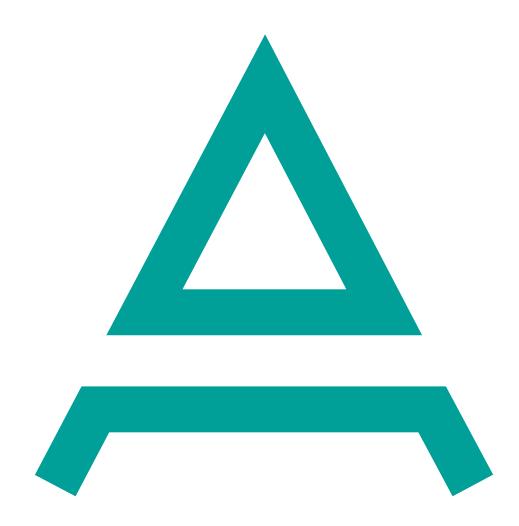


ANNUAL REPORT **2021**





 ${\it Guido\ Gryseels, RMCA\ Director\ General.}$



Introduction Guido Gryseels Director General of the RMCA

2021 was a highly successful year despite the many restrictions stemming from the coronavirus pandemic. Museum visits still had to be done in bubbles for a long time, a great many hygiene measures were in place, the Tembo restaurant was closed for a while and shipments - especially to and from Africa - remained laborious. Financially, it was also a difficult year due to reduced revenues from ticket sales, concessions and events and the rising costs of energy consumption and coronavirus measures. In public activities, tours and workshops for groups were only able to resume as normal from June. Starting in the autumn, public activities resumed more or less at the usual pace. Some of the online activities developed during the coronavirus pandemic proved very successful and will thus be maintained. This, for example, was how the online format for MuseumTalks, a series of lectures by scholars, experts, curators and authors from inside and outside the museum, became a keeper. A new podcast series called 'Tout passe, sauf le passé | Verteld verleden tijd' ('Everything passes, except the past') was also launched so the online listening audience could delve further into colonial history.

The 2021 temporary exhibition, *Human Zoo*, enjoyed a lot of press coverage. With this second

The RMCA was involved in about 100 scientific projects. The scientific research resulted in 162 publications, 9 doctorates completed, and great international attention...

temporary exhibition since its renovation, the AfricaMuseum continued briskly on its chosen path and sought to encourage critical engagement with our colonial past. A wall with derogatory statements and micro-aggressions directed at people of African descent made the link to contemporary racism and prompted visitors to reflect and talk.

The RMCA was involved in about 100 scientific projects. The scientific research resulted in 162 publications, 9 doctorates completed, and great international attention on, for example, the results of our research on carbon sequestration in tropical rainforests in Central Africa, our biodiversity research and its link to infectious diseases, and the research into natural hazards, especially in relation to the events surrounding the eruption of the Nyiragongo volcano on 22 May 2021 in Goma, Democratic Republic of the Congo (DRC).

Another major achievement in 2021 was the publication of the resource guide for archives on the history of the colonisation of the DRC, Rwanda and Burundi, a project in collaboration with the State Archives of Belgium. The project on provinces in the DRC published its 15th monograph, this time a volume on Ituri province, and our biodiversity studies described more than a dozen new species. Regarding knowledge dissemination, the Earth Sciences department organised the seventh edition of the successful Geologica

Belgica Meeting, which brought together 271 participants from 14 countries to exchange results and experiences.

A number of new research programmes were also launched in 2021, including a project to automate the wood identification process with the aid of artificial intelligence, a Swahili-Arab heritage project, archaeological studies on major rivers in the DRC, and studies on critical minerals in the Great Lakes region.

The RMCA was active in institutional collaboration programmes in 12 African countries. Nearly 100 African scientists completed a workshop or received training in Tervuren or in Africa itself. RMCA scientists supervised 80 doctoral students, 65% of whom came from 13 different African countries.

A great many collections and databases were put online and the number of visitors to our online databases and archives rose by 132%. More than 42,000 archival descriptions were posted online. About 4,000 sound recordings of music and songs from Rwanda were digitized and transferred to the Rwanda Cultural Heritage Academy.

The AfricaMuseum also actively participated in the social debate surrounding the colonial past. It collaborated with the parliamentary committee on the study of the colonial past and its impact on today's multicultural society.

Our State Secretary for Science Policy, Thomas Dermine, chose the AfricaMuseum as the venue for presenting to both press and public his restitution policy and the legal framework that was being prepared for it.

In that context, the AfricaMuseum, with additional support from Federal Science Policy, launched a major project on provenance research for its 84,000 ethnographic objects originating from the DRC. This year's 'Scientist-in-residence' programme was also framed in the theme of provenance research. In the museum's permanent exhibition, a special digital tour on the provenance of a number of objects was made available to visitors.

The RMCA's great productivity and significant results have come about thanks to the dedication and creativity of its entire staff. I wish to thank everyone wholeheartedly, including for their flexibility in how they worked during the coronavirus pandemic.

My sincere thanks also go to our structural and institutional partners: Federal Science Policy, the Directorate-General for Development Cooperation, the Ministry of Foreign Affairs, the National Lottery, the Belgian Buildings Agency, and our other sponsors.

My thanks also go to Thomas Dermine, State Secretary for Science Policy, for his dynamic approach and innovative way of supporting our research and public outreach activities.

Guido Gryseels Director General



On 06/07/2021, Thomas Dermine, State Secretary for Economic Recovery and Strategic Investments, in charge of Science Policy, gave a conference at the AfricaMuseum to present his draft law on restitution. The 'Provenance trail' in the permanent exhibition was officially inaugurated for the occasion.



This was the first exhibition at the AfricaMuseum with a pronounced focus on contemporary art and on the work of a renowned African artist ...

2021 promised to be a busy year with the ongoing *Mabele Eleki Lola!* exhibition and the opening of a new exhibition, *Human Zoo* in the autumn, the second temporary exhibition since the museum reopened in 2018.

Mabele Eleki Lola! The Earth, brighter than paradise until 15 August 2021

In Mabele Eleki Lola!, Congolese artist Freddy Tsimba entered into a dialogue with museum collections. The commissioner of the exhibition



was the writer In Koli Jean Bofane, with scientific input from Henri Bundjoko, Director of the Musée national de la République démocratique du Congo, Kinshasa.

This was the first exhibition at the AfricaMuseum with a pronounced focus on contemporary art and on the work of a renowned African artist, and has therefore attracted a new audience to the museum.

The exhibition concluded with a celebratory closing event on 15 August. Artist Freddy Mutombo presented the *Triumphal Entry* of the young

generation into the AfricaMuseum with a performance. Curator In Koli Jean Bofane and artist Freddy Tsimba were also present, signing visitors' catalogues.



Standing guides gave individual visitors further explanation throughout the exhibition during the holidays.



The closing performance Triumphal Entry by artist Freddy Mutombo.









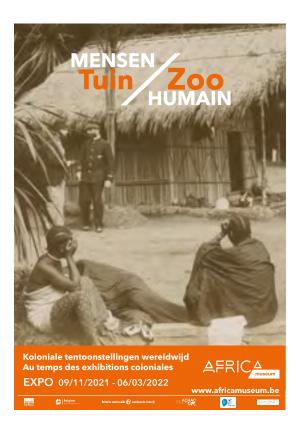


Human Zoo. The age of colonial exhibitions 9 November 2021-6 March 2022

This temporary exhibition focused on the phenomenon of people as 'living exhibits'. This exhibition was first organised in Paris (Musée du quai Branly) in 2012 and was organised at the AfricaMuseum in 2021 on the occasion of the colonial exhibition of 1897, which took place 125 years ago in Tervuren.

The focus was on the mock 'Congolese villages' on display in Tervuren, as well as in Antwerp (1885 and 1894) and Brussels (1958), as well as other human zoos organised worldwide at the intersection of popular entertainment and scientific fascination. More than one-and-a-half billion spectators came to see the 'inferior Other'.

Commissioners of the exhibition were historians Pascal Blanchard (Achac Research Group), and Maarten Couttenier and Mathieu Zana Etambala (both affiliated with the AfricaMuseum).



With this exhibition, which attracted great media interest, the museum invited visitors to think about the impact of human zoos.

Contemporary artists Teddy Mazina and Roméo Mivekannin made significant contributions to the exhibition.

With this exhibition, which attracted great media interest, the museum invited visitors to think about the impact of human zoos. It did not leave many unmoved. Extensive educational and cultural programming was attached to the exhibition, which was met with particular interest. In addition to tours for groups, and guided tours for individual visitors every Sunday, fourteen MuseumTalks offered (online) conversations about colonisation, decolonisation and (anti-)racism. Reading groups were also organised, along with memorial walks that dwelt upon ten spots around the museum that carry a piece of colonial history (in collaboration with the non-profit organisation Bakushinta). Furthermore, eight educational or cultural projects, mostly by young people and the diaspora, received (financial) support from the museum to organise specific activities as part of

the exhibition. The programme (in 2022) included a performance called Inconnu.es by Compagnie Ateliers Nedaere, in which the numbers and names of people displayed in human zoos were installed in the exhibition hall on wooden feet in the form of a labyrinth. La Diaspora Chuchote created a podcast series called *Saartje, Venus en cage* dedicated to the phenomenon of human zoos. Documentary film-makers Don Pandzou and Job van Nieuwenhove visited the exhibition with young people of African descent and found out how racist stereotypes in society impact upon their self-image and identity development. This is a mere selection of all the projects.

The Human Zoo exhibition sought to encourage critical engagement with our colonial past and questioned the role the museum has played in how we think about and deal with Africa, Africans and Belgians of African descent. As part of the exhibition, a wall and installation was created with everyday racist statements. These are linked to

racist stereotypes propagated by human zoos, which live on to this day. The museum intends to continue to join the battle against racism and discrimination against people of African descent and will develop several projects and collaborations around this in the future.



Artist Arsène Matton was sent to Congo in 1911 to make plaster moulds of living Congolese people. Many refused and fled; others were terrified during the process because they feared suffocation. Arsène Matton then turned the 'negative' casts into 'positive' busts, through which he wanted to offer an overview of the so-called 'racial diversity' in the colony. The busts were exhibited at the Museum of Belgian Congo from 1913 until the 1950s.

Arsène Matton (1873-1953), Bust of Sambuluma. Congo. 1911. Plaster, paint, brass. EO.1976.46.1, RMCA collection.



Human zoos brought not only Congolese but also other colonised 'Others' to the metropolis, where they were studied by Belgian anthropologists. According to the latter, they exhibited the same 'primitive characteristics' as European women, farmers, criminals, apes and Neanderthals. The confrontation with that broad group of 'Others' gave the white European bourgeoisie a chance to define itself.



A wall with derogatory statements and micro-aggressions that people of African descent often face today made the link to contemporary racism and prompted visitors to reflect and talk. On the floor were the words: racism, xenophobia, human zoo, colonisation, slavery. In a way, they are the roots of racist stereotypes that we know today. Contemporary newspaper articles about racist events in Belgium were also shown.



Artist Roméo Mivekannin's painting reinterprets a photograph taken in 1930 showing Congolese soldiers paying tribute to seven men (Hommage aux 7), also Congolese, brought to Belgium by Leopold II to be displayed in his human zoo during the 1897 World's Fair. In doing so, he questions the representation of the Black body in history, generally frozen in a pose that the subject did not choose: an ideological stance inspired by colonialism.



The stay in a mock Congolese village in Tervuren in 1897 was fatal for seven Congolese people: 'In memoriam (1897): Ekia (Bangala man), aged 21, 2 July; Gemba (woman from Bas-Congo), aged 25, 3 August; Private Kitoukwa, aged 30, 7 August; Mpeia (Bangala craftsman), aged 21, 10 August; Sambo (Yombe, Lower Congo), aged 21, 14 August; Zao (fisherman), aged 22, 14 August; Mibange (soldier), aged 21, 17 August.'

Congolese villages. Brussels-Tervuren universal exhibition. 1897. Photo from the album of A. Gautier. HP.1946.1058, RMCA collection.



With Muzungu Tribes, Burundian photojournalist Teddy Mazina created a laboratory to question the colonial imagery and the racist stereotypes it produced. His work reflects through photography upon colonial classifications and hierarchies of bodies and people.















Extra muros exhibitions

100 x Congo. A century of Congolese art in Antwerp (3/10/2020-13/09/2021)

This exhibition focused on 100 Congolese artworks and utensils that came into the possession of the City of Antwerp in colonial times, and are now part of the MAS collection. The AfricaMuseum contributed to this temporary exhibition by loaning two objects from its permanent display



With three new smartphone tours, visitors have an audio guide in their pocket.

trail', highlights the diverse and sometimes controversial origins of a number of objects. This route aims to provide a nuanced view of the complexities of acquisition, preservation, appropriation, accessibility and return of objects in the collection. In the 'Experts Talking' tour, museum scientists



This zoomorphic slit drum from Lower-Ubangi in the shape of an antelope was loaned for 100 x Congo. MO.0.0.36413.

the French translation of the catalogue.

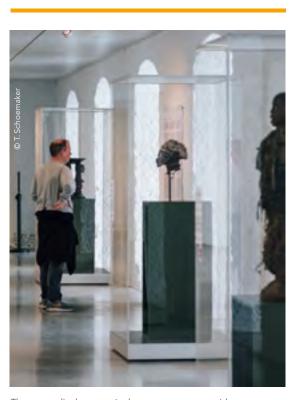
on an exceptional basis, as well as co-financing

Out of the shadows. Sculptures from South-West Congo (14/12/2021-10/04/2022)
In late November 2021, 119 objects from the museum's collection travelled to Paris to be exhibited at the La part de l'ombre exhibition at the Musée du quai Branly. RMCA ethnography curator Julien Volper was the exhibition curator and co-author of the catalogue, for which he also served as scientific director. Two museum restorers supervised the installation of the objects on-site.

In addition, the museum lent numerous pieces to exhibitions at home and abroad. Because of the importance and diversity of its collections, the museum receives a great many loan requests for external exhibitions.

Digital museum tours

Three digital tours for museum visitors were developed in 2021. They can download these tours using their own smartphone through the Faro Heritage app. The first tour, the 'Provenance



Three new display cases in the museum area provide an introduction to the 'Provenance trail' throughout the permanent exhibition. This route shares the results of ongoing provenance research. In-depth articles on the website provide more extensive information and context about the origin of the objects presented in the 'Provenance trail'.

take visitors through the highlights of the permanent exhibition. The third route further explores the temporary exhibition *Unrivalled Art*.

Revamped Africa Tube

Co-creation and collaboration directly from Congo was the basis for the room's redesign. The Waza arts centre in Lubumbashi was selected to serve as a curator to help AfricaTube take shape. In AfricaTube, Waza presents a changing selection of cultural productions by African artists released on online platforms. The result is a discursive yet eclectic dive into African cyberspace created by young people in the DRC, elsewhere on the continent or in the diaspora. In their performances, they play with boundaries and emancipate themselves from formal constraints. On Friday 25 June, Minister of Development Cooperation and Urban



Every year, the Waza arts centre of Lubumbashi presents a new selection of cultural productions released on online platforms at AfricaTube.



Minister Kitir took ample time to learn about other aspects of the RMCA's operations in Africa and, in particular, its activities around global citizenship and its educational programme, which are made possible in part thanks to structural collaboration with Belgian Development Cooperation. In a workshop room specially set up for pre-schoolers, the Minister met with a class from Forest who had been working on a booklet on slavery and colonial history in response to a racist incident at their school. The museum hosted the class twice for a tour.

Policy Meryame Kitir attended the opening of the revamped AfricaTube.

Expansion of (coronavirus-proof) educational offerings



The AfricaMuseum is committed to a family-friendly experience with numerous activities tailored to children and their parents.

Although museums no longer had to close their doors, the coronavirus pandemic still called for precautionary measures. For a long time, a museum visit had needed to be done in small bubbles, among many other restrictions. This made organising museum activities a challenge, especially in the first half of the year. The offering was adjusted as far as possible so that everything could continue in safe conditions. In June, tours and workshops for groups were able to resume as normal. AfricaSundays, where the museum opens its workshop spaces to families and selfguided visitors once a month, were also resumed in the autumn.

A number of new tours were also added to the regular educational offering. This was how two tours tailored to specific audiences came about: the NT2 tour for adults learning Dutch, and the interactive tour for adults with visual impairments. There was a new tour for young people called 'Wood', which is all about tropical wood, forests and (nature) conservation. During the summer, the free family trail 'Schatten van Vlieg', which allows children and their parents to discover the museum in an exciting yet relaxing way, was a success. A walk around the AfricaMuseum was another newcomer in the summer months. Visitors were able to discover the green surroundings while a guide spoke about the institution's past, present and future.

Standing guides also continued to be put to full use during school vacations. Such guides take up







On AfricaSundays, young and old are welcome for a musical, creative or inspirational guided activity.



In a new tour for people with visual impairments, an experienced guide uses verbal description, sound clips and tactile objects to explore one of the many themes in the museum's galleries.

post at strategic locations in the permanent and temporary exhibitions to explain neighbouring objects or rooms to young and old alike, or to provide hands-on entertainment. The visitors were pleasantly surprised by the presence of the guides and the opportunity to speak with them. Teachers are also an important target group. Along with CNCD-11.11.11, some training on the colonial past was organised in October for primary- and secondary-school teachers. The online format for MuseumTalks became a permanent feature. In addition to the programme linked to the exhibitions, scientists, experts, curators and authors from inside and outside the museum presented a new publication, research, an exhibition or documentary in some busily attended lectures.

An online listening audience was able to delve further into colonial history with the new podcast series 'Tout passe, sauf le passé | Verteld verleden tijd' (Everything passes, except the past). In the



The new 'Wood' tour for youths.



process, scientists at the museum uncovered fundamental aspects of colonisation through the story behind one object.

Residency programmes for scientists, artists and journalists

Provenance research is one of the museum's priorities. The aim is to examine the conditions under which collections (in particular, ethnographic pieces) were acquired during the colonial period. This is part of the museum's restitution policy. The 'Scientist in residence' programme engages African scientists in this provenance research. The residency of Prof. Placide Mumbembele Sanger (University of Kinshasa), scheduled for 2020 but postponed due to the health crisis, took place in 2021. He studied the origin of Yaka masks kept at the museum, and explained his research in a MuseumTalk on 30 June.

Through its 'Artist in residence' programme, the museum also welcomes artists from Central Africa to work with the collection. Drummer-percussionist and composer Lenyema Okiteke from Lubumbashi was a guest in the autumn. For his project and musical creation *Rhythmic Traces*, he researched the Luba sound archives in museum collections. In addition, the museum attaches great importance to opening up access to its collections and archives to artists and associations. Among them was the musical group AKAR, which rehearsed in the museum's auditorium for several weeks, with the doors open to the public on 5 December.

The Rwandan journalist Prudence Nsengumukiza spent a month as a 'Journalist-in-residence' at the museum in 2021.

Versatile event venue

Due to the coronavirus, events were suspended for much of the year. As the measures eased, applications picked up once more and companies came back to the museum as a venue for events, team-building exercises, nocturnes or study days. Bistro Tembo also reopened its doors on 9 June. Of course, we also organised our own late-night openings for our own audiences. For example, on 27 May, we joined the Nocturnes of the Brussels Museums Council with a varied programme in the temporary and permanent exhibition. The museum is also highly sought-after as a setting for film and television. Shooting for the film *Ritueel* (2022) and the VRT programme *Vive le vélo* took place at the museum.









JU M S

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 100 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 2021 is highlighted.

Automating wood identification to fight illegal logging

A substantial part of the timber traded each year is illegal. The UN estimates that illegal logging and the associated timber trade is worth about 50 to 152 billion USD per year. Timber regulations are already active (CITES, FLEGT, EUTR), but implementation and enforcement are a challenge. Currently, Belgium is a hub of illegal timber trade. Over a quarter of the total imports of tropical timber products into the European Union are imported via Belgium (mainly via the port of Antwerp). Wood identification is crucial in the enforcement process when it comes to verifying whether the shipment entering Belgium corresponds with the products mentioned on the accompanying documents. For this reason, there is a growing demand for timber identification tools that can be applied by law enforcement officers.

The RMCA launched the 'SmartWoodID' project in 2021. SmartWoodID aims at improving both identification success and speed by non-experts by automating part of the wood identification process through the use of artificial intelligence techniques.

Researchers are developing tools that can analyse wood anatomical images of timber species to identify hundreds of tree flora from Central Africa. The RMCA xylarium, which has over 80,000 wood samples from 13,600 species from around the world, is a crucial reference source for the project.



The 'SmartWoodID' project compiles an image database of Congolese wood species from the Tervuren xylarium. These images are used to identify wood based on macroscopic features with the help of artificial intelligence. Shown in photo: Prioria balsamifera (tola).

Swahili-Arab heritage in the eastern DRC

As early as 1860, traders from the Swahili coast on the shores of East Africa settled in the eastern part of the present-day DRC in search of ivory and slaves. Their presence had a lasting impact on the populations of the region. Swahili is now the common language and the practice of Islam is well-established.

Between 1892 and 1894, the colonial troops of King Leopold II carried out several military operations in the area under Swahili-Arab control. Objects taken as war trophies went from being family heirlooms to becoming tools of colonial propaganda in the RMCA and the War Heritage Institute (WHI).

Colonial research traditions long held Swahili-Arab culture as foreign to Congo. For this reason, no intensive research has been carried on these collections in Belgium. Within the framework of the project 'Congo-Arab Heritage in Historical Narratives' (CAHN) and in collaboration with the WHI and the KU Leuven, a team of researchers from the RMCA carries out provenance and object biography research. The focus is on objects that can provide information on the cross-cultural interactions and borrowings between the populations of the Upper Congo Basin and the East African coast.

The historical narratives that emerge from this research should open up dialogue with source communities in DRC and Tanzania, the Congolese diaspora, the scientific community, and civil society. The aim is to encourage a more nuanced historical understanding and critical consciousness by challenging the myth of the 'bad' Swahili-Arab traders and the 'good' Belgian colonizers. The project also establishes a collaboration between scholars in educational science for teaching programs, artistic interpretations, and public-oriented events such as exhibitions.

Funded by the Federal Science Policy, the CAHN project started in 2021 for a period of four years.



Interview with Aboubakar Husseini, Imam of the Quartier 18 mosque, Kasongo, DRC.



Interview with Jumaini Abdul, healer, Kasongo, DRC.



Images of Swahili-Arab objects conserved in Belgium are shown in an exhibition in Kasongo's Muslim quarter.

Critical minerals in the Great Lakes region of Central Africa

The Great Lakes region in Central Africa is geologically rich in technology metals and minerals. Lithium (Li), tantalum (Ta) and rare earth elements (REE), used in magnets, batteries and engines, are just a few examples of highly sought-after commodities which are in growing demand for modern technologies and the green energy transition.

A main research theme within the Geodynamics and Mineral Resources Unit is to gain a better understanding of the geological processes that form extractable deposits in the Great Lakes region and how mineralisation types influence potential methods of extraction, with a view to support efforts to ensure sustainable and fair exploration and exploitation.

In 2021, research projects were initiated on the origin and mechanisms of two different mineralising systems that host ore deposits in Central Africa: 1) Li-Nb-Ta-Sn-W deposits associated with granites, pegmatites and quartz veins, and 2) REE-P-Nb deposits in alkaline-carbonatite magmas. This research fits within a long-standing and fruitful local partnership on regional geology, geological mapping and capacity-building for researchers, universities and geological surveys.

A field mission to sample pegmatites and quartz veins from tin-tantalum mines in Rwanda, with significant lithium potential, was planned in the summer of 2021 but postponed due to COVID-19. It was successfully carried out in February 2022.



Drill core sample of a spodumene (lithium ore mineral)-rich pegmatite from Piran Rwanda Ltd operating in the Musha and Ntunga area, Rwanda.



Fieldwork and sampling in the Musha-Ntunga area, mined for tin and tantalum, and prospected for lithium by Piran Rwanda Ltd.



Abandoned open pit at Ntunga, Rwanda, until recently mined for tin and tantalum from weathered pegmatites. Mining and exploration currently continues in underground tunnels.

Evolutionary convergence and relationships between cichlids of four East African lakes

When different species possess similar traits they are not necessarily related. Penguins and dolphins have flippers, and bats and birds have wings. These are examples of convergent evolution, where similar structures appear independently along different evolutionary lines.

In East Africa, Lakes Victoria, Edward, Kivu and Albert are home to some 700 cichlid species. These species evolved very rapidly and each lake hosts a unique cichlid fauna. Some of the species are very similar, either within a given lake or between lakes. In the different lakes, one can find fish predators with large mouths and serrated teeth, snail predators with powerful jaws and teeth that can crack shells, and slender species that resemble sardines and hunt small crustaceans in the water column. Yet the extent of the relationships between similar species living in different lakes is still unclear.

As part of a doctoral degree being completed at the RMCA in collaboration with KU Leuven, the University of Antwerp, and RBINS, researchers are investigating the degree to which similar cichlids are related to each other, and how their similarities evolved.

In 2021, taxonomic revisions led to the description of about a dozen new species. During a visit to the Natural History Museum of London, morphological data were collected for 86 species from Lake Victoria. These were compared with data collected for 56 species from Lake Edward. A quantitative comparison of external characters shows that similar species from different lakes generally resemble each other more than they resemble other species from their own lake.

The full genome of 79 species was determined, making it possible to analyse their relationships. Preliminary results show, notably, that species from Lake Edward and Lake Kivu constitute a single radiation, with similar species from the two lakes being closely related to each other. The species from Lakes Albert and Victoria constitute a second and third radiation respectively. Each of these three radiations developed independently. This implies that the strong similarities between the species of different lakes emerged independently of each other, and thus are evolutionary convergences. The research team will investigate how such convergences managed to evolve so quickly and extensively.

These investigations were conducted as part of a doctorate funded by the Fonds Wetenschappelijk Onderzoek (FWO) for the 2019-2023 period and the 'KEAFish' project (BRAIN-be, BELSPO).



Five Haplochromis species from Lake Edward. From top to bottom, the pedophage Haplochromis paradoxus, the thick-lipped insectivore Haplochromis lobatus, the zooplanktivorous Haplochromis pappenheimi which resembles a sardine, the snail-crushing Haplochromis concilians, and the piscivorous Haplochromis mentatus. All of these species have very similar counterparts in other lakes of the region.

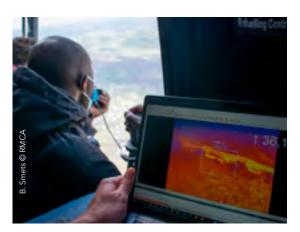
Nyiragongo eruption

The Nyiragongo volcano (DRC) erupted in the early evening of 22 May 2021. Residents of the northern side of the city sounded the alarm shortly before 17:00 UTC after seeing lava flowing from a nearby fissure on the flank of the volcano. The eruption took everyone by surprise, and management of the first hours of the crisis was complicated by confusion and lack of preparation owing to the absence of any warning signs. Intense seismic activity began as the lava flow was already devastating a densely populated area. It continued for several days, causing damage in Goma. The damages done at Goma addend to the panic, and prompted the spontaneous evacuation of part of the population. The eruption itself only lasted a few hours, and the damage from lava flows was much less extensive than in the 2002 eruption which wiped out nearly 10% of the city. Alerted within minutes by a network of Citizen Observers established as part of the HARISSA project ('Natural HAzards, RISks and Society in Africa: developing knowledge and capacities'), the teams of the RMCA, the European Center for Geodynamics and Seismology (ECGS), and the Luxembourg National Museum of Natural History (MNHN) offered their assistance to the Observatoire volcanologique de Goma (OVG) to provide crisis management support. Upon acceptance by the OVG, the support was backed by the Belgian government and Belgian Development Cooperation (DGD).

A team of scientists from Belgium and Luxembourg travelled to Goma to provide scientific support to the OVG, verify monitoring equipment and deploy additional seismometers temporarily, and assess the eruption's impact on the population and infrastructure and thus help craft a rapid and appropriate response. At the OVG's request, RMCA scientists also helped set up a group of international experts with relevant and complementary expertise. The group met daily until the end of the crisis to discuss the evolving situation and advise the OVG. The RMCA, the ECGS and the MNHN have been collaborating with the OVG since 2005. The role played by the Belgo-Luxembourgish team was essential, as the only scientific data available was obtained as a result of this partnership with the OVG, a partnership that is currently the sole long-term support structure for the latter.



Cracks resulting from the intrusion of the magmatic dyke.



The lava flow is observed from a helicopter with the help of a thermal camera.



Illustration of the type of lava flow impact in the northern part of Goma.

RMCA transfers over 4000 sound recordings to Rwanda

On 28 October 2021, the AfricaMuseum transferred over 4000 digitised sound recordings of Rwandan musical traditions from its collections to the Rwanda Cultural Heritage Academy. This transfer is one of the projects carried out in the framework of the SHARE programme. This cooperation programme between Belgium and Rwanda aims to share heritage and build capacity in conservation and collection management with museums and research institutes.

The audio files were recorded in Rwanda between the 1950s and 1990s. They come with a title, the place of recording and the ritual function of the music. These recordings therefore constitute a collection of great patrimonial and scientific value. The digitised recordings have been transferred to the Rwanda Cultural Heritage Academy. They will be archived at the Ethnographic Museum in the city of Huye, where they will be accessible to the public through social media and promoted in the museum's new permanent exhibition project.

This collaborative project between Belgium and Rwanda dates back to 2018, during a bilateral conference organised by the government of Rwanda. The SHARE programme was borne of this conference.

Within the framework of SHARE and at the request of the Rwandan government, three Belgian institutions - the AfricaMuseum, the State Archives of Belgium and the Ministry of Foreign Affairs - are preparing the inventory and digitisation of archives that concern Rwanda. Like the sound recordings, the digitised Rwandan archives kept in Belgium will be transferred to Rwanda.

The SHARE programme also includes the renovation and decolonisation of the Huye Ethnographic Museum, a musicology project, and linguistics research on the Kinyarwanda language. Scheduled for the 2019-2023 period , the SHARE programme is funded by the Directorate General for Development Cooperation and Humanitarian Aid (DGD).



Rémy Jadinon (RMCA); Bert Versmessen, ambassador of Belgium in Rwanda; Robert Masozera, Director General of the Rwanda Cultural Heritage Academy.



Matthieu Thonon (Musical Instruments Museum, Belgium); Jean-Paul Mugwaneza, Alice Kamasoni, Jonny Mugaba, and Félicien Nizeyimana (Rwanda Cultural Heritage Academy); Rémy Jadinon (RMCA).

Fruit flies: a major threat to crops

Fruit fly pests are considered one of the major threats for horticulture in both tropical and temperate regions. The number of these invasive pests is on the rise because of an increase in global trade and travel, along with climate change.

A new EU-funded project within the H2020 programme, FF-IPM ('In-silico boosted, pest prevention and off-season focused IPM against new and emerging fruit flies') aims to prevent and mitigate the impact of fruit fly pests and secure sustainable food production in Europe. The RMCA is one of 21 partners from 16 countries around the world. The project focuses on three invasive fruit flies that form a major threat: *Bactrocera dorsalis*, *Bactrocera zonata*, and *Ceratitis capitata*.

The project aims to develop tools and databases that can reliably predict where and when invasive pests are likely to enter Europe. It will also produce rapid detection and identification tools that are useful for inspecting imported cargo. Based on its expertise in the identification of fruit flies in Africa, the RMCA will coordinate the development of these tools. It will also perform population genetics research to trace the origin of potential invasions.

The project will also develop a management toolkit to eliminate fruit flies, focusing on Integrated Pest Management (IPM). This comprises a diverse set of methodologies that are considered benign, such as natural predators and parasitoids, without negative consequences on either human health or the environment. The project is innovative in targeting the use of such IPM tools in the 'off-season'. Fruit flies demonstrate a decline in population levels during the winter periods. By targeting the overwintering generation, researchers hope to prevent population growth later in season and hence reduce economic costs, as fly populations will not have attained the high number of flies which would necessitate much more intensive control methods. In addition to the numerous molecular analyses that were carried out, a smartphone app was also developed in 2021. The app provides an identification key for a selection of fruit flies that are considered of significance for quarantine measures in the European Union.



Bactrocera dorsalis, one of the target fruit fly species of the FF-IPM project.

International Geologica Belgica meeting

The 7th international Geologica Belgica meeting was held at the RMCA from 15 to 17 September 2021. With seven of its scientists in the organizing and scientific committees, the museum was one of the meeting's driving forces. There were 171 registered participants, 3 keynotes, 105 oral presentations, 83 posters, 1 forum, and the awarding of the Van den Broeck medal.

The abstract book is available online on

https://geologicabelgica2021.africamuseum.be/



Group photo of the 7th International Geologica Belgica Meeting, held at the RMCA from 15 to 17 September 2021.

BIOLOGICAL COLLECTION AND DATA MANAGEMENT

Review of available information on the spiders of Mayotte

Spiders feed mainly on insects, and play a significant environmental role in regulating insect populations, particularly of certain pest species. At the request of Mayotte's minister for ecological transition, a team of RMCA researchers carried out a review of the state of knowledge regarding spiders on the archipelago. Bibliographic compilations, studies of existing collections, and new field sampling efforts are now being used in the preparation of a guide to the spider fauna of Mayotte.

In 2021, a field mission was organized to carry out additional field sampling.



Collecting spiders after beating foliage.



Training day organized during the Mayotte mission.



Nephila inaurata in its web.

A guide to colonial archives in Belgium

The State Archives and the Royal Museum for Central Africa have published a source guide to the history of colonisation. This new publication identifies and locates all archives available in Belgium dating from the colonial period of the Democratic Republic of Congo, Rwanda and Burundi (see also p. 34). The archives relating to Central Africa during the colonial period are still insufficiently known. Researchers and society at large call for better access to the 'colonial archives', but there was no tool to identify and locate all sources available in Belgium. Yet nearly 20 kilometres of archives related to colonisation can be found in more than 80 repositories in Belgium.

The Guide des sources de l'histoire de la colonisation is therefore a crucial step forward in the identification and description of the archives on Congo Free State (1885-1908), Belgian Congo (1908-1960), and Rwanda-Urundi ([1916] 1923-1962).

The French-language guide serves as a GPS for the colonial archives, enabling for the first time citizens and researchers the world over to find out exactly who is keeping what on Belgian territory. In this way, this guide meets a threefold need: scientific, societal and memorial.

More than 1500 entries in nearly 2300 pages provide a description and contextualisation of all colonial archives and collections in Belgium, their relevance to research, and their links to other archives and collections. The guide is accompanied by an extensive historiographical overview and offers starting points for tracing sources held abroad on the Belgian colonisation. Hundreds of illustrations highlight the importance of iconographic sources. The book is the result of a long collaboration between the State Archives of Belgium and the RMCA and was written by more than thirty archivists and historians, under the supervision of Pierre-Alain Tallier, Marie Van Eeckenrode, and Patricia Van Schuylenbergh.

The source guide was presented at a press conference held at the State Archives of Belgium on 29 September 2021, in the presence of State Secretary Thomas Dermine.







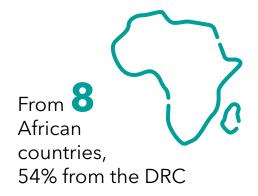
Press conference on 29 th September to release the source guide.

Study visits at the RMCA for 36 African researchers

For many years now, the RMCA has been organizing study visits and training courses for early-career African researchers thanks to the financial support of Belgian Development Cooperation (DGD). These take place at the museum and, for projects set up in Africa, in the field. The project goals and the capacity-building programme are designed around the United Nations Sustainable Development Goals (SGD). The programme covers a wide range of activities. In addition to scientific and technical training courses for individuals or groups, there are also grants for students pursuing masters, doctoral, and post-doctoral degrees; funding to participate in conferences; and residencies for artists and journalists. Compared with 2020, the pandemic had a lesser impact on grants awarded in 2021. 36 African researchers completed DGD-funded research visits at the RMCA. Another 12 scientists travelled to Tanzania for a course on pollinating flies. The ImmARCH and FormARCH training courses on archives, organized in Benin with the École du Patrimoine africain (EPA), were postponed to 2022 owing to COVID-related travel issues. Nonetheless, a 5-day virtual training course was attended by 48 students.

DGD-funded trainings and study visits at the RMCA for African researchers







On 8 November 2021, Bhely Angoboy Ilondea defended his PhD thesis 'Evaluation of Central African tropical rainforest resilience based on functional traits' at Ghent University.



Participants of 'FishBase 2021' (left to right): Salum Sophia Shaban (Tanzania), Mtonga Cretus (Tanzania), Ssekyanzi Athanasius (Uganda), Mrombo Nathan Lenjo (Kenya).



Julius Tumusiime (Uganda) on a study visit to the RMCA in March 2021 as part of his doctoral thesis 'Dynamics of snail species and interventions to reduce associated Schistosoma and Fasciola parasitic infections: A citizen scientists' approach in Western Uganda'.



Group photo of participants, instructors, and organizers of the workshop on pollinating flies, held every two years at the Sokoine University of Agriculture in Tanzania.

Publishing in the time of COVID-19

Despite a year of many ups and downs, the Publications service published or co-published 17 books, with a number of them in several language versions.

Book sales from our different channels (AfricaShop, direct sales, trade distributors, consignment points) were approximately the same as the previous year. As with 2020, the total brings us to a figure similar to the last year of closure for renovation (2018). We hope that 2022 will be a year with no more restrictions, and that the museum as well as national and international bookstores will reunite with their public and their customers. That said, Open Access and cuts in the subscription and acquisition budgets of libraries, universities, etc. have changed the picture.

2000 pages for a guide to historical sources

Together with the State Archives of Belgium, the RMCA has published *Belgique*, *Congo*, *Rwanda et Burundi*. *Guide des*



sources de l'histoire de la colonisation (19°-20° siècle). Vers un patrimoine mieux partagé! in collaboration with Brepols (see also p. 31). The two-volume book received financial support from the Fondation Universitaire Stich-ting of Belgium. Thanks to funding from BELSPO,

a digital version is also made available in open access. It was essential for the new source guide, which identifies and locates 20 km of archives kept in Belgium, to be accessible to as many users as possible in Belgium and abroad, particularly the three countries concerned.

https://www.brepolsonline.net/doi/book/10.1484/m.stmch-eb.5.127294

European Journal of Taxonomy

A new editor-in-chief, Fabio Cianferoni, has taken the helm of the scientific journal *EJT*. He presides over a new board, the Executive Committee, composed of 3 officers and their assistants. The journal's publication manager is the head of Publications at RMCA, and its liaison officer is the head of scientific publications at MNHN Paris. The 6 board members represent 5 nationalities.

EJT celebrated its tenth year in September 2021. An article assessing the journal's overall results was published for the occasion: 'European Journal of Taxonomy: a deeper look into a decade of data' (see list below).

The impact factor received in June 2021 for 2020 was 1.372, reaffirming the journal's stability along-side its direct competitors *Zootaxa* and *Zookeys*. Only 1 article by an author from Africa was published in *EJT* in 2021, out of 6 submissions. Several volumes discuss African species, one of which was described by RMCA researchers (see list below).

More book donations for Kinshasa

The RMCA continued its book donations to the Centre Wallonie-Bruxelles and the Texaf Bilembo cultural centre, both in Kinshasa, with a delivery of new publications from the past 12 months.

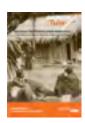


The books offered by the RMCA in 2020 and 2021 comprise a library fonds at the Centre Wallonie-Bruxelles in Kinshasa.

LIST OF RMCA PUBLICATIONS 2021*

Exhibition catalogues and guides

Blanchard, P., Couttenier, M. & Etambala, M.Z.



2021. Zoo humain. Au temps des exhibitions coloniales, 68 p. (Also available in Dutch: Mensentuin. Koloniale tentoonstellingen wereldwijd, and in English: Human Zoo. The age of colonial exhibitions).

Social Sciences and Humanities

Omasombo, J. (ed.) et al. 2021. Ituri. Terre et



identités sous tension. Series: 'Monographies des provinces de la République démocratique du Congo', vol. 15, Tervuren: RMCA, 571 p.

Ngoy Kimpulwa, B. & Englebert, P. (eds).



2021. Congo, l'État en morceaux. Politique et administration au prisme du découpage provincial. Series 'Cahiers africains', no. 96. Paris/Tervuren: L'Harmattan/ RMCA, 308 p. (PR)

Ndayiragije, R., Alidou, S., Ansoms, A. &



Geenen, S. (eds). 2021. Conjonctures de l'Afrique centrale 2021. Series: 'Cahiers africains', no. 97. Paris/Tervuren/Antwerpen: L'Harmattan/RMCA/CRE-AC, 463 p. (PR)

Van Beurden, S. 2021. Congo en vitrine. Art africain, muséologie et politiqu



africain, muséologie et politique. Les musées de Kinshasa et de Tervuren. Series 'Studies in Social Sciences and Humanities', vol. 180, Tervuren: RMCA, 321 p. (PR) Devos, M. & Maniacky, J. 2021. Africana



linguistica 27: 200 p. (PR; IF 0,067)

Various

Jaarverslag/Rapport annuel/Annual Report 2020.



Copublications with RMCA

Tallier, P.A., Van Eeckenrode, M. &



Van Schuylenbergh, P. (eds). 2021. Belgique, Congo, Rwanda et Burundi. Guide des sources de l'histoire de la colonisation (19-20° siècle). Vers un patrimoine mieux partagé! Copublication RMCA, National Archives of Belgium & Brepols, 2294 p.

Kameli, K., Mpane Enkobo, A. & Pinto Ribeiro, A.



(eds). 2021. Europa Oxalà, Exhibition catalogue. Lisbon: Afrontamento Ediçaos with all partners: RMCA, Mucem (Marseille), Coimbra CES & Calouste Gulbenkian Foundation (Lisbon), 88 p. (Also available in: French, Portuguese & Dutch.)

Pinto Ribeiro, A. & Calafate Ribeiro, M. 2021.



Europa Oxalà. Essays. Lisbon: Afrontamento Ediçaos with all partners: RMCA, Mucem (Marseille), Coimbra CES & Calouste Gulbenkian Foundation (Lisbon), 128 p. (Also available in: French, Portuguese & Dutch.)

Online publications

Vlassenroot, K. & Hendrickx, C. (eds.). 2021. Sharing Past



and Future: Strengthening African-European Connections. Proceedings/Actes. Online series 'Documents on Social Sciences and Humanities'. Published with Egmont Royal Institute for International Relations (Brussels), 170 p.

Van den Spiegel, D. & Mathys, A. 2021. Diplopodes et



autres myriapodes de Mayotte. Online series: 'Zoological Documentation',
112 p.

Musschoot, T., Boden, G. & Snoeks, J. 2021. Identification guide



to the Clupeiformes of the inland waters of Africa. Online series 'Zoological Documentation', 149 p.

Gijanto, L. & Cornelissen, E. (eds). *Nyame Akuma*, vol. 94 published by SAfA in partnership with RMCA, 45 p. Gijanto, L. & Cornelissen, E. (eds). *Nyame Akuma*, vol. 95 published by SAfA in partnership with RMCA, 66 p. Gijanto, L. & Cornelissen, E. (eds). *Nyame Akuma*, vol. 96 published by SAfA in partnership with RMCA, 48 p.

Open access

European Journal of Taxonomy (published by a European consortium including the RMCA), vol. 731 to 787 with some papers by RMCA scientists:

Van den Spiegel, D., Henrard, A. & Mathys, A.

2021. Sechelleptus arborivagus sp. nov., a new arboreal spirostreptid millipede (Diplopoda, Spirostreptidae) endemic to Mayotte Island (Comoros Archipelago), Indian Ocean'. European Journal of Taxonomy 755: 1-21. https://doi.org/10.5852/ejt.2021.755.1395 (PR; IF 1.372)

Bénichou, L., Guidoti, M., **Gérard, I.**, Agosti, D., Robillard, T. & Cianferoni, F. 2021. *'European Journal of Taxonomy*: a deeper look into a decade of data'. *European Journal of Taxonomy* 782: 173-196.

https://doi.org/10.5852/ejt.2021.782.1597 (PR; IF 1.372)

NEW PROJECTS

The museum is involved in a hundred or so scientific projects, four of which began in 2021:

- History from things and techniques: Crossing the present and the past in Central Africa
- Developing effective methods for the surveillance of non-European Tephritids on Belgian territory
- Towards a better appreciation of Central African textile masterpieces: understanding the craftwork and Preserving the collection of Textiles
- Insect Museum Open-omic Database

COMPLETED DOCTORATES

The following researchers completed their doctoral studies with the scientific and logistic support of the RMCA in 2021:

Earth Sciences

Antoine Dille

Remote sensing of slow-moving landslides in the tropics: natural and anthropogenic controls

Advisors: Matthieu Kervyn (VUB), François Kervyn (RMCA), Olivier Dewitte (RMCA)

Defended on 25 March 2021

Joseph Martial Akame

Processus d'accrétion crustale et évolution géodynamique à l'Archéen en bordure nord-ouest du craton du Congo (sud-Cameroun). Étude structurale et signature géochimique des isotopes radiogéniques (Pb-Pb, Sm-Nd et Lu-Hf)

Promotoren: Vinciane Debaille (ULB), Thierry De Putter (RMCA) Defended on 2 April 2021

Francesca Maddaloni

Lithospheric structure and tectonic evolution of intracratonic basins: the Congo basin natural laboratory

Advisors: Magdala Tesauro (Universiteit Utrecht & Universiteit van Triëst), Carla Braitenberg (Universiteit van Triëst), Damien Delvaux (RMCA)

Defended on 24 September 2021

Arthur Depicker

Earth surface processes and land degradation in the Kivu Rift Advisors: Gerard Govers (KU Leuven), Liesbet Jacobs (KU Leuven), Olivier Dewitte (RMCA) Defended on 22 October 2021

Nicholus Mboga

Evolution of land-use/cover from historical panchromatic images and recent high resolution imagery

Promotoren: Eléonore Wolff (ULB), Moritz Lennert, Olivier

Dewitte (RMCA), François Kervyn (RMCA) Defended on 30 November 2021

Biology

Michiel Jorissen

Tracing parasite transfer between invasive Nile tilapia and native cichlids in Central Africa Advisors: Tom Artois (UHasselt), Maarten Vanhove (UHasselt), Tine Huyse (RMCA) Defended on 21 June 2021

Bhély Ilondea Angoboy

Phenology and growth traits governing forest dynamics of tropical tree species communities: Experimental data based on the Luki Man and Biosphere Reserve, DR Congo Advisors: Joris Van Acker (UGent), Adeline Fayolle (ULiège), Tom De Mil (ULiège), Hans Beeckman (RMCA)

Defended on 8 October 2021

Cultural Anthropology & History

Barpougouni Mardjoua

Cultural Heritage, urban development and Archaeo-historical Study of Banikoara Town (Northern Benin)

Advisors: Victor Brunfaut (ULB), Didier N'Dah (Université d'Abomey-Calavi, Benin), Olivier Gosselain (ULB), Alexandre Livingstone-Smith (RMCA) Defended on 30 April 2021

THE SCIENTIFIC INSTITUTE IN FIGURES

Who?

3

departments

80

researchers

More than

15

disciplines

70

partner institutions and universities

What?

In 2021

- Around a hundred ongoing projects including 4 begun in 2021 *
- 116 presentations
 in scientific conferences
- 162 published articles , of which 114 were peer-reviewed **

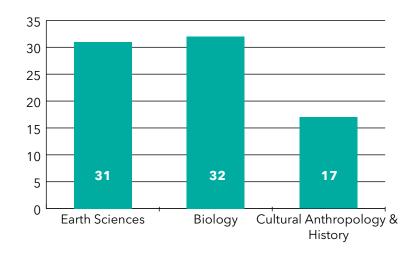
Doctoral theses

- 9 doctoral degrees completed in 2021***
- **80 ongoing doctoral programmes** in 2021
 - · including 13 begun in 2021
- 65% of doctoral students are from 13 countries in Africa
- 31% of doctoral students are Congolese
- 20% are Belgian
- Supervision of **35 master's or DEA students**

344 visitors came to the RMCA

to conduct research and/or consult the collections, archives or libraries

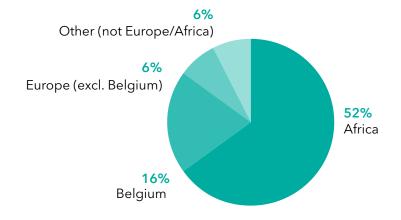
Number of doctoral students per department



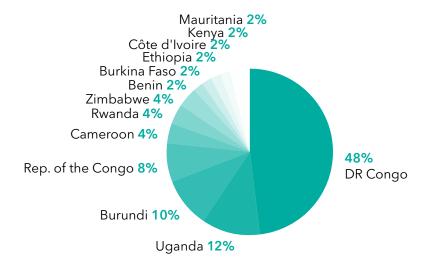
Doctoral students by nationality



Origin of doctoral students



Country of origin of African doctoral students



Taxonomy

15
new animal species
described

6

hoverflies

6 fishes

2 millipedes

1 spider



UU

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 digitize 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.

COLLECTION FIGURES

Cultural Anthropology & History

Biology

Earth Sciences

122 000

ethnographic artefacts

75 000

archaeological artefacts

9000

musical instruments

4000

ancient maps

500 000

historical photographs

20 000

historical objects and Western artworks

3 km

historical archives

70

historical films on the Belgian Congo, Rwanda and Burundi (1940-1960) 10 000 000

specimens among which:

6 000 000

insects

1 200 000

fishes

500 000

butterflies

300 000

spiders

195 000

amphibians

150 000

birds

135 000

mammals

80 000

wood samples

62 000

reptiles

17 000

snakes

264 000

aerial photographs

160 000

rock samples

25 000

geological maps

22 000

palaeontological specimens

19 000

minerals

1 km

geological archives

FIGURES FOR THE COLLECTIONS, ARCHIVES AND LIBRARIES

Loans

344

visitors to the RMCA for research or to consult the collections, archives, or libraries

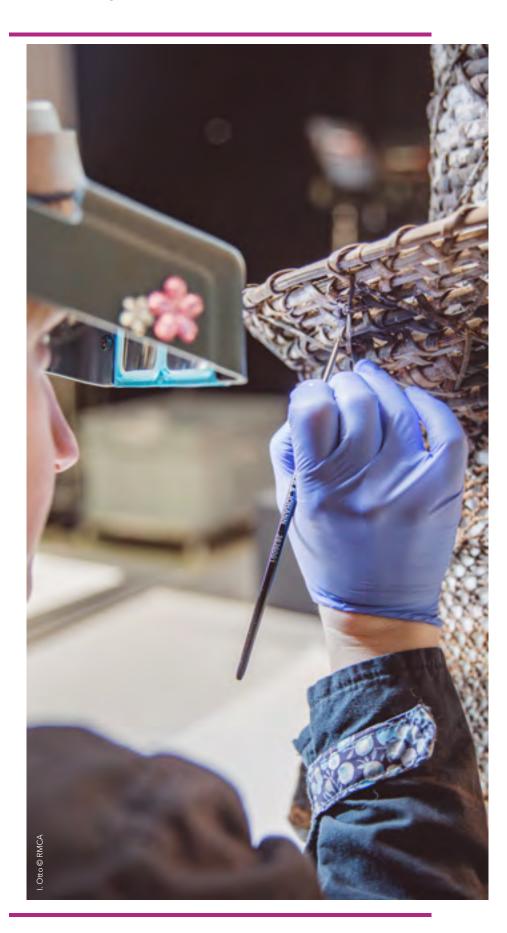
95

ethnographic and historical objects consulted by visitors

More than 1500 zoological specimens on research loan

502 objects on loan

in particular for 13 exhibitions in Belgium, France, Italy, Poland, Hong Kong and the United States



Expertise and services

Acquisitions

430

assessments of ethnographic objects and musical instruments

Identification of 21 wood samples

More than 18 000 zoological specimens including

10 000

freshwater snails

500

samples of Nile tilapia fins for genetic analysis

over **4000**

flies

and **4000** other invertebrates

90

wood samples

24

archive fonds, photo albums, postcard collections, paintings, etc.

Furthering the restitution debate

A number of objects in the RMCA's collections are not its moral or legitimate property. Significant portions of the collections were acquired during the colonial period, in conditions that were at times violent, unfair, or with a power imbalance. This was especially the case during the Congo Free State years between 1885 and 1908.

The RMCA has for many years been an active and transparent participant in discussions regarding the restitution of African cultural heritage and in the dialogue with the relevant stakeholders. The museum's restitution policy was published in early 2020.

https://www.africamuseum.be/fr/about_us/restitution

That said, the federal state remains the legal proprietor of the RMCA collections, and no decision regarding ownership can be made by the museum itself. Only the Federal State Secretary for Science Policy can make such a decision, in accordance with a strict legal framework and with parliamentary approval. In a press conference held on 6 July 2021 at the museum, State Secretary Thomas Dermine presented his approach with regard to the restitution of cultural heritage looted from Congo during the colonial period: 'What was acquired illegitimately does not belong to us. It must be returned.' The details of his approach can be found online (in French). His proposal will be submitted to parliament in 2022.

https://dermine.belgium.be/fr/restitution-la-proposition-de-thomas-dermine

On the same occasion, Thomas Dermine inaugurated the museum's 'Provenance trail'. This smartphone guided tour highlights pieces of different origins. The RMCA developed the tour to share the results of its provenance research efforts. The museum also publishes articles regularly to provide more context and details on the provenance of the objects in the circuit. Seven such articles were published in 2021.

https://www.africamuseum.be/en/discover/provenance

On 24 November 2021, a landmark round table discussion was held in Kinshasa to discuss the restitution, reconstitution and preservation of the DRC's cultural heritage. Participants included:

- C. Kathungu (Minister of Culture, DRC),
- T. Dermine (Belgian state secretary for Science Policy),
- Prof. Mumbembele (director a.i. of the IMNC),
- Prof. Ndaywel (Université de Kinshasa and African Union Panel),
- Prof. Bundjoko (director of the MNRDC),
- Prof. Yoka (director of INA, DRC),

- G. Gryseels (director-general of the RMCA),
- Prof. Shaje Tshiluila (anthropologist, Université de Kinshasa),
- Deo Tshilumba wa Kabeya (senior adviser for cultural and religious affairs, cabinet of the president of the republic, DRC),
- Mfumu Difima (head of the Conseil supérieur de l'autorité traditionnelle et coutumière, DRC),
- several customary chiefs.



At a press conference held at the museum on 6 July 2021, State Secretary Thomas Dermine presented his approach on cultural heritage looted from Congo during the colonial period. Petitions for restitution would be submitted to a Belgo-Congolese commission with equal representation, which would examine the provenance of the items.



Participants of the landmark round table discussion organized in Kinshasa on 24 November 2021 on the restitution, restitution, reconstitution and preservation of the cultural heritage of the DRC.

ARCHIVES

Digital access to the archives

Three kilometres: this is the total length of the historical archives conserved at the RMCA, covering the period form the mid-19th century to the present day. Visitors can consult the museum archives via the web portal archives. africamuseum.be

Launched in 2019, the online platform is regularly updated. Over 42,000 references are currently available. The system can also store high-resolution digital versions so that documents can be consulted at home.

As with the previous year, user numbers have grown considerably. The nearly 22,000 visitors in 2021 represent a 132% increase compared with 2020. They consulted around 105,000 pages. The number of visitors from Africa also increased. Belgium accounted for 33% of visitors, while 15% connected from the DRC and 13% from Rwanda.



Transfer of Rwandan archives

Together with the State Archives of Belgium and the Ministry of Foreign Affairs, the RMCA has been working since 2019 with the Rwandan government and its archive services at the Rwanda Cultural Heritage Academy to digitize archives, photos, and films on Rwanda that are conserved in Belgium. Digital files are then transferred to Rwanda.

To date, 90% of the RMCA's archive fonds on Rwanda have been inventoried and a quarter have been digitized. The inventory and digitization of archives at the Ministry of Foreign Affairs and the State Archives of Belgium are ongoing. In 2021, more biographies were written for prominent figures in Rwanda, including those who played key roles in the country's history. Featured were Nyirayuhi V Kanjogera, Rutangira, Alphonse Mfizi, André Coupez, Serge Desouter and Camille Tulpin. These biographies, published on archives. africamuseum.be, were shared regularly on Twitter and Facebook. They have since proved popular with Rwandan internet users as well as Belgian, European, Asian and American researchers.

archives.africamuseum.be

Ongoing digitization of natural history collections

Between them, the RMCA and the RBINS conserve nearly 50 million natural history specimens, a priceless heritage of past and present biodiversity. Their combined holdings represent one of the largest collections in Europe - surpassed only by the Natural History Museum of London and the Muséum national d'Histoire naturelle in Paris - and one of the 10 largest collections in the world. About 0.5% of these specimens were used to describe species for the first time (so-called type specimens) or were the subject of detailed and illustrated descriptions. The legacy constituted by these 250,000 specimens is unique on a global scale.

In 2021, efforts to digitize and publish the collections online continued. The online portal for the natural history collections now contains over 18,000 photos for 7,000 specimens.



Citizen science to enhance insect collection data

With its 6 million specimens, the RMCA entomology collection is one of the richest in the museum, and certainly one of great scientific importance.

The many type specimens in the collection are of special interest to researchers. These type specimens served as the basis for the description of their respective species, and are the most studied and most handled pieces in the collection. Efforts are now dedicated to their digitization to reduce handling and the associated wear and tear, thereby ensuring their good long-term condition.

Labels associated with each specimen provide essential information including the collector's name, collection site and year, identification records, sex determination, and so on. These metadata are an integral part of the specimen and their transcription in a database is crucial for scientific research. For this reason, the RMCA has invested in citizen science projects. These projects invite volunteer scientists to help enrich databases by transcribing labels – that is, by entering the information found on these labels into the corresponding fields in a database.

The first project, launched in 2021, involved the collection of Odonata (the insect order that includes dragonflies and damselflies). It was successfully completed in record time thanks to the volunteers involved. A second project planned for 2022 will cover the museum's butterfly collection.

These citizen science projects are carried out using the DoeDat platform managed by Botanic Garden Meise.



Type specimen of the dragonfly species Neurogomphus paenuelensis. A citizen science project asked volunteers to transcribe specimen labels.



FINANCIAL REPORT

	2017	2018	2019	2020	2021
Expenditure and revenue (in k€)					
Revenue	15 070	17 518	19 561	16 605	17 522
Expenditure	15 387	20 009	18 127	16 058	17 864
Balance	–317 ⁽¹⁾	-2491 ⁽¹⁾	1434	546	-341
Sources of revenue					
Human resources envelope	6356	_ (2)	_ (2)	_ (2)	_ (2
Endowment	3931	10 197	10 197	10 587	10 730
Own funds	504	952	3382	1237	1440
Projects	4010	5560	4967	4727	5.240
Other	269	809	1015	52	111
Total	15 070	17 518	19 561	16 605	17 522
Expenses by source (in k€)					
Personnel	11 476	11 294	11 985	11 294	11 780
Human resources envelope	6356	0	0	0	0
Personnel own funds	5120	0	0	0	0
Statutory personnel		5230	5841	5337	5540
Contractual personnel		6063	6144	5957	6239
Operations	3242	4962	5328	3927	5570
Equipment and library	670	3753	814	836	513
Total	15 387	20 009	18 127	16 058	17 864

⁽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 envelopes have been merged

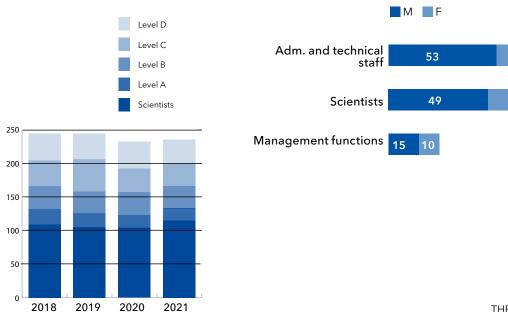
STAFF FIGURES

Distribution of statutory and contractual staff by level

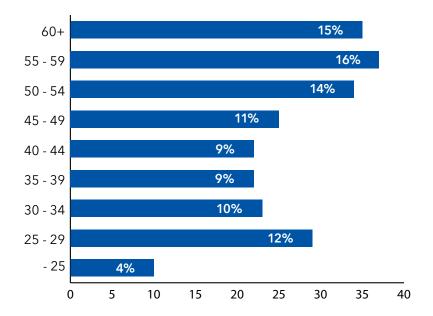
	2018	2019	2020	2021
Scientists	109	105	104	115
Statutory	36	31	34	30
Contractual	73	74	70	85
Level A	23	20	19	18
Statutory	13	12	12	11
Contractual	10	8	7	7
Level B	33	33	32	33
Statutory	23	22	23	26
Contractual	10	11	9	7
Level C	39	47	36	34
Statutory	18	18	19	20
Contractual	21	29	17	14
Level D	40	39	40	35
Statutory	1	1	1	1
Contractual	39	38	39	34
Total	244	246	231	237

Distribution by level

Distribution M/F



Age pyramid



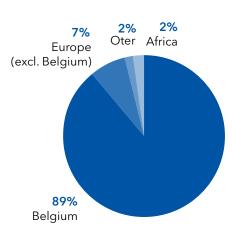
Cultural diversity

Country of birth

7% Africa Other 8% Europe (excl. Belgium) 77% Belgium

33 countries of birth:
9 countries in Europe , 10 countries in Africa,
14 other countries (Asia, North America and Central America)

Nationality



17 nationalities: 8 European, 5 African and other nationalities (Asian, American)

PUBLIC SERVICES

Visitors

AfricaMuseum welcomed 121,897 visitors in 2021.

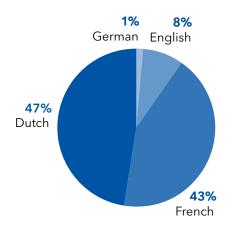
Of the 23,006 people who visited the exhibit *Mabele Eleki Lola! The earth, brighter than paradise,* 22,285 came in 2021. The *Human Zoo* exhibit attracted 15,268 visitors in total, 5,058 of them in 2021.



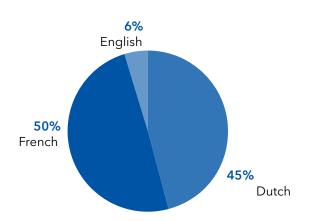
Guided tours

There were 709 guided tours and 115 workshops.

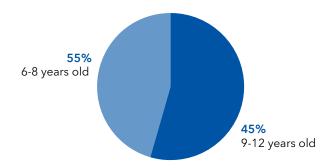
Guided Tours: breakdown by language



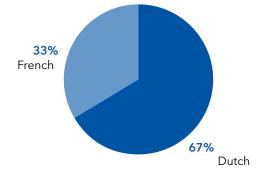
Workshops: breakdown by language



Kids Workshops: breakdown by age



Kids Workshops: breakdown by language



RMCA and the media

Total number of articles published: 811

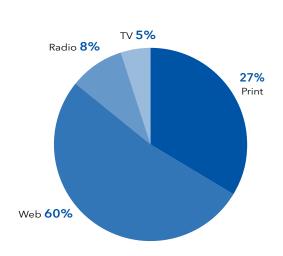
- Belgian media: 763 (a decrease of 49% compared with 2020)
- International media: 48 (an increase of 48% compared with 2020)

Belgian media

Breakdown of articles according to language

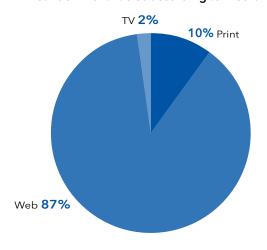
German 0,8% English 3% 0,2% Other French 42% 54% Dutch

Breakdown of articles according to medium

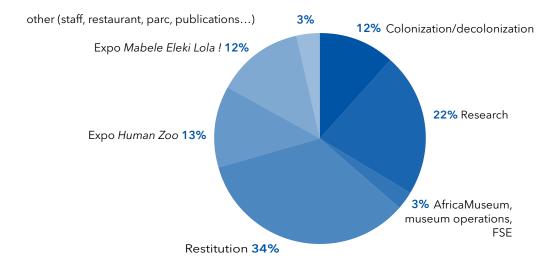


Foreign media

Breakdown of articles according to medium



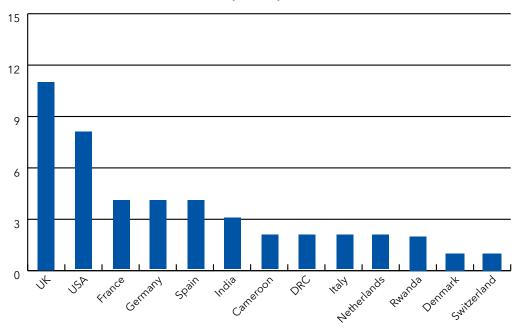
Overview of topics covered



Foreign media

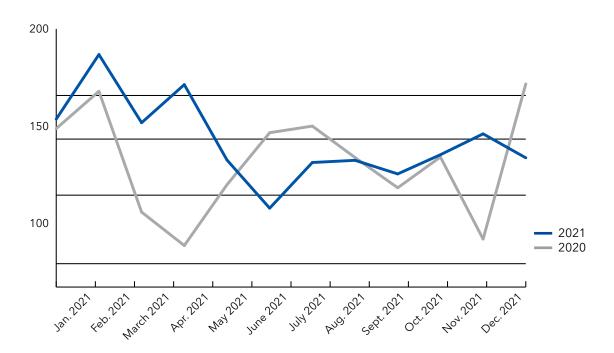
In 2021, the museum attracted significant international media coverage in 13 different countries.

Overview of the number of articles by country



Website

In 2021, the museum's webpages were visited 1,725,056 times, a 10% increase compared with 2020. This probably corresponds to a return to normal figures following pandemic-related closures in 2020.



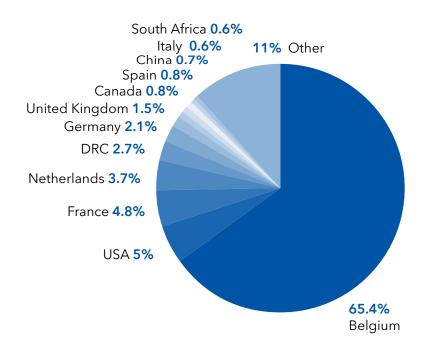
Website consultations

- 331,230 unique visitors (based on IP address) consulted the website a total of 503,080 times, which averages at 1.5 times per visitor.
- On average, a site visit lasted 2 minutes and 59 seconds.
- For the first time, more users visited the website using a mobile device (smartphone or tablet, 52%) rather than a computer (48%).
- 83% of visitors landed on the website directly or via a search engine, a slight increase over previous years. 7% of visitors reached the website by clicking an advertising link, while 4% reached it via social media.

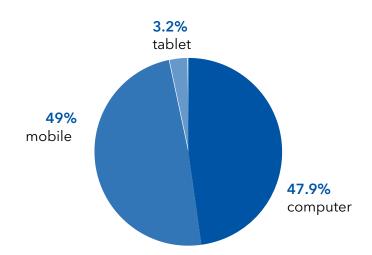
Origin of website visitors

65% of visitors viewed the website from Belgium. This is a slight decrease compared with 2020 (67%). After the USA (5%) and France (5%), the Netherlands (4%) and the DRC (3%) accounted for the greatest number of visits.

Origin of website visitors



Device type



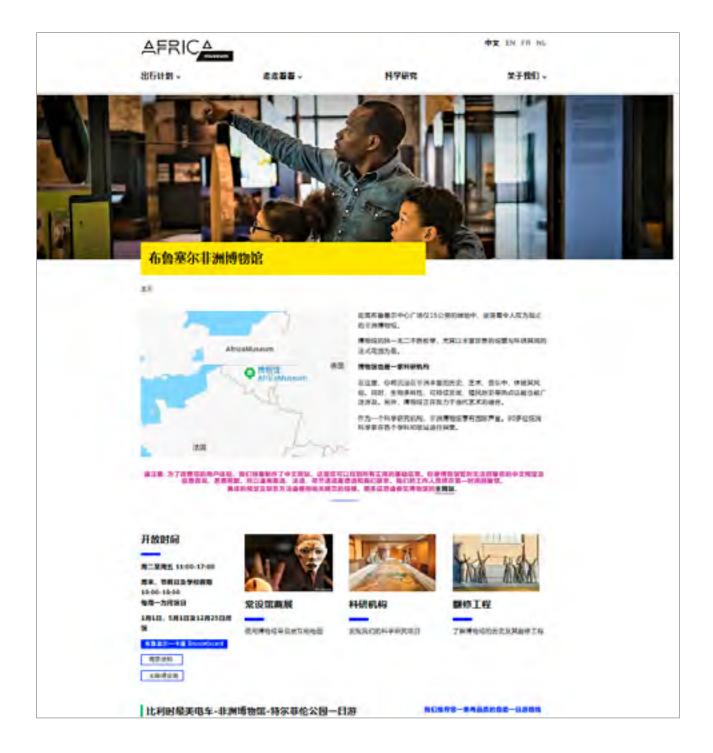
Social media

In 2021, the number of social media followers increased as follows:

- the Facebook page AfricaMuseum EN, went from 10,016 to 10,390 followers, a 4% increase.
- the Facebook page AfricaMuseum België went from 2,190 to 2,311 followers, a 6% increase.
- the Facebook page AfricaMuseum Belgique went from 2,244 to 2,851 followers, a 27% increase.
- the Instagram account had 4,916 followers including 767 new ones by the end of 2021, an 18% increase.
- the Twitter account had 6,738 followers including 654 new ones by the end of 2021, an 11% increase.

Website in Chinese

A mini-website in Chinese was also developed in 2021, containing the most essential information for visitors from China. This makes (part of) the website available in five languages.





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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.

Members with advisory rights:

- · Marie-Solange Mukarwema, Accountant, RRINS
- · Yves Geens, Accountant, RMCA
- Brigitte Lauwaert, Head, Mathematical Models Management Unit, RBINS
- Didier Van den Spiegel, Head of service, RMCA
- Françoise Stassart, Vice-secretary
 Attaché PPS Science Policy
- Jacques Lust, Secretary, Attaché PPS Science Policy
- · Johan Schrobiltgen, Inspector of finance
- · Pierre De Maret, Chair, Scientific Council,
- · Bruno Danis, Chair, Scientific Council, RBINS

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, Chair, Director General PPS Science Policy
- Guido Gryseels, Deputy Chair, Director General, RMCA
- Patricia Supply, Deputy Chair, Director General ad interim, RBINS
- · Ingrid Vanden Berghe, External member
- · Olivier Ninane, Advisor PPS Sciences Policy
- · François Mairesse, External member
- · Koen Verhoest, External member
- · Claude Bragard, External member

Director's advisory committee

Members with voting rights:

- · Guido Gryseels, Director General RMCA, Chairman
- Els Cornelissen, Head of Department a.i.
 Cultural Anthropology and History
- Marc De Meyer, Head of Department a.i. Biology
- · François Kervyn de Meerendré, Head of Service and Head of Department a.i.
- Jacky Maniacky, Head of Culture and Society Service
- Didier Van den Spiegel, Head of Biological
 Data and Collection Management Service
- Bruno Verbergt, Operational Director for Public Services (until February 2021)
- Patricia Van Schuylenbergh, Head of History and Politics Service

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
- · François Kervyn de Meerendré, Head of Service and Head of Department a. i.
- 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:

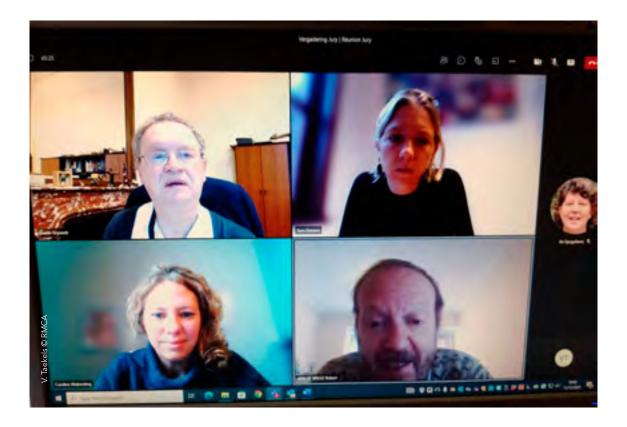
- · Pierre De Maret, Professor, ULB, Chairman
- · Frans Ollevier, Professor, KU Leuven
- · Éric Pirard, Professor, ULiège
- · Koen Vlassenroot, Professor, Ugent

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



Members of the Director's advisory committee during an online meeting.

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.

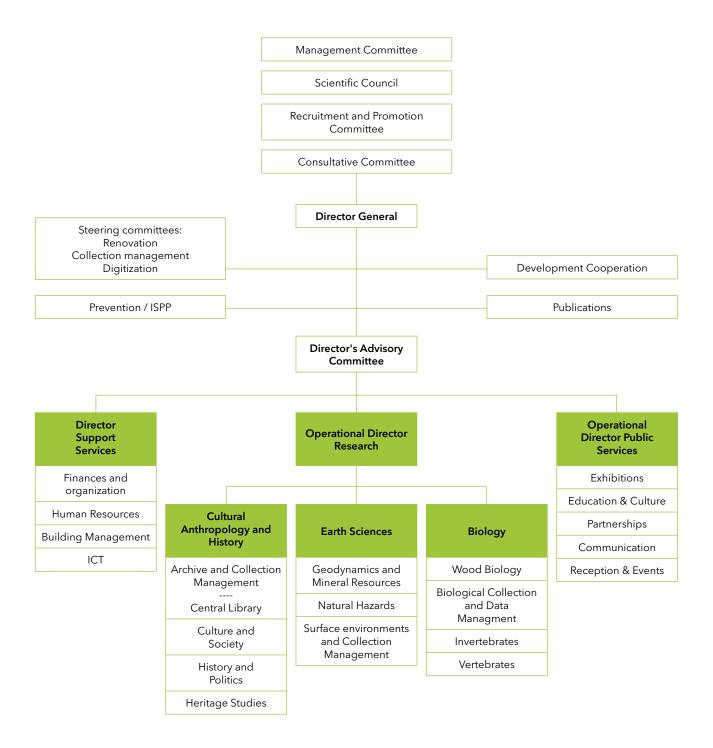
Management representatives:

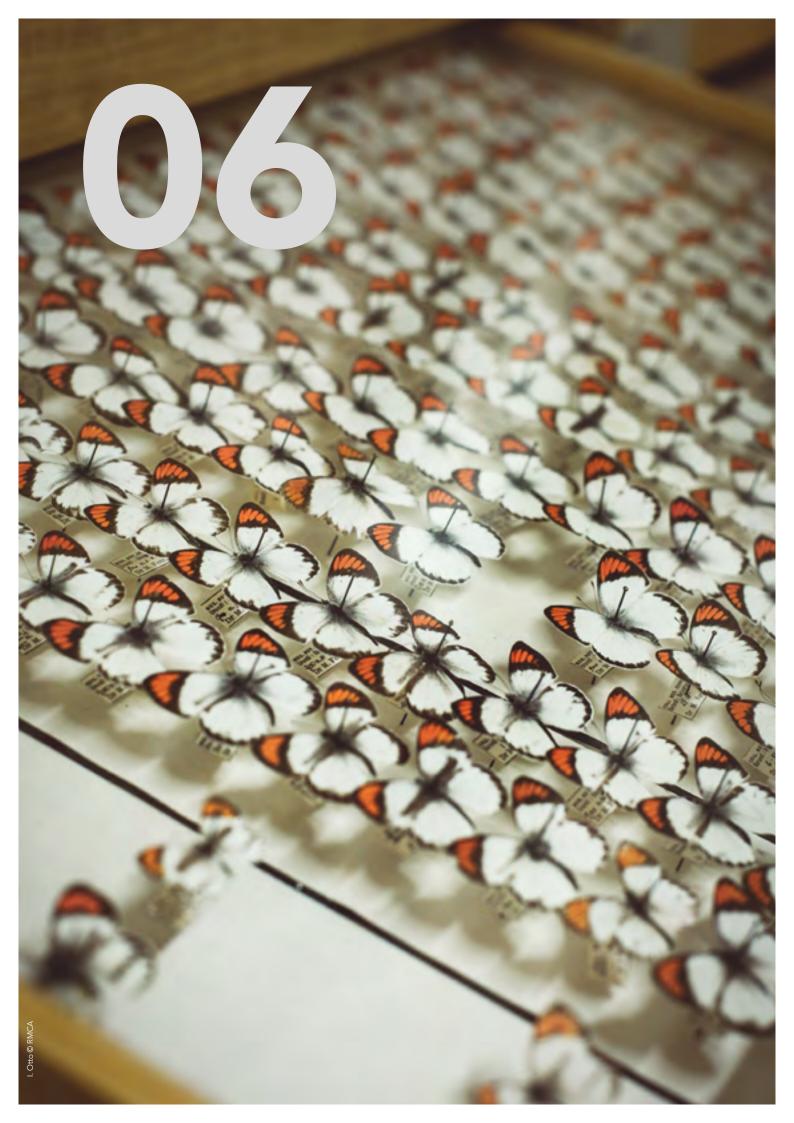
- · Guido Gryseels, Director General, Chair
- Bruno Verbergt, Operational Director for Public-oriented Services (until February 2021)
- Els Cornelissen, Head of Service and Head of Department a.i.
- · Marc De Meyer, Head of Service and Head of Department a.i.
- · Isabelle Gérard, Head of Service
- · François Kervyn de Meerendré, Head of Service and Head of Department a.i.
- · Kristien Opstaele, Head of Service
- · An Spegelaere, HR Head of Service
- · Mario Thoilants, Prevention advisor
- · Eric Van Herreweghe, Prevention advisor (until June 2021)
- Johan Van Impe, Prevention advisor RBINS/RMCA
- Dirk Verbist, Building Management Head of Service

Union representatives:

- Thierry De Putter, Head of Service (ACOD/CGSP)
- · Valérie Demeulemeester (ACOD/CGSP)
- · Geert Dewulf (ACV/CSC) (until May 2021)
- · Dr. Fabienne Nsanze, Empreva occupational physician
- · Kai Saillart (ACV/CSC) (starting May 2021)
- · Patricia Van Schuylenbergh (ACV/CSC)
- $\cdot \ \ Jean-Christophe \ Vancoppenolle \ (ACV/CSC)$
- Jimmy Verlez (VSOA/SLFP) (starting May 2021)

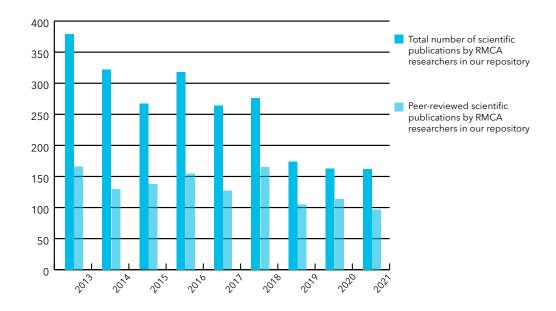
Organization Chart





PUBLICATIONS OF RMCA SCIENTISTS

Every year, the researchers of the museum publish articles in scientific journals or books, monographs, etc. with international, highly-regarded publishers. In 2021, they published 162 texts, of which 97 were peer-reviewed.

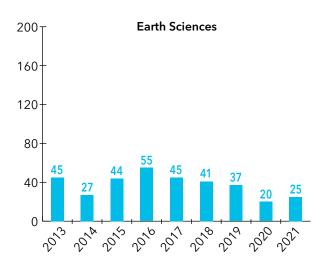


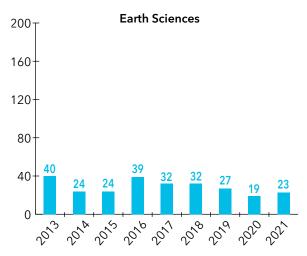
Statistics per discipline and per type in 2021

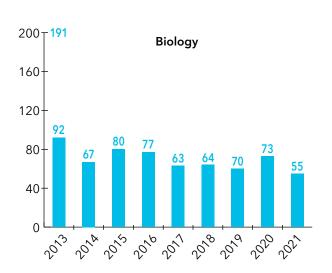
	Earth Sciences	Biology	Cultural Anthropology and History	TOTAL	
Total number of peer-reviewed scientific publications	25	55	16	96	> detail 1
Articles in scientific journals	23	52	6	81	> detail 2
Chapters in (edited) book	1	2	9	12	
Books and catalogues (as author or editor)	1	1	1	3	•
Total number of non-peer-reviewed publications	20	17	19	56	
Journal articles	1	4	3	8	•
Maps	6	0	0	6	
(edited) books/catalogues	0	1	5	6	•
Chapters in (edited) book	0	0	2	2	•
Chapters in (edited) catalogue	0	0	6	6	•
TOTAL	45	72	35		•

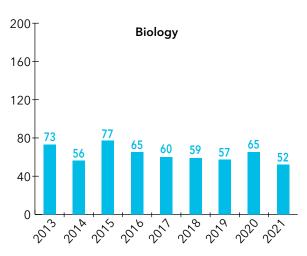
Detail 1: evolution in the number of peer-reviewed scientific publications

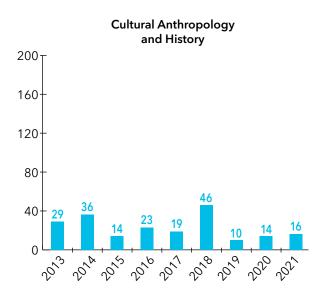
Detail 2: evolution in the number of articles in scientific journals

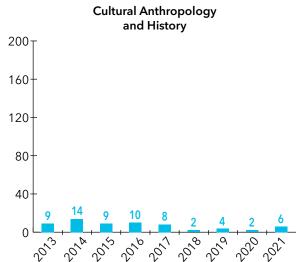












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The following lists represent a selection of the main publications by RMCA researchers in 2021. All references can be consulted on our website.

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

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Lupo, K.D., Schmitt, D.N., Ndanga, J.-P., Nguerede, L.P., Amaye, G.T., Livingstone-Smith, A., Edwards, N.M., Power, R.P., Young, C. & Npo, F. 2021. 'Hunter-gatherers on the basin's edge: a preliminary look at Holocene human occupation of Nangara-Komba Shelter, Central African Republic'. Azania - Archaeological Research in Africa 56 (1): 4-33. DOI: https://doi.org/10.1080/00672 70x.2020.1865636 (PR)

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Panella, C. 2021. 'Preface'. In: **Panella, C.** & Little, W.E. (eds), *Norms and Illegality. Intimate Ethnographies and Politics*. Lanham, Boulder, New York, London: Lexington Books (Rowman and Littlefield), pp. 11-14. ISBN: 978-1-7936-4630-9. (PR)

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COLOPHON

Published under the supervision of the Communications and Publications services

Texts: Kristien Opstaele, Jonas Van de Voorde and Eline Sciot, based on activity reports of the RMCA services and departments

Coordination: Jonas Van de Voorde and Isabelle Gérard (RMCA) Translation and revision: Emily Divinagracia (RMCA), Oneliner

(Sint-Niklaas)

Bibliographies: Iris Spapen (RMCA) Layout: Friederike Kratky (RMCA)

Cover: Three new showcases in the Provenance trail of the permanent exhibition. The circuit presents the results of ongoing provenance research.

Photo T. Schoemaker © RMCA

Printed on FSC paper at RMCA, Tervuren.

Responsible publisher: Karel Velle, Director general a.i. © Royal Museum for Central Africa, 2022 13, Leuvensesteenweg 3080 Tervuren (Belgium)

www.africamuseum.be Legal deposit: D/2022/0254/31 ISBN: 978-9-4645-9616-8

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