

# Annual Report 2015



***Photo on front side:***

*Jaguar at the Hydro mining site in Paragominas, Brazil. The photo was taken automatically by a camera responding to the animal's movement, as part of the UiO pilot project "Camera trap monitoring of red-listed mammals". Note the key information on the bottom line. From left: Camera location (CT 48), temperature (33°C), moon phase (full), date and time.*

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*All photos in this report can be used freely, on the condition that photographer and institution is stated.*

## 1. Introduction and background

The Biodiversity Research Consortium Brazil-Norway (BRC) carries out research on biodiversity and climate change issues in the Brazilian Amazon. Established in 2013, the consortium comprises the Federal University of Pará (UFPA), the Emilio Goeldi Museum of Pará (MPEG), the Federal Rural University of the Amazon (UFRA), the University of Oslo (UiO) and the Norwegian mining and aluminium company Norsk Hydro (Hydro).



*The Norwegian Crown Prince Haakon (right) and MPEG director Nilson Gabas jr. (left) during the BRC event in Belém 18 November 2015. Photo: Livia Prestes/Comunicação Museu Goeldi.*

The BRC is the result of a Hydro initiative. In 2012, not long after taking over Vale’s aluminium operations in Pará, Hydro approached the Natural History Museum (NHM) at the University of Oslo. NHM was given the responsibility to facilitate the creation of a research cooperation based on the recommendations in the Hydro technical report “Reforestation and Wildlife Program - HYDRO Paragominas, Pará, Brazil” by Salomão et al. (2012).

The Cooperation Agreement defines the main aim of the cooperation “to develop research activities both applied and basic, and build a strong base of outputs in biodiversity and climate knowledge” among the partners. The consortium shall also contribute to “increased university – industry partnership”. In addition to joint research and publications, “graduate education (master and PhD) will be important elements of the consortium activity.”

This report is prepared by the BRC secretariat. It presents the consortium’s main activities carried out in 2015. All major BRC activities are included, but we refer to specific BRC event reports for further details. In the final section, important lessons learned are presented.

## 2. Results

In 2015, BRC took several big steps forward. By the end of the year, the levels of knowledge, activity visibility and trust were considerably higher than at the start.

- A biodiversity synthesis report was completed, giving the consortium substantially better knowledge about the biodiversity status at MPSA and a crucial baseline for developing new research projects. The report also discovered gaps in existing knowledge, and gave recommendations on how to cover them. (see section 6 for further details)
- Two successful seminars were organized, in Oslo and Belém, uniting more than 160 people from academia, industry, civil society and government. Crown Prince Haakon attended the Belém seminar, and both seminars gave BRC unprecedented visibility and recognition. This is fundamental for achieving scientific collaborations with other prestigious institutions, as well as for achieving funding from external sources. (see section 7 and 8)
- The BRC Research Program 2015-2020 was elaborated and approved, enabling BRC to have a more strategic approach to project development. (see section 9)
- The project BRC 03/14 Plant biodiversity, soils and biomass was initiated, integrating researchers from UFRA and MPEG. In August, the project coordinators organized a one day seminar for Hydro employees in Paragominas. Two other projects were still under negotiations with Hydro for finalising the contracts.
- Seven new project proposals were approved by the BRC scientific committee, and recommended for Hydro funding. (see section 10)
- 10 students and 3 PhD candidates are currently involved in project BRC 03/14 Biodiversity, soils and biomass, and one Brazilian PhD candidate is hosted by UiO. (see section 11)
- The internal trust continued growing.

In short: BRC was consolidated as a fully operational research consortium. We have still not reached a high level of project activities, but in sum the secretariat regards the results in 2015 as satisfactory.



*BRC representatives at the MPEG Ferreira Penna research station in the Caxiuanã national park, March 2015. Photo: BRC.*

### 3. The BRC board

The BRC board consists of one representative from each member institution. In 2015, the board members have been: Assistant professor Gracialda Ferreira (UFRA), professor MarluCIA Martins (MPEG), professor Leonardo Sena (UFPA), head of HSE Domingos Campos (Hydro B&A) and research director Fridtjof Mehlum (UiO). The board had one ordinary and one extraordinary meeting in 2015. Gracialda Ferreira (UFRA) exercised the function as chair of the board.

At the regular March meeting, held at the MPEG Ferreira Penna research station in Caxiuanã, the board approved the 2014 annual report, maintained the division of labour between board and scientific committee, supported that the localization of the BRC secretariat would continue in Oslo and discussed general BRC communication. In November, UiO called for an extraordinary meeting in Belém in order to discuss the need for a substitute for BRC coordinator Torkjell Leira during periods of 2016. The board supported the proposed solution, to hire a substitute to be based in Belém.



*The BRC scientific committee during the March meeting at the MPEG Ferreira Penna research station in the Caxiuanã national park. Photo: Torkjell Leira (UiO/BRC)*

### 4. The BRC scientific committee

The BRC scientific committee consists of two representatives from each member institution. In 2014, the members of the committee have been: Researchers Tamara Thaiz and Selma Ohashi (UFRA), researchers Lourdes Ruivo and Rogerio Silva (MPEG), professors Leonardo Sena and Leandro Juen (UFPA), environmental manager Bernt Malme (Hydro corporate), head of HSE Domingos Campos (Hydro B&A), and professor Karl-Henrik Larsson and research director Fridtjof Mehlum (UiO). The committee had two ordinary meetings, one extraordinary meeting and one telephone meeting in 2016. Fridtjof Mehlum (UiO) exercised the function as chair of the committee.

In March, the committee met at the MPEG Ferreira Penna research station in Caxiuanã, back-to-back with the board meeting. The committee discussed Hydro requirements and resources in relation to research at MPSA and maintained the BRC research priorities with a small geographical expansion. The preliminary synthesis report, made from all Vale and Hydro environmental reports related to MPSA, was discussed, as well as progress reports from current projects. Five new project proposals were regarded and added to the list of three projects already on the table, but no funding

was promised. The committee further discussed internal and external communication, as well as external funding sources, especially the Amazon Fund. One very important decision was to elaborate an overarching BRC research program (see section 9 in this report for further details).



*BRC  
representa-  
tives at the  
Natural  
History  
Museum in  
Oslo,  
September  
2015.  
Photo: BRC*

The September meeting was held at the Hydro headquarters at Vækerø and at the Natural History Museum in Oslo, and included a visit to the Hydro plant in Holmestrand. The committee discussed the draft research program and suggested several changes. The progress of current projects was presented, and delays caused discomfort to the committee. As to new projects, seven new proposals were submitted, totaling 15. The committee decided to not recommend any new project for Hydro funding before the research program was approved. Further, the committee adopted an updated project proposal form and decided that all projects should be presented in English.

In an extraordinary meeting at UFPA in Belém in November, the BRC Research program 2015-2020 was approved. Subsequently, Hydro explained its intention to support seven of the projects on the list of proposals. The scientific committee applauded Hydro's decision to support the projects, but underlined that before its approval, the committee would need to finalize its evaluation. Hydro also informed that it would facilitate the contractual and reporting processes.

Following a project proposal evaluation process, the committee approved seven new projects in a telephone meeting in December. (See section 10).

## **5. The BRC secretariat**

The BRC secretariat is hosted by the Natural History Museum. The secretariat is responsible for coordinating the consortium's activities and for preparing the meetings of the board and the scientific committee. It is also responsible for coordinating internal application processes, external funding initiatives as well as internal and external communication. In 2015 the secretariat has been staffed by human geographer Torkjell Leira.

The most time-consuming activity in 2015 was organizing the public seminar in Oslo in September (see section 7). This was also by far the most expensive activity, consuming almost half of the secretariat's available funds. The public seminar in Belém in November, co-organized with MPEG on the initiative from the Norwegian embassy, also required a lot of resources and was supported financially by the Research Council of Norway (see section 8).

Other big tasks for the secretariat included following up the elaboration of the synthesis report (see section 6), coordinating and partly elaborating the BRC Research Program (see section 9), and coordinating the project proposal evaluation process (see section 10).

At the board meeting in March, UiO suggested to transfer parts of secretariat functions to Belém. This idea was met with scepticism, as Pará partners were satisfied with the current situation. 2015, thus, continued as before. However, at an extraordinary board meeting in Belém in November, UiO informed that the secretariat needs a substitute for coordinator during six months in 2016, as the current coordinator Torkjell Leira will have a leave of absence.

## **6. Synthesis report concluded**

Ever since BRC was established in 2013, UiO has proposed the elaboration of a report in English, synthesising the existing biodiversity knowledge at MPSA. In August 2014, Hydro announced it would support such a report, and Leonardo Sena (UFPA) was given the responsibility to coordinate the process. The authors made a critical review of all available reports with biodiversity data commissioned and produced by Vale and Hydro.

The draft report, split in a flora and a fauna part, was presented to the scientific committee at UFPA in March 2015. Following the committee's recommendations, the final report was submitted and presented in June.

The report concluded there are several gaps in the existing biodiversity knowledge at MPSA. For the flora part, only trees with a diameter of 10 cm or more have been studied. Further, no botanical material has been deposited in herbaria. This implies that there is no information of plants except from trees, and that it is not possible to validate the identification of tree species. In the inventories, the report identified a number of species that are classified incorrectly.

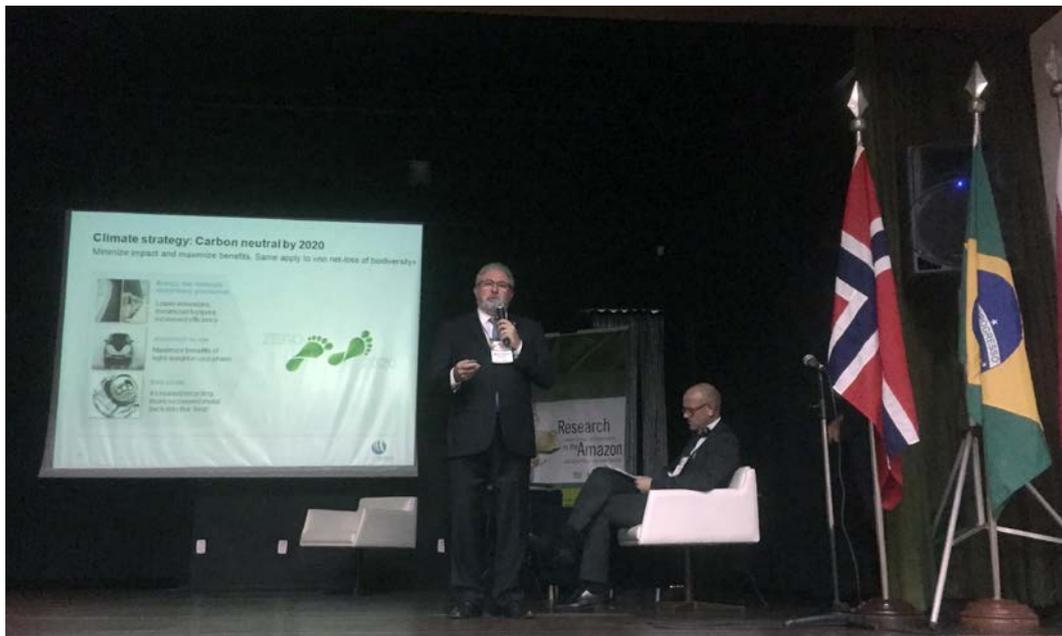
The fauna part found similar problems. In the list of animal species, the report lists a number of vertebrates that were incorrectly identified, and also species that do not occur in the region. There are almost no data on the largest taxonomic group, insects. In addition, the report concluded that the number of sampling sites in several of the studies is too small to give scientifically robust results.

The synthesis report gives a number of recommendations to Hydro, and indirectly to BRC. As a direct follow-up, several new research proposals were elaborated in order to fill the gaps identified, some of which were approved by the BRC scientific committee in December. The committee also commissioned a new project on pollination and seed dispersal based on the lack of knowledge on these processes at MPSA.

## 7. Public seminar in Oslo, September 2015

“Protecting Biodiversity in the Brazilian Amazon” was the title of the seminar at the Natural History Museum, September 15<sup>th</sup>. Approximately 70 participants from academia, civil society, industry and government met in order to discuss climate change, deforestation, reforestation and biodiversity research. Speakers included representatives from all five BRC members, as well as experts from the Norwegian University of Life Sciences (NMBU) and Rainforest Foundation Norway (RFN).

The BRC secretariat considers the seminar a success. It was scientifically interesting and brought together a lot of the most central actors working with Amazon climate change and biodiversity. Further, it presented BRC, its members and researchers to the most relevant Norwegian actors. As such, it gave BRC significant external visibility and recognition. Internally, the seminar was the first BRC event in Norway, and it gave eight BRC representatives the possibility to visit Norway for the first time. For the host, the Natural History Museum and UiO, it was a great opportunity to present its expertise on Amazon biodiversity.



*Alberto Fabrini, Hydro's executive vice president speaking at the seminar. In the chair, Morten Dæhlen, dean of the Faculty of Mathematics and Natural sciences at UiO.  
Photo: Fridtjof Mehlum (UiO).*

## 8. Public seminar and Crown Prince visit in Belém, November 2015

Early in 2015, UiO was approached by the Norwegian Embassy in Brazil and requested to organize a research seminar in Belém, on the occasion of the Norwegian Crown Prince Haakon's official visit to Brazil. UiO accepted the challenge on behalf of BRC.



*The Norwegian Crown Prince Haakon and MPEG director Nilson Gabas jr. during the seminar. In front of them head of BRC scientific committee Fridtjof Mehlum (UiO) and head of BRC board Gracialda Ferreira (UFRA) Photo: Livia Prestes/ Comunicação Museu Goeldi.*

The MPEG auditorium in the zoo-botanical garden was chosen as the venue. Consequently, the main part of the organizing locally was carried out by MPEG. November 18<sup>th</sup>, the seminar entitled “Climate Change and Biodiversity Research in the Amazon - New Knowledge and New Horizons” received 80-90 participants, including a brief visit by the Crown Prince. Speakers in the scientific session included representatives from all five BRC members, Embrapa and the Norwegian University of Life Sciences (NMBU). The session on Brazil-Norway cooperation had speakers from the Research Council of Norway, Norwegian Centre for International Cooperation in Education (SIU), the Brazilian Ministry of Environment (MMA) and the Pará state agency for research funding (FAPESPA). In the official session, the Crown Prince, the Norwegian Deputy Minister of Education and the Pará state secretariat for technology and innovation (SECTET) addressed the meeting. Local newspapers and TV stations covered the event extensively.

The same evening, at a reception given by Pará Governor Mr. Simão Jatene, Norway and the state of Pará signed a MoU on research cooperation. On the occasion, all BRC representatives were invited for a big, stylish dinner at the Pará state museum, offered by the Governor. The MoU may open up new opportunities for funding of future BRC research.

The seminar gave BRC unprecedented visibility, both in Pará and Norway. In Pará, both major newspapers wrote about the seminar and mentioned BRC several times. Through the seminar and MoU signing, the Pará state’s political, scientific and educational authorities were informed about our consortium. In Norway, the inclusion of the seminar in the Crown Prince’s and the scientific delegation’s agenda made BRC appear in a good light. Both the Crown Prince and THE Deputy Minister of Education mentioned BRC in their speeches at the seminar.

At the same time, we are of the opinion that the royal visit was partly a result of the BRC. Had it not been for our existing cooperation, Belém would certainly not have been included in the Crown Prince’s agenda during his state visit to Brazil.

Nascidos em novembro já podem sacar o PIS. Página 4.

POLÍTICA

Príncipe da Noruega defende cooperação

MEIO AMBIENTE Sociedade, cientistas e empresários devem buscar soluções conjuntas

O príncipe herdeiro da Noruega, Haakon Magnus, disse ontem, em Belém, que desastres ambientais são cada vez mais frequentes por causa do aquecimento global. Já em defesa do bem estar do planeta, ele defendeu soluções conjuntas, envolvendo sociedade, comunidades científicas e empresas. Haakon está na capital paraense para cumprir agenda de dois dias em missão diplomática para fortalecer a relação entre o país e o Pará. O príncipe fez o pronunciamento ontem à tarde, no encerramento do seminário internacional "Pesquisas em Mudanças Climáticas e Biodiversidade na Amazônia - Novas perspectivas", que ocorreu no Parque Zoológico do Museu Paraense Emílio Goeldi (MPEG).

Brasil-Noruega (BRIC). Dividido em seções temáticas, o evento contou com presença de novos horizontes e combinaram compromissos no âmbito dessa parceria internacional. Assinado em 2013, o BRIC, visa estabelecer estudos e pesquisas conjuntas para a preservação da biodiversidade na Amazônia. De semestrais, participaram pesquisadores noruegueses e brasileiros que investigaram "mudanças de vida em ecossistemas afetados dos dois países. Além do Museu Goeldi, o Conselho é formado pela Universidade Federal Rural de Amazonas (UFRA), pela Universidade Federal do Pará (UFPA), pela Universidade de Brasília (UnB) e pela Universidade norueguesa NINA Høim.



Príncipe Haakon Magnus participou de seminário internacional no Museu Goeldi.

na dar suporte à restauração da floresta amazônica. Haakon começou seu pronunciamento por volta das 12h30v, em português, disse inicialmente ser um prazer estar no Brasil. Depois, falou do seu prazer em estar em Belém, "o porto da Amazônia". E afirmou estar ansioso por participar daquele semina-

rio. O príncipe disse que seu pai esteve na Amazônia, em 2011 naquele ano, o rei da Noruega, Harald V, esteve em Itá Viana (BR) e visitou uma área Yanomami. O príncipe também comentou sobre as políticas climáticas da Noruega. "Desde 1990, nos preocupamos com mudanças climáticas. O grande objetivo que

temos é diminuir as emissões de gases até 2050", afirmou. Também é objetivo de seu país diminuir o efeito estufa e o desmatamento em países em desenvolvimento. O príncipe citou, ainda, o Fundo da Amazônia, do qual a Noruega é o maior contribuinte, desde a sua criação em 2008, com a doação de 1 bilhão de dólares até 2017", afirmou.

Mudanças climáticas estão no alvo de pesquisas dos dois países

Para ações de combate ao desmatamento. E novos investimentos devem ser atraídos durante a Conferência do Clima de Paris COP 21, no final do ano, em Paris. Haakon destacou a importância da Amazônia para o bem estar do planeta e falou da demanda da população mundial por crescimento econômico, mas que isso deve ser feito de maneira sustentável, para que possa ser criado um "futuro próspero, verde e justo para todos". Após participar do seminário, o príncipe conduziu o Parque Zoológico do Museu Paraense Emílio Goeldi, Nelson Galvão, vice-prefeito de Belém, uma apresentação. Depois, a veterinária Thaisiana Paquetinho mostrou ao príncipe um filhote de guriçica, que ele pediu para segurar. Pouco depois das 18h, o príncipe fez estadia com sua comitiva.

Grupo pesquisa a relação entre as mudanças climáticas e a biodiversidade

O diretor do Museu Emílio Goeldi, Nelson Galvão, falou sobre a importância da visita do príncipe Haakon Magnus à instituição científica. Trazendo representativo futuro de grupo que virá ao Museu Goeldi, em um momento em que estamos realizando, com um filhote, com o governador e a comunidade científica e representantes de empresas privadas da Noruega, para tratar de uma questão que é ambiental e econômica para o Pará, além do mundo, que é a relação entre as mudanças climáticas e a biodiversidade", afirmou Galvão, que

destacou a importância que os noruegueses dão à busca pela sustentabilidade científica. Ainda segundo Galvão, a visita e parte da visita estrangeira da Noruega em honor pariteris no terceiro mundo. Sobretudo pariteris ecológicos localizados no região Norte do país. Nos subtemas que são: biodiversidade, pesquisa, inovação, ciência e as tomadas de decisões são baseadas em políticas públicas sustentáveis pelo Sul e Sudeste. Mas temos aqui a busca de conhecimento local, através de uma parceria estratégica, estabelecer os caminhos para a nossa

próprio desenvolvimento". O diretor também destacou a importância do seminário realizado ontem. "É a conexão, no sentido de ser a primeira manifestação concreta de uma parceria que veio tráfego há duas anos e que, agora, começa a vibrar e ter de fato ideias práticas desfeitas para a Amazônia. E já conseguimos bons. Conhecemos com uma parceria estratégica com a Noruega, que, como há dois anos, que defendeu um fundo para ser usado na Amazônia, no valor de um bilhão de dólares".

Maírcia Murtinho, que integra o comitê de Pesquisa sobre Biodiversidade Brasil-Noruega (BRIC), disse que o maior objetivo, principalmente para a Amazônia Oriental (área do condado do Pará e parte do Maranhão), é a restauração ecológica. "Não é plantar e deixar. É recuperar a floresta, na medida da sua recuperação de forma de fazer sistema de água no rio e a população sofrer".

Vice-ministro de Clima e Meio Ambiente, Lara Rodrigues Lande disse, "que é só mantendo a floresta em pé que você combate as mudanças climáticas. Aqui é uma resposta imensa de biodiversidade. Preservando a floresta, você consegue combater as mudanças climáticas, uma ameaça para o mundo inteiro, e consegue salvaguardar essa riqueza de biodiversidade do Brasil. Eu disse que a Noruega firmou parceria com o Brasil em 2008, com o apoio para o Fundo Amazônia. Teusqueleto, prometo um bilhão de dólares. E em 2015, essa meta foi cumprida. A Noruega doou um bilhão de dólares para o Fundo Amazônia, isso porque o Brasil conseguiu, de fato, atingir todas as suas metas de desmatamento com 78% de redução", disse.

Hoje, às 18h15, o príncipe Haakon visitará o Centro Regional da Amazônia (CEA) do Instituto Nacional de Pesquisas Espaciais (INPE), em Belém. Ele conhecerá as instalações e os projetos desenvolvidos no CEA, órgão que atua para se consolidar como referência no monitoramento da floresta amazônica, desenvolvendo técnicas e tecnologias de monitoramento de florestas tropicais. Essa segunda, às 18h10, fará passeio de barco até a ilha de Combú para conhecer o modo sustentável de vida de uma comunidade tradicional.

Pará e Noruega firmam protocolo de intenções em favor do meio ambiente

O governador Simão Jatene e o príncipe da Noruega, Haakon, protagonizaram ontem a assinatura importante para o desenvolvimento sustentável da Amazônia, em particular no Pará. Eles firmaram, no Palácio Lauro Sodré, no bairro da Cidade Velha, um Protocolo de Intenções pelo qual a região, além de ações já concretizadas de

combate ao desmatamento, possa avançar em ações positivas no aproveitamento dos recursos naturais e melhoria da qualidade de vida dos seus habitantes. Após a assinatura, as autoridades participaram de um jantar.

O Pará contribui para a diminuição do desmatamento no País, com a redução de 9 mil quilômetros e bilhões pa-

ra cerca de 2 mil quilômetros (80% menos). Mas, não temos um desafio agora que está no ar, que é a questão central. Essa redução toda foi feita em cima dos mecanismos de comando e controle, de repensar, que levam à substituição até eliminar as atividades que são mais agressivas ao meio ambiente. Porém, ao se pensar essas atividades, você precisa

trabalhar alguma coisa no lugar, porque já pessoas precisam viver", afirmou o governador. "É esse o ponto central da nossa discussão: trazer a discussão ambiental para o bojo da própria economia, ou seja, substituir atividades mais agressivas ao meio ambiente por atividades mais amigáveis. Essa é a busca do desenvolvimento sustentável e a presença

do príncipe aqui é um sinal extremamente positivo", destacou Simão Jatene. O governador afirmou que "o Pará possui o programa Municípios Verdes, que tem uma presença forte da Noruega". Então, essa visita aponta na oportunidade de estabelecer laços para uma economia sustentável", assinalou.

O Memorando de Entendimento, como disse o governador, trata de estudos e pesquisas compartilhados entre as instituições de pesquisa da Noruega e do Estado do Pará, através de oportunidades e a presença da Noruega aqui se dá através da interação com a Norsk Hydro e o país que mais tem aportado recursos.

One of several full page articles in the Belém press about the Crown Prince visit and the BRC seminar. The title says "Norwegian Prince defends cooperation", while the ingress says "Society, researchers and industry should find solutions together." Further down, the headlines say "Group investigates the relationship between climate change and biodiversity" and "Pará and Norway signs MoU in favor of the environment".

9. The BRC Research Program 2015-2020

BRC project activities kick-started with the approval of three research projects in 2014. Since then, the scientific committee has felt a necessity to elaborate a document guiding the research. In the Caxiuaná meeting in March, the committee decided "to constitute a task force to prepare a draft overarching BRC research program". In August, a first draft was presented to the committee, and the final version, a 5-page BRC Research Program 2015-2020, was approved at the extraordinary meeting in Belém in November.

The overarching objective of the Research program is to plan, promote and implement collaborative research projects on the environmental impacts from mining activities in the Eastern Brazilian Amazon. The thematic lines of study are the following:

- a) Biodiversity surveys and monitoring in the mining areas and surroundings
- b) Greenhouse gas fluxes and carbon footprint related to mining operations
- c) Restoration of tropical forests, including restoration of biodiversity and forest soils

The main section of the program deals with the question of how to prioritize both thematic areas and individual project proposals.

## 10. Seven new research projects approved

Once the Research program was approved, the scientific committee was finally ready to look at the incoming project proposals. A total of 15 projects were on the table, some of them presented already in 2014.

At the committee meeting in November, Hydro presented its intention to support seven of the projects on the list. After an evaluation process by committee head Fridtjof Mehlum, the BRC the secretariat and Gizelia Matos and Bernt Malme from Hydro, the project coordinators revised the proposals. In a telephone meeting in December, the committee approved the following seven projects and recommended them for Hydro funding:

- BRC 05/15 Camera trap mammals survey (UiO+UFPA)
- BRC 06/15 Soil contamination from stored wood (UFRA)
- BRC 07/15 Vector insects (UFPA)
- BRC 08/15 Bird diversity (UFPA)
- BRC 09/15 Wood-decay fungi (UiO)
- BRC 10/15 Aquatic biota monitoring (MPEG + UFPA+ UiO)
- BRC 11/15 Herbivorous insects (UFPA)

In addition, Hydro reserved funding for a new project (BRC 12/16) on pollination and seed dispersal. This proposal will be elaborated by the four academic partners and presented to the committee in March 2016.



*Lab and field activities under the project BRC 03/14 Plant biodiversity, soils and biomass. Photo: BRC.*

## **11. Student involvement and exchange**

BRC is increasing student involvement in project activities. The project BRC 03/14 Plant biodiversity, soils and biomass, integrates a total of 10 students and 3 PhD candidates. Unfortunately, the other two projects have still not initiated regular activities.

At UiO, linked to BRC cooperation, the CAPES/SIU-supported fungi and lichens project is currently involving one Brazilian PhD at the Natural History Museum in Oslo and two Norwegian masters students have carried out fieldwork in Pará, together with UFRA. All Brazilian Science without Borders students at UiO were invited to the seminar in September, and at least three participated.

## **12. Networking and fundraising**

As in 2014, BRC has systematically used networking opportunities to promote the BRC and Brazil-Norway cooperation. The two big seminars we organized in 2015 were the most important. In connection with the seminar in Oslo, Brazilian BRC representatives met with the Norwegian Research Council (NFR). Preparing the seminar, the BRC secretariat had contact with all relevant universities, ministries, independent research institutions and NGOs in the Oslo area. Preparing the Belém seminar, UiO was in close contact with NFR and the Norwegian Embassy in Brazil. MPEG worked closely with Pará state authorities.

In March, Fridtjof Mehlum and Torkjell Leira visited the Norwegian Embassy in Brasilia and also met with representatives from the Brazilian Ministry of the Environment for discussing potential funding opportunities for BRC research. The BRC secretariat also had meetings with Pará NGOs Peabirú, Imazon and IEB in order to map Amazon Fund funding opportunities. A planned visit to BNDES in Rio, discussing a future Amazon Fund application, was postponed due to the workload with the seminars.

## **13. Internal and external communication**

Internal communication has mostly consisted of e-mail exchanges coordinated by the secretariat. In addition to BRC meetings and seminars, the three most important topics in 2015 have been the synthesis report, the research program and project proposals. Personal meetings, though, prove to be the best and most efficient means of internal communication. BRC meetings and seminars in March, September and November proved very fruitful. The secretariat made another visit to Belém in June in order to discuss new research proposals and a possible Amazon Fund application. In December, the scientific committee had a telephone meeting, but it was almost cancelled due to poor lines.

The BRC homepage has been static in 2015. Developed by the Goeldi Museum's ICT department in 2014, it contains basic information about the consortium and the first projects approved. Unfortunately, the secretariat has not had capacity to feed it with news and more content. The address is: [brc.museu-goeldi.br](http://brc.museu-goeldi.br) Most of the other external communication in 2015 has been linked to the two seminars.

## 14. Lessons learned

In 2015, BRC took many long and important steps forward, as exposed in this report. Keywords are these: more consistency, more knowledge, more trust, more activities and more recognition. The BRC secretariat considers the following aspects as the three most important reasons for this development:

- The personal engagement of a large number of people in BRC.
- The institutional support from the five BRC partners
- The financial support from Hydro and the counterparts from the academic institutions.

Still, BRC has met a series of challenges. Here are four of the most significant, including measures taken to overcome the hurdles:

1. **Language.** No Norwegian BRC researcher speaks Portuguese. Some Brazilian researchers don't speak English. This is a basic challenge for all Brazil-Norway cooperation, even more so in the North of Brazil. Internally, BRC has shifted gradually from bilingual to English written communication. This gradual shift was chosen to allow Brazilian researchers to get used to English. Project related oral communication in the field, face-to-face, is seldom a problem. All BRC reports are produced in English, in Brazil often with the help of translators. The two public seminars organized in 2015 had translation service.
2. **Project contract negotiations.** Two of the three projects approved in 2014 did not manage to sign a contract with Hydro in 2015. There is room for improvement regarding administrative procedures before starting a project between Hydro, project coordinators and UFPA's and MPEG's project foundations. In addition, there has been a change of law regulating relations between public and private actors (include no of Law). To contribute to solving these questions, UFRA has shared experience from existing projects with Hydro. Further, Hydro has committed to simplify contractual and reporting procedures from 2016 and onwards. BRC will also establish a project management group to facilitate communication and coordination.
3. **Strategic research development.** BRC made the option to start project activities early, in order to accelerate integration and get results. This approach has proved positive, but the down side has been a lack of strategic project development. In order to change this situation, we have developed the BRC Research Program 2015 – 2020.
4. **External funding.** BRC's plan for 2015 was to establish a dialogue with BNDES with the aim of getting support from the Amazon Fund. We did not accomplish this, mainly due to the work load involved in organizing two public seminars. We have defined, however, that MPEG will be the proponent of a future application. Other external applications, among them to Norad, have been turned down. BRC needs to reinforce the efforts to get external funding in 2016.

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