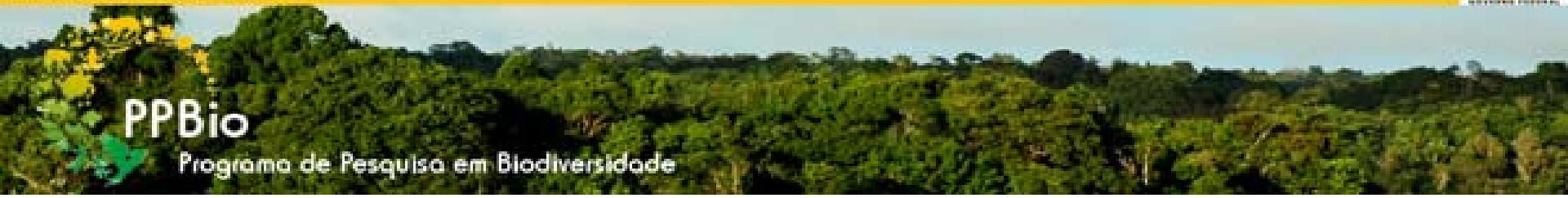


PPBio

Programa de Pesquisa em Biodiversidade

Brazilian Biodiversity Research Programme

Cintia Gomes de Freitas

cintuca@gmail.com

Instituto Nacional de Pesquisas da Amazônia (INPA)

Brazil - A megadiverse country

- Challanges in describe, manage and conserve biodiversity
- Convention on Biological diversity member: Conserve, sustainable use and sharing the biodiversity benefits

PPBio

2004:

The Ministry of Science and Technology established the Program for Planned Biodiversity Studies – PPBio to integrate and conduct studies of biodiversity over large areas using its institutes and partners.

Components

(1) Biological collections (maintenance, extension and make it available on-line)

(2) Biological inventories (integrate network: surveys on research sites)

(3) Thematic projects (support researches about biodiversity commercial applications)

And by strengthening Regional Centers and capacity building of human resources

Financing

- Initially by MCT (Ministry of Science and Tecnology)

- Nowadays, MCT (through CNPq – Brasilian National Councel for Scientific and technological Development) - Regional hubs and coordination of the network

- Most of the financing comes from projects submited by individual or groups of researchers to many agencies

Partnerships

• Research Institutes and Universities, Environmental Agencies in states and the Federal Government

• IBAMA (Supervise and regulates potential impactants activities)

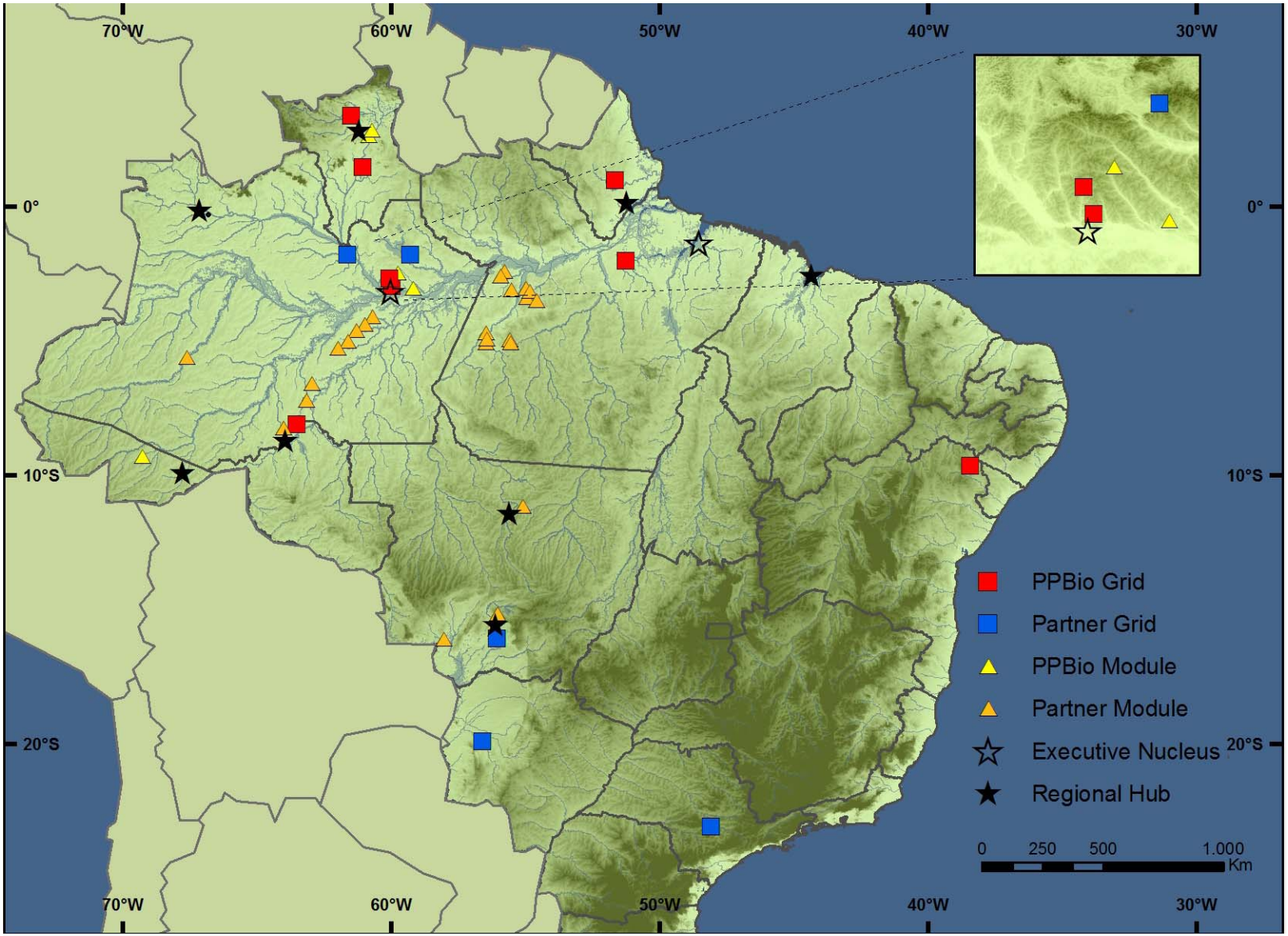
• ICMBio (regulates use of protected areas)

• SFB (Brazilian Forestal Service)

• Partnerships with other international efforts, such as RAINFOR

•International PPBio in Australia: Coordinator - Prof. Jean-Marc Hero (m.hero@Griffith.edu.au) – Grids in Australia and Nepal

PPBio research sites in Brazil



Philosophy

Biodiversity inventories are expensive and must be useful to several users.

Who needs information on biodiversity?

Decision Makers

Conservation planning
Land-use planning
Impact evaluation
Natural resources management (wood, non-timber products, medicinal products, game animals)

Industry

Live collections for bioprospection

Modelers

Prediction of impacts from human disturbances

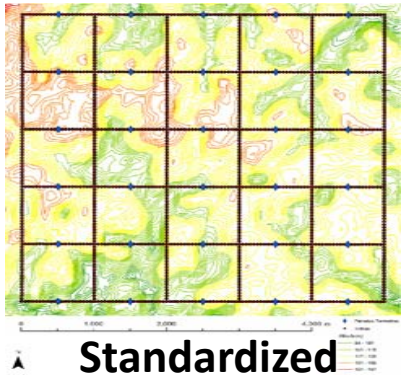
Academic Community

Studies on ecology and evolution

Philosophy

Biodiversity can not be studied without considering the environment.

Philosophy



Standardized inventories

Biological information

Data availability in internet for everyone

Long term infrastructure

Local people involved

Training people

Philosophy

Training people

17 courses

332 people

20 capacity activities

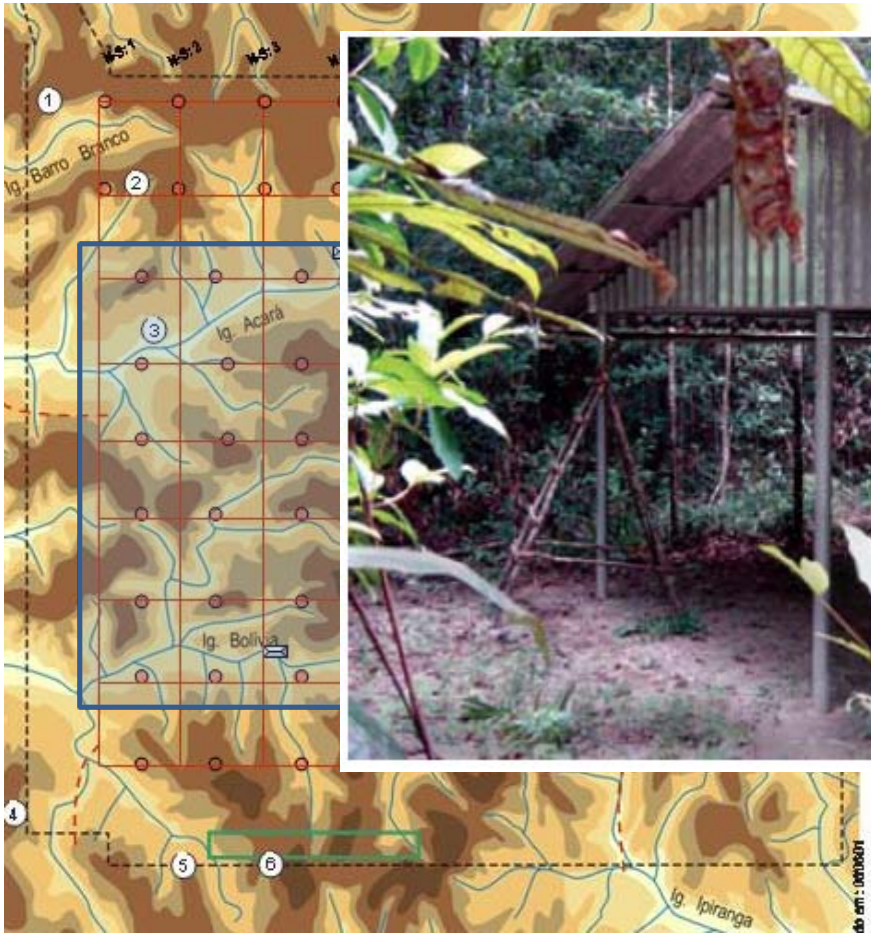
106 people

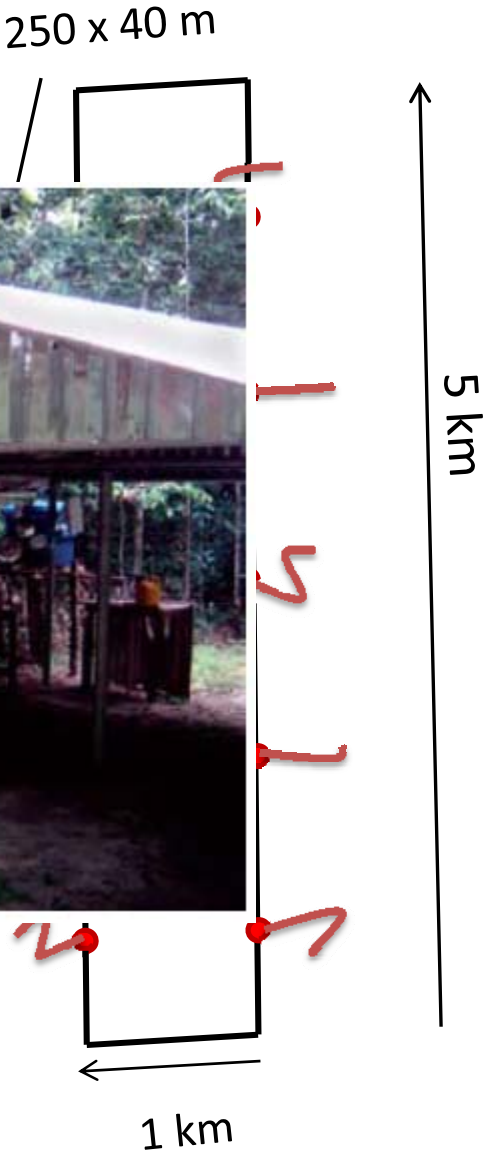
Methods

PPBio uses the RAPELD method, which integrates
RAP – rapid inventories
and
PELD (LTER) – long-term research

RAPELD Grids and modules

25 km^2 – 30 permanent plots





An efficient system for studying biodiversity must:

(1) Be standardized

(2) Permit integrated inventories

(3) Be large, to permit inventory and monitoring of all elements of biodiversity and ecosystem processes

(4) Be modular, to permit comparisons with less intensive sampling over large study areas.

(5) Be compatible with other existing initiatives.

(6) Make data available quickly and in a usable form to managers and scientific community

(1) Standardization

• Data collected on different geographical scales generally cannot be compared (Urban 2005).

• Biodiversity measures (such as species richness, community composition, genetic variability, biomass change, and productivity) are all strongly scale dependent.

• It is more important to standardize sampling design than sampling methods.

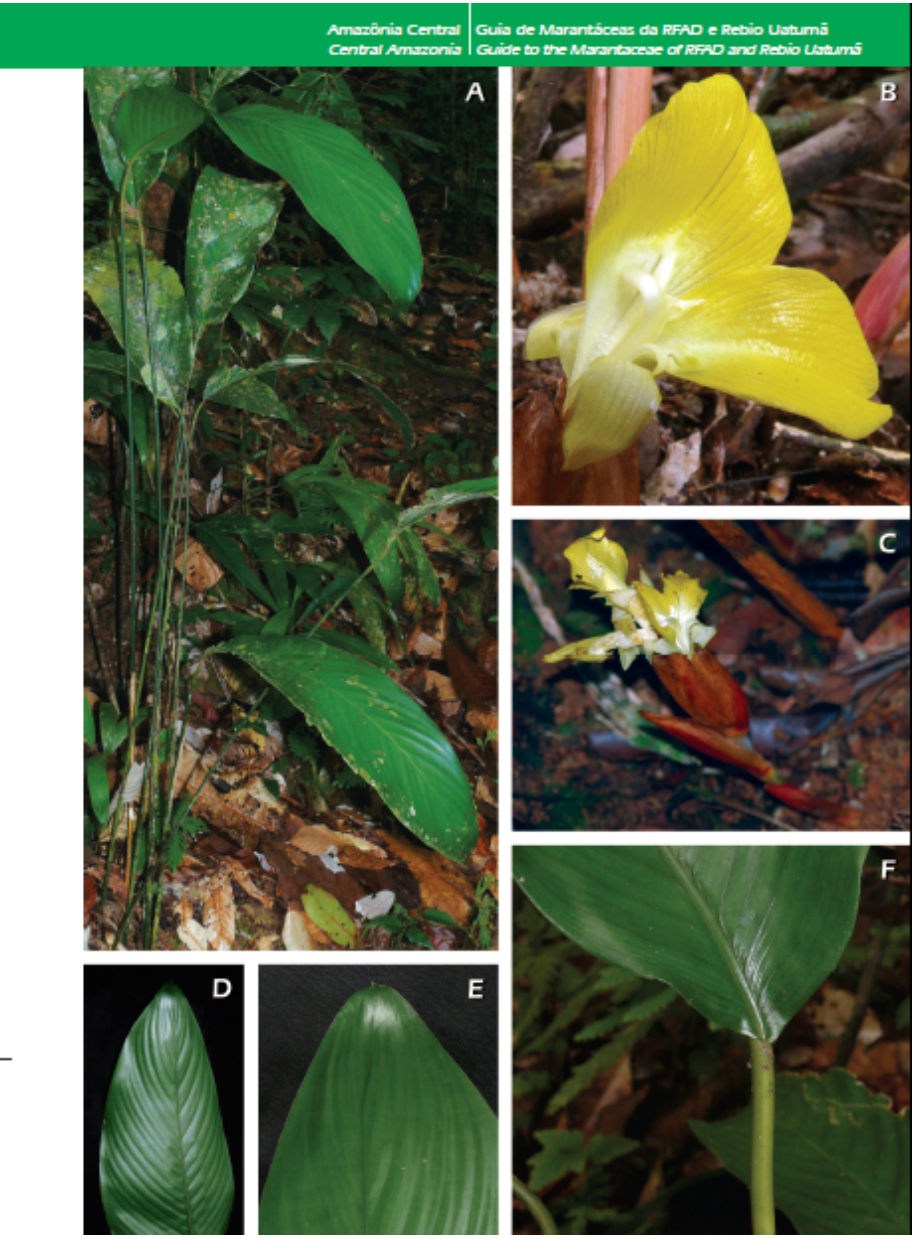
Why do we need standardized plots and not only occurence points?

Occurence points allows:

- Mapping species distribution
- To calculate species richness

Why they are not enough?

Calathea zingiberina

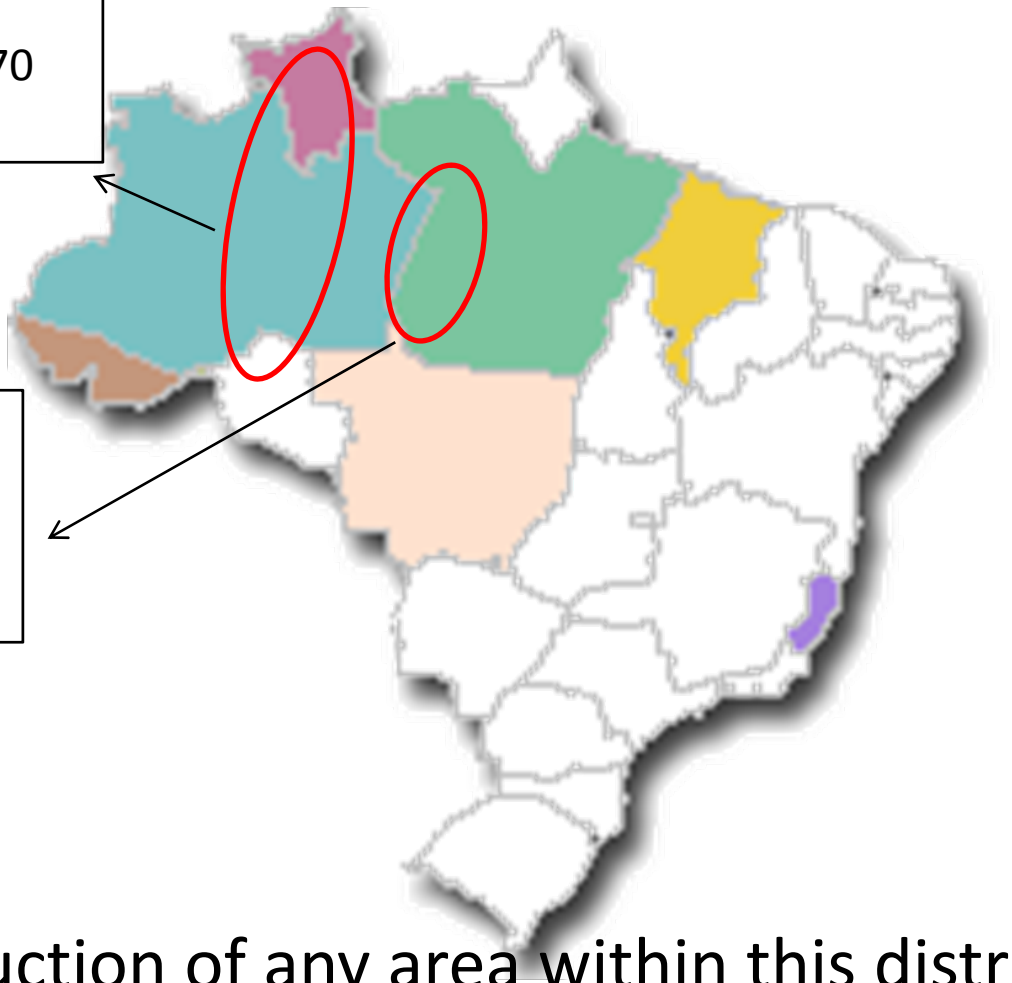


Let's see...

This is a widely distributed specie, correct?

0 a 83 ind/plot

509 individuals in 170 plots

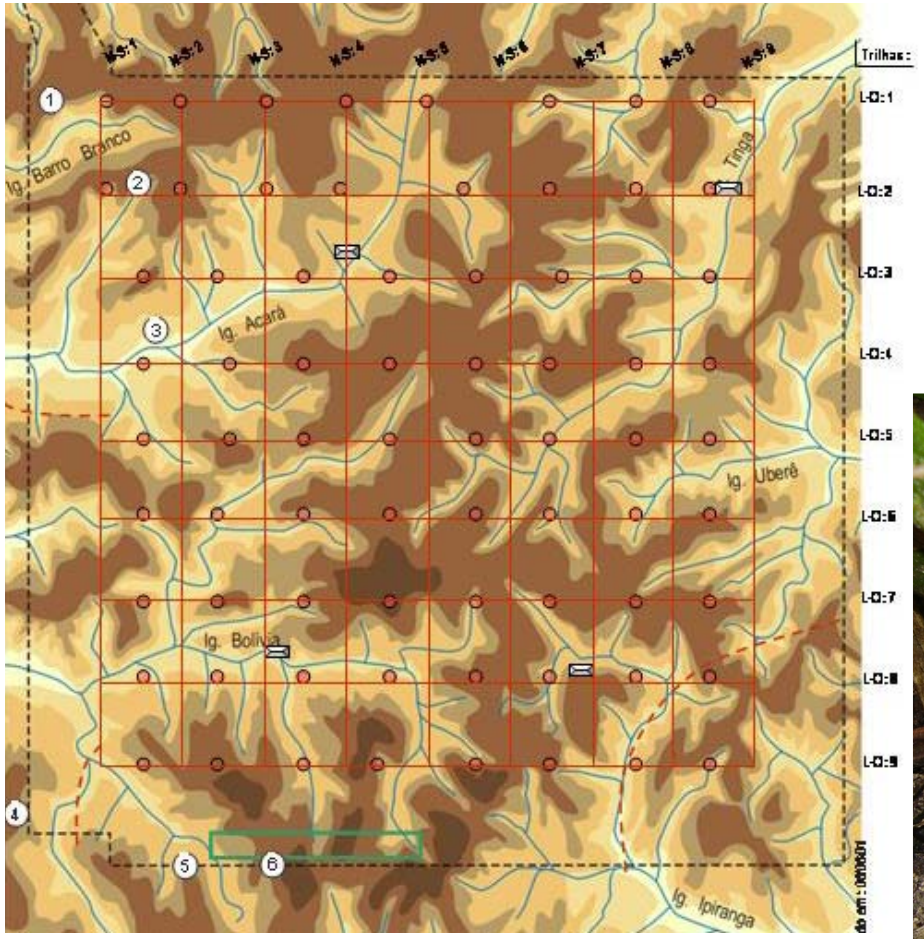


0 a 477 ind/plot

1750 ind in 105 plots

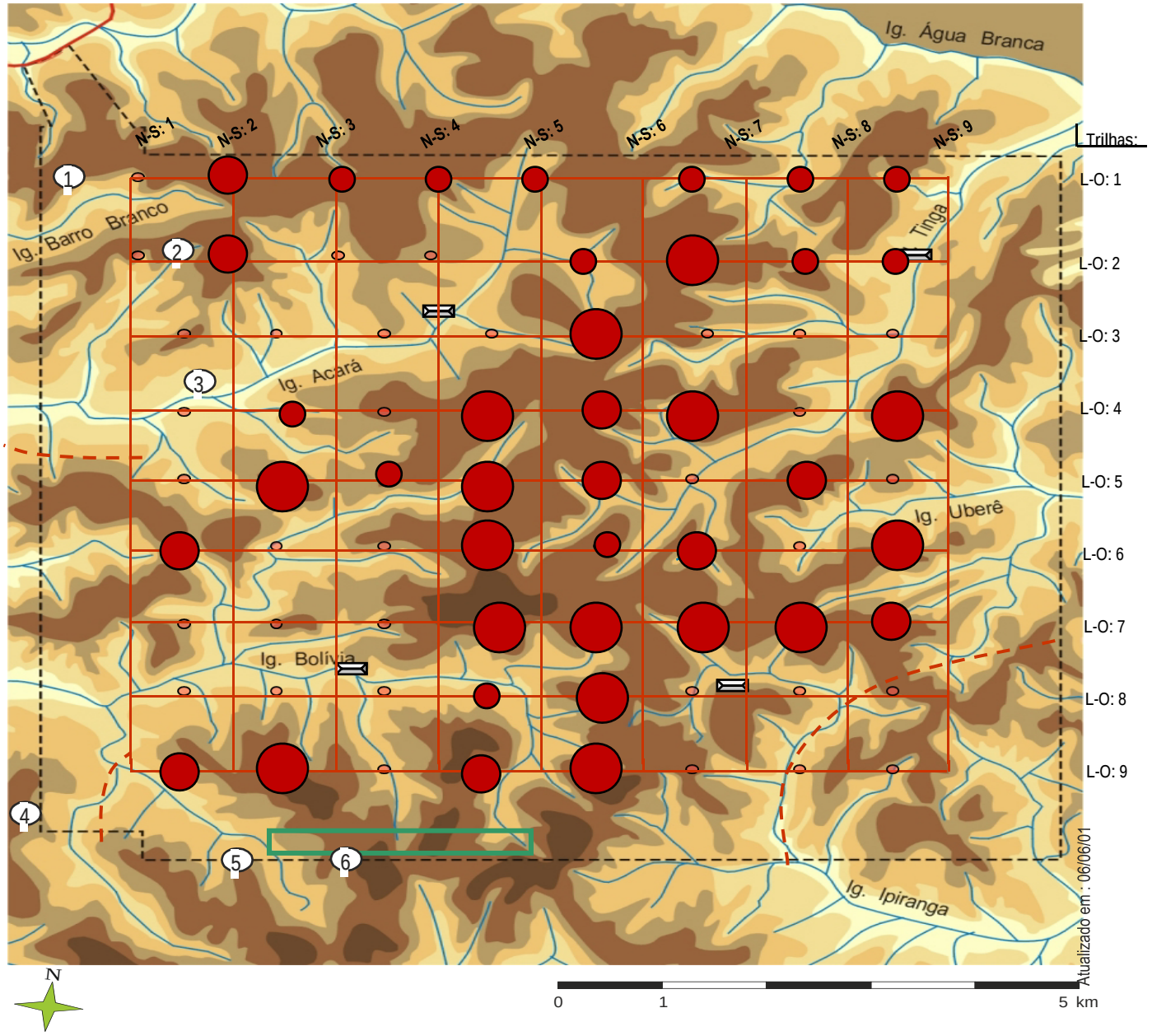
Destruction of any area within this distribution is equally relevant for this species?

Occurence points allow mapping of species' habitats?



Attalea attaleoides (Barb. Rodr.) Wess. Boer

Distribution of *Attalea attaleoides* at Reserva Ducke

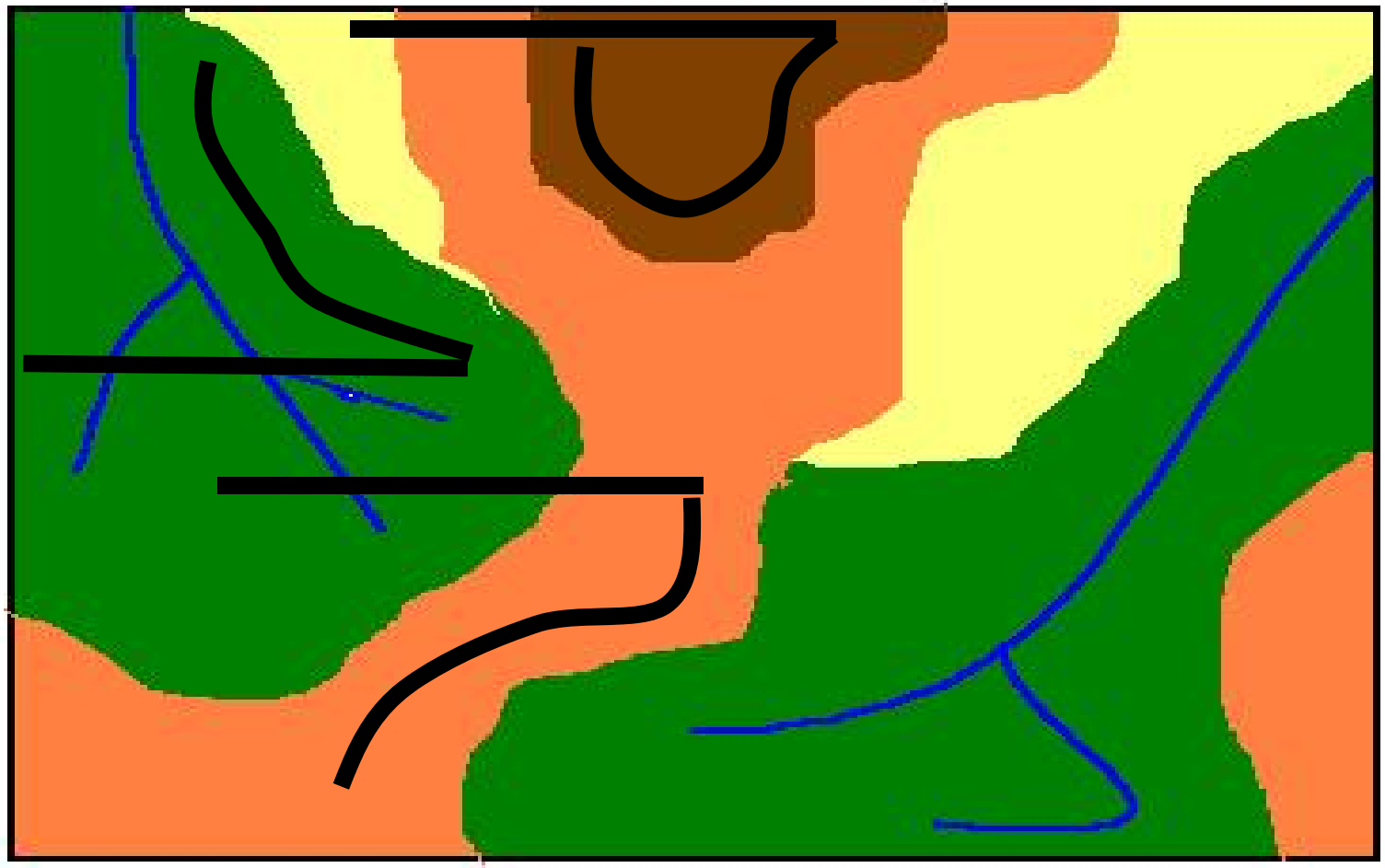


Occurence x Abundance

- Occurence points do not provide abundance information

- Occurence points are not always enough to understand the relationships between species and environment, and therefore to predict impacts of climate or other anthropogenic changes

Why does PPBio uses plots following contour lines?



Permanent plots follow contour lines

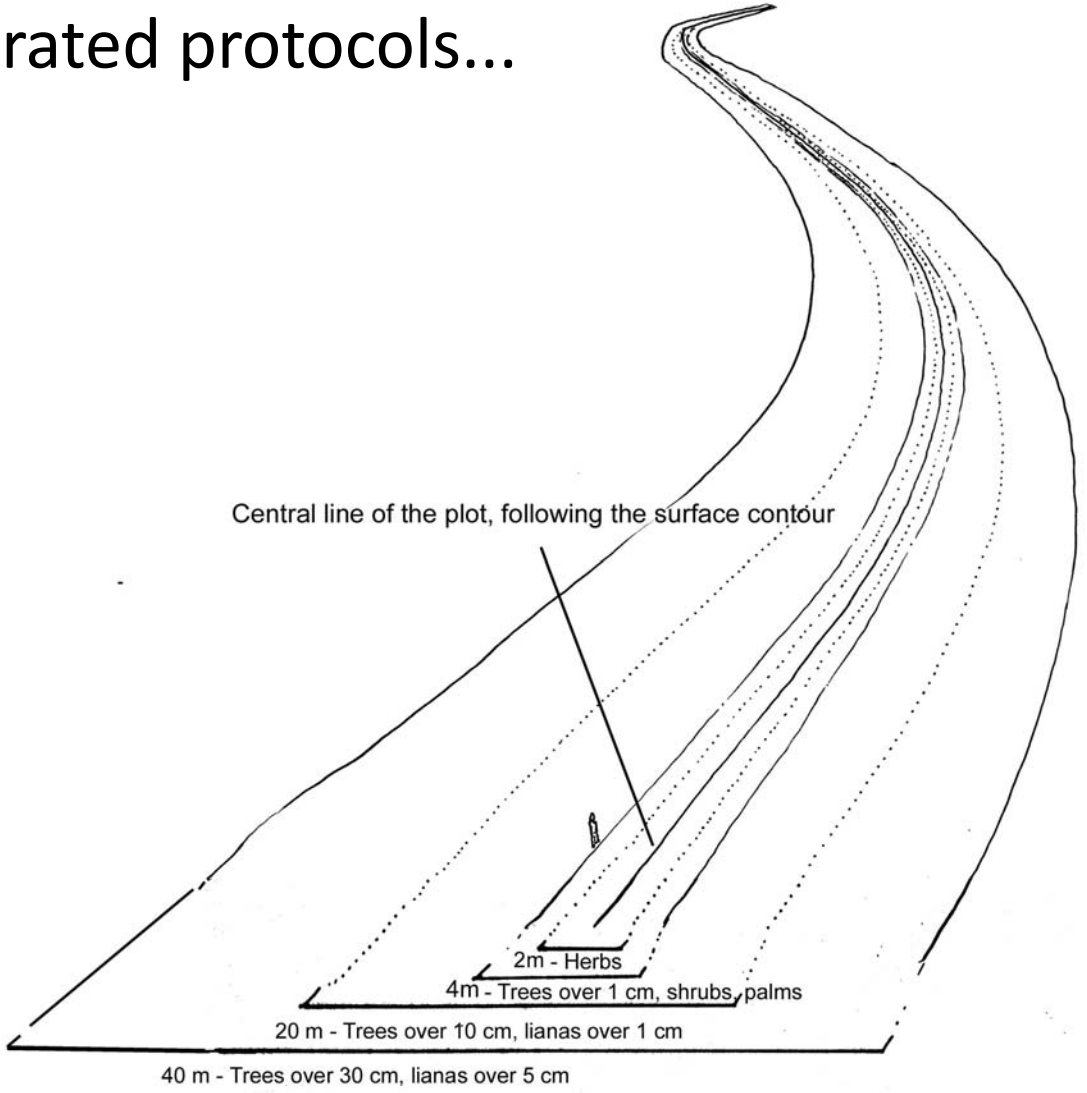
• If each plot sample only one “environment”, it is possible to determine the relationships between species or ecosystem processes and these environments

• These relationships may be used to model species distributions or processes and make predictions for unsampled areas

(2) Integration

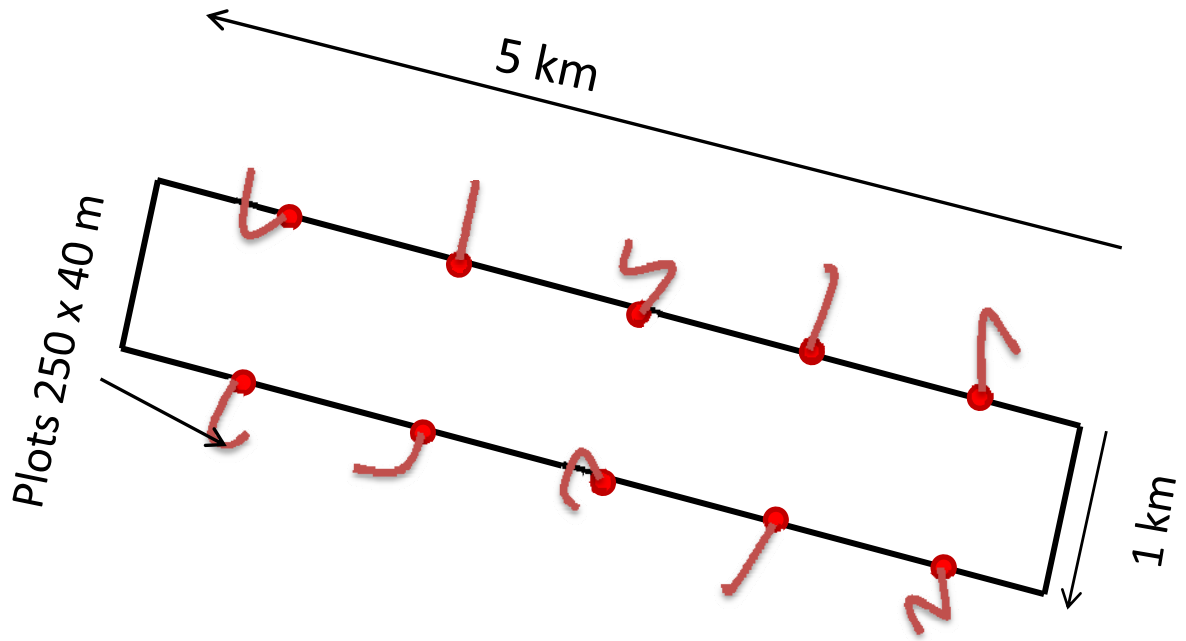
Since there are many potential biodiversity targets and users, integrated surveys are much more efficient than isolated studies.

How different sampling needs, from different taxonomic groups, can be adjusted in integrated protocols...



Plots are 250 m long, but the width is adjusted according to the size of the organisms to be sampled

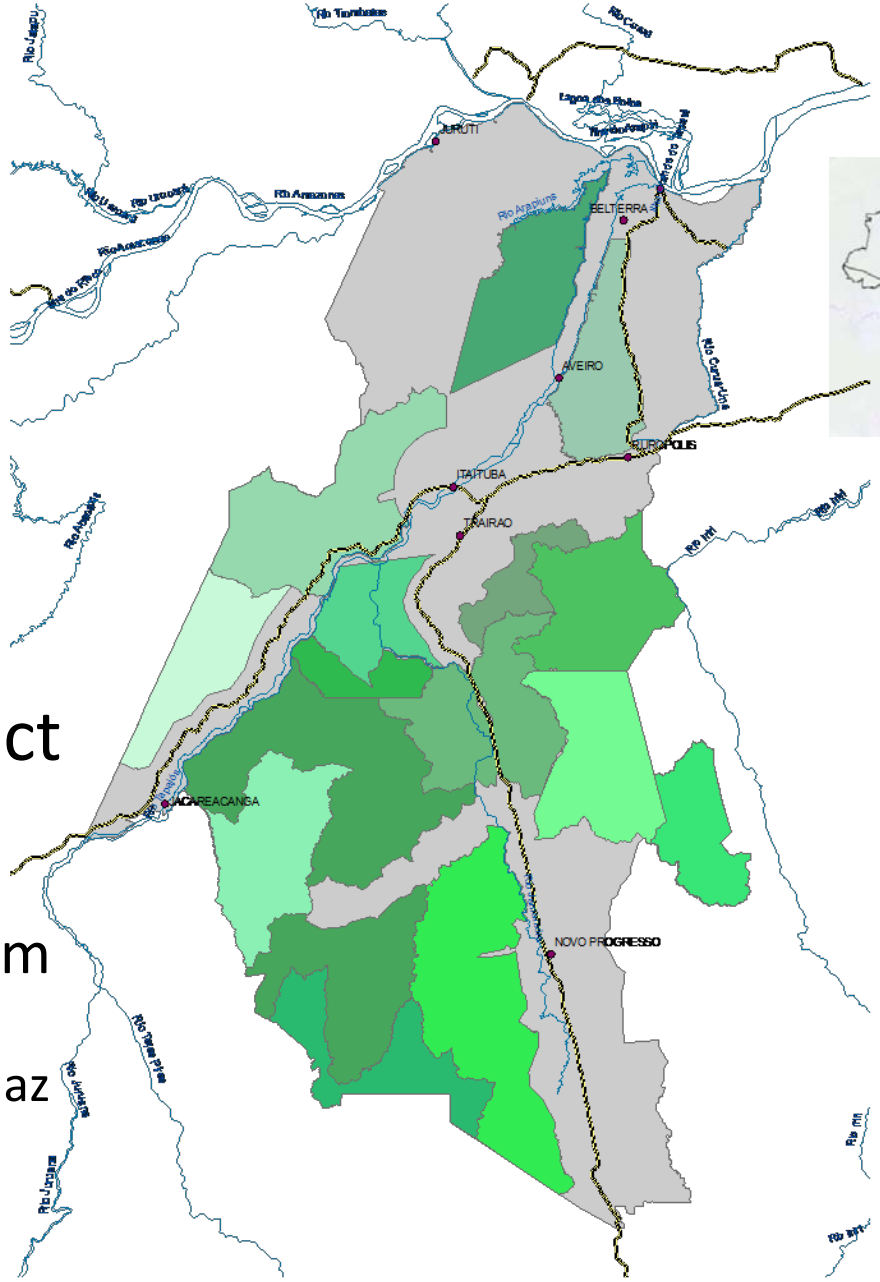
(4) Modularity



Evaluation of the Sustainable Forest District BR-163

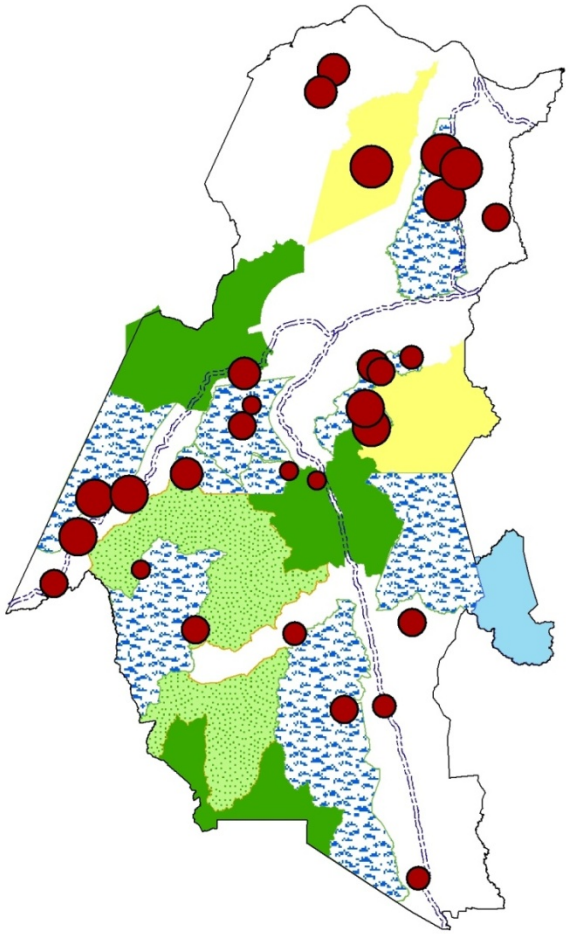
30 modules over 600 x 200 km

Project coordinated by Ana Albernaz

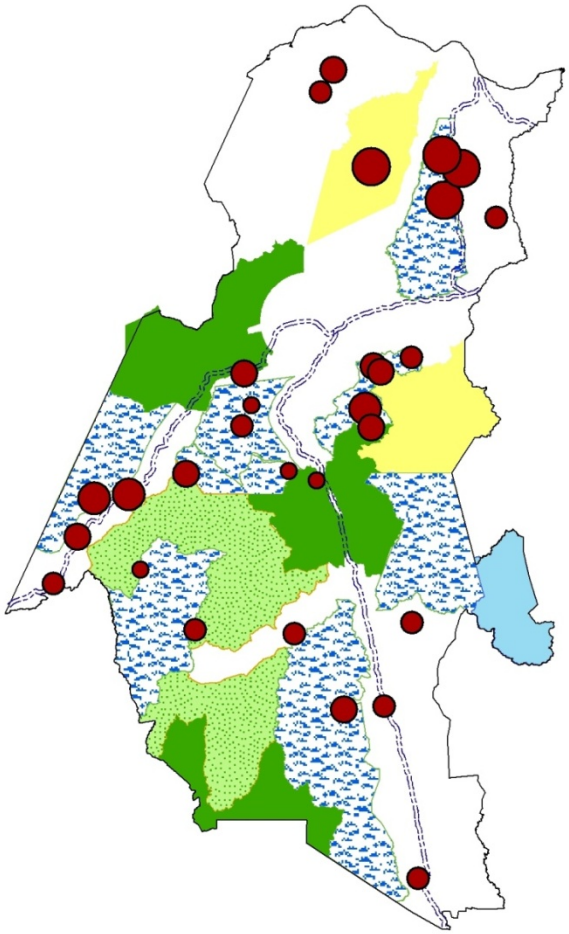


Wood Potential

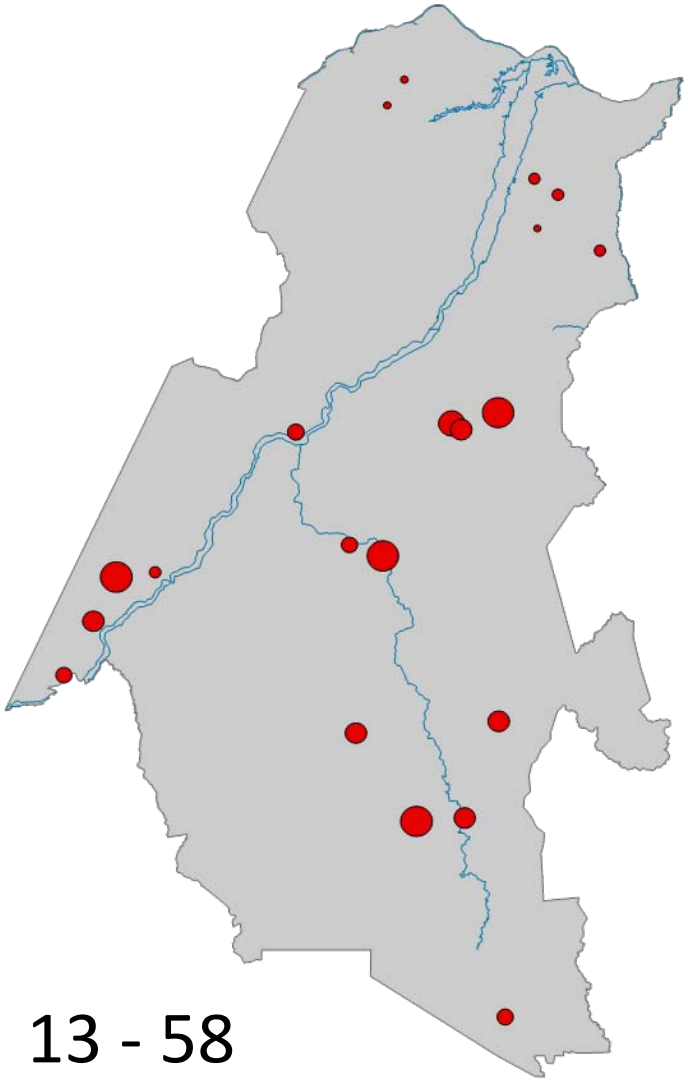
basal area (m^2/ha)



Wood Volume (m^3/ha)

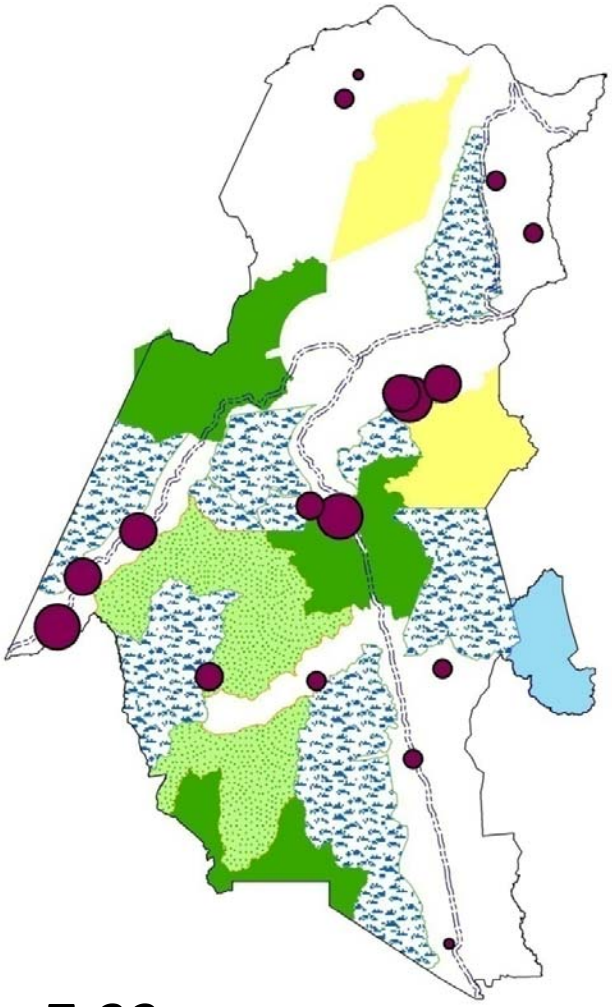


Herb Richness



13 - 58

Palm Richness

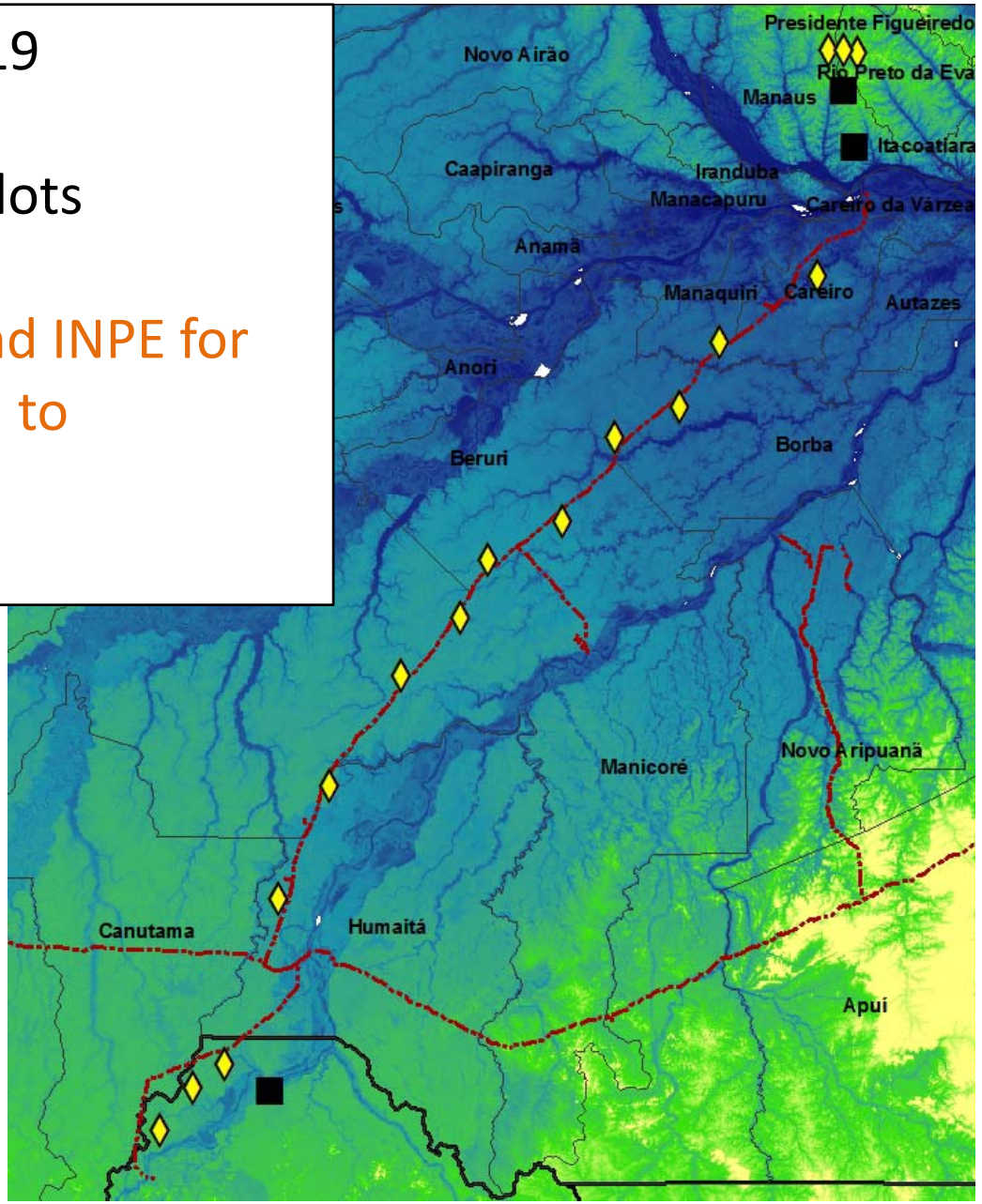


7-32

Ecohidrology project at BR 319

11 research modules – 110 plots

Partnership between INPA and INPE for vegetation dynamics coupled to hydrological research



(5) Compatibility with other initiatives

TEAM:
Conservation International

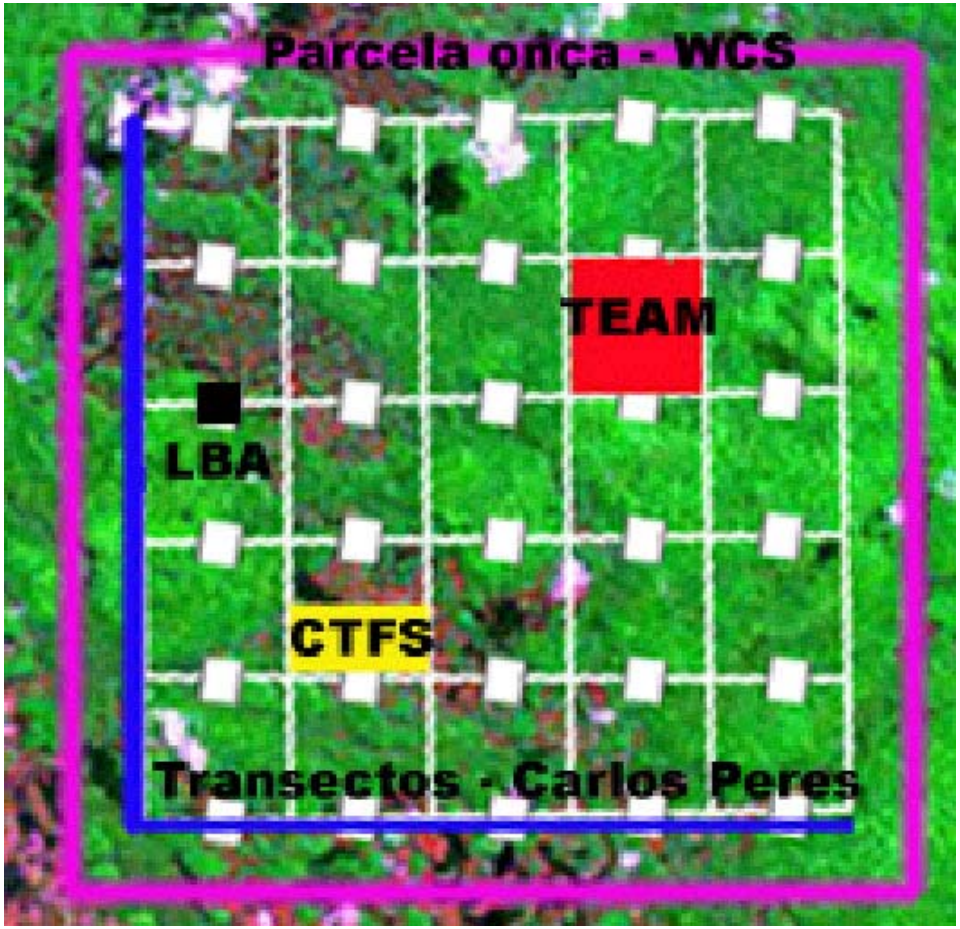
100 ha

CTFS:
Smithsonian

50 ha

LBA: NASA

<50 ha



Mammal Transects:
Carlos Peres
UNIVERSITY OF EAST ANGLIA **UK**

WCS: Wildlife Conservation Society

Jaguars: 3,600 ha

(7) Make data available quickly

- Data collected under PPBio is public
- Data and metadata are freely accesible through internet

Metadata are essential to data management

- Metadata describe data and how they were collected.

- They should be made available as soon as possible, to allow other researchers to know what is being studied and where.

- PPBio uses the Ecological Metadata Language (EML), which is also used by LTER

http://ppbio.inpa.gov.br/Port/inventarios/nrrr/maraca/herpetomaraca

Ministério da Ciência e Tecnologia

buscar

PPBio
Programa de Pesquisa em Biodiversidade

lingua/language | página inicial | inventários | coleções | proj. temáticos

você não está autenticado acessar

você está aqui: página inicial » inventários biológicos » núcleo regional roraima » esec maraca » metadados herpetofauna esec maracá

navegação

- Página Inicial
- Sobre o Programa
- Coleções Biológicas
- Inventários Biológicos
  - Núcleo Regional Roraima
    - ESEC Maraca
- Projetos Temáticos
- PPBio Internacional
- Núcleos Regionais
- Sítios de Coleta
- Metadados e Dados
- Produção Bibliográfica
- Guias de Identificação
- Instalação Infra-estrutura
- Treinamento e Capacitação
- Intercâmbio
- Projetos Associados
- Acervo Digital

Metadados Herpetofauna Esec Maracá

Título: Efeitos dos Fatores Bióticos e Abióticos nas Comunidades de Serpentes e Lagartos na Esec – Maracá

Responsáveis

- 1. Luiz Felipe Pimenta de Moraes
  Email: moraes@inpa.gov.br
  Para acessar o currículo lattes do pesquisador(a) clique aqui
- 2. Pedro de Sá Petit Lobão
  Email: pedrolobao@inpa.gov.br
  Para acessar o currículo lattes do pesquisador(a) clique aqui

Endereço:
Coordenação de Pesquisas em Ecologia – CPEC
Instituto Nacional de Pesquisas da Amazônia – INPA

notícias RSS

- Oportunidade no Programa de Monitoramento de Médios e Grandes Mamíferos - UNIR
  2010-05-31
- I Curso de Capacitação e Integração em Projetos de Biodiversidade - PPBio e CENBAM
  2010-05-29
- Núcleo Regional Angatuba realiza workshop interno
  2010-05-21
- Bolsista PPBio faz palestra em ciclo de seminários do PDBFF
  2010-05-07
- Seminário sobre o Monitoramento de Impactos sobre a Biodiversidade em áreas de Concessões Florestais

Metadados Herpetofauna Esec Maracá

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Endereço:
Coordenação de Pesquisas em Ecologia – CPEC
Instituto Nacional de Pesquisas da Amazônia – INPA
Avenida Efigênio Sales 2239
69011-970
Telefone: 55 92 3643 1834

Resumo:
O projeto em questão busca gerar informações sobre ecologia de comunidades de serpentes e lagartos, com o intuito de contribuir para o conhecimento sobre biodiversidade da Unidade de Conservação Estação Ecológica de Maracá, RR.

Coordenadas Geográficas:
Oeste: -61.4869
Leste: -61.4599
Norte: +3.4073
Sul: +3.3866

Abrangência Temporal:
Setembro de 2006 a setembro de 2007.

Métodos de Coleta dos Dados:

Foi realizada coleta de dados se nas parcelas presentes na grade do PPBio na ESEC Maracá, num total de 30 parcelas. Dois métodos principais foram aplicados para lagartos e serpentes: 1) Transecto de amostragem visual, uma combinação do método de levantamento por encontros visuais e do método de contagem pontual; e 2) Procura ativa (removendo liteira, procurando debaixo de troncos, etc.) nas parcelas em transectos de 1x250m. Também foram coletados dados através de encontros ocasionais. Para estimar a composição da comunidade de presas foram utilizadas armadilhas de queda com isca em cada uma das parcelas.Os dados referentes aos fatores bióticos e abióticos foram disponibilizados por outros pesquisadores através do Programa PPBio.

Arquivos de Dados:

- Herpetofauna Maracá.pdf (melhor para visualização)
- Herpetofauna Maracá.csv (melhor para importação em planilha de dados)
  número de registros: 30
- Disponibilidade de Presas.pdf (melhor para visualização)
- Disponibilidade de Presas.csv (melhor para importação em planilha de dados)
  número de registros: 30

Informações sobre as tabelas de atributos:

Herpetofauna Maracá

Nome do Atributo: TRILHA

Definição: Identificador da TRILHA na qual os dados foram coletados

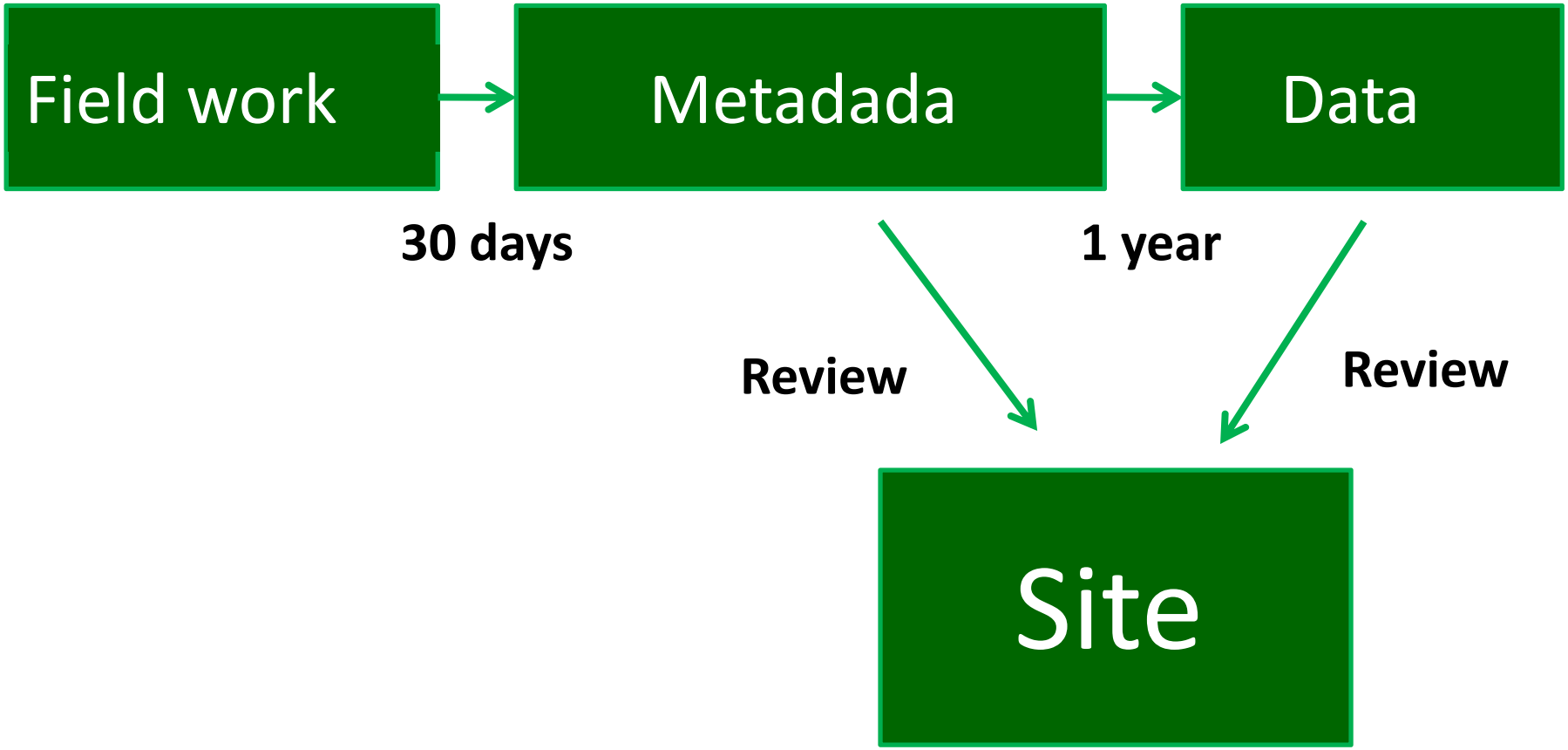
Nome do Atributo: PARCELA

Definição: Identificador da PARCELA na qual os dados foram coletados

Nome do Atributo: A. ame

Definição: Número de indivíduos da espécie *Ameiva ameiva* amostrados na parcela

Data flow - How it works today



Knowledge Network for Biocomplexity (KNB)

http://knb.ecoinformatics.org/

- Morpho: a tool to create, administrate and share metadata.

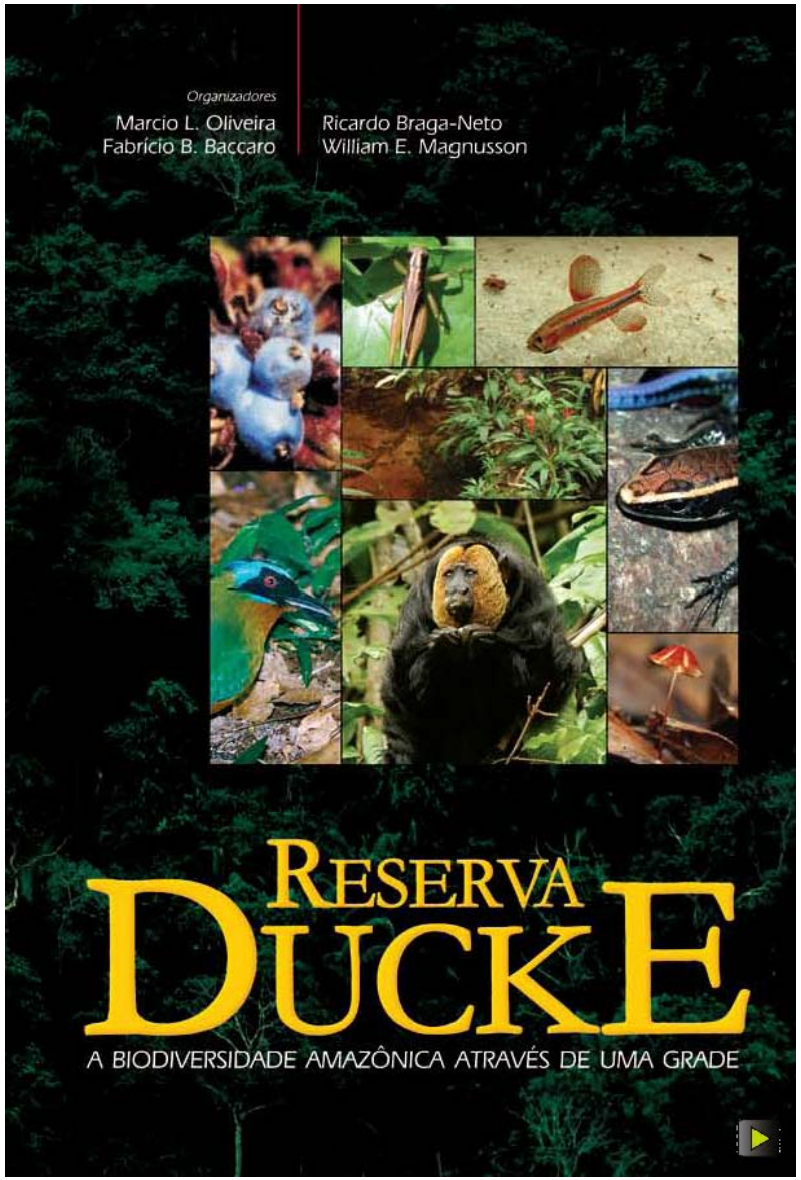
- Metacat : a tool to store, browse and recover data

Integration and synthesis

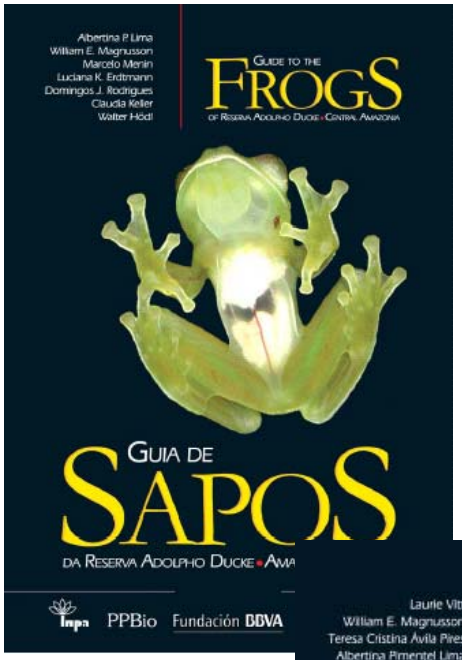
- Annual meetings to share results among regional hubs

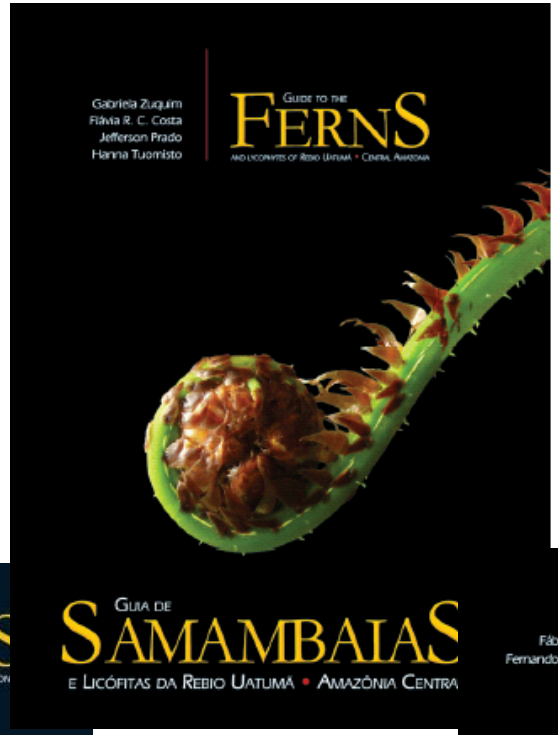
- Workshops for analysis and writing of papers
  - I workshop on vegetation studies in 2009 had 8 researchers and produced 3 papers
  - II workshop on vegetation studies in 2010 had more than 150 people (researches, students and MCT members) and the potential for 7 papers

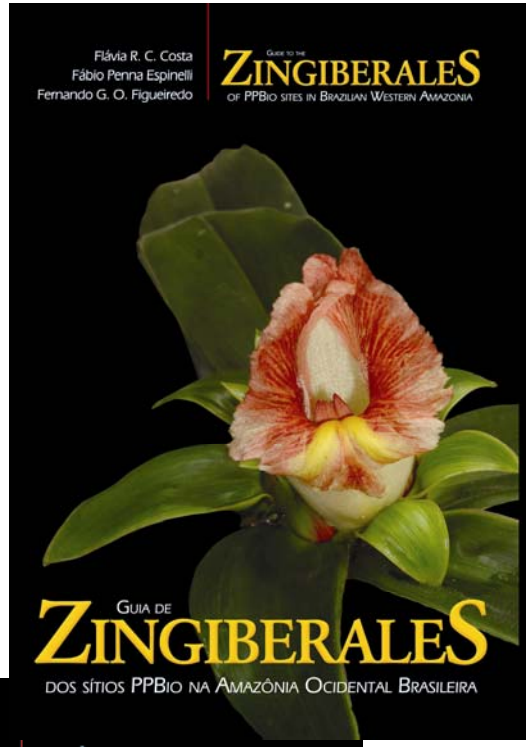
eBook about Reserva Ducke

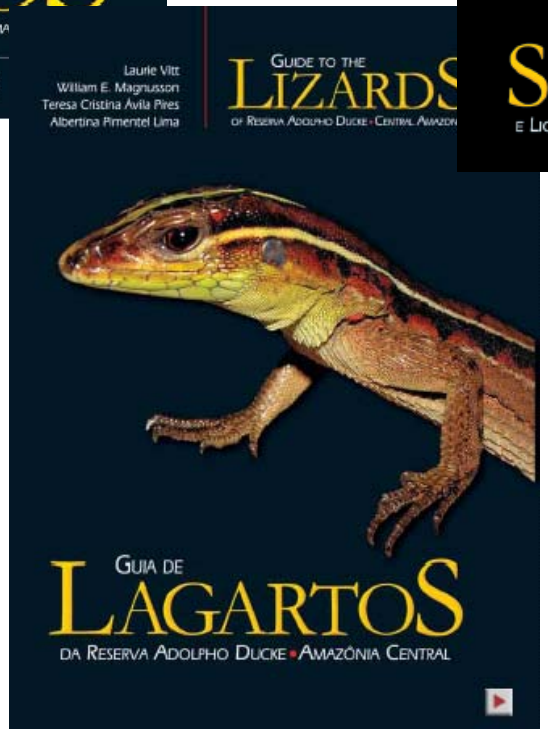


Field Guides





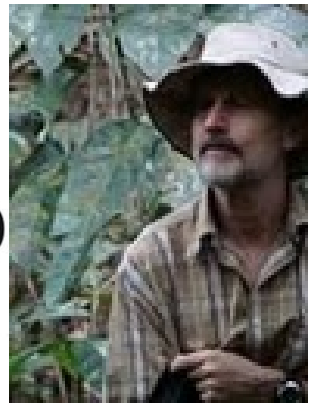




Guides donated to more than 120 public highschools in Manaus

PPBio

PPBio



Willian Magnusson (Researcher INPA/PPBio Coordinator)

Flávia Costa (Researcher INPA/PPBio)

Carolina Castilho (PhD at INPA/Tree communitiy)

Thaise Emílio (PhD st - INPA/Palm community and hidrology)

Gabriela Zuquim (PhD st -University of Turku, Finland/ferns)

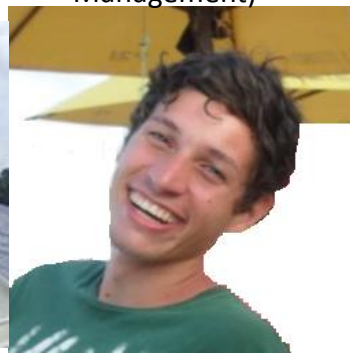
Flávia Pezzini (PPBio Researcher - Data Management)

Fabrício Baccaro (PhD st. - INPA/Ant community)

Fernando Figueiredo (PPBio - INPA/herbs community)

Juliana Schietti (PhD st.-INPA/Tree community /Satelite imagery)

Andressa Scabin (M. Sc. INPA-Brisbane University/Impact wood exploitation)



Cristian Dambros (M. Sc. INPA-PPBio/Termites community ecology)

Cintia Freitas (PhD st. - INPA-Arhus University/Reproduction of palms)

Carlos Eduardo Barbosa (PhD st - INPA-CA University/Seeds and seedlings of tree community)

Hélder Espirito-Santo (PhD st-INPA/Fish communitiy)

Thank you! Tak! Obrigada!

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Flávia RC Costa – flaviacosta001@gmail.com

Willian Magnusson – bill@inpa.gov.br

http://ppbio.inpa.gov.br