

## ABOUT THE PPBIO PROTOCOLS

The PPBio has no standard protocols for sampling organisms, although some methods have proved more efficient than others and are therefore being replicated in different locations.

More important than standardization of sampling techniques is standardization of spatial scale, because although different techniques can be calibrated to each other, it is usually not possible to do this for different scales of sampling. However PPBio develops tools to aid biodiversity monitoring and you can have access to these contents on the site:

**PPBio protocols** in: [https://ppbio.inpa.gov.br/en/Survey\\_guides\\_and\\_protocols](https://ppbio.inpa.gov.br/en/Survey_guides_and_protocols)

**videos** in: [https://ppbio.inpa.gov.br/en/Videos\\_Surveying\\_and\\_Monitoring\\_Target\\_Groups](https://ppbio.inpa.gov.br/en/Videos_Surveying_and_Monitoring_Target_Groups)

**Identification guides:** [https://ppbio.inpa.gov.br/en/Identification\\_Guides](https://ppbio.inpa.gov.br/en/Identification_Guides)

**Repository data:** [https://ppbio.inpa.gov.br/en/Data\\_Management](https://ppbio.inpa.gov.br/en/Data_Management)

**To learn more read the book "Biodiversity and Integrated Environmental Monitoring" in:**

<https://ppbio.inpa.gov.br/sites/default/files/Biodiversidade%20e%20monitoramento%20ambiental%20integrado.pdf>

Below, we provide a collection of articles that provide sampling techniques that have been replicated in different locations, and can be used as a basis for the planning of biodiversity studies in the Environmental Impact Studies and forest concessions. Some of these are included in the folder.

### Articles List

BRAGA-NETO, R., LUIZÃO, R.C.C., MAGNUSSON, W.E., ZUQUIM, G. & CASTILHO, C.V. 2008. Leaf litter fungi in a Central Amazonian forest: the influence of rainfall, soil and topography on the distribution of fruiting bodies. *Biodiversity and Conservation* 17(11):2701-2712. [available online](#)

CASTILHO, C.V., MAGNUSSON, W. E., ARAÚJO, R.N.O., LUIZÃO, R.C.C., LUIZÃO, F.J., LIMA, A.P. & HIGUCHI, N. 2006. Variation in aboveground tree live biomass in a central Amazonian forest: effects of soil and topography. *Forest Ecology and Management* 234:85-96. [available online](#)

CASTILHO, C.V., MAGNUSSON, W. E., ARAÚJO, R.N.O., LUIZÃO, F.J. 2010. Short-Term Temporal Changes in Tree Live Biomass in a Central Amazonian Forest, Brazil. *Biotropica* 42:95-103. [available online](#)

CHUPEL, T. F., ARAGONA M. & PENHA, J.M.F. 2010. Effect of vegetation cover and topography on mesoscale spatial distribution of marsupials and rodents of Pirizal region, Northern Pantanal, Brazil. *Zoologia*. No prelo.

COSTA, F.R.C., MAGNUSSON, W.E. & LUIZÃO, R.C.C. 2005. Mesoscale distribution patterns of Amazonian understorey herbs in relation to topography, soil and watersheds. *Journal of Ecology* 93:863-878. [available online](#)

COSTA, F.R.C., GUILLAUMET, Jean-Louis, LIMA, A.P. & PEREIRA, O.S. 2008. Gradients within gradients: The mesoscale distribution patterns of palms in a central Amazonian forest. *Journal of Vegetation Science*. [available online](#)

DIAS, M.S., MAGNUSSON, W.E., ZUANON, J. 2010. Effects of Reduced-Impact Logging on Fish Assemblages in Central Amazonia. *Conservation Biology* 24: 278-286. [available online](#)

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- ESPÍRITO-SANTO, H.M.V, MAGNUSSON, W.E., ZUANON, J., MENDONÇA, F.P. & LANDEIRO, V.L. 2008. Seasonal variation in the composition of fish assemblages in small Amazonian forest streams: evidence for predictable changes (p). *Freshwater Biology* 54(3):536-548 [available online](#)
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- FRANKLIN, E. ; MAGNUSSON, W. ; LUIZÃO, F. J. 2005. Relative effects of biotic and abiotic factors on the composition of soil invertebrates communities in an Amazonian savannah. *Applied Soil Ecology* 29(3):259-273.
- HAUGHLAND, D.L; HERO, J.M.; SCHIEK, J.; CASTLEY, J.G.; BOUTIN, S.; SÓLYMOS,P.; LAWSON, B.E.; HOLLOWAY, G.; MAGNUSSON, W. E. 2010. Planning forwards: biodiversity research and monitoring systems for better management. *Trends in Ecology & Evolution*, 25: 199-200. [available online](#)
- KINUPP, V.F. & MAGNUSSON, W.E. 2005. Spatial patterns in the understory shrub genus *Psychotria* in Central Amazonia: effects of distance and topography. *Journal of Tropical Ecology* 21:363-374. [available online](#)
- LIMA, A. P., MENIN, Marcelo, ARAUJO, M. C. 2007. A new species of *Rhinella* (Anura: Bufonidae) from Brazilian Amazon. *Zootaxa* (Auckland)1663: 1 - 15.
- MAGNUSSON, W.E., COSTA, F.R.C., LIMA, A.P., BACCARO, F.B., BRAGA-NETO, R., ROMERO, R.L., MENIN, M., PENHA, J., HERO, J.-M. & LAWSON, B.E. 2008. A Program for Monitoring Biological Diversity in the Amazon: An Alternative Perspective to Threat-based Monitoring. *Biotropica* 40(4): 409–411. [available online](#)
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- SANTOS, E.M.R., FRANKLIN, E., MAGNUSSON, E. 2007. Cost-efficiency of sub-sampling protocols to evaluate Oribatid-Mite communities in an Amazonian Savanna. *Biotropica* 40:728-735.[available online](#)
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