

BOLETIM SOCIEDADE BRASILEIRA DE ICTIOLOGIA



EDITORIAL

Dear associates,
First of all, we would like to give our compliments to the former directorship, composed by Luiz Roberto Malabarba, Fernando Jerep and José Birindelli for the outstanding work they have been making for the last four years (2015-2019). We received the SBI directorship with great honor and thank for all the help provided during this transition. We hope to continue the job up to their level.

As our first editorial, we have in our hands this special edition of SBI Bulletin about scientific collections, an important and urgent topic to discuss. This series of manuscripts resulted from a section of the II Symposium on Phylogeny and Classification of Neotropical Fishes, organized by SBI and State University of Londrina, in October 2017. The scientific collections are the foundation stone of virtually all biological work. If one does not use collection material directly, she/he will rely on knowledge produced by someone who uses. Those collections are a continuous picture of the biodiversity, how taxa change through time, and allow us to tell stories about evolution, systematics, ecology, among other.

This edition counts with articles about 22 Brazilian fish collections and 17 other collections distributed around the world. Despite the different localities, one thing all articles have in common: our investment in sampling the neotropical fish biodiversity and an urge to discuss the slow (or rapid) dismantling of scientific collections, due to limited investment to their maintenance and care. Our former SBI President, Luiz Malabarba opens this bulletin with an article that questions the “chronicles of a death foretold” of museums and scientific collections, urging us to review our values regarding scientific and cultural patrimony.

As the new directorship, we would like to thank the contribution of several people in the making of this bulletin and invite the readers which are not members of SBI yet that join our Society. The Brazilian Ichthyology Society is made for you, and by you, getting stronger with the interaction of its members.

Maria Elina Bichuette
Veronica Slobodian
Carla Natacha Marcolino Polaz
SBI Board of Directors

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FISH COLLECTION

IAvH-P

Freshwater fish collection of the Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Colombia

Carlos DoNascimento & Kevin Giancarlo Borja Acosta

The freshwater fish collection of the Instituto Humboldt (IAvH-P) was founded in 1971 in Bogotá by the naturalist Jorge Hernández Camacho. The collection was formerly affiliated to the Instituto de Desarrollo de los Recursos Naturales Renovables (Inderena). The first specimens mainly proceeded from inventories and monitoring programs developed by oil companies (e.g. British Petroleum) in their operational influence areas in Colombia, catches from fishing vessels, and from research programs of international organizations, e.g. Japan International Cooperation Agency (JICA) and Food and Agriculture Organization (FAO). Since 1985, the collection initiated their own inventories with the creation of the Fish and Wildlife Division of the Research Unit Federico Medem (Unifem). In 1993, the freshwater fish collection along with the remaining taxonomic collections of the Inderena was transferred to the Instituto de Investigación de Recursos Biológicos Alexander von Humboldt (IAvH), which replaced the official national functions of the Inderena. In 1995, the collection was moved from Bogotá to its current location in Villa de Leyva, where occupies a colonial religious building (cloister and church), dating from the end of the XVI century (Figs. 1A, B). At the moment of this movement, the collection comprised only 2691 lots (Maldonado-Ocampo *et al.*, 2007), with a small fraction of marine species (197 lots) that were subsequently exchanged for the freshwater specimens housed at the Instituto de Investigaciones Marinas y Costeras (Invemar). The Instituto Humboldt and Invemar form part of the Environmental National System (SINA) of Colombia and are affiliated to the Ministerio de Ambiente y Desarrollo Sostenible of Colombia. In those early years, the IAvH-P collection also received the donation of around 350 lots from the fish collection of Museo del Mar (MM) of the Universidad de Bogotá Jorge Tadeo Lozano, which included the reference material collected by Darío M. Castro (mainly from

the Amazon, Caquetá, and Meta rivers) along with some types of *Corydoras* species described by this author (Castro, 1987; DoNascimento & Borja-Acosta, 2018). Nevertheless, during all this time, the collection remained without an ichthyologist in charge until August of 2003, when Javier Alejandro

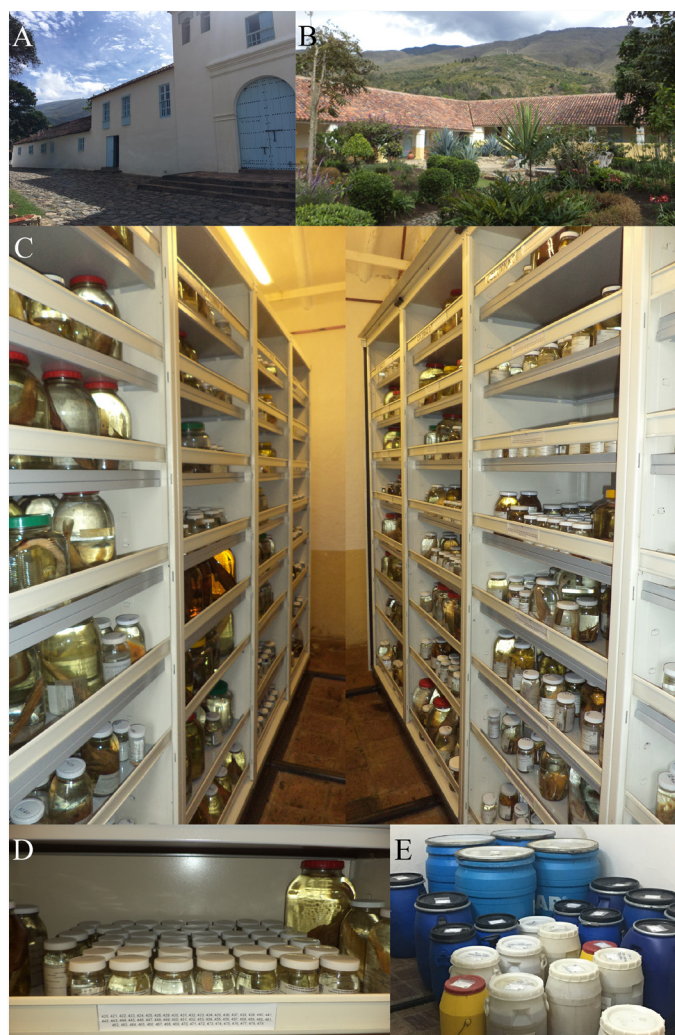


Figure 1. A. Building facade of the Claustro de San Agustín that houses the freshwater fish collection of the Instituto de Investigación de Recursos Biológicos Alexander von Humboldt (IAvH-P) in Villa de Leyva, Colombia. B. Internal view of the Claustro de San Agustín. C. Sliding mobile storage of the IAvH-P collection. D. Individual shelf showing organization of jars by catalog number. E. Storage area for plastic barrels containing large specimens.

Maldonado-Ocampo became its first curator and shortly Juan David Bogotá-Gregory joined him as a researcher to help in the curatorial activities of the collection. Posterior to 2008, there was another hiatus with no ichthyologists associated to the collection, until 2014 when a curatorial position for the collection was formally opened, being filled by Carlos DoNascimento. More recently, another two ichthyologists (Juan Gabriel Albornoz-Garzón and Alejandro Méndez-López) were hired as researchers to support multiple research field projects involving the IAvH-P collection.

The IAvH-P collection is the second largest ichthyological repository in Colombia with more than 22,000 catalog lots entirely systematized in the Specify software, representing around 3,100 unique sampled localities across all main river systems (Amazon, Orinoco, Magdalena-Cauca, and Caribe and Pacific versants) and all political departments of the Colombian territory (Fig. 2). In terms of taxonomic coverage of the native Colombian ichthyofauna, 1,155 species are represented which accounts around 74% of the total number of recorded species for this country. These facts have been essential and pivotal for the successful completion and continuous updating of the checklist of freshwater fishes of Colombia (DoNascimento *et al.*, 2017). The IAvH-P collection also holds specimens from other Neotropical countries: Brazil, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Peru, and Venezuela (Fig. 2) and an important number of type specimens of more than 70 nominal species, with 18 of them represented by their respective holotypes (DoNascimento *et al.*, 2016; DoNascimento & Borja-Acosta, 2018). The IAvH-P collection has become in an important supporting centre for research of Colombian and Neotropical fishes, being cited or acknowledged in more than 90 papers published in peer reviewed journals (Arbeláez *et al.*, 2017) and has served to numerous dissertation works of Colombian and international students at undergraduate and graduate levels. Catalog information of records at IAvH-P is available in the Darwin Core format through the Colombian node of the GBIF, the SiB Colombia (http://ipt.sibcolombia.net/iavh/resource.do?r=peces_coleccion_instituto_humboldt). Recently, the electronic version of the catalog of type specimens of IAvH-P was made accessible online along with high resolution photographs of these specimens (<https://sites.google.com/humboldt.org.co/tipospecies/>). Currently, we are developing an

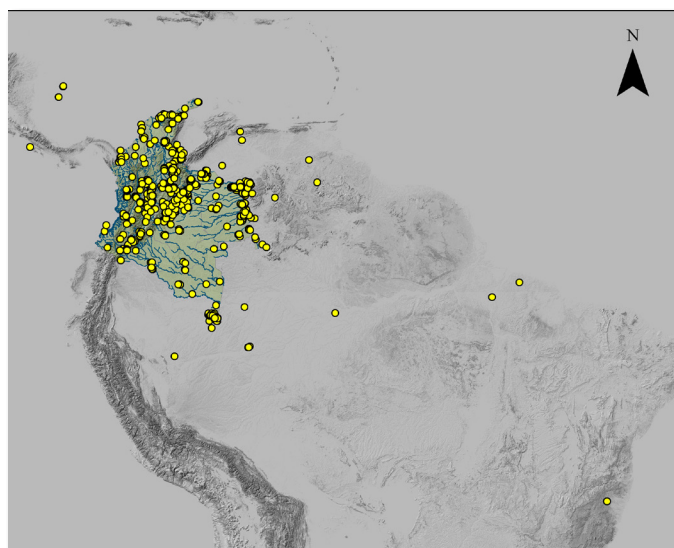


Figure 2. Map of South America showing collecting localities (yellow dots) of catalog lots of IAvH-P.

online database to search and access the catalog data and associated multimedia content (photographs, radiographs, links to published DNA sequences, and files of bibliographic references) in a single website.

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Colecciones Biológicas, Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Claustro de San Agustín, Carrera 8 No. 15-08, Villa de Leyva, Boyacá, Colombia. cdonacimiento@humboldt.org.co

Name and acronym	Colección de Peces de Agua Dulce del Instituto de Investigación de Recursos Biológicos Alexander von Humboldt (IAvH-P)
Institution	Instituto de Investigación de Recursos Biológicos Alexander von Humboldt
Address	Claustro de San Agustín, Carrera 8 No. 15-08, Villa de Leyva, Boyacá, Colombia
Curator(s) and contact(s)	<p>Curator: Carlos DoNascimento (cdonacimiento@humboldt.org.co)</p> <p>Researchers: Juan Gabriel Albornoz-Garzón (jalbornoz@humboldt.org.co), Alejandro Méndez-López (amendez@humboldt.org.co)</p> <p>Collections database administrator: Kevin Giancarlo Borja Acosta (kborja@humboldt.org.co)</p> <p>Collection technician: Carlos Montaña (crmontana@humboldt.org.co)</p>
Website	<p>CEIBA (Data Infrastructure Portal of Instituto Humboldt): http://i2d.humboldt.org.co/ceiba/resource.do?r=peces_coleccion_instituto_humboldt</p> <p>Colombian Biodiversity Information System - SIB-Colombia (Colombian node of GBIF): https://ipt.biodiversidad.co/iavh/resource?r=peces_coleccion_instituto_humboldt</p> <p>Online Catalog of Types: https://sites.google.com/humboldt.org.co/tipospeces/</p>
Year of foundation	1971
Facilities and area of the collection	Curator office, triage space, research lab, sliding mobile storage of the fish collection (Fig. 1C), organized in glass jars (100, 200, 400, 500, 1000, 4000 cc of capacity), arranged by catalog number (Fig. 1D) and storage area for large specimens in plastic barrels of 50, 100, 200 l of capacity (Fig. 1E) / 111.6 m ²
Number of visitors per year (average considering 2015, 2016, 2017)	13
Number of loaned lots per year (average number considering 2015, 2016, 2017)	147
Specimens habitat	98% freshwater, 2% marine
Specimens origin	Colombia (Amazon, Caribbean, Magdalena-Cauca, Pacific, and Orinoco hydrographic regions), Brazil, Costa Rica, Ecuador, French Guiana, Guyana, Panama, Peru, Venezuela
Current cataloging method	Specify Software 6.7.1 Wolverine
Total number of lots and number of lots from Neotropical region	22,300
Total number of specimens and number of specimens from Neotropical region	202,748
Total number of holotypes and number of holotypes from Neotropical region	18
Total number of paratypes and number of paratypes from Neotropical region	947 specimens in 148 lots representing 79 nominal species
Number of tissue samples from Neotropical fishes	1,556
Number of C&S specimens	55
Number of dry skeleton specimens	7

NEW MEMBERS

We invite you to join SBI. Payments of the annuity can be made by credit card or bank transfer / deposit. Check out our website and our new members: Ana Carolina dos Santos Gauy, Ana Clara Sampaio Franco, Andre Luiz Machado Pessanha, Caleb McMahan, Dakini Milena Graebin Beutler, Guillermo Orti, Ingrid

Hyrycena dos Santos, Jocélio Roos da Silva, Josiane Santos Bandeira Inglês, Luana Arruda Sêga, Marcelo Crossa. Always keep your registration information updated on the SBI website. Any doubt or difficulty in recovering your password, contact us (tesouraria.sbi@gmail.com or contato.sbi@gmail.com).

BECOME A MEMBER

To join SBI just visit our homepage at <http://www.sbi.bio.br>, and register. The affiliation will entitle the receiving of copies of the journal *Neotropical Ichthyology* (NI), and discounts in the registration of the *Brazilian Meeting of Ichthyology* and in the annuity and meetings of the Brazilian Society of Zoology.

In addition, your participation is fundamental

in maintaining SBI, an officially recognized non-profit and public utility association.

Send your contributions to the next issues of the SBI Bulletin by email to boletim.sbi@gmail.com. You can participate by submitting articles, pictures of fish for the first page, photos and data about fish species, news and other information of interest to the society. We count on your participation!

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First page, background photo: At fish collection of the Naturhistorisches Museum, Vienna, 2011 (photo: J. L. Birindelli).

Last page, background photo: At fish collection of the Muséum National d'Histoire Naturelle - Paris, 2008 (photo: J. L. Birindelli).

Os conceitos, ideias e comentários expressos no Boletim Sociedade Brasileira de Ictiologia são de inteira responsabilidade de quem os assinam.

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A Sociedade Brasileira de Ictiologia, SBI, fundada a 2 de fevereiro de 1983, é uma associação civil de caráter científico-cultural, sem fins lucrativos, legitimada durante o I Encontro Brasileiro de Ictiologia, como atividade paralela ao X Congresso Brasileiro de Zoologia, e tendo como sede e foro a cidade de São Paulo (SP). - Artigo 1º do Estatuto da Sociedade Brasileira de Ictiologia.

Utilidade Pública Municipal: Decreto Municipal 36.331 de 22 de agosto de 1996, São Paulo

Utilidade Pública Estadual: Decreto Estadual 42.825 de 20 de janeiro de 1998, São Paulo

Utilidade Pública Federal: Portaria Federal 373 de 12 de maio de 2000, Brasília, D.F.