



BRILA

Bioacoustics Research In Latin America

Mission Statement: Uniting scientists and resources across disciplines engaged in bioacoustical research in Central and South American countries.

NOTES on CURRENT RESEARCH & DEV. Dec 2015

Amphibians

TBC

Bats

Location: Costa Rica
Researcher: Sergio Estrada Villegas
Contact: estradavillegassergio@gmail.com

Birds

Birds (general)

Location: Amazon (general)
Researcher: Hervé Glotin
Contact: glotin@univ-tln.fr

Finches

Location: Costa Rica
Researcher: Carla Trejos
Contact: ktrejos07@gmail.com

Oscine and Tyranni Passerines Species

Location: Brazilian Amazon Rainforest

Researcher: Marcelo Silva

Contact: silva.malu@uol.com.br

Parrots

Location: Central and South America

Researcher: Marcelo Araya-Salas

Contact: marceloa27@gmail.com

White-Eared Ground-Sparrows (*Melospiza leucotis*)

Location: Costa Rica

Researcher: Luis Sandoval

Contact: biosandoval@hotmail.com

Fish

TBC

Insects

TBC

Marine Mammals

Amazon River Dolphins (*Inia geoffrensis*)

Location: Brazil

Researcher: Jessica Melo

Contact: jessicafmelo@live.com

Location: Peru

Researcher: Marie Trone

Contact: mtronedolphin@yahoo.com

Blue Whales (*Balaenoptera musculus*)

Location: Chile
Researcher: Julie Patris
Contact: julie.patris@univ-amu.fr

Bottlenose Dolphins (*Tursiops truncatus*)

Location: Mexico, Yucatan Peninsula
Researcher: Carmen Bazúa-Durán
Contact: bazua@unam.mx

Bryde's Whales (*Balaenoptera edeni*)

Location: Gulf of California, Mexico
Researcher: Cassandra Vera Cuevas
Contact: cassandra_vera@hotmail.com

California Sea Lions (*Zalophus californianus*)

Location: Gulf of California, Mexico
Researcher: Omar Bustamante
Contact: omarb.p@hotmail.com

Location: Mexico
Researcher: Eduardo Vivas
Contact: evivas@cibnor.mx

Cetaceans (variety of species)

Location: Brazil; South Atlantic shelf break
Researcher: Artur Andriolo
Contact: artur.andriolo@ufjf.edu.br

Location: Chile, Peru
Researcher: Hervé Glotin
Contact: glotin@univ-tln.fr

Location: Mexico
Researcher: Heather Spence
Contact: info@heatherspence.net

Location: Mexico
Researcher: Eduardo Vivas

Contact: evivas@cibnor.mx

Spinner Dolphins (*Stenella longirostris*)

Location: Brazil

Researcher: Juliana Moron

Contact: julianamoron@hotmail.com

Reptiles

TBC

ACOUSTIC METHODS

Hervé Glotin

<http://glotin.univ-tln.fr/>

glotin@univ-tln.fr

LSIS UMR 7296, DYNI, Computer Science, Aix Marseille Université, CNRS, ENSAM, Université de Toulon, Institut Universitaire de France (IUF), 13397 Marseille, 83957 La Garde, 75005 Paris, France

Hervé Glotin began his scientific career developing human speech recognition systems. He has adapted these methodologies and extended them to investigating biodiversity by ascertaining information from acoustical and visual data using scaled machine learning techniques. What this means is that his team develops methods to process acoustical and visual data in real time, even when recording systems are sampling at 1 MHz! Currently, Hervé is head of the Scaled Acoustic Biodiversity (SABIOD) Big Data which is funded by the Centre National de la Recherche Scientifique (CNRS) and he leads the Information Dynamics and Integration group in France. He has co-authored more than 100 peer-reviewed articles and has organized several international workshops on machine learning with bioacoustical data.

Hervé's research group explores new mathematical transforms to view and process data in novel ways in order to obtain more information from recordings. Some examples include developing techniques to:

- distinguish up to 500 different avian species from natural environment recordings that contain anthropogenic noise,
- count and track individual sperm whales,
- track bats,
- individually identify Amazon River dolphins.

Hervé has offered his services to store your data on his server free of charge, and to apply algorithms to process your data, obtaining parameters such as peak frequencies, bandwidth, peak to peak amplitude,

signal duration, etc. Furthermore, he can process your data with innovative techniques to possibly individually identify organisms, determine geographic origin, etc. Please contact Hervé at the above email address if you are interested in collaborating.

Equipment

Eduardo Vivas

evivas@cibnor.mx

CIBNOR, Av Instituto Politecnico Nacional 195, Playa Palo de Santa Rita Sur, La Paz, Baja California Sur 23096, Mexico

Eduardo has dedicated much time and effort in promoting bioacoustical research in Mexico and other countries. One barrier to such research has been access to quality recording and processing equipment. Eduardo has developed low-cost, high-quality recording equipment and acoustic cameras. He has open sourced the instructions for equipment construction. If you are unable to access these publications you may contact Eduardo at the above email address to obtain a PDF copy. If you have further questions, or would like to invite Eduardo to your facility to teach a workshop on equipment construction, please contact him at the above email address.

Hydrophone:

<http://scitation.aip.org/content/asa/journal/poma/11/1/10.1121/1.3573502>

Linear Array:

<http://scitation.aip.org/content/asa/journal/poma/19/1/10.1121/1.4800535>

Autonomous Surface Vehicle:

<http://scitation.aip.org/content/asa/journal/jasa/136/4/10.1121/1.4899630>

System for Recording Spiders

<http://scitation.aip.org/content/asa/journal/jasa/131/4/10.1121/1.4709023>

Chamber for Recording Bats:

<http://scitation.aip.org/content/asa/journal/jasa/130/4/10.1121/1.3654449>