

Introduction to bioacoustics and ecoacoustics

Dr Gianni Pavan

Centro Interdisciplinare di Bioacustica e Ricerche Ambientali
Dipartimento di Scienze della Terra e dell'Ambiente
Universita' di Pavia
Via Taramelli 24 - 27100 PAVIA - I
<http://www.unipv.it/cibra>

Banca Dati Nazionale Spiaggiamenti Mammiferi Marini
<http://mammiferimarini.unipv.it>

Consiglio Scientifico International Society of Ecoacoustics
<http://sites.google.com/site/ecoacousticssociety>

Bioacoustics studies the sounds emitted by animals to communicate and to echolocate, and their acoustic sensing capabilities to perceive the environment around them. Ecoacoustics investigates natural and anthropogenic sounds and their relationship with the environment over a wide range of study scales, both spatial and temporal including populations and communities.

Ecoacoustics operates in all types of terrestrial and aquatic (freshwater and marine) ecosystems extending the scope of acoustics and bioacoustics.

Ecoacoustics recognizes that sounds can be both the subject and tools of ecological research. As the subject, sounds are investigated in order to understand their evolution, functions and properties under environmental pressures. As tools, sounds are used to study and monitor animal diversity, abundance, behaviour, dynamics and distribution, and their relationship with ecosystems and the environment.

The seminar will present an overview of these highly interdisciplinary disciplines and of the most advanced research being developed nowadays.