



PUBLICS

Registration is open for technicians and researchers as well for phd students and for master.



REQUIREMENTS

All lectures and labs are given in English.

Knowledge and/or experience in fisheries and/or ichthyology are expected.



DATES AND DURATION

It is possible to sign up for only the first Week or Both Week

88 hrs /

from 23rd September to 4th October

> 23-27 september:
Eastern North Atlantic

> 30 september-4 october:
Pacific Ocean



PLACE

Station marine de Concarneau,
Place de la Croix - 29900 Concarneau



INSTRUCTORS

Dr. Catriona Clemmesen, GEOMAR
Helmholtz Centre for Ocean
Research Kiel, Germany

Dr. Cindy van Damme, Wageningen
Marine Research, The Netherlands

Dr. Peter Konstantinidis, Leibniz
Institute, Germany

Dr. Nalani Schnell, MNHN, Marine
Station Concarneau, France



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FORMATIONS HAUTEMENT SPÉCIALISÉES LARVAL FISH COURSE

We offer an international lecture and laboratory course at the marine station of the Muséum national d'Histoire naturelle in Concarneau, France, based on samples from the Eastern North Atlantic and Pacific Ocean.

TARGET SKILLS

- > You will get a comprehensive view of the ecology and taxonomy of early life history stages of fishes.
- > We will get you started on how to identify your own larval fish samples.

OBJECTIVES

We provide :

- > labs on larval fish identification, (50 fish families),
- > lectures on key identification features, systematics, and ecology,
- > lectures on sampling and preservation methods.

TEACHING OUTLINE

First Week: Eastern North Atlantic samples

Second week: Pacific Ocean samples

SYLLABUS

- > What is a larva?
- > What do larvae feed on, and how do they feed, match-mismatch theory.
- > Physical processes, environmental factors.
- > Age and growth.
- > Cohorts, recruitment.
- > Climate change.
- > Sampling and preservation methods.
- > Fish egg identification, key identification features, relevant literature and available resources.
- > Computer identification keys.
- > The citizen science project "objectif plancton".

LECTURES AND LABS ON THE IDENTIFICATION OF THE FOLLOWING TAXA

- > Anguilliformes (*Congridae*)
- > Clupeiformes (*Clupeidae*, *Engraulidae*)
- > Stomiiformes (*Gonostomatidae*, *Sternoptychidae*, *Phosichthyidae*, *Stomiidae*)
- > Aulopiformes (*Synodontidae*, *Evermannellidae*, *Scopelarchidae*)
- > Myctophiformes (*Myctophidae*)
- > Lampridiformes (*Lamprididae*, *Trachipteridae*)
- > Ophidiiformes (*Carapidae*, *Ophidiidae*, *Bythitidae*)
- > Gadiformes (*Bregmacerotidae*, *Gadidae*, *Merlucciidae*)
- > Beryciformes (*Holocentridae*, *Diretmidae*)
- > Scorpaeniformes (*Scorpaenidae*, *Cottidae*)
- > Syngnathiformes (*Syngnathidae*, *Fistulariidae*)
- > Atheriniformes (*Atherinidae*)
- > Percomorph families:
e.g., *Acanthuridae*, *Acropomatidae*, *Apogonidae*, *Ammodytidae*, *Blenniidae*, *Callanthiidae*, *Callionymidae*, *Carangidae*, *Chaetodontidae*, *Champsodontidae*, *Chiasmodontidae*, *Coryphaenidae*, *Gempylidae*, *Gobiidae*, *Labridae*, *Lethrinidae*, *Lutjanidae*, *Melamphaidae*, *Moronidae*, *Pomacanthidae*, *Pomacentridae*, *Rachycentridae*, *Scombridae*, *Serranidae*, *Sparidae*, etc.)
- > Pleuronectiformes (*Scophthalmidae*, *Bothidae*, *Pleuronectidae*, *Soleidae*)
- > Tetraodontiformes (*Molidae*, *Diodontidae*, *Balistidae*)



REGISTRATION

Course registration will open 15th January 2024.

Places are limited to 15 participants.

Information and Registration:
<https://sites.google.com/view/larval-fish-course/home>



REGISTRATION FEES

- > For 2 weeks: **2 100 €**
- > For public structures and individuals reduction of 50 % of the costs of training (**1 050 €**)
- > for the first week only: **1 050 €**
- > For public structures and individuals reduction of 20 % of the costs of training (**840 €**)

Not included is lodging and meals other than lunches. You will be on your own during the weekend.

CONTACT

For any further information please contact :

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