# RIPFLOW TEAM FROM PORTUGAL



Universidade Técnica de Lisboa



Maria Teresa Ferreira, biologist, professor of freshwater ecology and aquatic management



Patrícia Rodriguez-Gonzalez, forest eng., PhD, post-doc, ecology of wetland and riparian woods



António Albuquerque, forest eng., field support



INSTITUTO SUPERIOR TÉCNICO Universidade Técnica de Lisboa



António N. Pinheiro, hydraulic eng., professor of hydraulics

Contract researcher or PhD student, profile yet to be defined Aspects of Applied Biology 58, 2000 Vegetation Management in Changing Landscapes

#### Riparian types on a Mediterranean basin

By F C AGUIAR, M T FERREIRA, 1 S MOREIRA and A ALBUQUERQUE

Forestry Department, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017, Lisboa, Portugal Assessing reference sites and ecological quality of river plant assemblages from an Iberian basin using a multivariate approach

M. T. Ferreira<sup>1</sup>, A. Albuquerque<sup>1</sup>, F. C. Aguiar<sup>1</sup> and N. Sidorkewicz<sup>2</sup>

•River vegetation types and distribution patterns: woody and herbaceous

•Vegetation benchmarks for quality assessment and restoration

•Assessment of ecological integrity using multivariate and multimetric tools



Ecological Indicators 5 (2005) 137-149

This article is also available online at: www.elsevier.com/locate/ecolind

ECOLOGICAL INDICATORS

Assessing biotic integrity in Iberian rivers: Development of a multimetric plant index

M.T. Ferreira\*, P.M. Rodríguez-González, F.C. Aguiar, A. Albuquerque

Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisbon, Portugal Accepted 14 January 2005 Limnetica, 25(1-2): 411-424 (2006) © Asociación Española de Limnología, Madrid. Spain. ISSN: 0213-8409

Riparian and aquatic vegetation in Mediterranean-type streams (western Iberia)

M. Teresa Ferreira & Francisca C. Aguiar

Arch. Hydrobiol. 155 1 121-145

Stuttgart, August 2002

#### © Springer 2005

#### Patterns of exotic and native plant species richness and cover along a semi-arid Iberian river and across its floodplain

Francisca C. Aguiar\*, Maria Teresa Ferreira and António Albuquerque Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisboa, Portugal; \*Author for correspondence (e-mail: fraguiar@isa.utl.pt; phone: +351-21-3653487; fax: +351-21-3645000)

# Invasive plants in river corridors and their profiles of biological attributes Invasiveness in reference and non-reference sites

Environmental drivers of invasion

AQUATIC CONSERVATION: MARINE AND FRESHWATER ECOSYSTEMS

Aquatic Conserv: Mar. Freshw. Ecosyst. 17: 335-347 (2007)

Published online 14 July 2006 in Wiley InterScience (www.interscience.wiley.com) DOI: 10.1002/aqc.776

Alien and endemic flora at reference and non-reference sites in Mediterranean-type streams in Portugal

FRANCISCA C. AGUIAR\*, M. TERESA FERREIRA, ANTÓNIO ALBUQUERQUE and ILÍDIO MOREIRA

Instituto Superior de Agronomia (Institute of Agronomy), Departamento de Engenharia Florestal, Tapada da Ajuda, Lisbon, Portugal Hydrobiologia (2006) 570:3–9 © Springer 2006 J.M. Caffrey, A. Dutartre, J. Haury, K.J. Murphy & P.M. Wade (eds), Macrophytes in Aquatic Ecosystems: From Biology to Management DOI 10.1007/s10750-006-0155-7

## Invasive river plants from Portuguese floodplains: What can species attributes tell us?

I. Bernez<sup>1,2,\*</sup>, F. Aguiar<sup>2</sup>, C. Violle<sup>3</sup> & T. Ferreira<sup>2</sup>

<sup>1</sup>UMR EQHC INRA-Agrocampus Rennes, 65, rue de Saint-Brieuc, C S 84215, 35042 Rennes, Cedex, France <sup>2</sup>Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisboa, Portugal <sup>3</sup>CNRS/Centre d'Ecologie Fonctionnelle et Evolutive, 1919 Route de Mende, 34293 Montpellier, Cedex 5, France (\*Author for correspondence: E-mail: Ivan.Bernez@agrocampus-rennes.fr) RIVER RESEARCH AND APPLICATIONS

River Res. Applic. 20: 43-59 (2004)

Published online 10 December 2003 in Wiley InterScience (www.interscience.wiley.com). DOI: 10.1002/rra.718

## COMBINED EFFECTS OF ENVIRONMENTAL FACTORS AND REGULATION ON MACROPHYTE VEGETATION ALONG THREE RIVERS IN WESTERN FRANCE

IVAN BERNEZ, a,b\* HERVÉ DANIEL, CJACQUES HAURY and MARIA TERESA FERREIRA

<sup>a</sup> Forestry Department, ISA-UTL, Tapada da Ajuda, 1349-017 Lisboa Codex, Portugal

<sup>b</sup> UMR EQHC, ENSAR-INRA, 65 rue de Saint Brieuc, 35 042 Rennes Cedex, France

<sup>c</sup> UMR SAGAH INRA-INH-Université Angers, 2 rue Le Nôtre, 49045 Angers Cedex 01, France

#### EXOTIC AND NATIVE VEGETATION ESTABLISHMENT FOLLOWING CHANNELIZATION OF A WESTERN IBERIAN RIVER

REGULATED RIVERS: RESEARCH & MANAGEMENT Regul. Rivers: Res. Mgmt. 17: 509–526 (2001) DOI: 10.1002/rrr.642

F.C. AGUIAR<sup>a,\*</sup>, M.T. FERREIRA<sup>a</sup> AND I. MOREIRA<sup>b</sup>

<sup>a</sup> Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisboa, Portugal <sup>b</sup> Departamento de Protecção das Plantas e Fitoecologia, Instituto Superior de Agronomia, Tapada da Ajuda, 1349-017 Lisboa, Portugal

#### •Response of riparian vegetation to regulation

•Response of riparian vegetation to channelisation

River Flow 2006 – Ferreira, Alves, Leal & Cardoso (eds) © 2006 Taylor & Francis Group, London, ISBN 0-415-40815-6

Evaluation of environmental impacts resulting from river regulation works: A case study from Portugal

A.E. Barbosa & E. Alves Portuguese National Laboratory for Civil Engineering (LNEC), Department of Hydraulics and Environment

R.M.V. Cortes University of Trás-os-Montes and Alto Douro (UTAD), Forestry Department

P. M. Silva-Santos University of Trás-os-Montes and Alto Douro (UTAD), Laboratory of Applied Ecology

F. Aguiar & T. Ferreira Technical University of Lisbon, Higher Institute of Agronomy (ISA)



## Spatial variation of wetland woods in the latitudinal transition to arid regions: a multiscale approach

Patricia María Rodríguez-González<sup>1</sup>\*, Maria Teresa Ferreira<sup>1</sup>, António Albuquerque<sup>1</sup>, Dalila Espirito Santo<sup>2</sup> and Pablo Ramil Rego<sup>3</sup>

•Wetland wood types along all the western Iberian Atlantic coast

•Structural characteristics within stands

•Multi-scale environmental factors determining vegetation and structure



Available online at www.sciencedirect.com

DIRECT.

Forest Ecology and Management

Forest Ecology and Management 203 (2004) 261-272

www.elsevier.com/locate/foreco

### Northern Ibero-Atlantic wetland woods Vegetation types and within-stand structure

Patricia M. Rodríguez-González<sup>a,\*</sup>, M. Teresa Ferreira<sup>a</sup>, Pablo Ramil Rego<sup>b</sup>

<sup>a</sup>Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Universidade Tecnica de Lisboa, Tapada da Ajuda, Lisbon 1349-017, Portugal <sup>b</sup>Departamento de Botánica, Escola Politécnica Superior de Lugo, Lugo 27002, Spain

Received 5 November 2003; received in revised form 5 July 2004; accepted 21 July 2004

## Human-disturbed landscapes: effects on composition and integrity of riparian woody vegetation in the Tagus River basin, Portugal

FRANCISCA C. AGUIAR\* AND MARIA TERESA FERREIRA Instituto Superior de Agronomia, Departamento de Engenharia Florestal, Tapada da Ajuda, 1349-017 Lisbon, Portugal Date submitted: 12 May 2004 Date accepted: 7 February 2005

•Influence of different types of land use on riparian woods

•Human-related influence close to the river corridor vs. in the river valley

•Changes in riparian integrity in 75 years in relation to changes of land use



Available online at www.sciencedirect.com

SCIENCE DIRECT.

Forest Ecology and Management

Forest Ecology and Management 212 (2005) 145-159

www.elsevier.com/locate/foreco

Changes in riparian woods over space and time: Influence of environment and land use

M. Teresa Ferreira\*, Francisca C. Aguiar, Carla Nogueira

Instituto Superior de Agronomia, Departamento de Engenharia Florestal, Tapada da Ajuda, 1349-017 Lisbon, Portugal

Received 6 May 2004; received in revised form 4 December 2004; accepted 30 March 2005

J. N. Am. Benthel. Soc., 2002, 21(1):43–53 © 2012 by The North American Benthological Society

#### Relative influence of environmental variables on macroinvertebrate assemblages from an Iberian basin

F. C. AGUIAR AND M. T. FERREIRA<sup>1</sup>

Departamento de Engenharia Florestal, Instituto Superior de Agronomia, Universidade Técnica de Lisboa, Tapada da Ajuda, 1349-017 Lisboa, Portugal

P. PINTO

Departamento de Biologia da Universidade de Évora, Largo dos Colegiais, Apartado 94, 7001 Évora, Portugal

•Relative influence of riparian and environmental variables on stream functioning

Organic matter processing

#### •Tree foliar isotope signatures

Limnetica, 27 (1): 93-106 (2008)
 Asociación Ibérica de Limnología, Madrid. Spain. ISSN: 0213-8409

AIL Ø

#### Leaf litter decomposition in western Iberian forested wetlands: lentic versus lotic response

Ana Sampaio <sup>1,\*</sup>, Patricia Rodríguez-González <sup>2</sup>, Simone Varandas <sup>3</sup>, Rui Manuel Cortes <sup>3</sup> and Maria Teresa Ferreira <sup>2</sup>

Verh. Internat. Verein. Limnol. 2008, vol. 30, Part 3, p. 391–394, Stuttgart, July 2008 © by E. Schweizerbart'sche Verlagsbuchhandlung 2008

# Tree foliar $\delta^{\mbox{\tiny 15}} N$ and $\delta^{\mbox{\tiny 13}} C$ signatures in Ibero Atlantic forested wetlands

P.M. Rodríguez-González, J.S. Pereira and M.T. Ferreira

## **Riparian restoration**

METODOLOGIAS PARA A PRODUÇÃO DE PLANTAS LENHOSAS RIBEIRINHAS DE QUALIDADE

Carla Faria André Fabião Mafalda Pereira António Fabião Maria Helena Almeida Breeding techniques for NINE riparian species







AGUAS DO ASTER

Planning habitat restoration

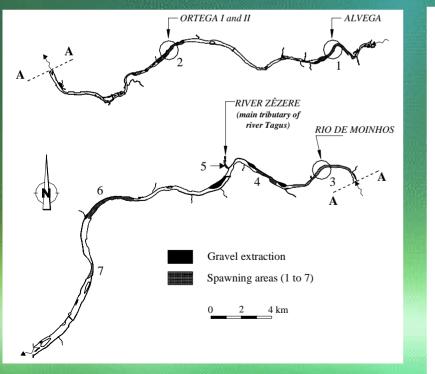
# 1D modeling of fish habitat

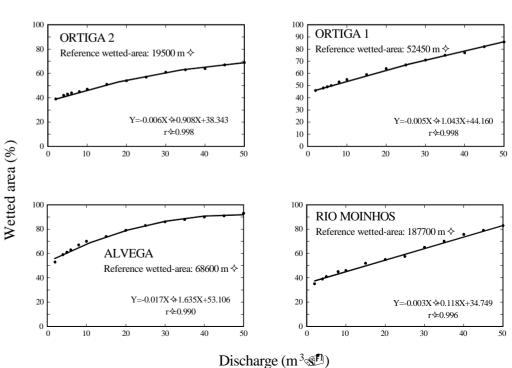


A simple method for assessing minimum flows in regulated rivers: the case of sea lamprey reproduction.

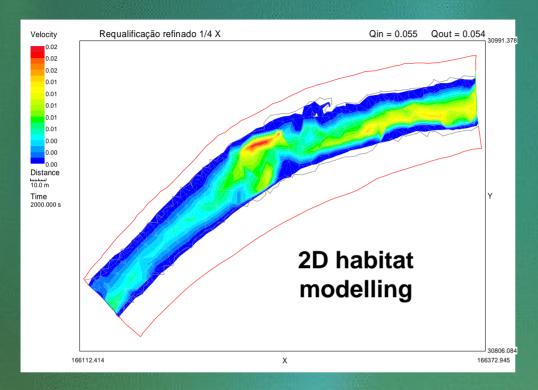
J. M. OLIVEIRA, M. T. FERREIRA, A. N. PINHEIRO and J. H.BOCHECHAS.

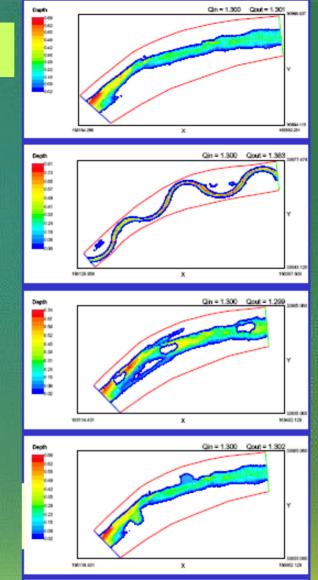
AQUATIC CONSERVATION: MARINE AND FRESHWATER ECOSYSTEMS14: 481–489

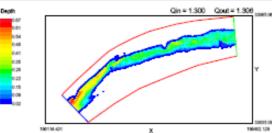




# 2D modeling of fish habitat









4th ECRR Conference on River Restoration Italy, Venice S. Servolo Island 16-21 June 2008

Using a two dimensional approach to evaluate channel rehabilitation in a Mediterranean stream (Southern Portugal)

Boavida I., Santos J., Lourenço J, Cortes R., Ferreira T., Pinheiro A.