

fórum
biodiversidade

11

GREEN INFRASTRUCTURES FOR BIODIVERSITY

Organização:

 **CASCAIS**


GREENFEST

PROGRAMA

DIA 28

- 09:00 – 13:00** Workshop APENA – Soil Bioengineering
- 13:00 – 14:30** Lunch
- 14:30** Opening session
- Carlos Carreiras** – Presidente da Câmara Municipal de Cascais
- João Cardoso de Melo** (Chairman) – Agência Cascais Natura (Portugal)
- João Reis Machado (Coordenador Científico)** – Universidade Nova de Lisboa – Fundação para a Ciência e Tecnologia \ Associação Portuguesa de Corredores Verdes (Portugal)
- Tito Rosa** – Presidente do Instituto de Conservação da Natureza e da Biodiversidade
- Pedro Afonso de Paulo** – Secretário de Estado do Ambiente e Ordenamento do Território¹
- 15:00** Opening speech From Agronomy to Landscape and Greenways
- Julius Gyula Fabos (Keynote Speaker)** – University of Massachusetts, Amherst (USA)
- 16:00** **SESSION 1 - GREENWAYS AND FORESTS**
- Chairman: Francisco Castro Rego – ISA – UTL (Portugal)
- 16:15 – 17:00** The function and dynamics of corridors with respect to biodiversity and fire management: examples from forest and range landscapes of North America
- Stephen C. Bunting (Keynote Speaker)** - College of Natural Resources, University of Idaho (USA)
- 17:00 – 17:15** Coffee break
- 17:15 – 17:45** Exploring the potential of vegetation corridors in forest fire hazard reduction at the landscape level: examples from Portugal
- J.C. Azevedo** – Presidente da Associação Portuguesa de Ecologia da Paisagem (Portugal)
- 17:45 – 18:15** Forests are also for the people: which greenways are needed?
- José Ferreira de Castro** – Instituto Politécnico de Bragança (Portugal)

¹ A confirmar

SESSÃO 1 - GREENWAYS AND FORESTS

FRANCISCO CASTRO REGO (CHAIRMAN)

Forestry Engineering course at the Instituto Superior de Agronomia, Lisbon (1972-1978); PhD on Forestry and Wildlife and Range Management at the University of Idaho (1986); Professor at the Universidade de Trás-os-Montes e Alto Douro (1986-1990); Associate Professor at the Instituto Superior de Agronomia (ISA), Technical University of Lisbon (1990 to present); President of the Instituto Superior de Agronomia (1990-1994); University of Idaho Alumni Achievement Award (1995); Director of the National Forest Research Station (1995-1998); National representative in the Technical Committee of COST (EU) in the Forestry Domain (1996-2010); Coordinator of the National Commission for Forest Fires (2001-2002); Chairman of the European Forest Institute (2003-2004); Director of the Portuguese Forest Services (2005-2007); Coordinator of the EU Project FIRE PARADOX (2006-2011); Coordinator of the Centro de Ecologia Aplicada Baeta Neves - CEABN (1995 to present).

The domains of experience and expertise are mainly in Fire Ecology and Management, Landscape Ecology and Ecological Modelling.

STEPHEN C. BUNTING (KEYNOTE SPEAKER)

Ph.D., Texas Tech University, Lubbock, Texas, 1978, Range Ecology; M.S., Texas Tech University, Lubbock, Texas, 1974, Range Ecology; B.S., Colorado State University, Ft. Collins, Colorado, 1971, Forest and Rangeland Management. Assistant, Associate Professor, and Professor, Rangeland Ecology and Management, University of Idaho, Moscow, Idaho, August 1978-present. Associate Professor, Departamento Agronomia, Universidad Nacional del Sur, Bahia Blanca, Argentina, October 1989-February 1990. Research Associate, Range and Wildlife Management Department, Texas Tech University, Lubbock, Texas, June 1971-August 1978.

The domains of experience and expertise are Rangeland ecology, fire ecology

The function and dynamics of corridors with respect to biodiversity and firemanagement: examples from forest and range landscapes of north america

Stephen C. Bunting, Professor, College of Natural Resources, University of Idaho, Moscow, ID, USA (telephone: 011.208.885.7103, email: sbunting@uidaho.edu)

Abstract

Corridors have been frequently proposed to maintain and increase connectivity in landscapes that have been fragmented by natural and human-caused changes. It is assumed that corridors enhance species movement between isolated patches thus increasing population stability and movement of genetic material within a population thereby increasing landscape biological diversity and viability of key species. Corridors have been proposed at many spatial scales on landscapes varying from 10s to 1000s of km². While corridors have been shown to function well in some instances, their effectiveness has not been extensively studied and they remain controversial for widespread application in many landscapes and for many species. Additional observations have been made with respect to the functionality of landscape corridors including: 1) no single corridor vegetation structure serves all species equally well and some landscape patterns may actually serve as a barrier to species movement, 2) the function of corridors is dynamic as landscapes change through time with disturbances and succession, 3) corridors may enhance the movement of invasive species, 4) the movement of wildfire within the landscape may be either enhanced or restricted by corridors, and 5) in some cases, landscape structure has been specifically modified to serve other purposes (e.g. fire breaks, flood zones, walkways, greenbelts). These areas may or may not function as effective biological corridors. It is clear that if corridor systems are developed, their intended purpose must be specifically identified, they must be carefully planned, and their effectiveness be monitored. The benefits to conservation of biological diversity and fire management and the costs of implementation and maintenance of corridor systems should be evaluated in comparison with other options.

JOÃO C. AZEVEDO

PhD and MSc in Forestry, Texas A&M Univ., USA; "Licenciatura" in Forest Eng., UTAD, Portugal. Professor at the Polytechnic Inst. of Bragança. PI of the Marginal Land Ecosystem Services research group and member of the Direction Board of CIMO Mountain Research Centre. Chair of APEP (IALE-Portugal).

Exploring the potential of holm oak corridors in fire hazard reduction planning

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Abstract

In north-eastern Portugal, holm oak (Quercus rotundifolia) woodlands have persisted in the landscape despite the occurrence of frequent fires. The hypothesis that these elements have a role in fire related processes has been proposed by foresters and scientists but only recently it has been addressed. In this research we analysed the current distribution of holm oak remnants in

the region in terms of features such as slope, aspect, distance to streams, and position in the slope. We also compared their distribution in relation to the distribution of areas burned in the last decades. We found that holm oak woodlands are often adjacent to burned areas suggesting a barrier effect of these vegetation structures. Also, the woodlands are often located towards the bottom of very steep slopes. Additionally, we tested the hypothesis that these patches arrest wildfires based on a modeling and simulation approach using field data collected in edges of holm oak woodlands. Computer simulated fire behaviour provided evidence that variations in intensity and velocity across holm oak edges make it possible for these woodlands to affect significantly fire spread. Founded on these results we explored the potential for holm oak corridors to be used in fire hazard reduction planning.

JOSÉ FERREIRA DE CASTRO

José Castro é Engenheiro Florestal (UTAD, 1988), MSc em Rural Planning in Function of Environment (CIHEAM, 1996) e PhD em Ciencias del Paisaje (UAH, 2005). Exerceu na área do Inventário Florestal ligado à indústria papeleira (CELPA, ex-ACEL 1985/88) e na área do Planeamento e Projecto Florestal no sector da madeira e derivados (SONAE, 1987/88). É Professor do Departamento de Ambiente e Recursos Naturais no Instituto Politécnico de Bragança (IPB) desde 1988, responsável pela leccionação das Unidades Curriculares de Planeamento e Gestão do espaço florestal às formações em Engenharia Florestal e Engenharia do Ambiente, assim como de Ecologia da Paisagem e Turismo e Recreio da Natureza. Leccionou já em licenciaturas, mestrados e doutoramentos de outras instituições portuguesas (Universidades de Trás-os-Montes e Alto Douro, de Lisboa, Técnica de Lisboa, de Évora, do Porto, dos Açores, e Instituto Politécnico de Viana do Castelo) e estrangeiras (Universidades de León - Nicarágua, de Alcalá de Henarés e Internacional de Andalucía - Espanha, de Varsóvia - Polónia). Liderou projectos nestas áreas, como o Plano de Desenvolvimento Florestal Sustentável do Município de Vinhais (1996/99) e o Plano de Ordenamento do Parque Natural de Montesinho (2004/07). É membro do Conselho Geral do IPB e do Colégio Nacional de Engenharia Florestal da Ordem dos Engenheiros (OE). Foi presidente da Associação Portuguesa de Ecologia da Paisagem e Coordenador do Colégio Regional da OE.