附: 专家简介

Prof. Derek Eamus is a plant physiologist, ecophysiologist and ecohydrologist who has worked mostly on tree species for the past 25 years. For the decade 1990-2000 he worked on savanna ecophysiology, through the CRC for Tropical Savannas and the Northern Territory University, with an emphasis on carbon and water relations of savanna trees.

Following his appointment as Professor of Environmental Sciences at UTS in 2000, he has undertaken projects that integrate measurements over several spatial scales, from leaf-scale processes (e.g photosynthesis and transpiration) and leaf-scale attributes (specific leaf area, foliar Nitrogen content), to



tree-scale processes and attributes (whole tree water-use; hydraulic architecture and xylem embolism), to stand –scale processes and attributes (canopy exchange of water and CO₂; leaf area index) and catchment scale processes (vegetation and groundwater interactions). Most recently he has started using remotely sensed information (for example MODIS LAI and ET) to examine larger-scale patterns and processes.

In the past 5 years Derek has undertaken ecophysiological and ecohydrological studies of two distinct groundwater dependent ecosystems; one in arid central Australia (The TI Tree Basin) and one in mesic NSW (the Kangaloon borefield). Derek leads the Terrestrial Ecohydrology Research Group within the School of Life Sciences, at UTS and has recently co-authored a textbook entitled "Vegetation Dynamics: A Synthesis of Plant Ecophysiology, Remote Sensing and Modelling", published by Cambridge University Press.



田汉勤博士,美国奥本大学索伦·玛莎·狄克逊讲席终身教授,国际气候与全球变化研究中心主任,全球碳计划 (GCP)和国际氮计划 (INI)联合项目首席,NASA 碳观测计划专家组成员,美国大学联盟海洋大气-气候理事会成员,曾任美国生态学会亚洲分会主席。长期致力于全球变化研究,在全球和区域各产人生物地球化学循环和生态水文过程方面取得系统性的创新成果,其自主开发的动态陆地生态系统模型(DLEM)已成为全球变化研究领域最为知名的模型之一。发表 SCI 论文 200 多篇,其中 5 篇发表在 Nature 和 Science 上,被引用率上万余次 (H-Index: 51)。承担主持了美国基金委等资助的 30 多项研究项目,其 研究成果成为 IPCC 及若干国家气候变化评估的重要科学依据。荣获首届叶笃正全球

变化科学奖,奥本大学杰出教授和创新成就奖,美国东南大学联盟学术成就奖。 入选国家千人计划专家,美国科学促进会会士 (AAAS Fellow)。 潘淑芬教授,美国奥本大学林业与野生生物学院地理信息系统与遥感实验室主任。长期致力于空间分析和遥感应用方面的研究,结合地理空间建模,卫星观测和大数据技术,评估和预测自然-人类系统耦合下的全球环境及其变化。 先后主持和协调 来自 NASA, USDA NOAA DOF 等不同机构的二十多项

USDA, NOAA, DOE 等不同机构的二十多项科研项目,从景观-流域-区域-全球等多尺度开展了全球变化背景下的各项研究,其研究区域跨越了亚洲,非洲及北美等许多地区,发



表科研论文 72 篇。潘教授目前正在主领奥本大学地理空间与环境信息学的新本科学位专业,致力于发展数字地球及可持续发展方面的国际合作。

刘德立博士,现为澳大利亚新南威尔士州初级产业部高级研究员(Principal Research Scientist),澳大利亚农学会会员,澳大利亚查尔斯特大学兼职教授。长期致力于作物生长发育和风险管理的农业系统模型、气候变化与波动的影响分析、作物模型计算机软件开发等研究,具有 26 年的作物模拟模型和决策支持系统软件研发的经验。1997 年进入新南威尔士州农业部 Bureau of Sugar Experimental Stations (BSES),独立开发了基于物理过程的甘蔗生长模拟模型(QCANE)。近期开发的主要软件包括自主产权的 GIS 气候变化适应策略分析系统(CCAST)、气候数据统计降尺度模型(WG-NWAI)和一个基于 Web 的决策支持系统(Cropmate)。在国际 SCI 期刊上发表研究论文 100 余篇,软件著作权 16 项。





杨希华博士,澳大利亚新南威尔士州环境遗产 署首席研究员(Principal Research Scientist),澳大利 亚土壤侵蚀与地面覆盖专家组成员,DustWatch 骨 干成员。有超过 25 年的地理信息科学与遥感研究经 历,长期致力于土壤侵蚀模拟及应用研究。

发表高质量SCI论文50多篇,承担和主持了澳大利亚研究理事会(ARC)及新南威尔士州等资助的20多项研究项目,其研究成果成为澳大利亚新南威尔士州土壤侵蚀模拟的重要科学依据,学术成果丰硕。

Dr. Daniel Ramp is a conservation biologist with an interest in landscape ecology, behavioural ecology, road ecology, and wildlife-human interactions. His interest is in science that informs conservation initiatives aimed at understanding, mitigating, and adapting to environmental change, driven particularly by human population growth and climate change. Spatial modelling of fine-scale processes that are then extrapolated to landscape scales is a recurring theme, as is research aimed at identifying processes of disturbance that promote persistence or extinction.

Daniel is the Director of the UTS Centre for Compassionate Conservation. At the core of his research lies an adoption of the principles of



compassionate conservation, a growing international movement that incorporates the wellbeing of individuals alongside other factors in decision making. With a long interest in marsupials from the family Macropodidae, Daniel is a co-founder of THINKK – the think tank for kangaroos, an academic forum that aims to foster greater understanding among Australians of kangaroos.

Daniel is Associate Professor in the School of Life Sciences in UTS. Previously he was a Senior Research Fellow in the Australian Wetlands and Rivers Centre at the University of New South Wales. He held an ARC Postdoctoral Fellowship at UNSW working on road ecology after completing his doctoral research on eastern grey kangaroos at the University of Melbourne.