

SENTINELS OF GLOBAL CHANGES: THE FRENCH PACIFIC ISLAND TERRITORIES AS EXCEPTIONAL SITES FOR RESEARCH AND MANAGEMENT OF INVASIVE ALIEN SPECIES

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Islands are often celebrated as laboratories of evolution because of their strong isolation, restricted areas, small populations and simplified communities, allowing the study of evolutionary patterns and processes (e.g. colonization, extinction, speciation and adaptive radiation). Though, in the context of the current biodiversity crisis under global change pressures, thousand of species have already been vanished from Pacific islands in the last five centuries, and many more endemic birds, skinks, insects, snails and plants are experiencing an on-going contemporary extinctions or decline because of introduced invasive species. The French Pacific island territories (French Polynesia, New Caledonia, and Wallis et Futuna), formed by hundred of tropical and subtropical islands (ranging from 1 to 17,000 km²) stretched over a distance of 7,000 km from West (Melanesia) to East (Polynesia), provide a unique experimental ground and excellent model system for both research and management of invasive alien species. Through few examples chosen among conducted programs (miconia tree, predatory rodents and cats, alien ants), we will introduced some relevant conservation issues that would be better addressed in such high biodiversity insular context, including the rise of novel or hybrid ecosystems, the new relationships between alien and native species (e.g. predation, competition, mutualism), the shift of species altitudinal ranges with climate change, and restoration initiatives to recover endangered species and habitats. We believe that there are strong opportunities to make the difference in conservation in these territories where “the house is still burning”...