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Did humid-temperate rivers in the Old and New Worlds respond differently to clearance of riparian vegetation and removal of woody debris?

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Abstract:

Clearance of riparian vegetation and removal of woody debris are perhaps the most pervasive of all forms of human disturbance to river courses. Geomorphic consequences of these impacts have varied markedly from river system to river system, a result of variations in catchment setting, climate, geology, sediment supply and evolutionary history. In this paper, geomorphic responses of rivers to rapid, systematic clearance of riparian vegetation in New World (colonial) societies are contrasted with changes associated with gradual, piecemeal, yet progressive clearance of riparian forests in northern Europe (the Old World). It is postulated that the dramatic nature of river metamorphosis experienced in landscapes such as southeastern Australia records the breaching of fundamental geomorphic thresholds in a different manner to that experienced in Old World landscapes.