WORKING PROJECT TITLE	Assessing the invasion history of *Eucalyptus camaldulensis* along river systems in the Western Cape
CORE TEAM MEMBER	Dave Richardson
ACADEMIC LEVEL OF THE PROJECT	BSc Hons
PROJECT BACKGROUND	For many invasive alien species knowledge required to implement efficient management strategies is scarce. However, before effective and appropriate control approaches can be explored, precise information on conflict-generating aspects as well as the invasion history and ecology of the target invasive alien species are required. South Africa has major problems with invasive alien trees, and eucalypts are one of the most important taxa. Specifically, *Eucalyptus camaldulensis* is considered to be the most widespread and most aggressive invasive eucalypt in the country. The species has many uses, but also causes major impacts. However, little is known about key aspects of its ecology in South Africa, including its invasion history along major river systems, invasion processes and dynamics, and people's perceptions of its positive and negative effects on ecosystems. Research is needed to determine when the species began invading along different river systems in the Western Cape and what role the implementation of dams played in this aspect. This project will survey historical aerial photographs and imagery from the programme of the Department of Rural Development and Land Reform (http://www.ngi.gov.za) to compile and interpret available data. Strong analytical skills and some experience with geographical information systems would be of advantage for this project.

	The data collected during this project will be part of an overarching publication in an international, peer-reviewed journal and the candidate will be considered as a co-author. This project is of high relevance to refine recommendations for a national management strategy for this important invasive tree species.
FURTHER READING	Allsopp, M. & Cherry, M. (2004) Assessment of the economic impact on the bee and agricultural industries in the Western Cape of the clearing of certain *Eucalyptus* species. Available via Plant Protection Research Institute, Agricultural Research Council of South Africa. http://www.dwaf.gov.za/wfw/docs/Allsopp&Cherry,2004.pdf Forsyth, G.G., Richardson, D.M., Brown, P.J. & van Wilgen, B.W. (2004) A rapid assessment of the invasive status of *Eucalyptus* species in two South African provinces. *South African Journal of Science* 100: 75-77. Hirsch, H., Allsopp, M., Canavan, S., Cheek, M., Geerts, S., Geldenhuys, C.J., Harding, G., Hurley, B.P., Jones, W., Keet, J.-H., Klein, H., Ruwanza, S., van Wilgen, B.W., Wingfield, M.J. & Richardson, D.M. (2019) *Eucalyptus camaldulensis* in South Africa – past, present, future. *Transactions of the Royal Society of South Africa* (in press)
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