

Generating insight to underpin improved weed management and consequent protection of Aboriginal sites on the Burrup Peninsula

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Summary The Burrup Peninsula, or Murujuga, is located in the Pilbara region, 1500 km north of Perth. This National Heritage listed area has a unique geology and topography of rockpile and block slope terrain surrounded by a marine environment. It supports a mix of arid inland, coastal and remnant Kimberley plant species, over 70 of which are utilized by Aboriginal people. The diverse terrestrial and marine life is of high cultural significance for Aboriginal culture, as evidenced by the globally significant rock-art galleries occurring there. A causeway, built to support industrial development some 53 years ago linked the then Burrup Island to the mainland. Subsequent visitation and development has contributed to the introduction of a diversity of weeds, one of the most threatening being the neotropical vine, stinking passionflower (*Passiflora foetida* L.). This weed is rapidly invading the rock terrain and coastal vegeta-

tion, forming dense mats that smother native flora and rock art. The invasion and subsequent control of this species is impacting upon the Aboriginal heritage and natural ecosystem values of the Burrup. Here we document ongoing efforts across multiple collaborations to improve weed management on the Burrup Peninsula. We discuss the results of a six month phenology monitoring study and the implications of those results to date. We will explore possible impacts and also control solutions. We show that this insight may help to make tangible improvements to the on-ground management of weeds to improve outcomes for biodiversity conservation, as well as Aboriginal cultural and historical values across this significant landscape.

Keywords Burrup Peninsula, geology, native vegetation, Aboriginal heritage, plant use, rock art, invasive weeds, *Passiflora foetida*, ecosystem impacts.