



The project will investigate the effectiveness of spraying to control gamba grass, photo NERP Northern Hub.



**Northern Australia  
Environmental  
Resources  
Hub**

National Environmental Science Programme

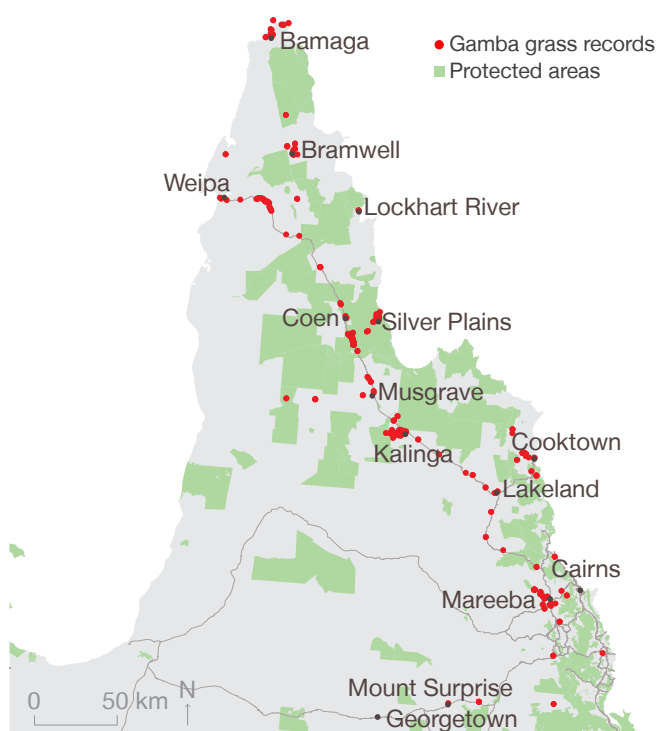
# Improving gamba grass control

Start-up factsheet

## Gamba grass has high economic, social and environmental costs

Gamba grass was planted across northern Australia as a pasture species in the mid-1980s and has spread rapidly. In north Queensland, gamba infestations are found near Bamaga, Coen, Weipa, Cooktown and Mareeba. The grass

is also widespread along Cape York roadsides and in isolated patches in the Gulf region. Despite being declared as a Weed of National Significance in 2012, and listed as a key threatening process under the Environmental Protection and Biodiversity Conservation (EPBC) Act, it continues to spread, increasing fire risks and significantly disrupting biodiversity and ecosystem services. Environmental, social and economic costs will increase unless control is improved.



Gamba grass can spread quickly, threatening assests such as Protected Areas. Gamba data from [ALA 2018](#). Protected area data from [CAPAD 2016](#).

## Overview

This project will:

- consolidate knowledge about the distribution and spread of gamba grass in north Queensland, the effectiveness of controlling gamba in natural areas, and how gamba biology affects control success
- test gamba control methods in the field
- provide practical best-practice solutions for controlling gamba incursions in natural areas
- provide guidelines to scale up control methods to manage larger gamba infestations
- inform the management of other high biomass grassy weeds across northern Australia to reduce their environmental, social and economic costs
- address priorities in the EPBC's Threat Abatement Plan for high biomass grassy weeds and inform savanna carbon accounting.



# Field trials and new guidelines will help control gamba grass

The lack of herbicides registered for use in natural areas is a major barrier to managing gamba grass and other high biomass grassy weed species in the north, especially where infestations cover large areas. Few selective herbicides are available with on-label registration for use in these non-crop areas and therefore current control relies heavily on 'minor use' permits. Non-selective herbicides such as glyphosate have off-target effects on native vegetation so are inappropriate for use in natural areas at large scales.

This project will review herbicide and integrated management approaches to controlling gamba and trial various control methods in natural ecosystems to inform best practice and herbicide registration processes. The trials will assess off-target herbicide effects and recovery following treatment and biomass removal. The project will develop best-practice management guidelines to



Gamba grass is a high biomass grassy weed, photo NERP Northern Hub.

control gamba incursions and infestations in natural areas, including control methods for selective herbicide application. The guidelines will assist land managers to better manage gamba, and project outcomes will be relevant to the entire gamba grass range across the NT, WA and Qld.

## Project activities

- Consolidate knowledge, identify research gaps and plan field trials through desktop research and collaborative workshops
- Run field trials to test the efficacy of several herbicides and application methods to control gamba grass outlier incursions and core infestations in natural areas
- Collect and collate data about the distribution and potential spread of gamba grass in north Queensland to inform containment and buffer management strategies
- Develop best-practice management guidelines for gamba grass incursions and infestations based on trial results.

## Anticipated outputs

- A review of the effectiveness of current management approaches for gamba grass
- Guidelines on best-practice management of small outlier gamba grass incursions, new occurrences and large gamba grass infestations
- Scientific papers and datasets
- Communication products such as factsheets and summary recommendations.

## Who is involved?

This project is led by [Dr Helen Murphy](#) from CSIRO, with field monitoring by CSIRO's Matt Bradford and Andrew Ford.

Dr Murphy will be assisted by [Queensland Government](#) staff as well as researchers from [Charles Darwin University](#) and [The University of Western Australia](#).

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For further information and project updates, visit the project webpage at [www.nespnorthern.edu.au/projects/nesp/cape-york-weeds](http://www.nespnorthern.edu.au/projects/nesp/cape-york-weeds)



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