

## BOOK



### DROUGHT COUNTRY : THE DRY TIMES THAT HAVE SHAPED AUSTRALIA

Godfree RC (February 3, 2025) CSIRO Publishing, 304 pages  
<https://www.publish.csiro.au/book/7989>

Weaving historical accounts with scientific theory, *Drought Country* is an exploration of the most brutal Australian droughts of the past three centuries, taking you on a journey through topics as varied as climate mythmaking, colonialism, smallpox, economic depression, a 'dust bowl', heatwaves, ecosystem collapse, and the coming of the second 'age of coal'. Written for a general audience, the book contains images of drought impacts on human societies and landscapes collected from a broad range of historical and contemporary sources, and maps of Australia's greatest droughts from the mid-1700s until present.



Cover article - *Methods in Ecology and Evolution*

## SELECTED SCIENTIFIC PUBLICATIONS



### Rapid data collection, technology & software development

RAPID ECOLOGICAL DATA COLLECTION FROM 360-DEGREE IMAGERY USING VISUALISATION AND IMMERSIVE SAMPLING IN THE R PANNOTATOR PACKAGE

Godfree RC, Knerr N (2025) *Methods in Ecology and Evolution*

Knerr N, Godfree RC (2024) pannotator: Visualisation and Annotation of 360 Degree Imagery. The Comprehensive R Archive Network (CRAN);  
 DOI: [10.32614/CRAN.package.pannotator](https://doi.org/10.32614/CRAN.package.pannotator)

[https://nunzioknerr.github.io/pannotator\\_website/](https://nunzioknerr.github.io/pannotator_website/)



### Drought, fire, biogeography, impact assessment

IMPLICATIONS OF THE 2019–2020 MEGAFIRES FOR THE BIOGEOGRAPHY AND CONSERVATION OF AUSTRALIAN VEGETATION

Godfree RC, Knerr N, Encinas-Viso F et al. (2021) *Nature Communications*

HISTORICAL RECONSTRUCTION UNVEILS THE RISK OF MASS MORTALITY AND ECOSYSTEM COLLAPSE DURING PANCONTINENTAL MEGADROUGHT

Godfree RC, Knerr N, Godfree D et al. (2019) *PNAS*

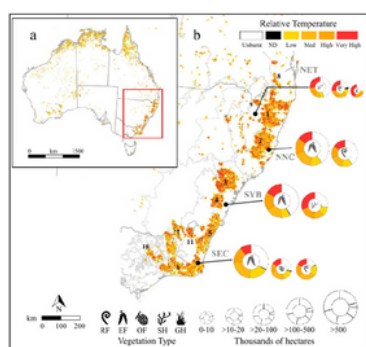
SYNCHRONOUS BOOM–BUST CYCLES IN CENTRAL AUSTRALIAN RODENTS AND MARSUPIALS IN RESPONSE TO RAINFALL AND FIRE  
 Bennison K, Dickman CR & Godfree R (2018) *Journal of Mammalogy*

EMPIRICAL EVIDENCE OF FIXED AND HOMESTATIC PATTERNS OF POLYPLOID ADVANTAGE IN A KEYSTONE GRASS EXPOSED TO DROUGHT AND HEAT STRESS

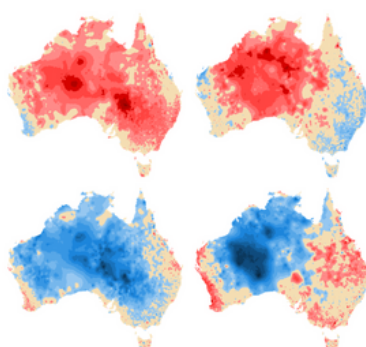
Godfree RC et al. (2017) *Royal Society Open Science*

NONINDIGENOUS PLANT ADVANTAGE IN NATIVE AND EXOTIC AUSTRALIAN GRASSES UNDER EXPERIMENTAL DROUGHT, WARMING, AND ATMOSPHERIC CO<sub>2</sub> ENRICHMENT

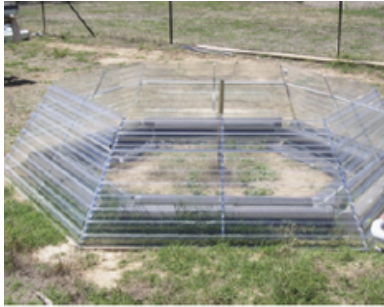
Godfree RC et al. (2013) *Biology*



Spatial modelling bushfire impacts



Climate mapping



Original design of system for CO<sub>2</sub> enrichment and drought simulation



Network analysis of historical drought impacts



Water management research in Barmah Forest

## SELECTED SCIENTIFIC PUBLICATIONS



### Risk assessment

POLYPLOIDY AFFECTS THE SEED, DORMANCY AND SEEDLING CHARACTERISTICS OF A PERENNIAL GRASS, CONFERRING AN ADVANTAGE IN STRESSFUL CLIMATES

Stevens A, Nicotra A, Godfree R & Guja L (2020) *Plant Biology*

WHY NON-NATIVE GRASSES POSE A CRITICAL EMERGING THREAT TO BIODIVERSITY CONSERVATION, HABITAT CONNECTIVITY AND AGRICULTURAL PRODUCTION IN MULTIFUNCTIONAL RURAL LANDSCAPES

Godfree RC, Firn J et al. (2017) *Landscape Ecology*

ECOLOGICAL RISK ASSESSMENT OF TRANSGENIC PASTURE PLANTS: A COMMUNITY GRADIENT MODELLING APPROACH

Godfree RC et al. (2004) *Ecology Letters*



### Environmental health and water management

ENVIRONMENTAL WATER ALLOCATIONS ARE INSUFFICIENT TO CONTROL AND INVASIVE WETLAND PLANT: EVIDENCE FROM A HIGHLY REGULATED FLOODPLAIN WETLAND

Vivian L... and Godfree RC (2014) *Journal of Applied Ecology*

WETLAND PLANT GROWTH UNDER CONTRASTING WATER REGIMES ASSOCIATED WITH RIVER REGULATION AND DROUGHT: IMPLICATIONS FOR ENVIRONMENTAL WATER MANAGEMENT

Vivian LM, Godfree RC et al. (2014) *Plant Ecology*

RELATIONSHIPS BETWEEN SEED BANK COMPOSITION AND AN INVASIVE PLANT IN A FLOODPLAIN WETLAND OF THE MURRAY-DARLING BASIN

Vivian L & Godfree RC (2020) *Australian Journal of Botany*

RELATIONSHIPS BETWEEN ARCEUTHOBIMUM AMERICANUM AND THE STRUCTURE OF PINUS CONTORTA VAR. MURRAYANA STANDS IN CENTRAL OREGON.

Godfree RC et al. (2003) *Plant Ecology*

THE EFFECTS OF DWARF MISTLETOE, WITCHES' BROOMS, STAND STRUCTURE, AND SITE CHARACTERISTICS ON THE CROWN ARCHITECTURE OF LODGEPOLE PINE IN OREGON

Godfree RC et al. (2002) *Canadian Journal of Forest Research*



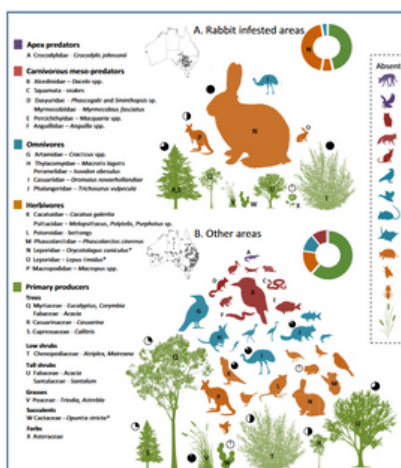
### Ecology and evolution

AWN LENGTH VARIATION IN AUSTRALIA'S MOST WIDESPREAD GRASS, THEMEDA TRIANDRA, ACROSS ITS DISTRIBUTION

Cavanagh AM, Godfree RC & Morgan J (2024) *Australian Journal of Botany*

SURFACING BEHAVIOUR AND ECOLOGY OF THE MARSUPIAL MOLE (NOTORYCTES TYPHLOPS) AT ULURU-KATA TJUTA NATIONAL PARK

Bennison K, ... Godfree R et al. (2014) *Australian Mammalogy*



Trophic structure of drought impacts