SHaRED Submission Summary

21 February 2022

Overview

SHaRED Submission Description

Submission Name	Mating system and early viability resistance to habitat fragmentation in a bird-pollinated eucalypt
Dataset Citation Name	Mating system and early viability resistance to habitat fragmentation in a bird-pollinated eucalypt
Dataset Alternative Name	Eucalyptus incrassata
Dataset Summary	Data were used to demonstrate fitness impacts caused by fragmentation context. Showed extensive pollination can protect tree fitness from fragmentation. Grew open-pollinated progeny arrays of the bird-pollinated, mallee tree Eucalyptus incrassata in a randomised block design in a common garden experiment at Monarto, South Australia. Progeny arrays were collected from parental trees in either continuous forest or highly fragmented contexts. Data are therefore experimental, for hypothesis testing Data are not descriptive ecological, not plot based and not time-series. Data are not a representative sample of Eucalyptus incrassata and not representative of mallee eucalypts.
Dataset Version	1
Submitting Username	martin.breed
SHaRED Submission ID	15592
Submission Publication Date	2014-05-19 08:09:11.15
Submission DOI	http://doi.org/10.4227/05/5379BC28E8ED2
Usage Guide	Possibly useful for meta-analysis or review of effects of habitat fragmentation on plants (e.g. pollination, mating system, genetic diversity etc).
Number of Study Locations	1
Repeat Visits	N

Dataset Author

Author Given Name(s)	MF
Author Surname or Organisation	Breed
Affiliation	
Author Given Name(s)	AJ
Author Surname or Organisation	Lowe
Affiliation	

Project Metadata

Project Name	Restoration Genetics of Murray Mallee and Neotropical Forests
Project Abstract	Completed PhD by Dr Martin Breed at the University of Adelaide, supervised by Prof Andrew Lowe, Dr Mike Gardner and Dr Kym Ottewell. Main goals of PhD

	1. Examine and quantify the impact of fragmentation and tree density on mating patterns, and how this may vary with pollinators of differing mobility 2. Determine the theoretical expectations and perform empirical tests of mating pattern-fitness relationships in trees 3. Explore the plant genetic resource management implications that arise from the observations in aims 1 and 2

Scope

Dataset Temporal Metadata

First Visit Date	01/11/2009
Last Visit Date	01/01/2012

Dataset Spatial / Location Metadata

Spatial Scale	Landscape
Study Area Description	1 study area in the Murray-Darling Basin mallee near Monarto, South Australia.
Study Area Geometry	{ "questionId" : "5.3.1", "srs":"EPSG:4283", "features" : [{"id":"PNT_4","geometry":"POINT(139.1358643 -
iso19139 DCMI Box	northlimit=-35.15445; southlimit=-35.15445; eastlimit=139.13586; westlimit=139.13586; projection=GDA94
IBRA Region	Kanmantoo
	Murray Darling Depression

Subject Metadata

ANZSRC FOR Codes	501
	602
	502
	603
	604
ANZSRC SEO Codes	Ecosystem Assessment And Management (9605)
	Flora, Fauna And Biodiversity (9608)
	Remnant Vegetation And Protected Conservation Areas (9613)
Ecological Theme	Evolutionary Ecology
	Landscape Ecology
	Molecular Ecology
	Pollination
	Restoration Ecology
Threats and Pressures	Climate Change
	Habitat Fragmentation
	Natural Resource Use
Conservation Management Themes	Habitat Restoration
	Landscape-Scale Management
Environmental Features	None

Species Metadata	
Flora Species Taxon Name	Eucalyptus incrassata
Flora Group	Flowering Trees
Curation Status	
Other Curation Activities	Peer reviewed
Latest Update	28/11/2012
Project Status	
Project Status	Completed

Methods

Sampling and Methods	
Sampling Design	Opportunistic Sampling
	Other
	Randomised Complete Block
	Common garden experiment
Measurements	Derived - Categorical Data
	Raw Observations - Binary Data
	Raw Observations - Continuous Data
	Other
Measured Attributes	Other
	Microsatellite locus allele
	Location
	Presence
Method Name	Opportunistic Sampling of progeny arrays
Method Abstract	Parental trees from fragmented context were located opportunistically in the landscape around Monarto, SA (e.g. road verge) Parental trees from continuous context were located opportunistically in the continuous vegetation around Monarto, SA (e.g. conservation parks) Details of seed collection are outlined in methods section of paper
Method Drift Description	
Method Name	Randomised complete block design common garden experiment
Method Abstract	Seedlings were planted in a Randomised complete block design common garden experiment at Monarto, SA All procedures prior to planting are outlined in methods section of paper (e.g. rearing and germination conditions) The height of each plant was measured with a tape measure after 15 months of growth. Also at this time, disease status (presence-absence of fungal disease) was observed.
Method Drift Description	
Associated Materials	

Associated Material Description	Breed MF, Ottewell KM, Gardner MG, Marklund MHK, Stead MG, Harris JBC, Lowe AJ. 2012. Mating system and early viability resistance to habitat fragmentation in a bird-pollinated eucalypt. Heredity. doi: 10.1038/hdy.2012.72
Associated Material Type	Published Paper
Suggested Associated Material Type	
Associated Material Identifier	10.1038/hdy.2012.72
Associated Material Identifier Type	DOI
Associated Material Description	Dryad submission of same data
Associated Material Type	Other
Suggested Associated Material Type	Dryad submission
Associated Material Identifier	10.5061/dryad.4k660
Associated Material Identifier Type	DOI

Other Related Artefacts

Other Artefacts	Plant Material
	Other
	Genetic Material
	DNA

Conditions Of Use

Licensing and Acknowledgement

License Type	CC-BY 3.0 Australia
Acknowledgement	Work was supported by the Australian Research Council Linkage project (LP110200805) and the South Australian Premiers Science and Research Fund awarded to AJL, funding from the Native Vegetation Council of South Australia (grant 09/10/27), Nature Foundation SA Inc., Australian Geographic Society, Biological Society of South Australia, Field Naturalist Society of South Australia, Wildlife Preservation Society of Australia and National Climate Change Adaptation Research Facility Travel Grants awarded to MFB. Thanks to Dr Barbara Hall for assistance identifying the fungal disease, Mt Lofty Botanic Gardens staff for assistance in rearing the seedlings and Rob Murphy and the many volunteers for assistance with the common garden experiment.
Citation	Breed, MF, Lowe, AJ (2014). Mating system and early viability resistance to habitat fragmentation in a bird-pollinated eucalypt, Version 1. http://doi.org/10.4227/05/5379BC28E8ED2. ÆKOS Data Portal, rights owned by University of Adelaide. Accessed 21 Feb 2022.
Rights Statement	(C)2014 University of Adelaide. Rights owned by University of Adelaide. Rights licensed subject to CC-BY 3.0 Australia.
Access Statement	These data can be freely downloaded via the Advanced Ecological Knowledge and Observation System (ÆKOS) Data Portal and used subject to the CC-BY 3.0 Australia. Attribution and citation is required as described under License and Citation. We ask you to send citations of publications arising from work that use these data to TERN Eco-informatics at datacited@aekos.org.au and citation and copies of publications to martin.breed@adelaide.edu.au

Custodian Organisation

Legal Dataset Custodian Organisation	University of Adelaide
Legal Dataset Custodian Organisation Type	University

Dataset Contact	
Dataset Contact Role	ARC Postdoctoral Research Fellow
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Submission Files

Submission Files	
File Name	Breed_Heredity_online.pdf
File Size	531.9 kB
File Description	Published paper of data Breed MF, Ottewell KM, Gardner MG, Marklund MHK, Stead MG, Harris JBC, Lowe AJ. 2012. Mating system and early viability resistance to habitat fragmentation in a bird-pollinated eucalypt. Heredity.
SHaRED File Type	RELATED_DOC
File Format	pdf
File Format Version	1
SHaRED File ID	15717
File Name	martin.xlsx
File Size	115.5 kB
File Description	MS Excel file with 3 data tabs and 1 readme tab
SHaRED File Type	DATA
File Format	excel
File Format Version	1
SHaRED File ID	15716

SHaRED (Submission Harmonisation and Retrieval of Ecological Data) is an online data submission service for ecologists to upload their research datasets and enable them to be published via ÆKOS data portal. ÆKOS is an online ecological data service providing free and open access to rich, ecological data collected using plot-based research methods.

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