



COMPADRE

Plant Matrix Database

 @compadreDB



COMADRE

Animal Matrix Database

 @comadreDB

The COMPADRE & COMADRE team



Archer



Buckley



Caswell



Che-Castaldo



Hodgson



Scheuerlein



Vaupel

“To say that humanity has been slow to explore the home planet is an understatement”

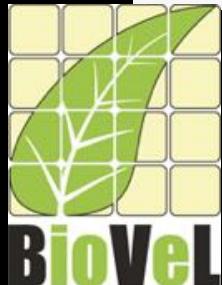
E.O. Wilson





Nutrient Network

DATLife



The Plant List

i3
ispersal Diaspore Database



TRY

eOL
Encyclopedia of Life

NCBI Resources
GenBank



BIOEN

USDA Agricultural Research Service
ARS National Agricultural Library

THE ERA OF BIG DATA, BIG SCIENCE is here!

Big(ish?) demography

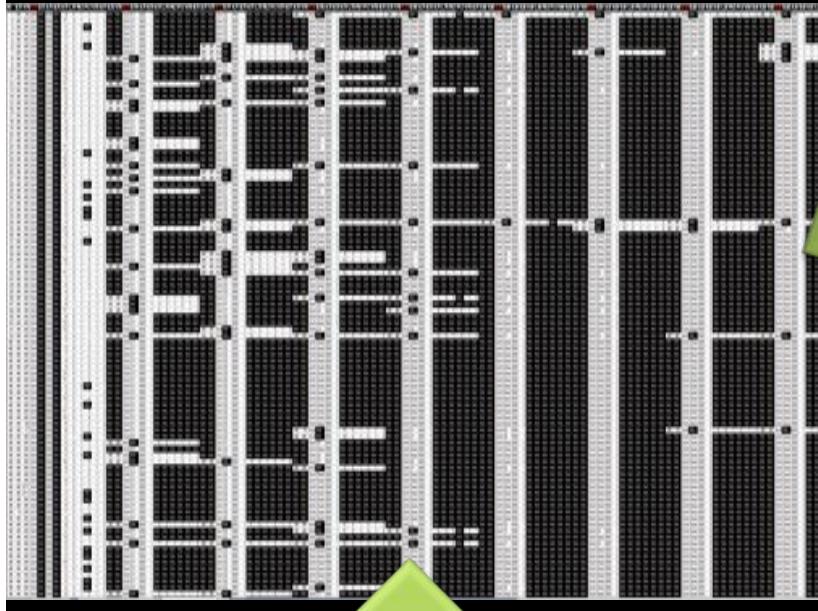


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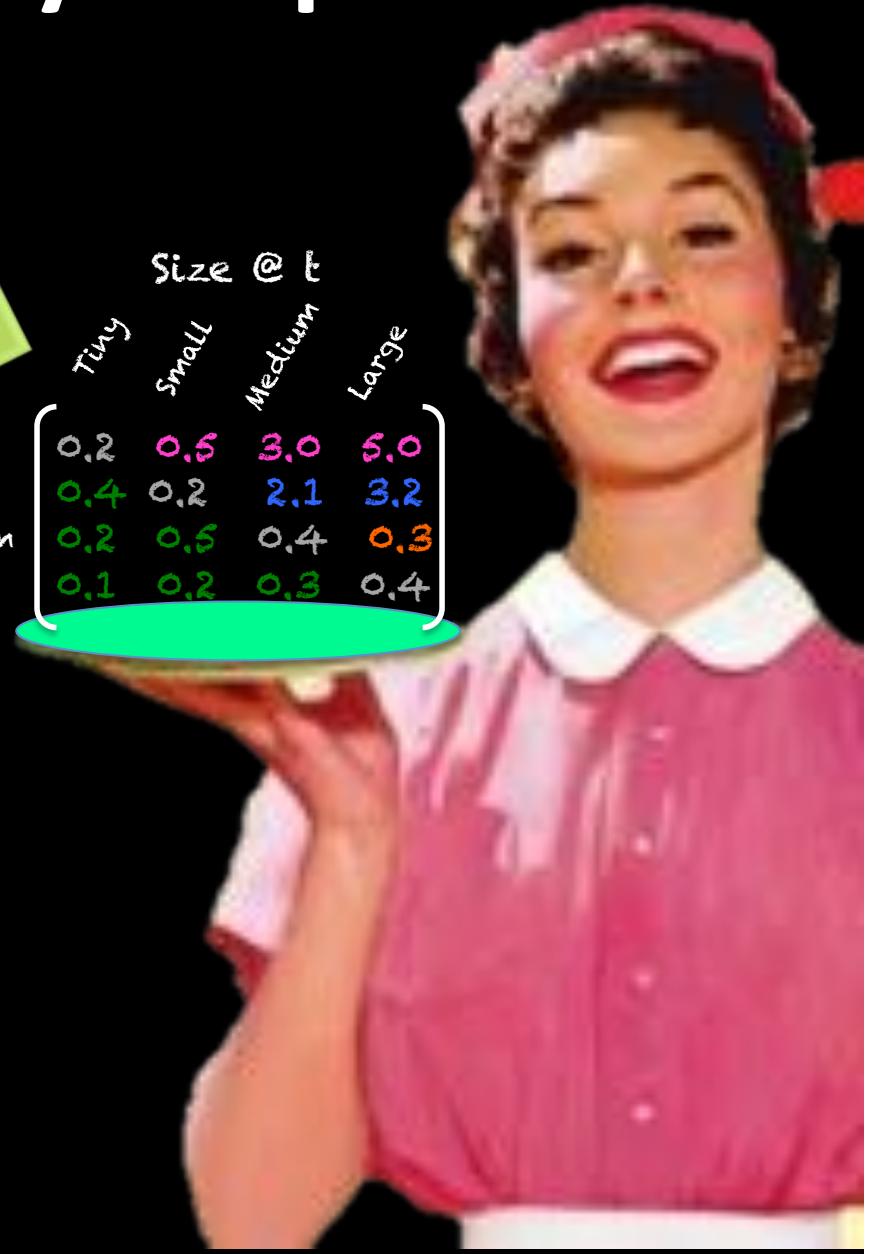
COMADRE
Animal Matrix Database

From the field to your plate!

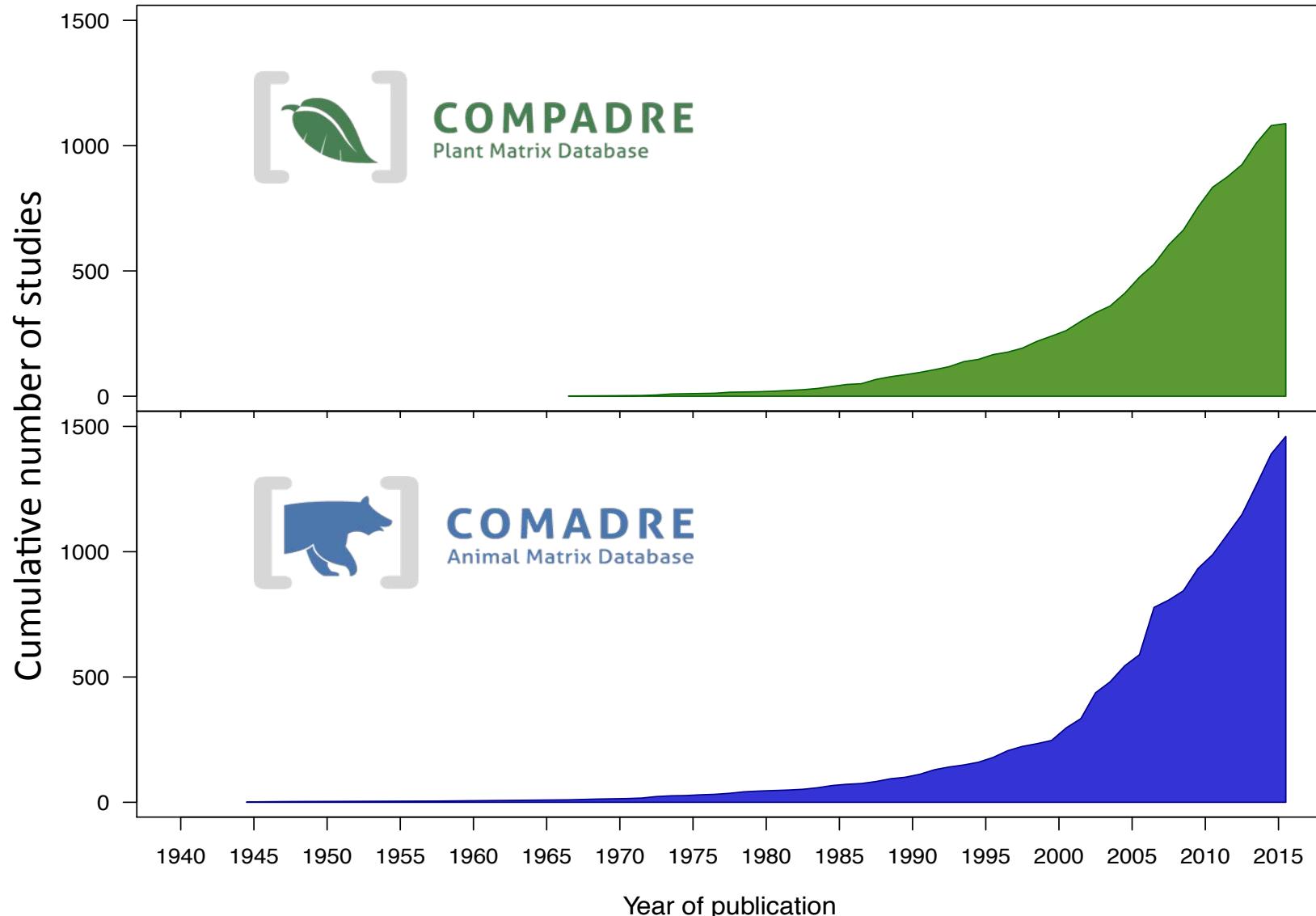


Size @ $t+1$

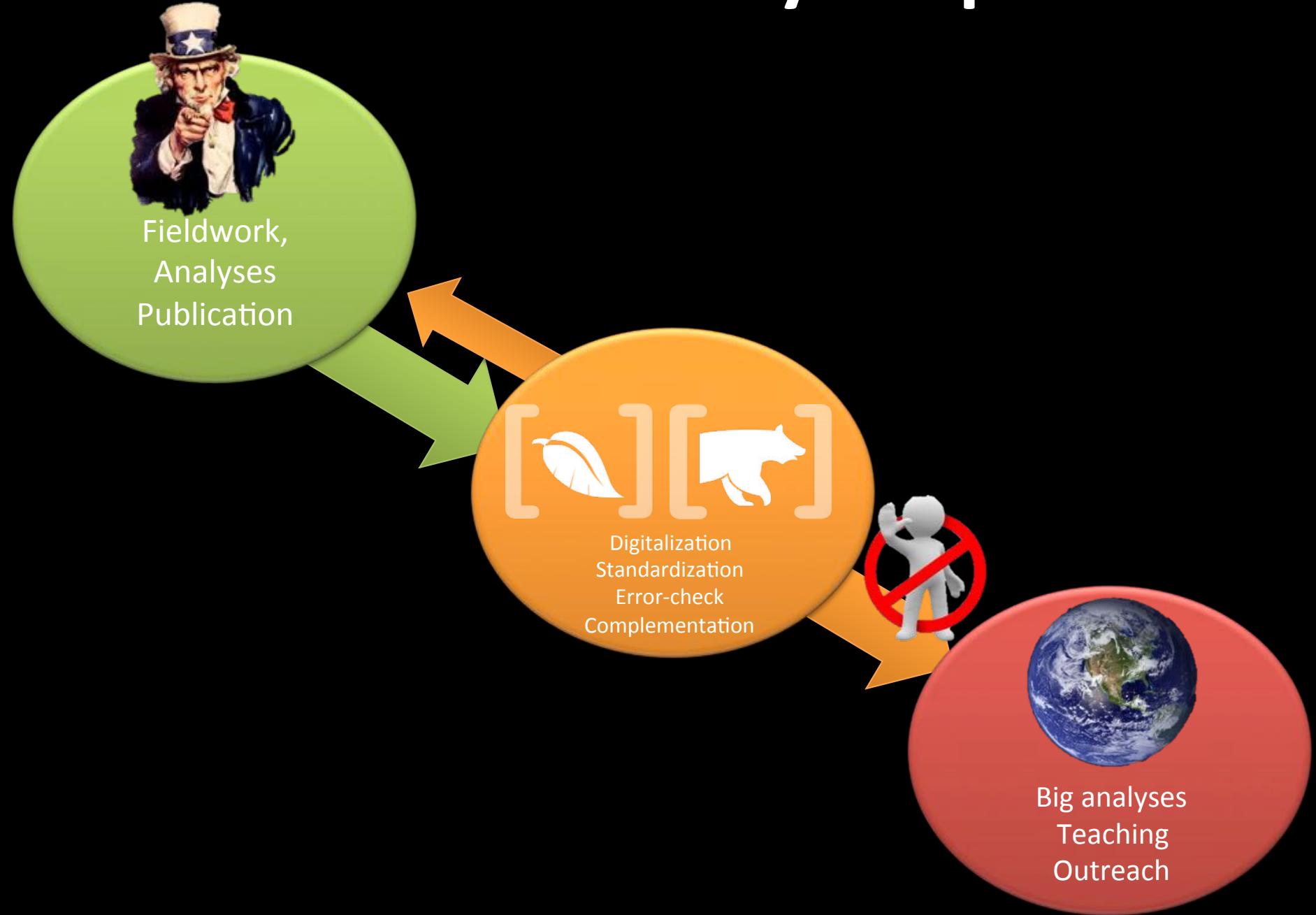
	Tiny	Small	Medium	Large
Tiny	0.2	0.5	3.0	5.0
Small	0.4	0.2	2.1	3.2
Medium	0.2	0.5	0.4	0.3
Large	0.1	0.2	0.3	0.4



From the field to your plate!



From the field to your plate!



COMPADRE ONLINE SEPT 2014

COMADRE ONLINE OCT 2015

COMADRE: a global database of animal demography

A manuscript in consideration for *Journal of Animal Ecology*

Roberto Salguero-Gómez^{1,2,§}, Owen R. Jones^{3,4,§}, C. Ruth Archer^{1,5}, Christoph Bein¹, Hendrik de Buhr¹, Claudia Farack¹, Fränce Gottschalk¹, Alexander Hartmann¹, Anne Henning¹, Gabriel Hoppe¹, Gesa Römer¹, Tara Ruoff⁶, Veronika Sommer¹, Julia Wille¹, Jakob Voigt¹, Stefan Zeh¹, Dirk Vieregg¹, Yvonne M. Buckley^{2,7}, Judy Che-Castaldo⁸, David Hodgson⁹, Alexander Scheuerlein¹, Hal Caswell^{10,11}, & James W. Vaupel^{1,3,12}



COMADRE
Animal Matrix Database

100 YEARS Journal of Ecology

Journal of Ecology

doi: 10.1111/1365-2745.12334

FORUM

The COMPADRE Plant Matrix Database: an open online repository for plant demography

Roberto Salguero-Gómez^{1,2,3*}, Owen R. Jones^{4,5}, C. Ruth Archer⁶, Yvonne M. Buckley^{2,3}, Judy Che-Castaldo⁷, Hal Caswell^{1,9}, David Hodgson¹⁰, Alexander Scheuerlein¹, Dalia A. Conde^{4,5,11}, Erik Brinks¹, Hendrik de Buhr¹, Claudia Farack¹, Fränce Gottschalk¹, Alexander Hartmann¹, Anne Henning¹, Gabriel Hoppe¹, Gesa Römer¹, Jens Runge¹, Tara Ruoff¹², Julia Wille¹, Stefan Zeh¹, Raziel Davison⁶, Dirk Vieregg¹, Annette Baudisch⁶, Res Altweig¹³, Fernando Colchero^{4,14}, Ming Dong¹⁵, Hans de Kroon¹⁶, Jean-Dominique Lebreton¹⁷, Charlotte J. E. Metcalf^{18,19}, Maile M. Neel¹², Ingrid M. Parker²⁰, Takenori Takada²¹, Teresa Valverde²², Luis A. Vélez-Espino²², Glenda M. Wardle²⁴, Miguel Franco^{25†} and James W. Vaupel^{1,4,26†}



COMPADRE
Plant Matrix Database

YOU ARE HERE

www.compadre-db.org



Home Data News About Us Help



Welcome to the COMPADRE Plant Matrix Database and COMADRE Animal Matrix Database site! COMPADRE and COMADRE contain matrix population models of hundreds of plant and animal species.



Both COMPADRE and COMADRE are open-access database. Although login is not required, we suggest that users [register](#) to obtain notification of data updates, useful code, and important news. By using these databases, users are agreeing to the COMPADRE and COMADRE [user agreement](#).

www.compadre-db.org



Home Data News About Us Help



Access the data here



What's in store?

COMPADRE and COMADRE contain thousands of plant and animal species with tens of thousands of matrix population models and ancillary information. These databases are under continuous development, and more data are released periodically. We maintain a list of species/studies "in store" that we have not yet released for COMPADRE and COMADRE. If you know of some species/study not included herein, please contact us with the source [here](#).

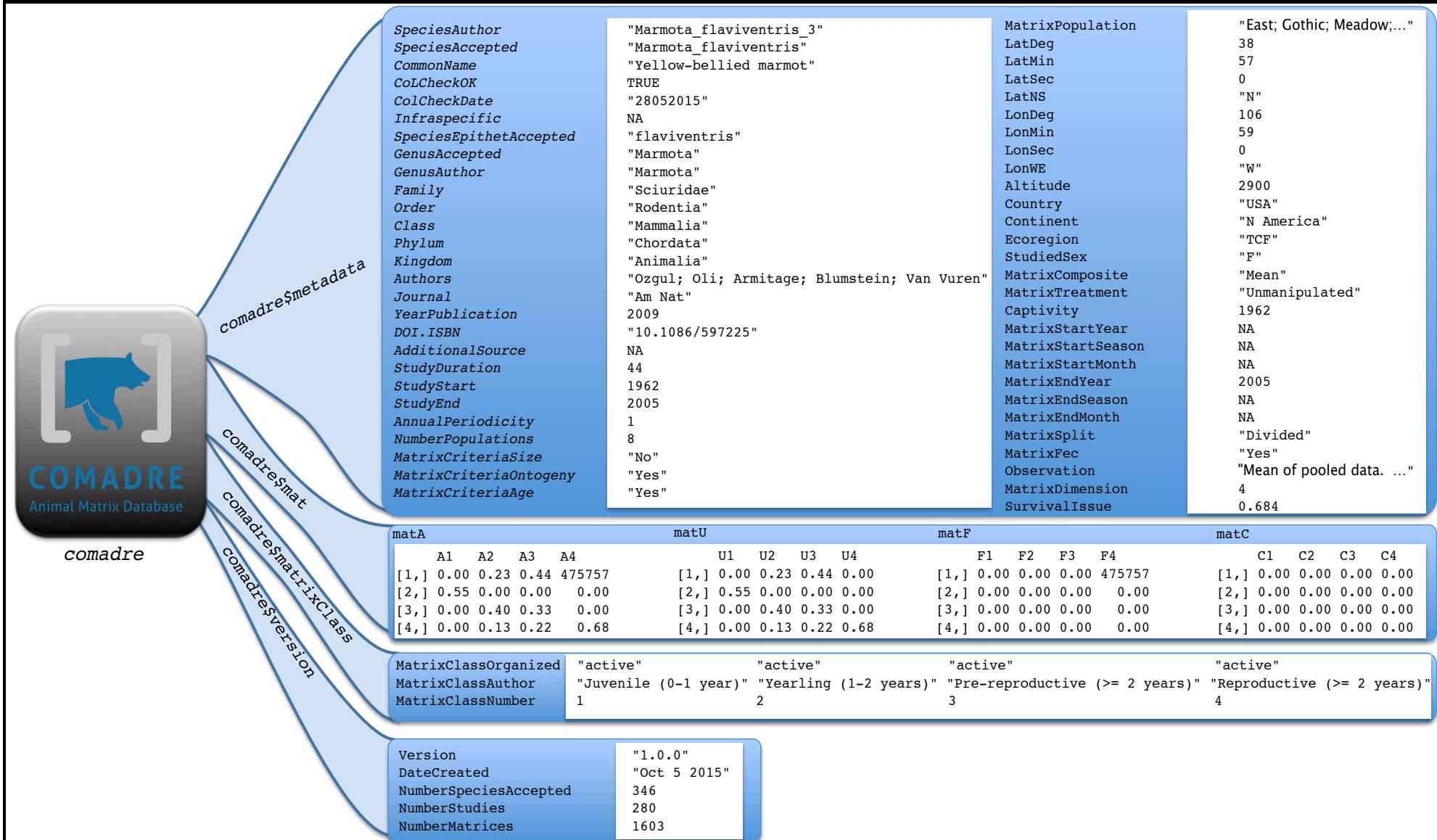
How are the data collected and error-checked

COMPADRE and COMADRE data are obtained from (mostly) published literature. We aim to be as transparent as possible about how this is done. You can find our data digitization protocol [here](#).

What is in COMPADRE? What is in COMADRE?

COMPADRE 3.2.1: 637 species, 6242 matrices

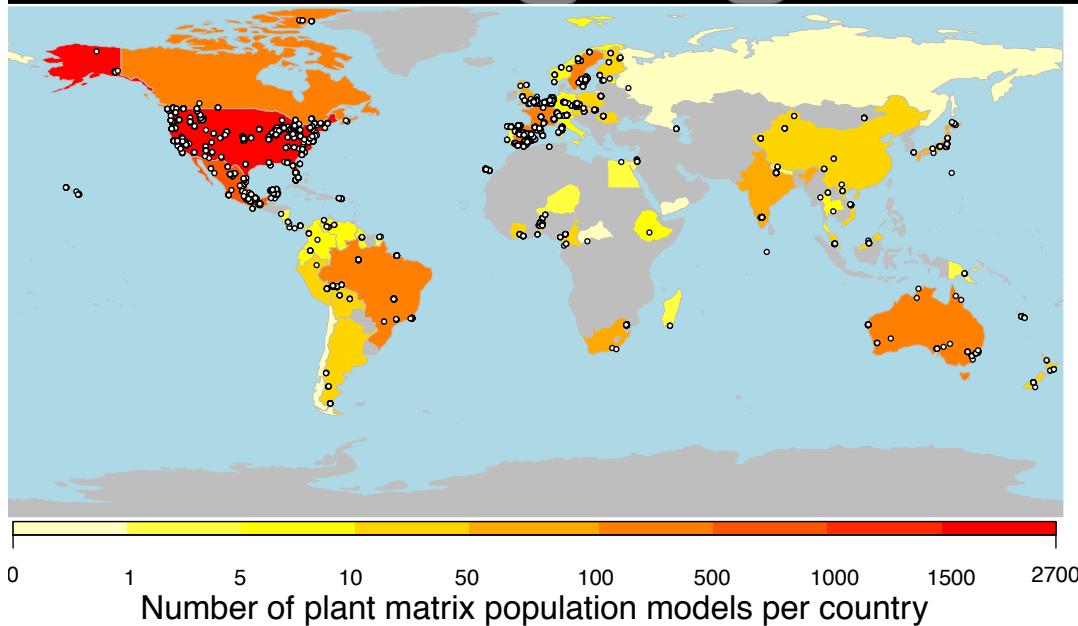
COMADRE 1.0.0: 345 species, 1625 matrices



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Plant Matrix Database

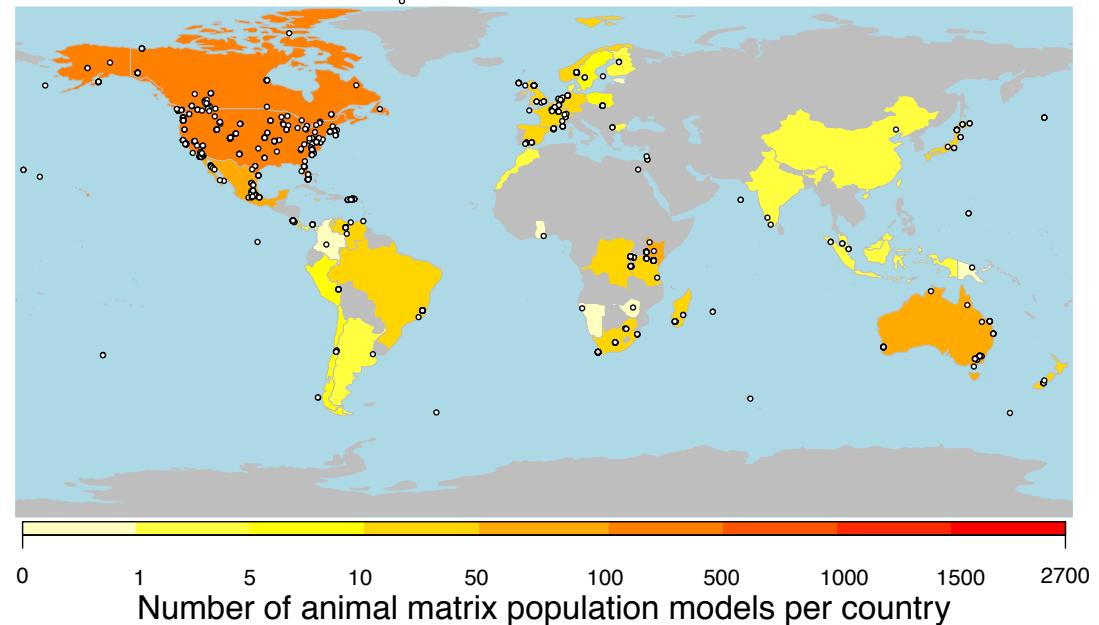


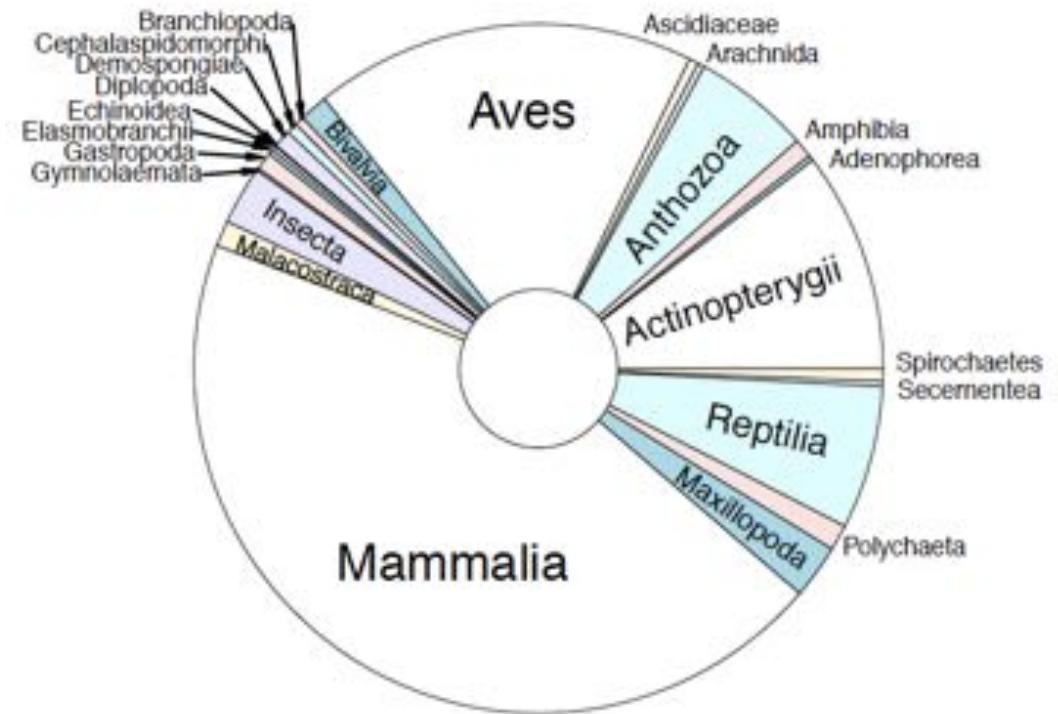
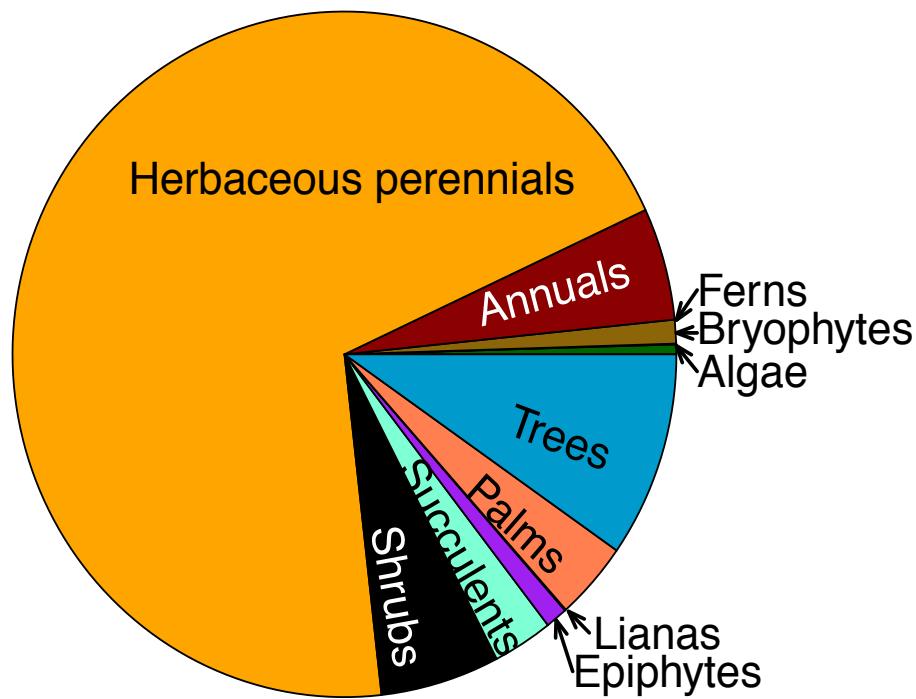
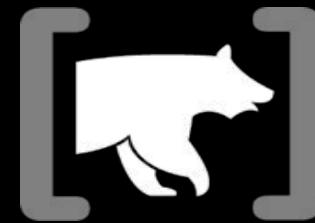
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Animal Matrix Database



Salguero-Gómez et al. J Animal Ecol in review
bioRxiv – DOI 10.1101/027821

Salguero-Gómez et al. J Ecol 2015

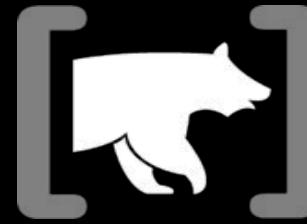




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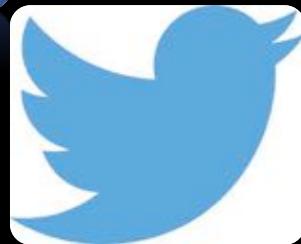
<http://compadredb.wordpress.com>



COMADRE
Animal Matrix Database



www.facebook.com/groups/compadrecomadre



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@comadreDB



<https://github.com/jonesor/compadreDB>

Workshops:

Mexico: Sep 2014

Czech Republic: Aug 2015

ESA: Aug 2015

Netherlands: Oct 2015

BES: Dec 2015

MPIDR: April 2015



COMPADRE-R
R-Age
Salguero-Gómez & Jones *in prep*



RESEARCH POTENTIAL

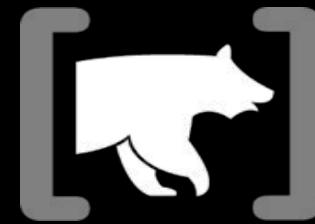
ARTICLE

Jones et al. Nature 2014

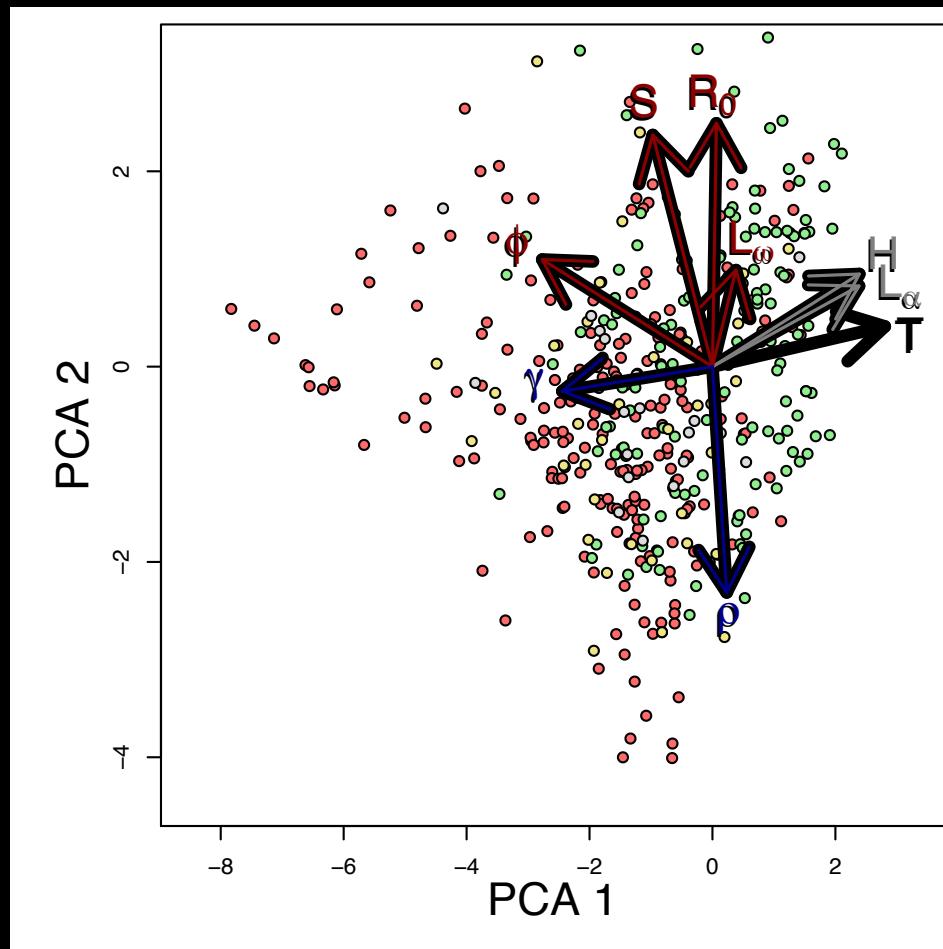
Adler et al. PNAS 2013

Salguero-Gómez et al. J Ecol 2013

35 peer-review publications... and >20 on-going projects

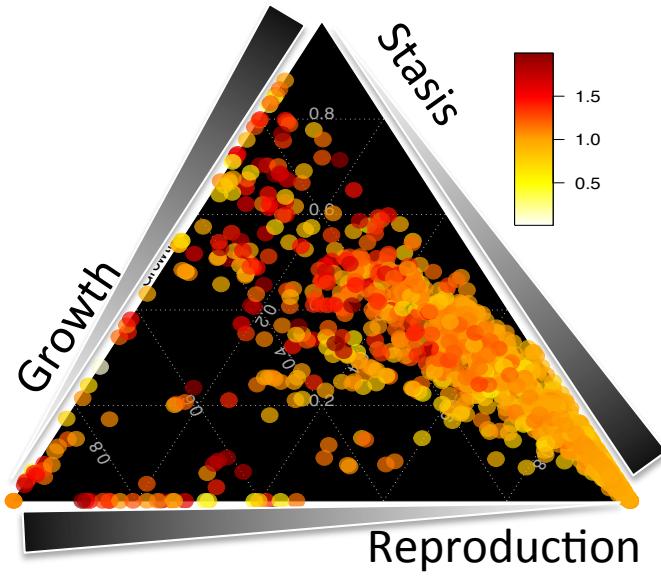


The fast-slow continuum and reproductive strategies structure plant life history variation worldwide





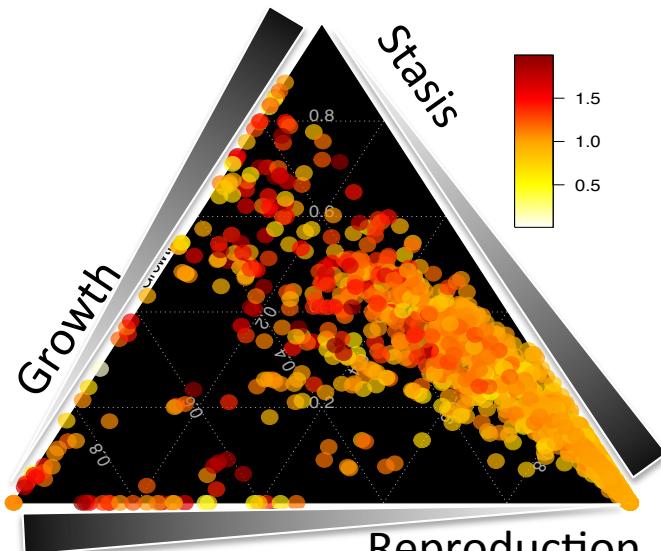
Population growth rate



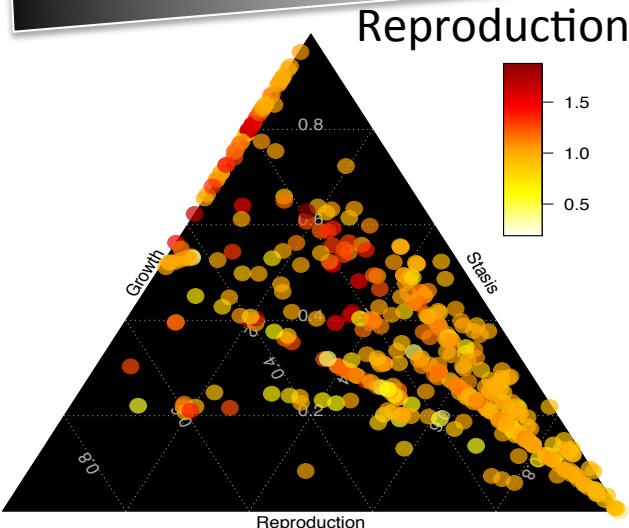
n = 1501 matrices



Population growth rate

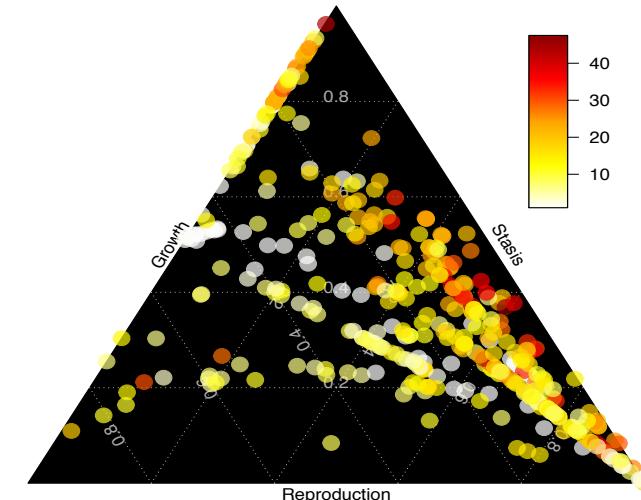
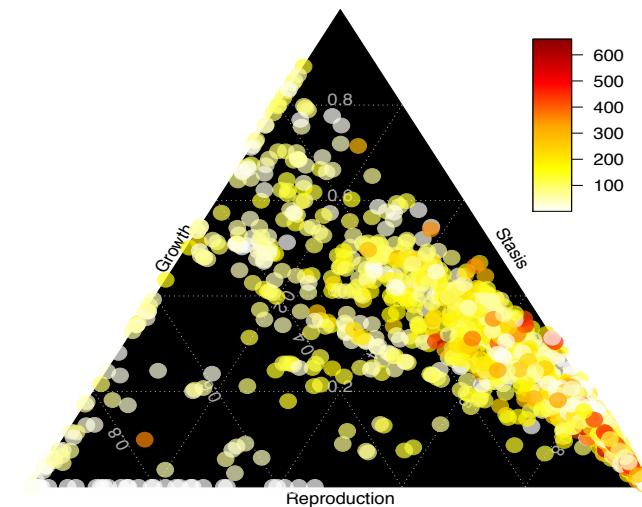


n = 1501 matrices



n = 437 matrices

Mean life expectancy

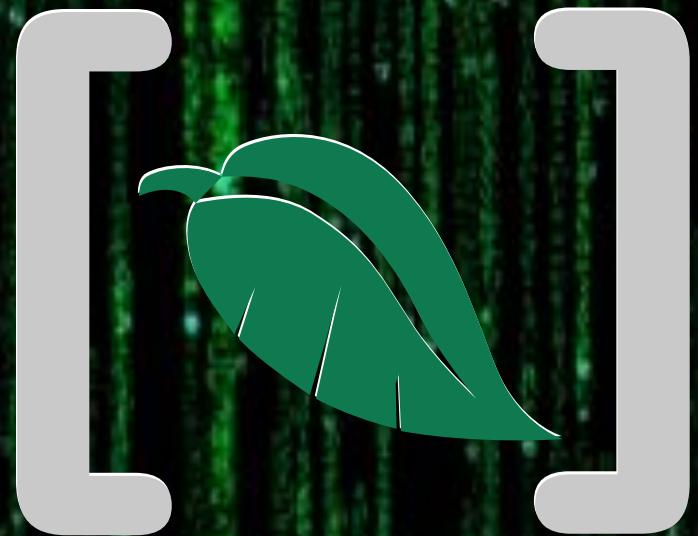


“I’m not interested in your data; I’m interested in merging your data with other data.

Your data will never be as exciting as what I can merge it with”

Tim Berners-Lee





COMPADRE

Plant Matrix Database

Upcoming >1100 plant studies



COMADRE

Animal Matrix Database

Upcoming >1300 animal studies