

Addressing biodiversity shortfalls at CNR

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del Sistema Terra
e Tecnologie per l'Ambiente



SHORTFALL	WHAT IT ADDRESSES
Linnean	species
Wallacean	geographic distribution
Prestonian	populations
Darwinian	origin and evolution
Rakovitzan	unexplored environments
Raunkiaeran	functional traits and ecological functions
Hutchinsonian	abiotic tolerances
Eltonian	ecological interactions

Three main approaches

- Description of diversity
- Inference on processes
 - Intervention

CONSIGLIO NAZIONALE DELLE RICERCHE AQ/1/194

GUIDE PER IL RICONOSCIMENTO DELLE SPECIE ANIMALI DELLE ACQUE INTERNE ITALIANE

.18.

**ANOSTRACI, NOTOSTRACI
CONCOSTRACI**

(Crustacea: Anostraca, Notostraca, Conchostraca)

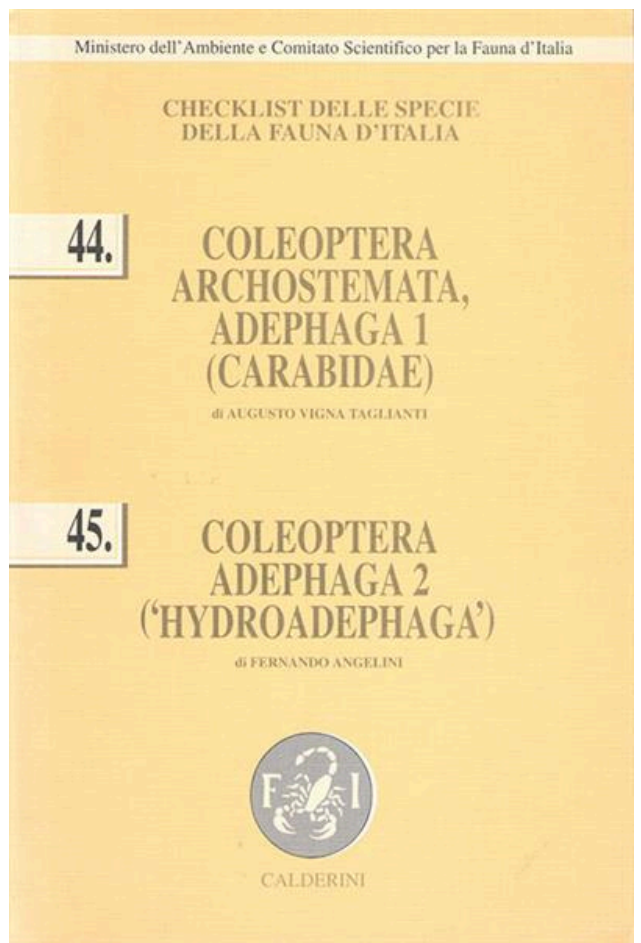
di

VEZIO COTTARELLI e GRAZIELLA MURA



1983

Description of diversity



Checklist update

Taxonomy @ CNR, 2017

DiSSCo

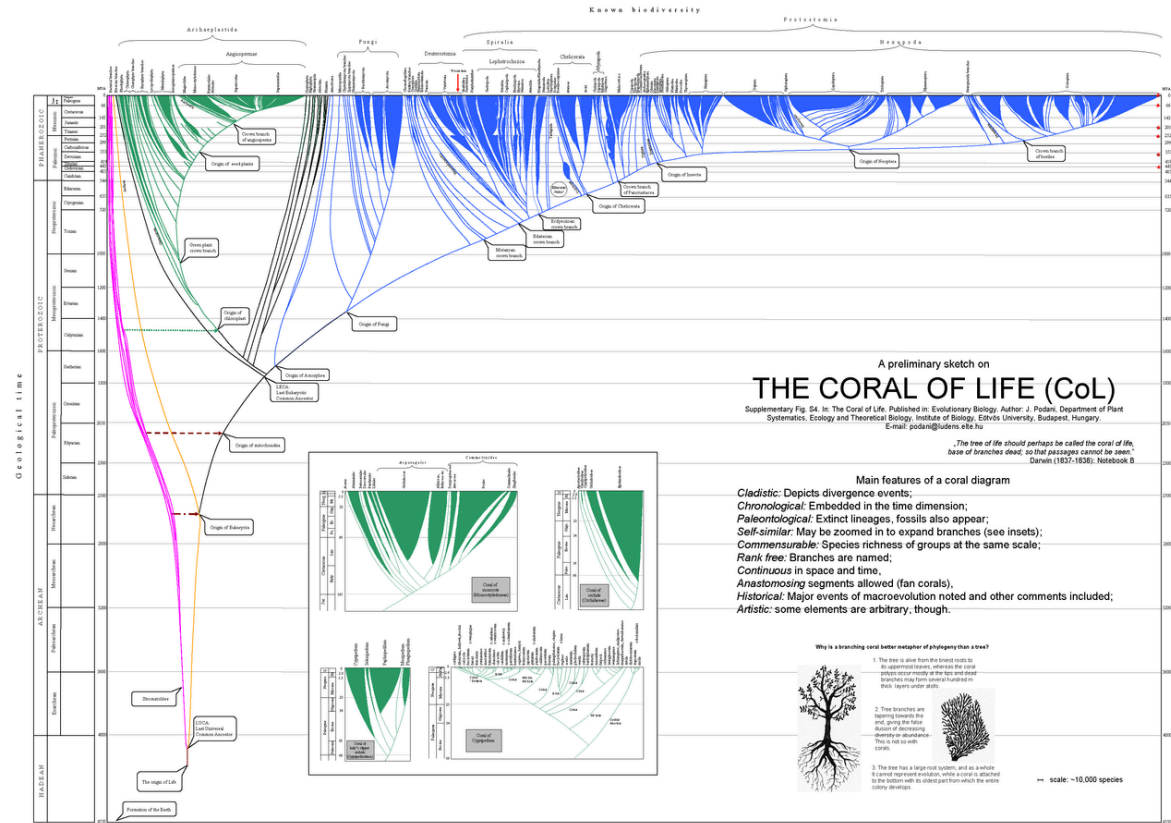
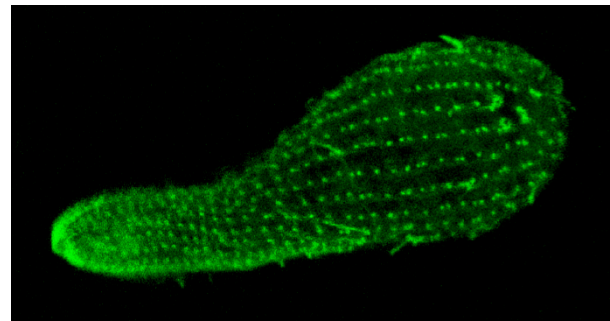
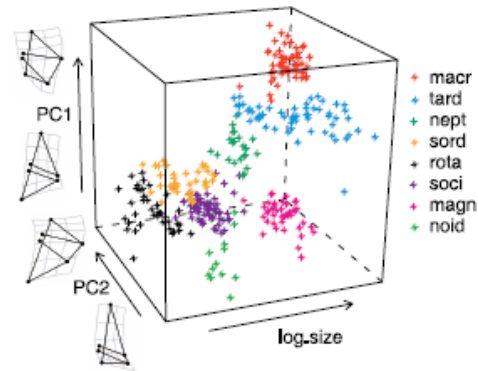
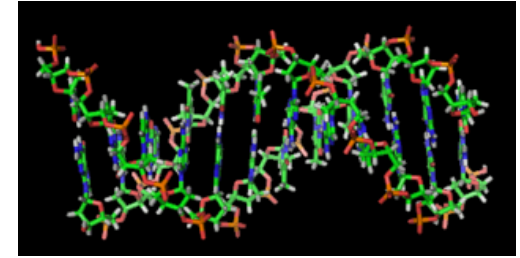
LTER

Lifewatch

...



Description of diversity

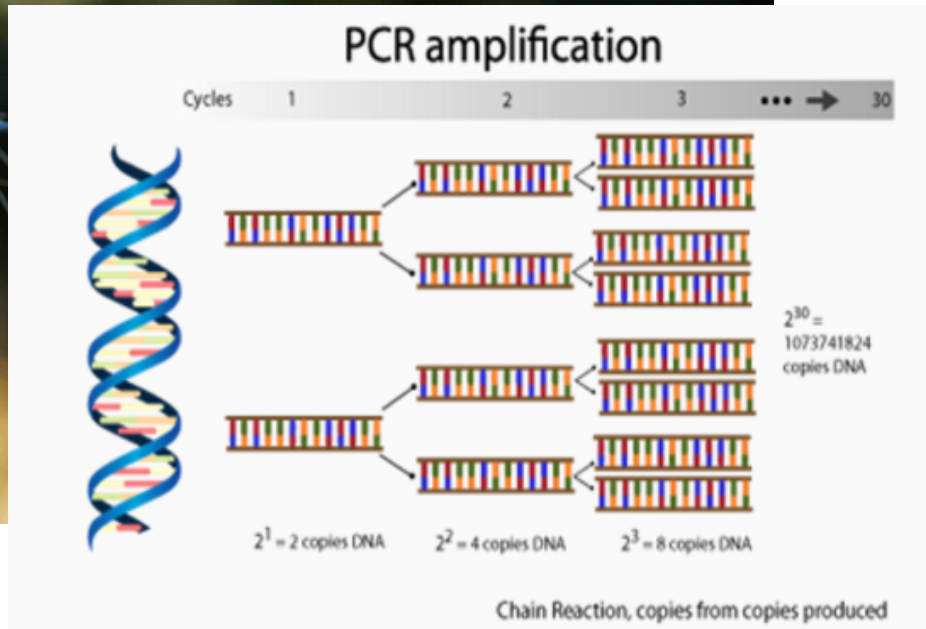
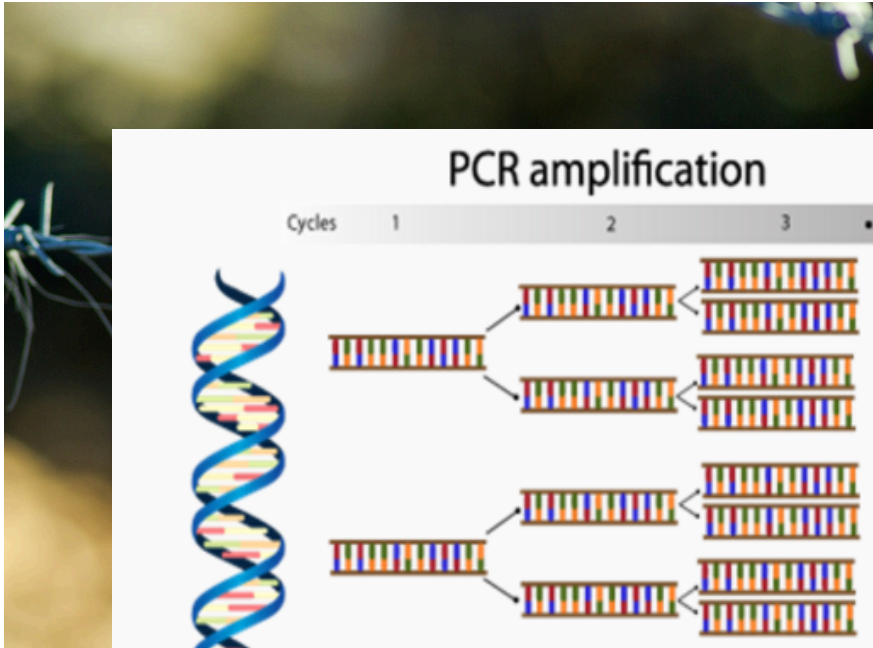


Description of diversity



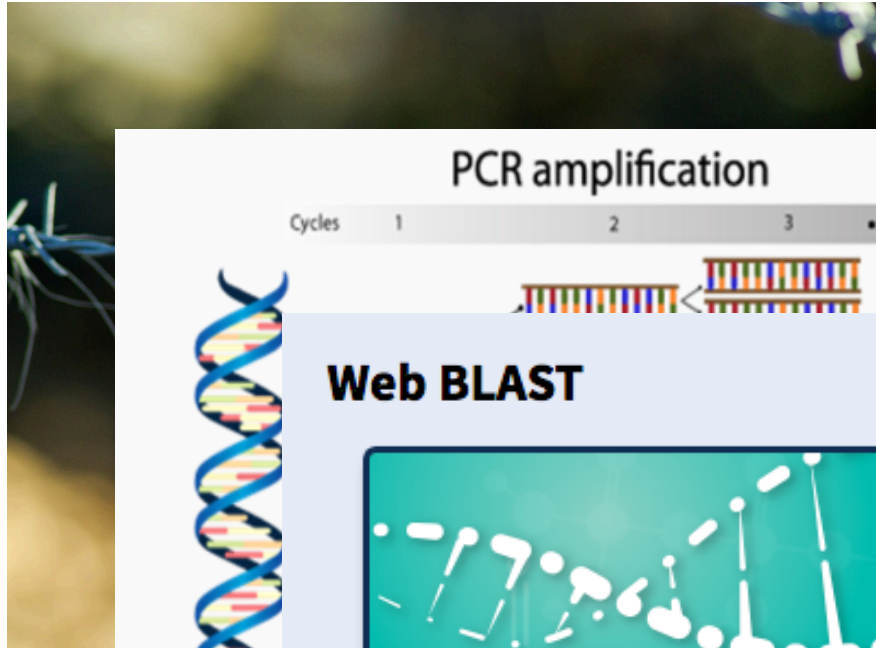
1. Hair on barb wire... which species?

Description of diversity



1. Hair on barb wire... which species?
2. Amplify a DNA marker

Description of diversity



Web BLAST



1. Hair on barb wire... which species?
2. Amplify a DNA marker
3. Compare with a reference database



Description of diversity



Download [GenBank](#) [Graphics](#)

Equus caballus isolate AAPP30 mitochondrion, complete genome
Sequence ID: [JQ340168.1](#) Length: 16656 Number of Matches: 1

Range 1: 5456 to 6063 [GenBank](#) [Graphics](#) [Next Match](#) [Previous Match](#)

Score	Expect	Identities	Gaps	Strand
1123 bits(608)	0.0	608/608(100%)	0/608(0%)	Plus/Plus
Query 1	TAAGCCTCCTAATCCGCTGCTGAATTAGGCCAACCTGGGACCTACTAGGAGATGATCAGA	60		
Sbjct 5456	TAAGCCTCCTAATCCGCTGCTGAATTAGGCCAACCTGGGACCTACTAGGAGATGATCAGA	5515		
Query 61	TCTACAATGTTATTGTAACCGCCCATGCATTGTAATAATTTCTTTATGGTCATACCCA	120		
Sbjct 5516	TCTACAATGTTATTGTAACCGCCCATGCATTGTAATAATTTCTTTATGGTCATACCCA	5575		
Query 121	TTATAATCGGAGGATTCGGAAACTGATTAGTCCCCCTGATAATTGGAGCACCTGATATAG	180		
Sbjct 5576	TTATAATCGGAGGATTCGGAAACTGATTAGTCCCCCTGATAATTGGAGCACCTGATATAG	5635		
Query 181	CTTTCCCCGAATAAACACATAAGCTTCTGATTACTTCCCCCATCATTCCTACTTCTTC	240		
Sbjct 5636	CTTTCCCCGAATAAACACATAAGCTTCTGATTACTTCCCCCATCATTCCTACTTCTTC	5695		
Query 241	TCGCTTCTCAATAATTGAAGCAGGTGCCGGAACAGGCTGAACCGTATATCCTCCTCTAG	300		
Sbjct 5696	TCGCTTCTCAATAATTGAAGCAGGTGCCGGAACAGGCTGAACCGTATATCCTCCTCTAG	5755		
Query 301	CTGGAAATCTGGGCGATGCAGGAGCCTCTGTTGACTTAACCATTTTCTCTCCACCTGG	360		
Sbjct 5756	CTGGAAATCTGGGCGATGCAGGAGCCTCTGTTGACTTAACCATTTTCTCTCCACCTGG	5815		
Query 361	CTGGGCTGCTCGATTTTAGGTGCCATCAACTTTATTACACAATCATTAAACATAAAAC	420		
Sbjct 5816	CTGGGCTGCTCGATTTTAGGTGCCATCAACTTTATTACACAATCATTAAACATAAAAC	5875		
Query 421	CACCAGCTCTATCCCAATATCAAACCCCTATTCGTTTGATCTGTCCTTATTACGGCAG	480		
Sbjct 5876	CACCAGCTCTATCCCAATATCAAACCCCTATTCGTTTGATCTGTCCTTATTACGGCAG	5935		
Query 481	TACTCCTTCTCCTAGCCCTCCCGTCTAGCAGCAGGATTACCATGCTTCTCACAGACC	540		
Sbjct 5936	TACTCCTTCTCCTAGCCCTCCCGTCTAGCAGCAGGATTACCATGCTTCTCACAGACC	5995		
Query 541	GTAACCTAAACACTACTTTCTTCGACCCCGCAGGAGGGGATCCAATCCTTTATCAAC	600		
Sbjct 5996	GTAACCTAAACACTACTTTCTTCGACCCCGCAGGAGGGGATCCAATCCTTTATCAAC	6055		
Query 601	ACCTATTC 608			
Sbjct 6056	ACCTATTC 6063			

Description of diversity



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2013 horse meat scandal

From Wikipedia, the free encyclopedia



This article needs to be **updated**. Please update this article to reflect newly available information. *(May 2016)*

The **2013 horse meat scandal** was a scandal in parts of Europe in which foods advertised as containing beef were found to contain undeclared or improperly declared [horse meat](#) – as much as 100% of the meat content in some cases.^[1] A smaller number of products also contained other undeclared meats, such as pork.^[2] The issue came to light on 15 January 2013, when it was reported that horse [DNA](#) had been discovered in frozen [beefburgers](#) sold in several Irish and British supermarkets.^[3]

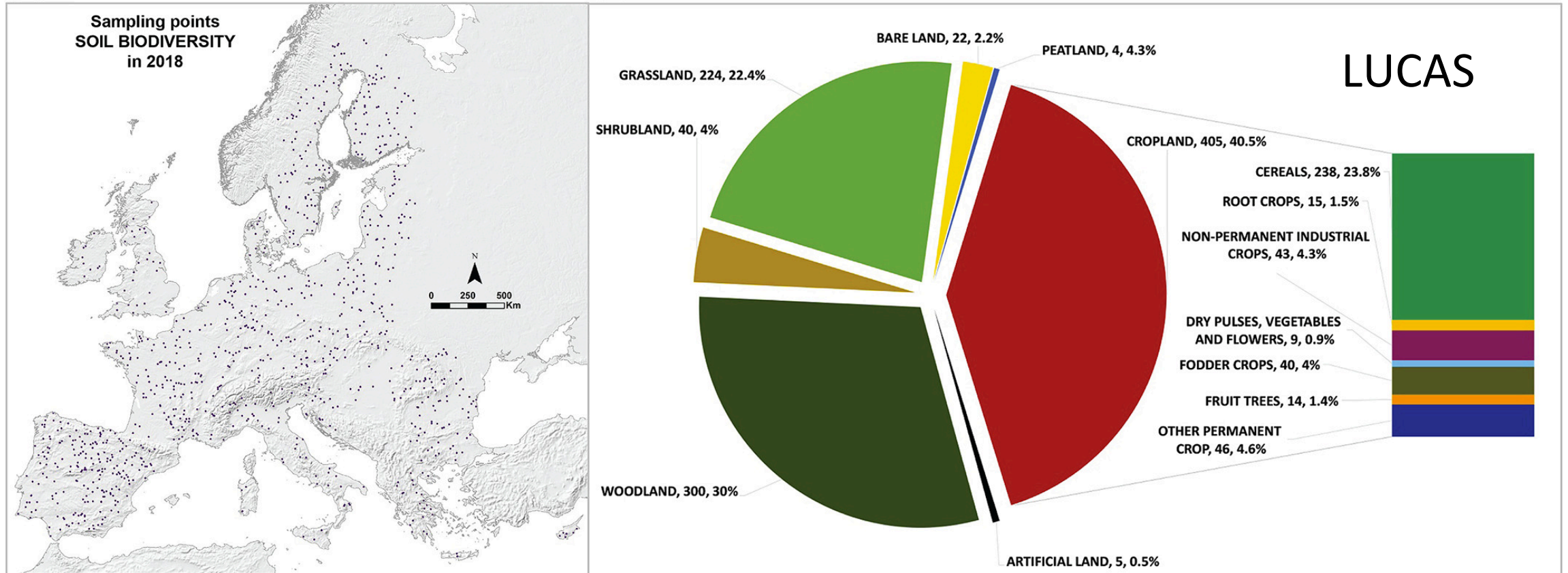
The analysis stated that 23 out of 27 samples of beef burgers also contained pig DNA; pork is a taboo food in the [Muslim](#) and [Jewish](#) communities.^[4]



Description of diversity



Description of diversity

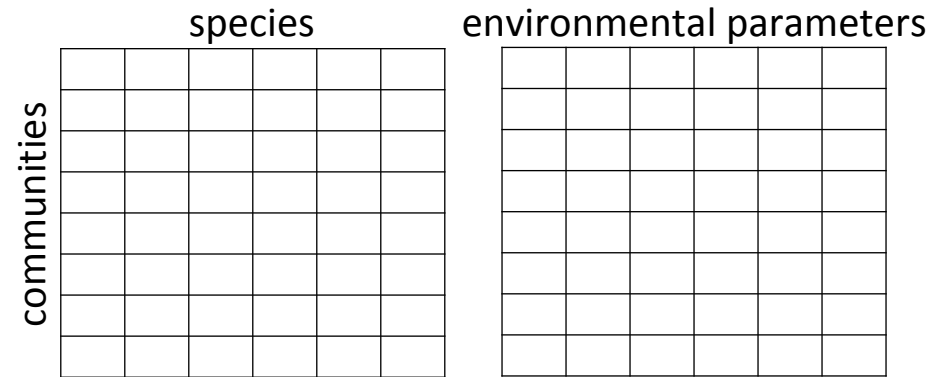


Inference on processes

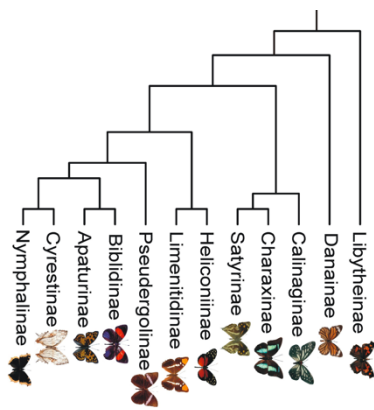
species

communities

Inference on processes

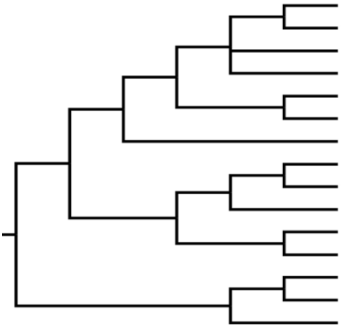


Inference on processes

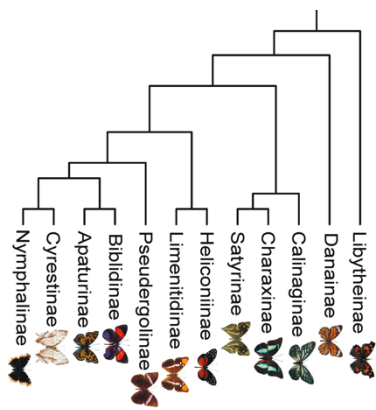


species

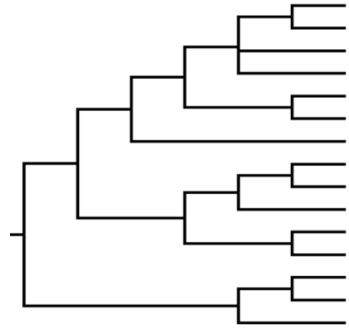
environmental parameters



communities



Inference on processes

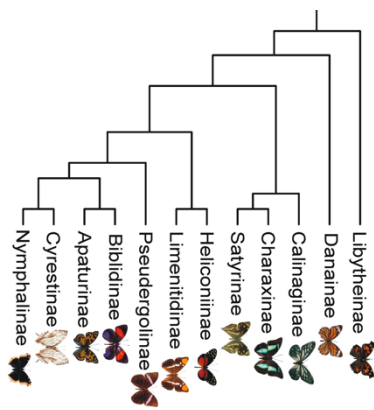


communities

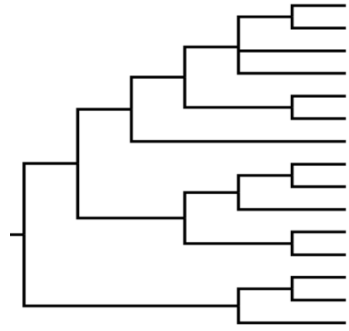
species

environmental parameters

traits



Inference on processes

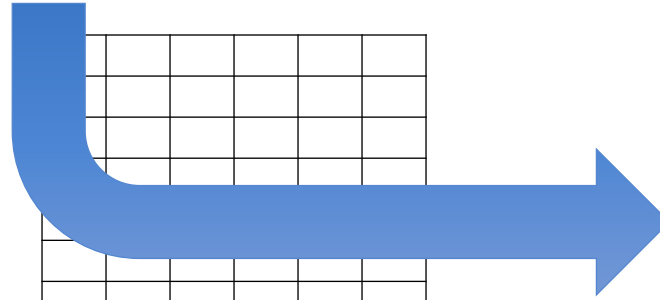


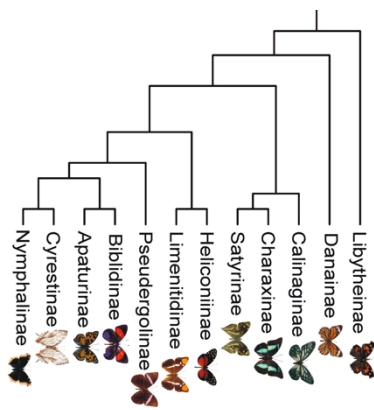
communities

species

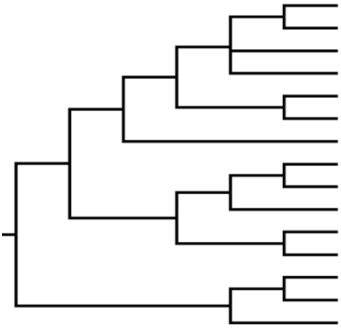
environmental parameters

traits





Inference on processes

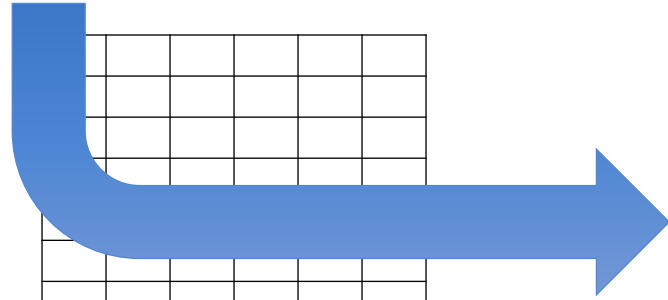


communities

species

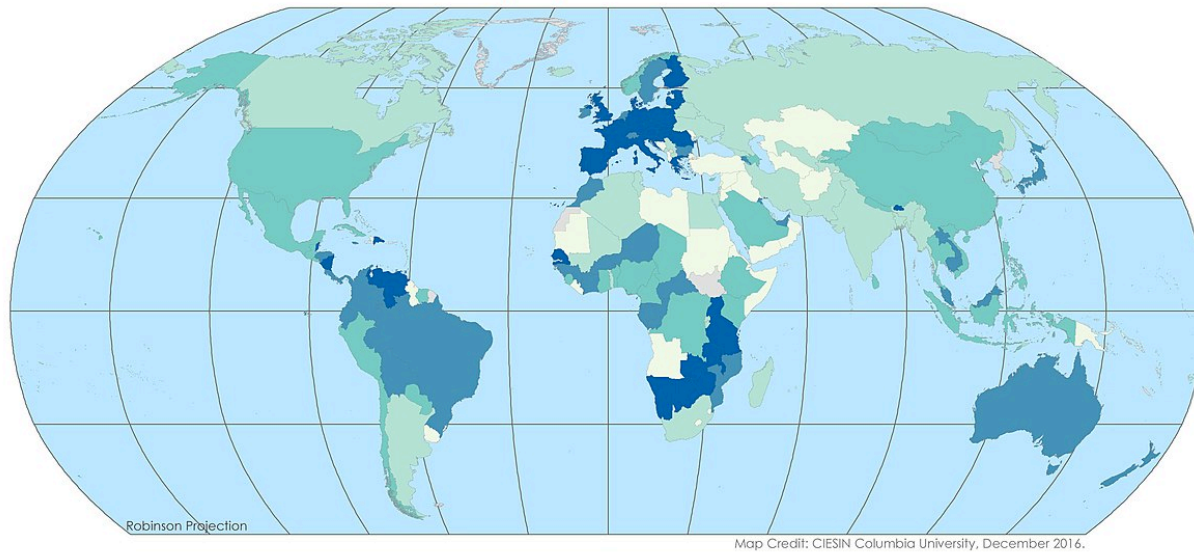
environmental parameters

traits



Intervention

2016 EPI: Ecosystem Vitality Objective – Biodiversity and Habitat
Environmental Performance Index (EPI)



European Union

Home > ... > A European Green Deal > Actions being taken by the EU > EU Biodiversity strategy for 2030

EU Biodiversity strategy for 2030

"Making nature healthy again is key to our physical and mental wellbeing and is an ally in the fight against climate change and disease outbreaks. It is at the heart of our growth strategy, the European Green Deal, and is part of a European recovery that gives more back to the planet than it takes away."

Ursula von der Leyen, President of the European Commission



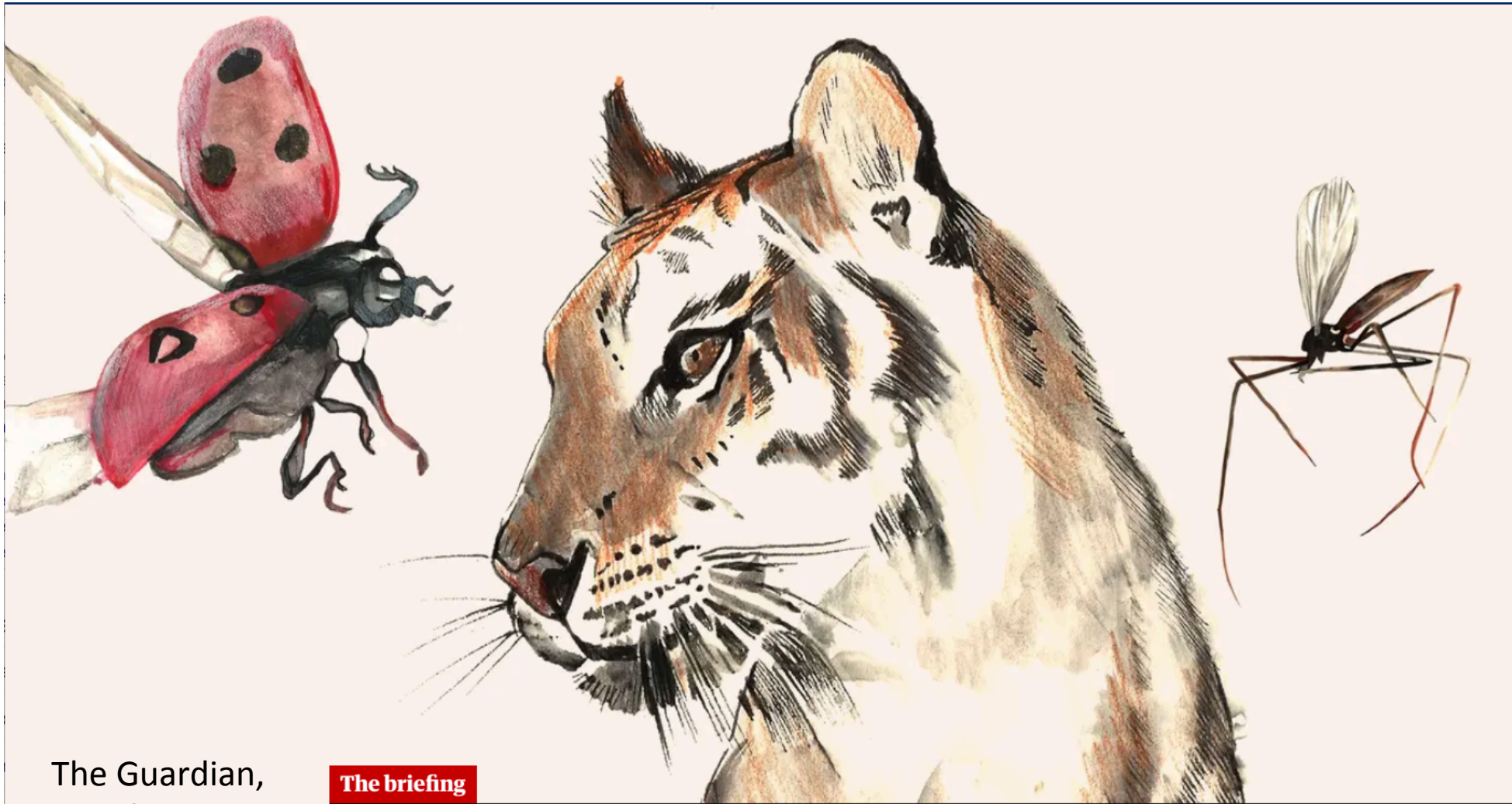
Institute for
European
Environmental
Policy

European Union

The EU institutions have raised the stakes on biodiversity, but will the Green Deal deliver?

But does the Green Deal have what it takes to preserve and restore Europe's biodiversity?

More importantly, many European cities and their citizens have already taken up this challenge themselves.



The Guardian,
March 2018

The briefing

What is biodiversity and why does it matter to us?

▲ The number of animals living on the Earth has plunged by half since 1970.

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