# Open networks like communities of practice for OneHealth: some experiences from Belgium and beyond

Hans Keune

CBD - WHO Regional capacity building workshop on biodiversity and health – Helsinki 20171024



RESEARCH INSTITUTE
NATURE AND FOREST



Biodiversity.be

## How we started







## **BRAIN-be**

Belgian Research Action through Interdisciplinary Networks

Home

New

Contact

Sitemap

Belspo



#### About BRAIN-be

Agenda History Programme

- > Objectives
- > Management structure
- > Thematic axis Call for proposals

#### **Projects**

Axis 1: Ecosystems, biodiversity and evolution

Axis 2: Geosystems, universe and climate

Axis 3: Cultural, historical and scientific heritage

Axis 4: Federal public strategies

Axis 5: Major societal challenges Axis 6: Management of collections

Pioneering projects

Welcome to the website of the research programme BRAIN-be (Belgian Research Action through Interdisciplinary Networks).

BRAIN-be is the first phase (2012-2017) of a recurrent framework programme which allows, through the funding of research projects based on scientific excellence and European and international anchorage, to meet the needs for scientific knowledge of the Belgian federal departments and to support the scientific potential of the Federal Scientific Institutions. Read more...

#### Documentation

General information Promotors documents Media



#### International cooperation

ERA-NETS JPI



#### About us

Team Contact





d ideas

# Impact of green/blue spaces on specific morbidity and cause-specific mortality in Belgium: the GRESP-

#### - Hypotheses

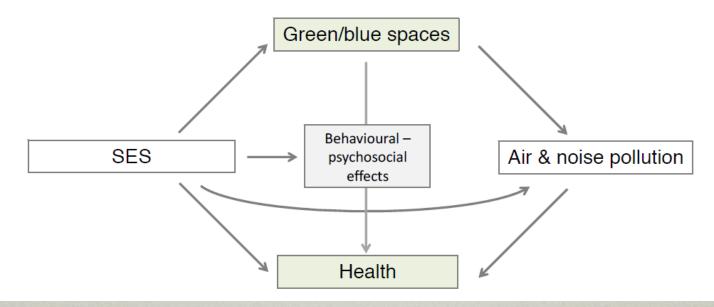
## The C

Impact of & mortality is





- Associations exist between residential proximity to green and/or blue spaces and specific morbidity, perceived health, and all-cause and cause-specific mortality.
- ➤ These associations are partly but not entirely attributable to various underlying **environmental** characteristics of the residential area and to **SE factors**.





# DRIVERS of ALLERGIC SYMPTOMS



#### RESPIRIT

ASSESSING SPATIO-TEMPORAL RELATIONSHIPS
BETWEEN RESPIRATORY HEALTH AND BIODIVERSITY
USING INDIVIDUAL WEARABLE TECHNOLOGY



POLLEN LOADS



AIR POLLUTION

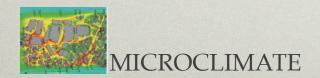
CLIMATE CHANGE and ALLERGENICITY OF POLLEN

CENTRAL RESEARCH QUESTION: DOES <u>RECENT</u>

<u>EXPOSURE</u> TO PLANT <u>DIVERSITY</u> HAVE AN IMPACT

ON THE <u>ACUTE EXPRESSION</u> OF <u>ALLERGENIC</u>

SYMPTOM SEVERITY?

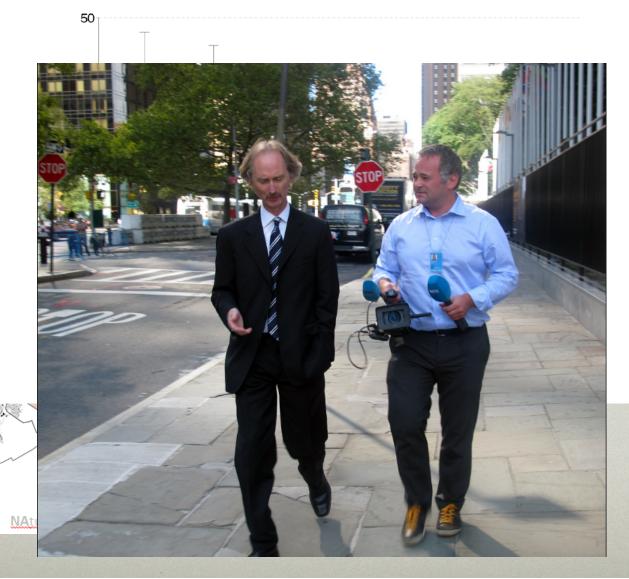




**BIODIVERSITY IN THE LANDSCAPE** 

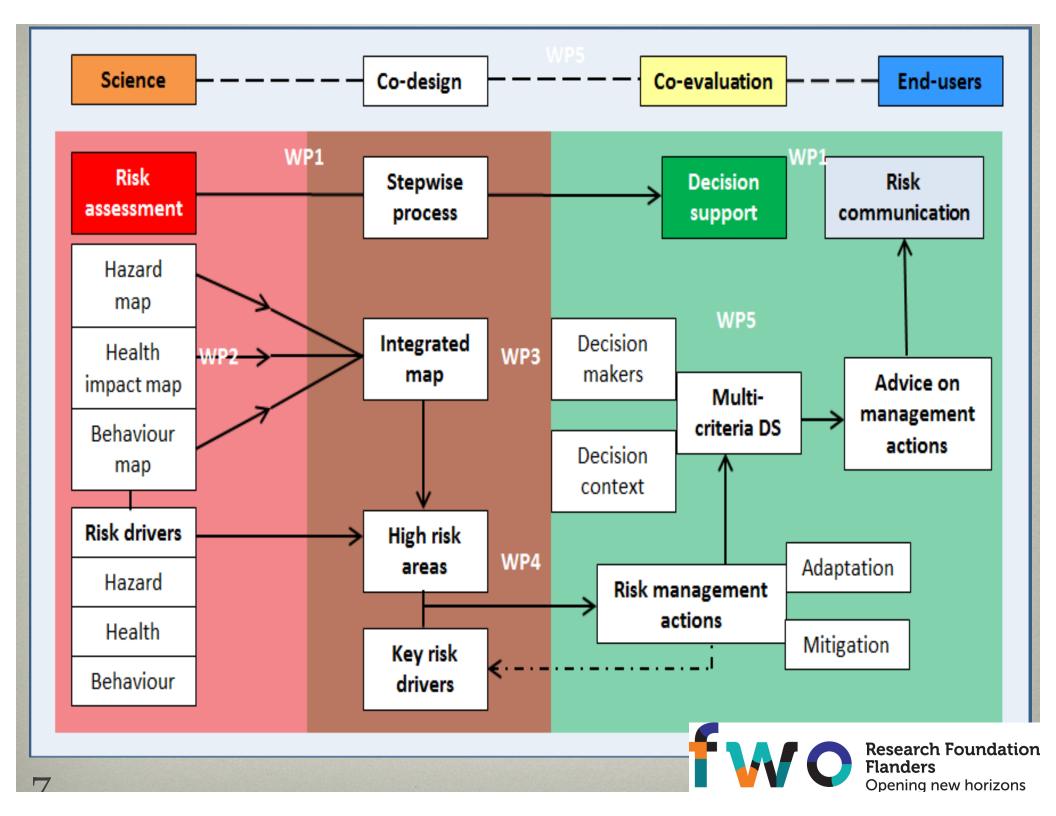
# NAture impact on MEntal health Distribution

Figuur 4 | Percentage van de bevolking (van 15 jaar en ouder) met recente psychische problemen, gemeten aan de hand van de gedichotomiseerde GHQ-12 score [2+], volgens leeftijd en geslacht, Gezondheidsenquête, België, 2013



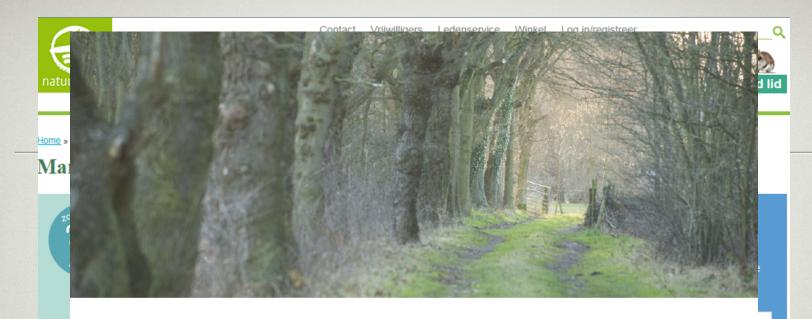
Example database: Cadastre





# On-going collaborations: more than only science





# Natuur en gezondheid

29 MAAI Na de s gezinsv Welzijn

Hierono

VEEL POTENTIEEL, EN VEEL WERK AAN DE WINKEL!

In deze tekst zetten verschillende organisaties samen het belang van de relatie natuur  $\xi$  gezondheid op de kaart. Eerst goed nieuws: er is al heel wat gaande! Vervolgens gaan we in op volgende stappen: waar liggen de kansen? En wat stellen wij voor als volgende stap: werk aan de winkel! Ten slotte een overzicht van organisaties die hier rond samenwerken.

#### Goed nieuws!

Eerst het goede nieuws: er is al heel wat kennis en er wordt al heel wat in praktijk uitgeprobeerd. Er is al heel wat onderzoek gedaan. In België begint dit op gang te komen.













rojec<u>t</u>



Provincie Antwerpen

# In the pipeline:

March 28th 2018 official announcement Chair Care & the natural environment — University of Antwerp

October 4th 2018 in close collaboration with the COPBH: Capacity building and networking event—presentations, project-market, try outs,

prof. dr. Hilde Bastiaens







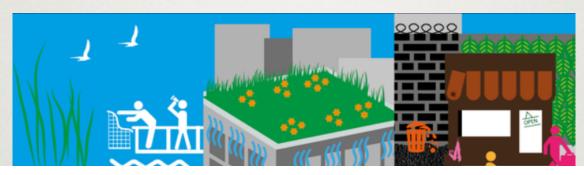
# Hearing Nature & Health Flemish Parliament Com.



• <a href="https://www.vlaamsparlement.be/commissies/commissievergaderingen/1189721#volledig-verslag">https://www.vlaamsparlement.be/commissies/commissievergaderingen/1189721#volledig-verslag</a>

# Hoge Gezondheidsraad: advies in voorbereiding

#### Green and blue cities: nature and health in an urban setting



#### A five-step approach is proposed:

- Literature review
- Scoping with stakeholder consultation
- Preparing a draft report
- Stakeholder hearing to assess draft conclusions and recommendations
- Finalizing the advisory report.





# International capacity building, collaboration, networking







#### **CBD**



## Convention on Biological Diversity

Distr. GENERAL

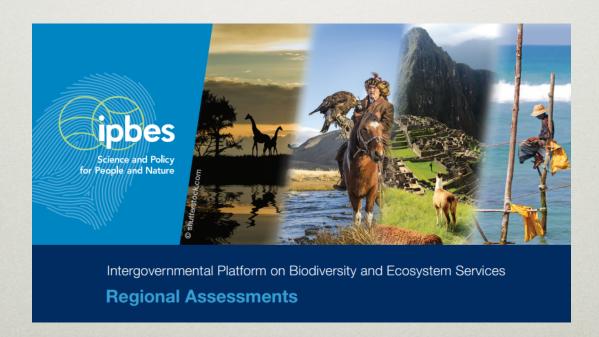
UNEP/CBD/SBSTTA/REC/XIX/6 4 November 2015

ORIGINAL: ENGLISH

SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE Nineteenth meeting Montreal, Canada, 2–5 November 2015 Agenda item 4.1

#### RECOMMENDATION ADOPTED BY THE SUBSIDIARY BODY ON SCIENTIFIC, TECHNICAL AND TECHNOLOGICAL ADVICE

XIX/6. Biodiversity and human health





#### B) Characterization of evidence

C) Key messages



Nature step

# Policy step

for People and Nature



Intergovernmental Platform on Biodiversity and Ecosystem Services

Health? Assessments



# http://www.biodiversity.be/health/58

Nice people!





#### ANTIMICROBIAL RESISTANCE (AMR) SESSION

This is a report of the session on cross-pollinating agro-eco-human health perspectives to reduce antimicrobial resistance (AMR) threats that took place on 6th October 2016 in Brussels, in the framework of the European OneHealth/EcoHealth workshop organised by the Belgian Community of Practice Biodiversity & Health which is facilitated by the Belgian Biodiversity Platform



Session coordinator: Wim Hiemstra & Aurélie Binot

We

Europ

Meet

#### INTRODUCTION

The session focused on the global threat of antimicrobial resistance (AMR) which poses an important challenge for human, animal and environmental health experts and practitioners to overcome disciplinary silos and quicken

antibiotic resistance. In the morning session, three presenters reflected on how the human, animal, environmental streams of information on AMR-ABR were brought together in a practical way, thus presenting a systems perspective.

The afternoon session deepened presenters' and

The ir large. addre

developed over time. The Claretanding and action towards a One Health/ approach and One Medicine

of the OneHealth concept

#### COMMENTARY Open Acces

## The need for European OneHealth/ EcoHealth networks



Hans Keune<sup>1,2,3,4</sup>\*, Lucette Flandroy<sup>5</sup>, Séverine Thys<sup>6</sup>, Nick De Regge<sup>7</sup>, Marcella Mori<sup>7</sup>, Nicolas Antoine-Moussiaux<sup>8</sup>,
Maarten P.M. Vanhove<sup>9,10,11,12</sup>, Javiera Rebolledo<sup>13</sup>, Steven Van Gucht<sup>13</sup>, Isra Deblauwe<sup>6</sup>, Wim Hiemstra<sup>14</sup>,
Barbara Hasler<sup>15</sup>, Aurélie Binot<sup>16</sup>, Sara Savic<sup>17</sup>, Simon R. Ruegg<sup>18</sup>, Sjerp De Vries<sup>19</sup>, Julie Garnier<sup>20</sup> and Thierry van den Berg<sup>7</sup>

**Abstract**: Elaborating from the European One Health/Ecohealth (OH/EH) workshop that took place in fall 2016 and aimed to bring together different communities and explore collaborative potential, the creation of European networks focusing on the development of important OH/EH perspectives was a direct output from discussions at the end of some sessions, in particular:

- A network on transdisciplinary One Health education.
- A network integrating inputs from social sciences in One Health/EcoHealth actions and networks.
- A network aiming at translating research findings on the Environment-Microbiome-Health axis into policy making, with a view to make healthy ecosystems a cost-effective disease prevention healthcare strategy.

It was also suggested that a European Community of Practice could be initiated in order to support these several concrete networking initiatives, and to help to promote the building of other emerging initiatives.

Keywords: One Health, EcoHealth, Community of Practice, Europe, Interdisciplinarity, Transdisciplinarity, Crosssectorial

#### Some key conclusions

OH, EH, Planetary Health and related concepts share similar ambitions aimed at the integration of various dimensions and realities that are influencing health.

Although these different concepts have different histories within diverse expert contexts, the core message of integration is basically similar.

It was preferred to underline commonalities, rather than differences, in order to benefit from complementarity.

Implementation of OH/EH concepts can benefit from transdisciplinary and iterative processes between policy, science and practice.

One should however be careful of creating big OH/EH institutions resulting in building fences rather than creating openness to (new) collaborations. This may be overcome by focusing on open, collaborative networks like Communities of Practice

#### Network ideas

A network on transdisciplinary One Health education.

A network integrating inputs from social sciences in One Health/EcoHealth.

A network aiming at translating research findings on the Environment-Microbiome-Health axis into policy making.

A European Community of Practice could be initiated in order to support these several concrete networking initiatives, and to help to promote the building of other emerging initiatives.





# Network for Evaluation of One Health (NEOH)

Barbara Häsler, NEOH chair, Royal Veterinary College and Leverhulme Centre for Integrative Research on Agriculture and Health, United Kingdom

bhaesler@rvc.ac.uk







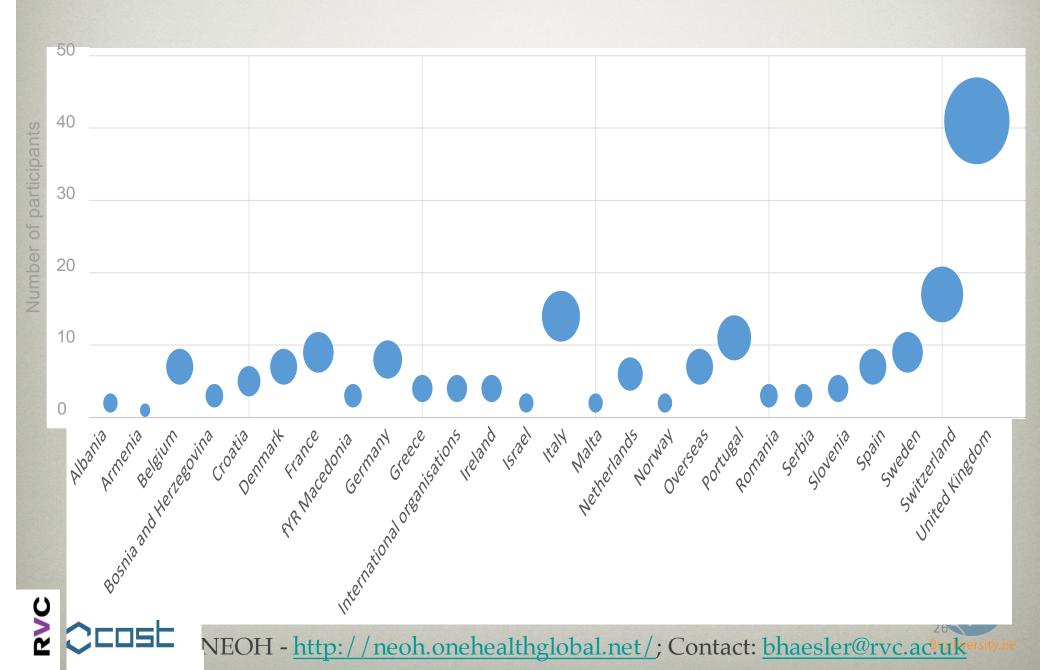
## NEOH definition of One Health

A paradigm that addresses complex challenges to promote the health and well-being of all species and the environment through the integration of relevant sciences at systems level

Substantial overlaps and links with the **Ecohealth** movement



#### NEOH members and associates



#### Next step after NEOH

# Network European OneHealth/EcoHealth

Open network, open for other networks – ECA region *Integration:* 

- Nature related health benefits & risks
  - Social science

Capacity building/mainstreaming:

- European OneHealth/EcoHealth Summer school
- Networking on education and capacity building

*Next meeting:* 

Second European OneHealth/EcoHealth meeting

September 10 – 15 2018

Bologna, Italy

# Multi-level



#### Biodiversity and Health

Chapter

# On the importance of OneHealth/EcoHealth networks

Open invitation for contributions about national, regional, international experiences, needs

What are your experiences?

What goes well?

What are your needs?

What are your challenges?

Interested to collaborate? hans.keune@inbo.be



# Thank you!

