


Bsa/ management: an implementation perspective

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Bsal management: trying to actively change a system

Active chytrid management in Europe: two known examples

Science necessary but not sufficient

Bsal management

Success! Biologists may have found a way to eliminate amphibian-killing fungus in the wild

by Shreya Dasgupta on 24 November 2015



Bsal management: trying to actively change a system

Active chytrid management in Europe: two known examples

Science necessary but not sufficient

S'ha aïllat la zona infectada, gestionat la població d'amfibis afectada i aplicat un estricte protocol de bioseguretat

 M'agrada 1

Aïllat el primer brot d'un fong que amenaça les salamandres del sud d'Europa



Mortalitat de tritó verd infectat de Bsal.

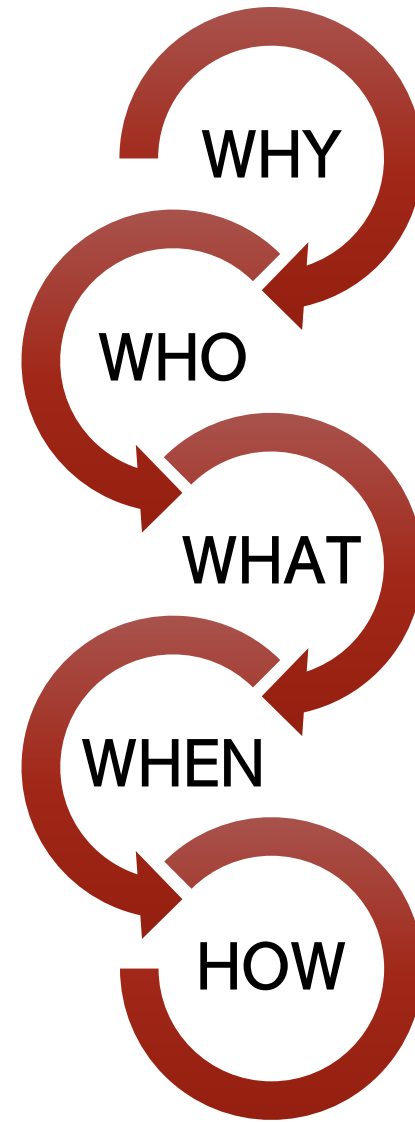
Autor: D. Fernández (GRENP)

24/02/2020

Un equip tècnic del Parc del Montnegre i el Corredor amb el suport del Servei de Fauna i Flora de la Generalitat de

Five key questions determine
...action or inaction
...efficiency or hesitancy
...success or failure
on the management side

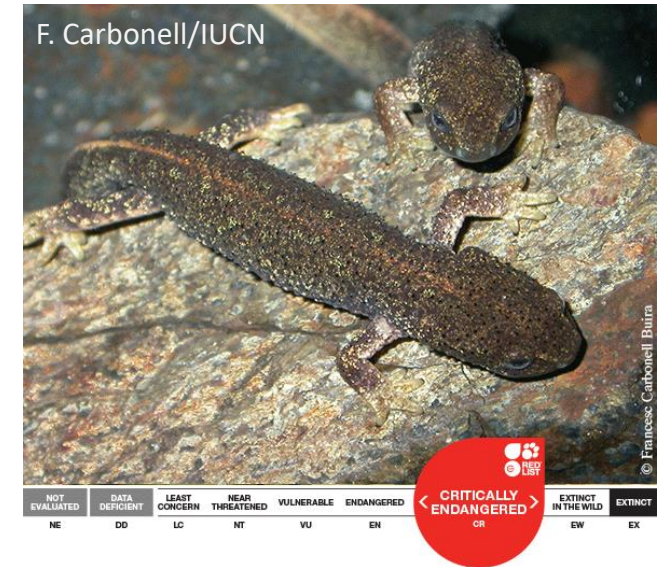
Can we answer them?



Obviously to protect amphibians!

But is it that obvious?

Have we ever stopped to think about it?



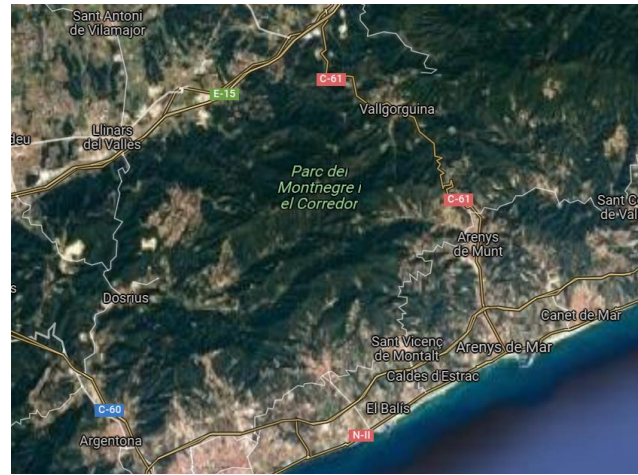
WHY: objectives

Which amphibians are most important?

What are the side effects of treatments and intervention?

Do we care about welfare?

Is legislation there? Helpful?



WHY: objectives

Who

...cares?

...decides?

...advises?

...acts?

Need

...diversity of opinions

...implementation funding

...mandates

...decision-makers



Middle ground?



WHO: managers & experts

Science ≠ management
...novelty vs provenness
...secrecy vs communication
...generality vs specificity

Good intentions but lack \$\$\$
Little demand for action
Middle ground discouraged

WHO: managers & experts

LETTER

doi:10.1038/nature22059

Decision-making for mitigating wildlife diseases: From theory to practice for an emerging fungal pathogen of amphibians

Conservation Biology

Contributed Paper

PERSPECTIVES AND NOTES

Conservation Science and Practice

Conservation decisions under pressure: Lessons from an exercise in rapid response to wildlife disease

Stefano Canessa¹ | Annemarieke Spitzen-van der Sluijs² | Tariq Stark² | Bryony E. Allen^{3,4} | Phillip J. Bishop^{5,6} | Molly Bletz⁷ | Cheryl J. Briggs⁸ |



Quantifying the burden of managing wildlife diseases in multiple host species

Stefano Canessa¹,^{*}† Claudio Bozzuto,²† Frank Pasmans,¹† and An Martel¹†

THE CORONAVIRUS CRISIS

Ramping Up Its COVID Response, EU Will Buy Up To 1.8B Doses Of Pfizer Vaccine

May 8, 2021 · 10:11 AM ET

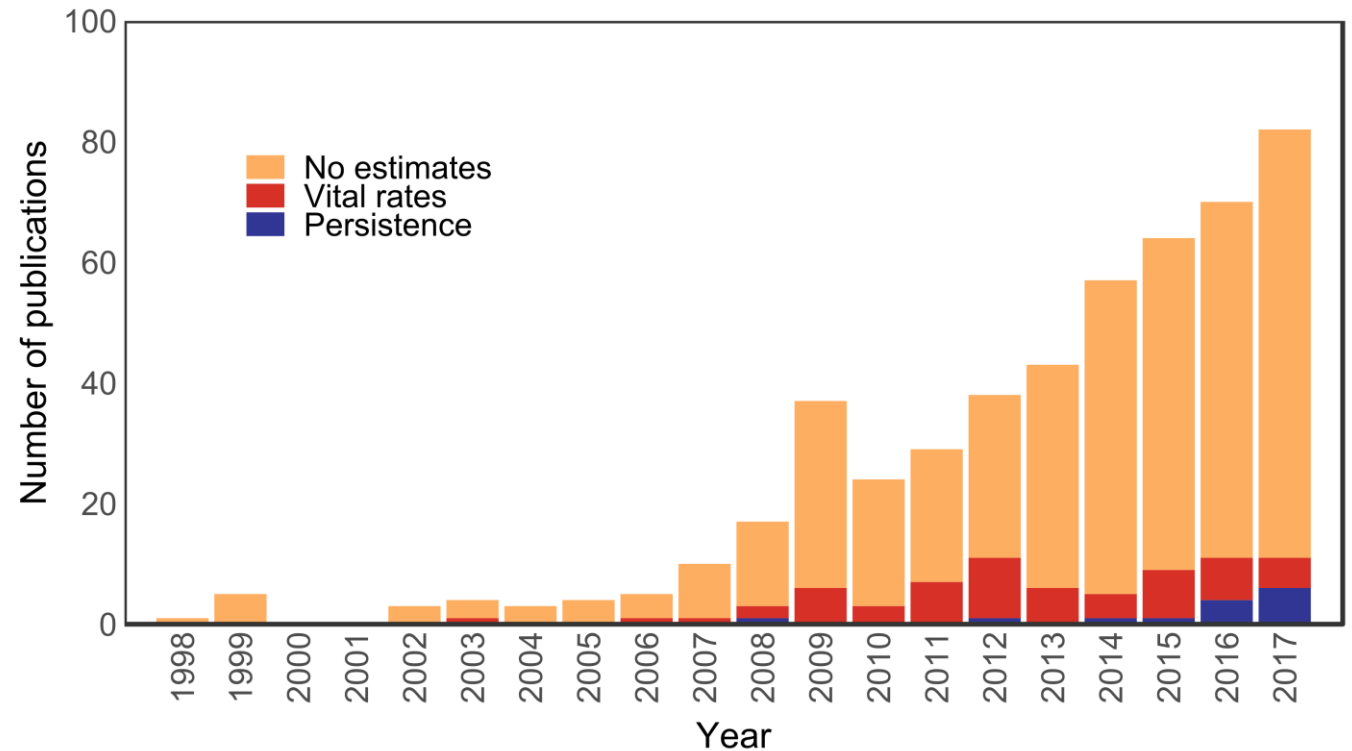


Science ≠ management
...novelty vs provenness
...secrecy vs communication
...generality vs specificity

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Drivers of salamander extirpation mediated by *Batrachochytrium salamandrivorans*

Conservation Biology



General why = objectives

Local why = actions

Should we

... eradicate Bsal locally?

...control its spread?

...mitigate impacts?

Can be very different!



WHAT: local actions & aims

Some combinations of objectives are simply unachievable:

General why = objectives

Local why = actions

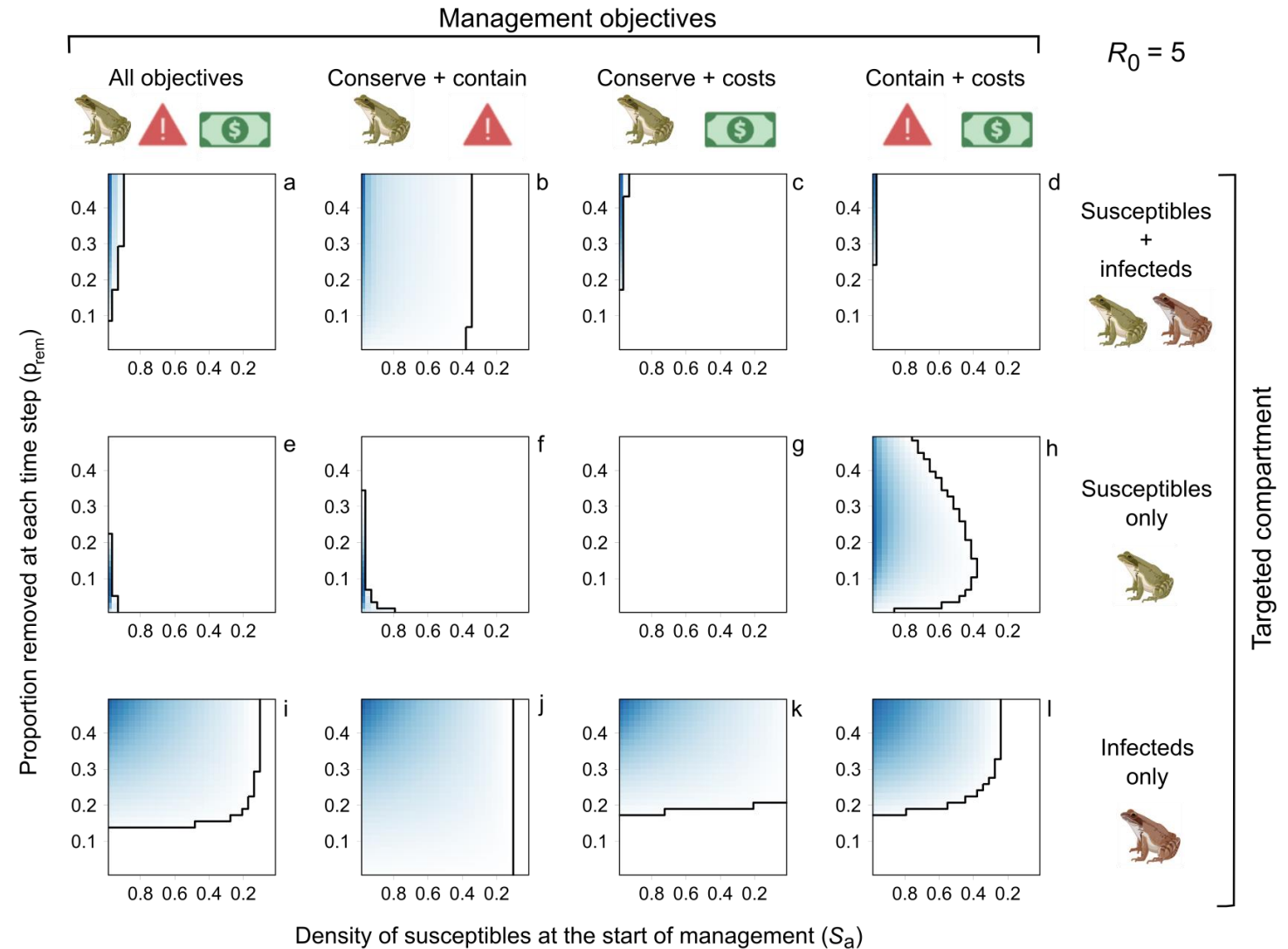
Should we

... eradicate Bsal locally?

...control its spread?

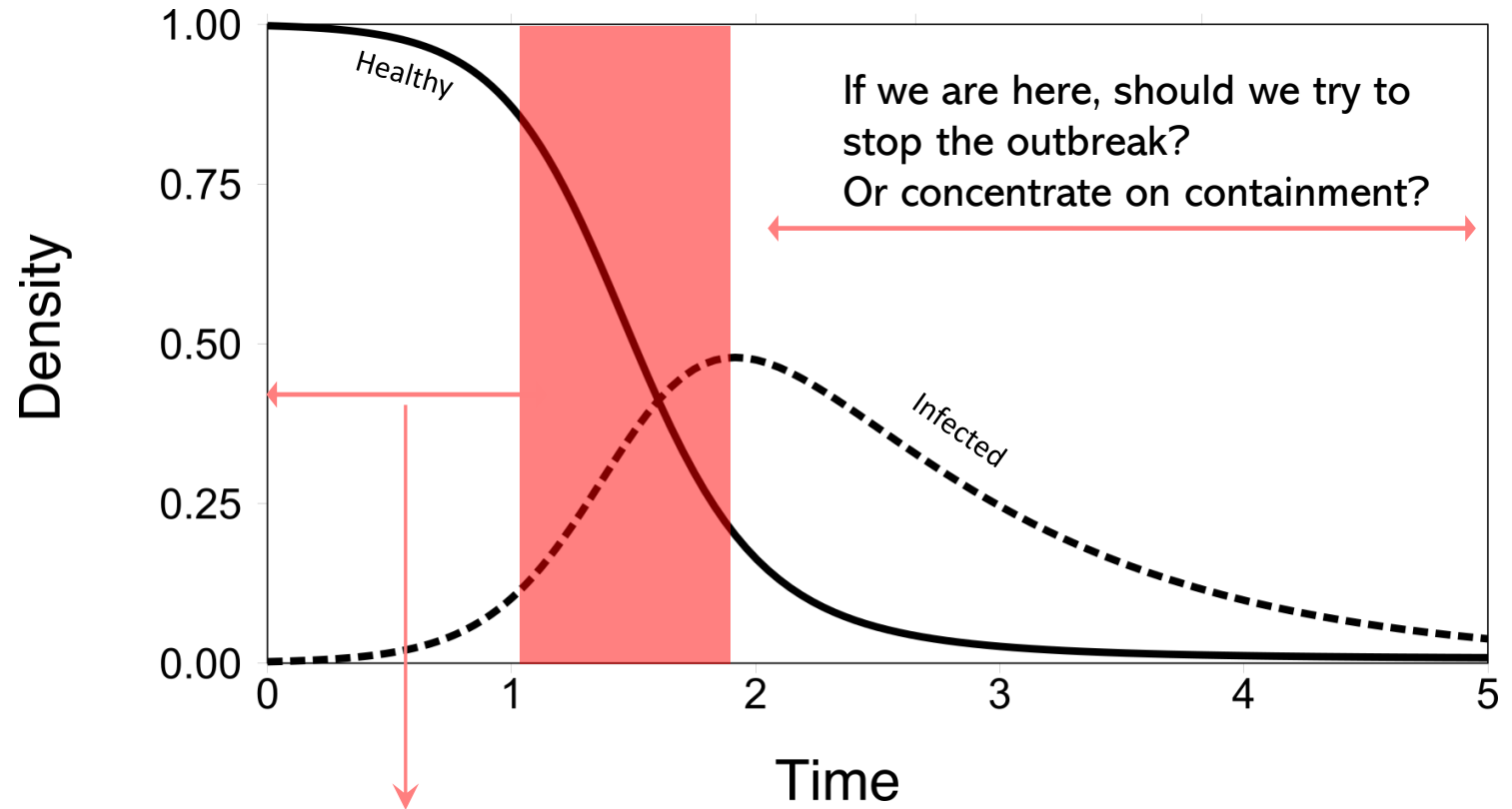
...mitigate impacts?

Can be very different!



Time window for
...eradication, tiny
...containment, small
...mitigation, it depends
→ generally, earlier better

Do we know
...how to detect
...when to respond
...how to respond
→ late is too late



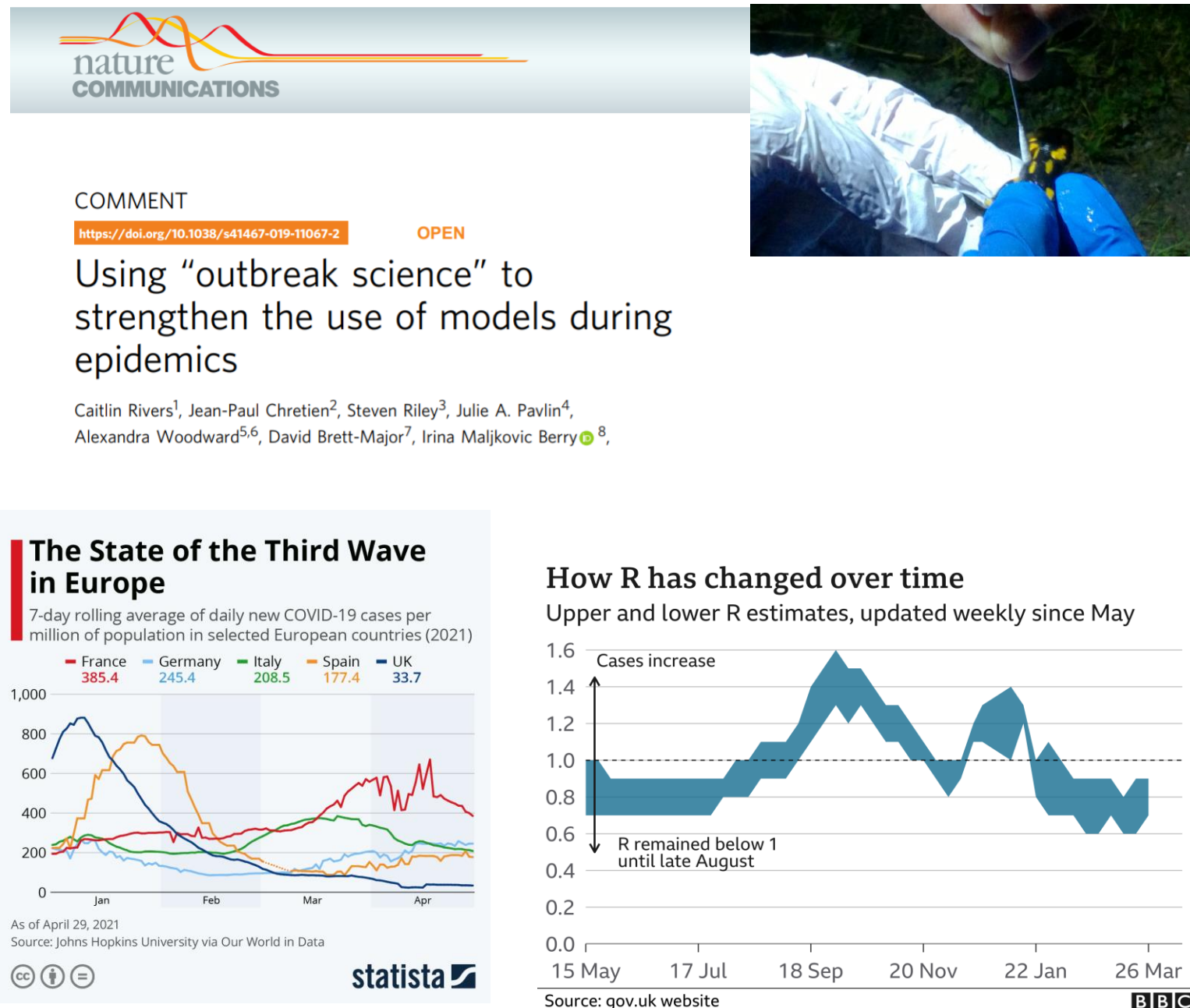
Here we can act depending on

- Detection
- Estimation
- Consultation
- Admin and funding
- Implementation

Uncertain knowledge
Lack of proven actions
Implementation = experiment

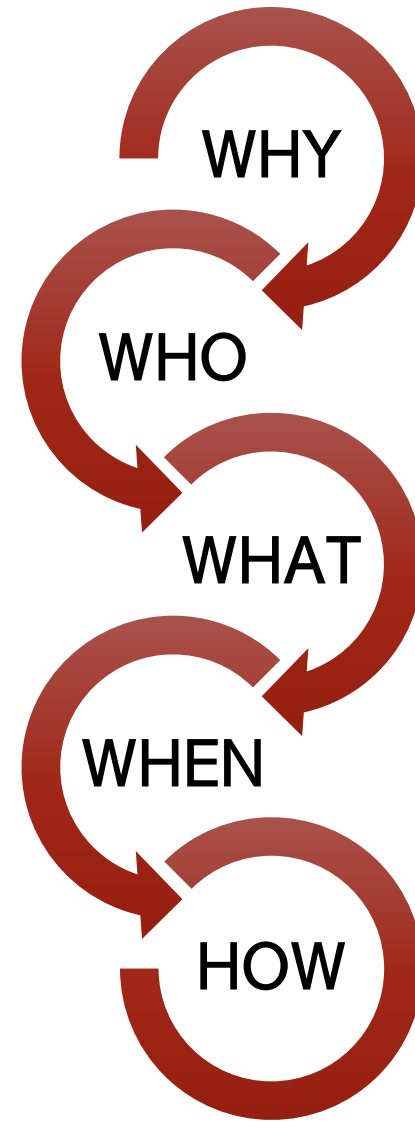
Monitor for a purpose
Collect and analyse data
Science-based management

HOW: implementation



Five key questions determine
...action or inaction
...efficiency or hesitancy
...success or failure
on the management side

Can we answer them?





Bsa/ management: an implementation perspective

Do we have the structures in place for

...detection – assessment – deliberation – action - improvement

...effective science-management communication

...applied research (without defunding basic research...)

...not overwhelming practitioners with tasks and rules

Can we do it?

Should we do it?