Successes and failures of movement ecology

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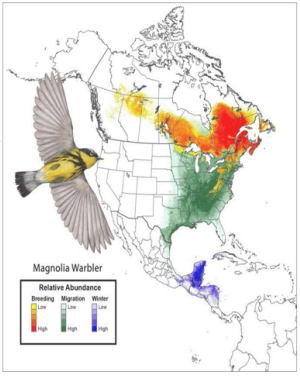
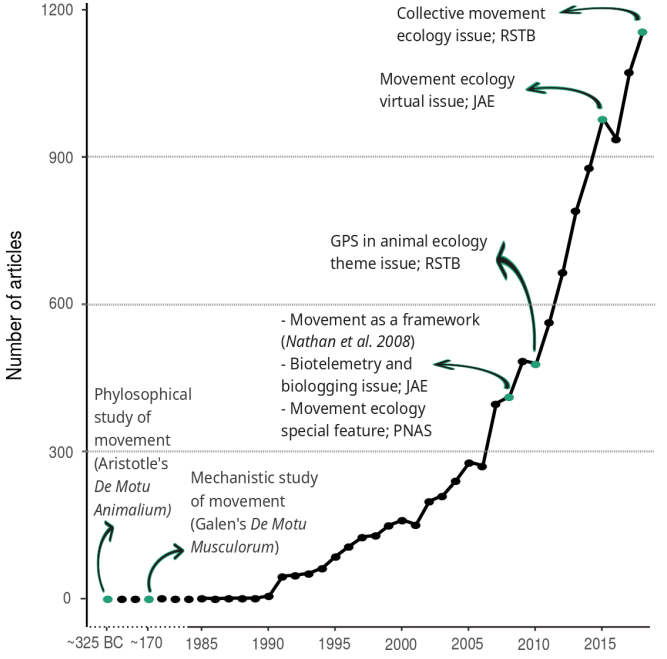
Movement ecology

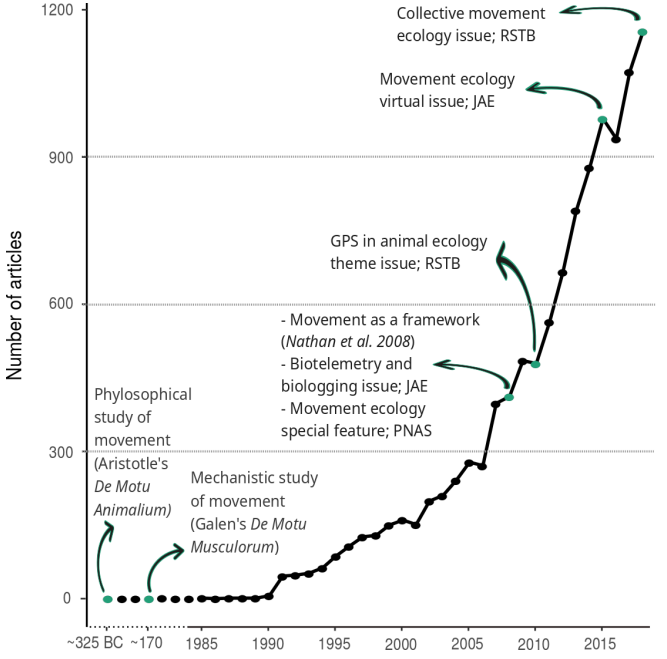
Movement ecology



Movement ecology

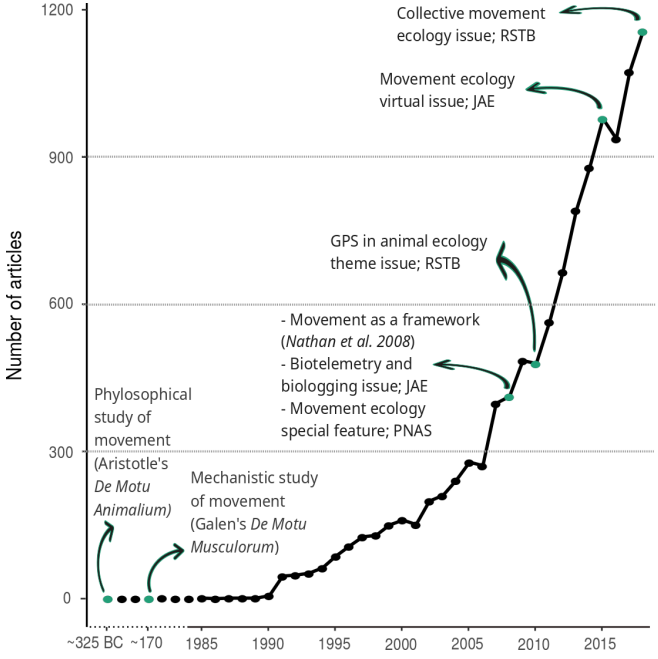


Movement ecology



Tracking devices

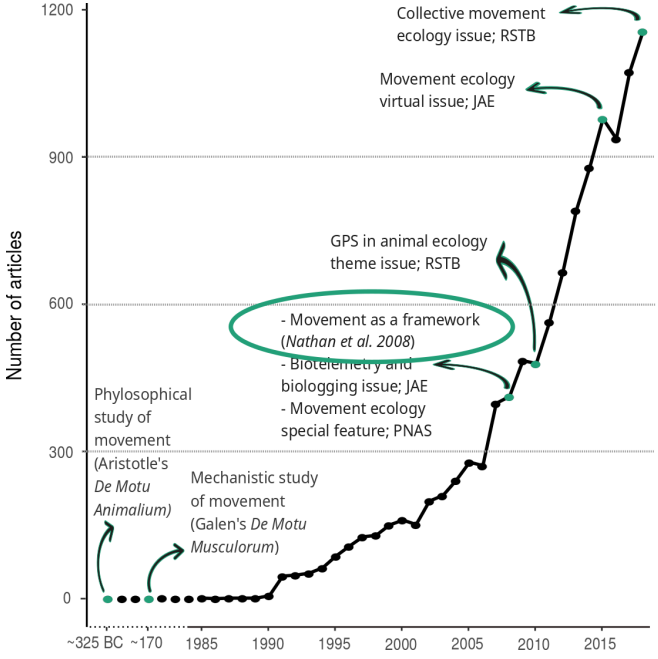
Movement ecology



Tracking devices

Software

Movement ecology



Tracking devices

Software

R ArcGIS SAS SPSS MATLAB python

Movement ecology framework

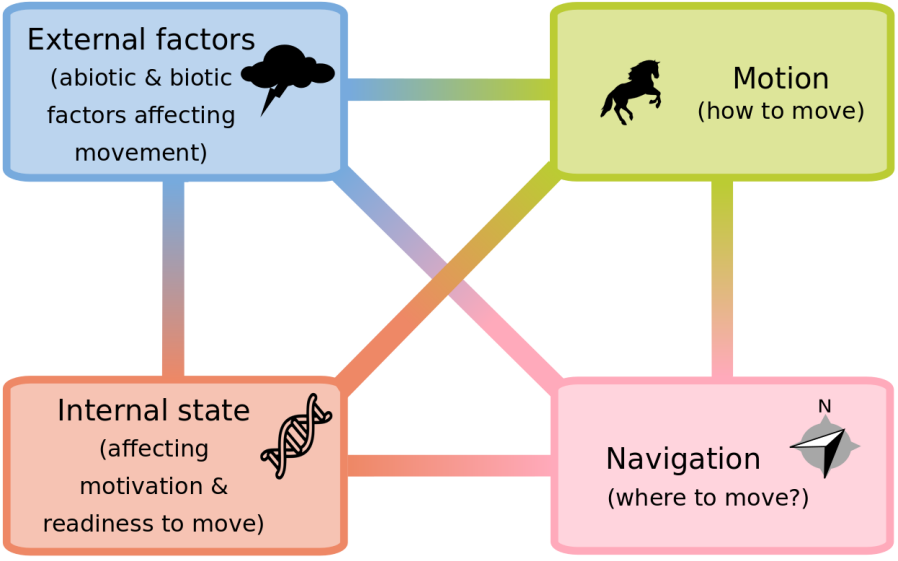
External factors
(abiotic & biotic factors affecting movement)

Motion
(how to move)

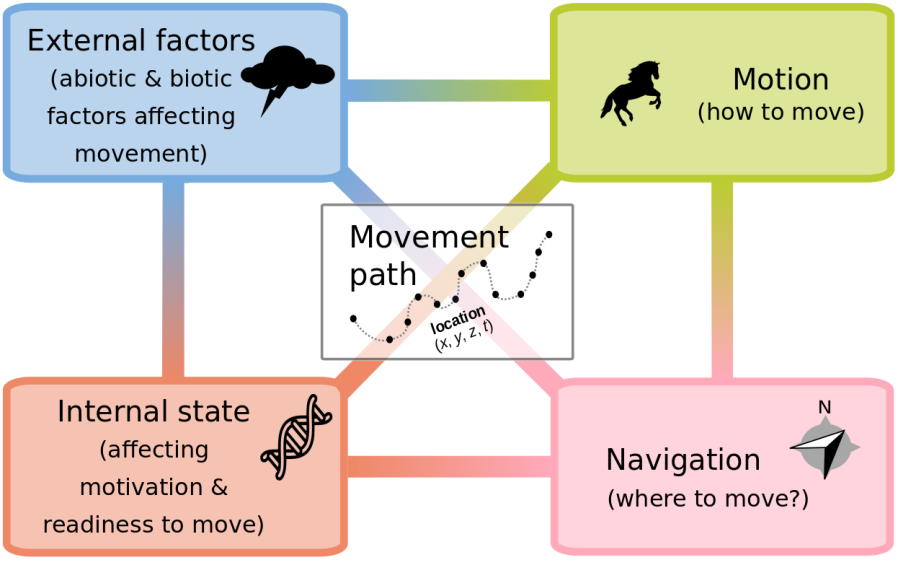
Internal state
(affecting motivation & readiness to move)

Navigation
(where to move?)

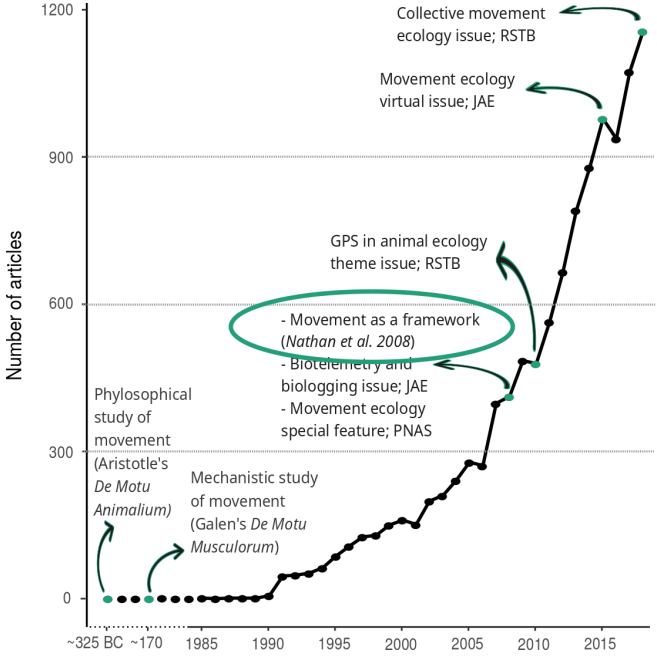
Movement ecology framework



Movement ecology framework



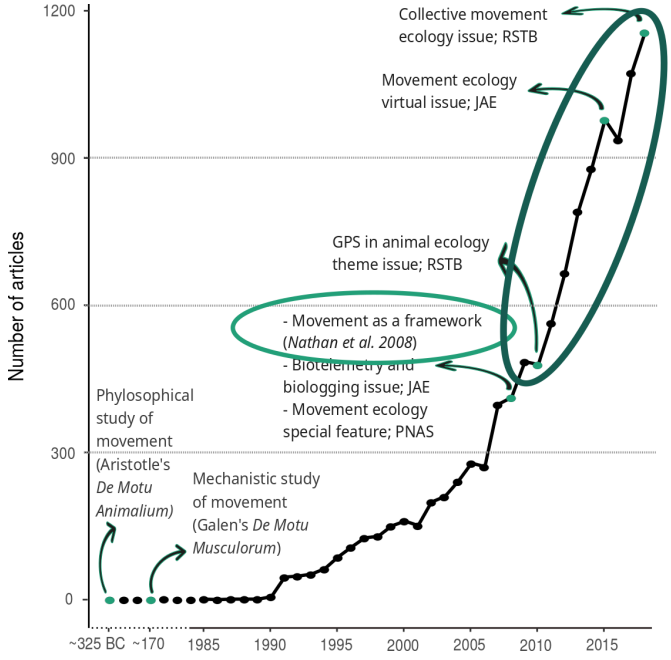
In this study...



Tracking devices

Software

In this study: last 10 years of movement ecology



Tracking devices

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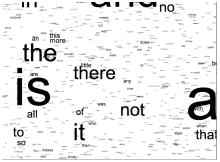
Methods

Identify
mov-eco papers

Download &
extract text



Extract key
information

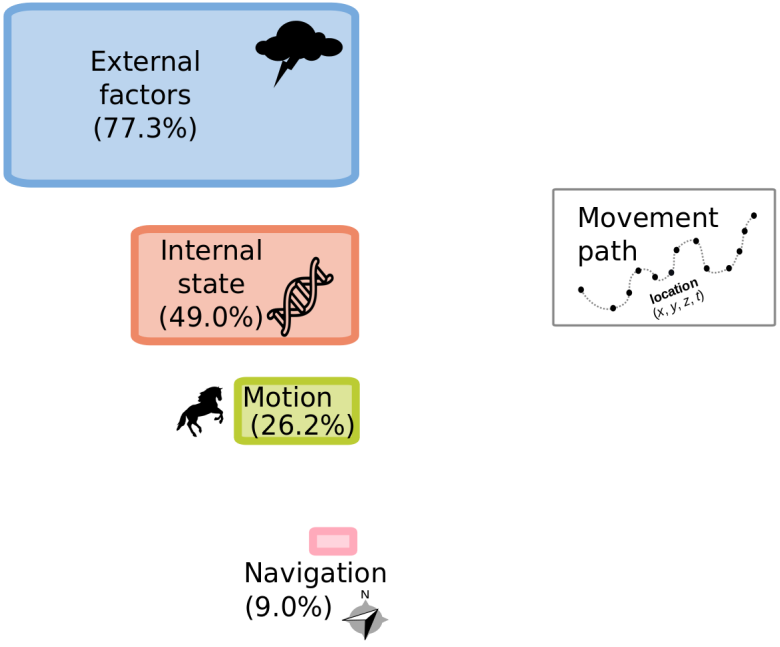
Statistical
analysis

8007 movement ecology papers

More on the methods: https://rociojoo.github.io/mov-eco-review/

The whole study: Joo et al. (pre-print): https://arxiv.org/abs/2006.00110

Results: Movement ecology framework



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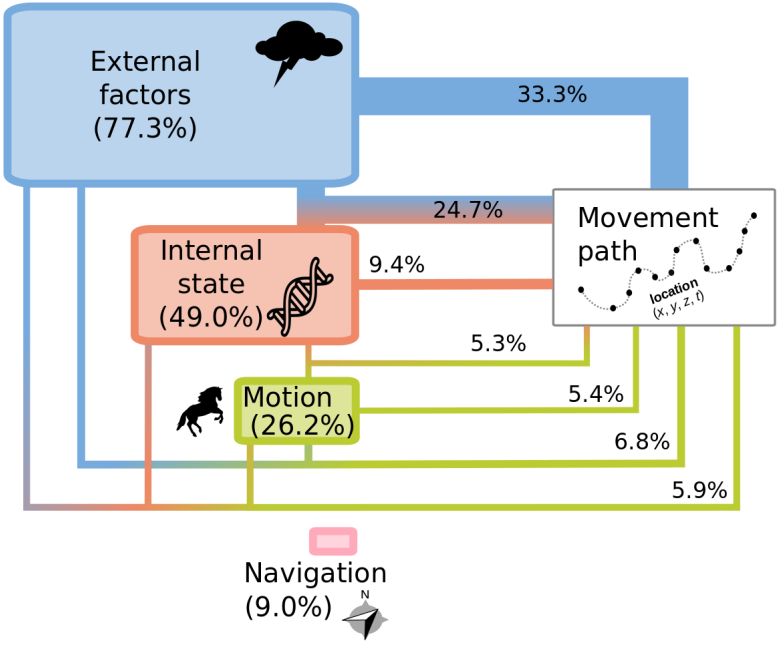
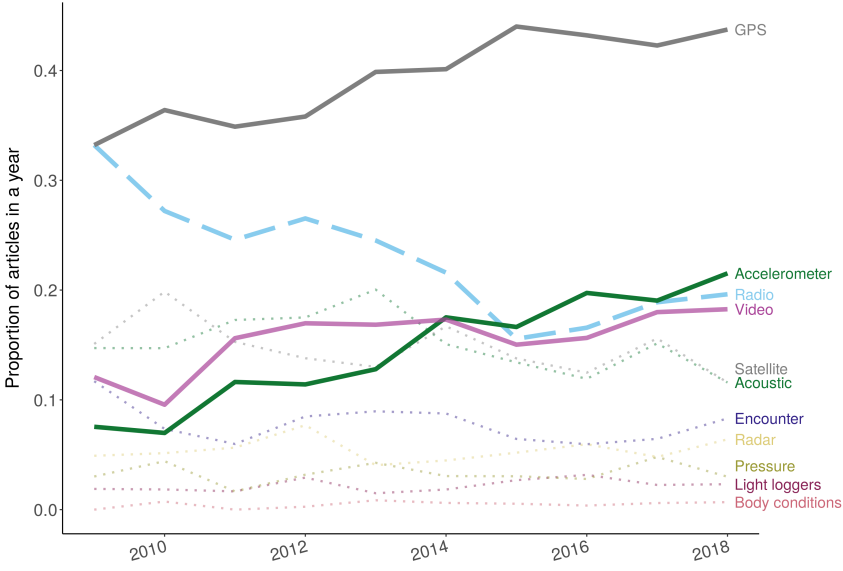
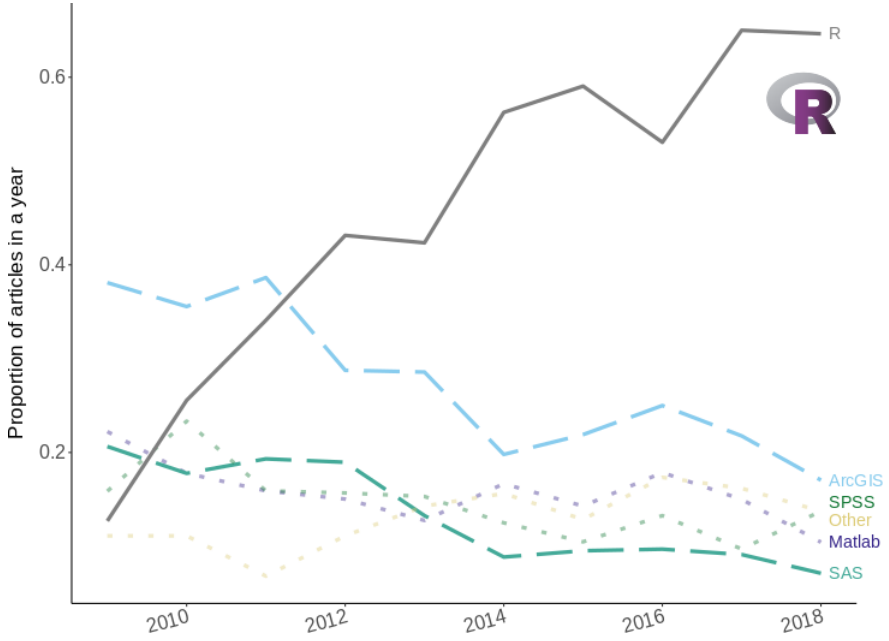


Results: tracking devices



Results: software



Conclusions

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  - External factors $>$ movement processes
    - Easier to study
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A field more driven by data and technologies than new concepts?

Thanks for your attention

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