

Reviewing a decade of movement ecology for conservation

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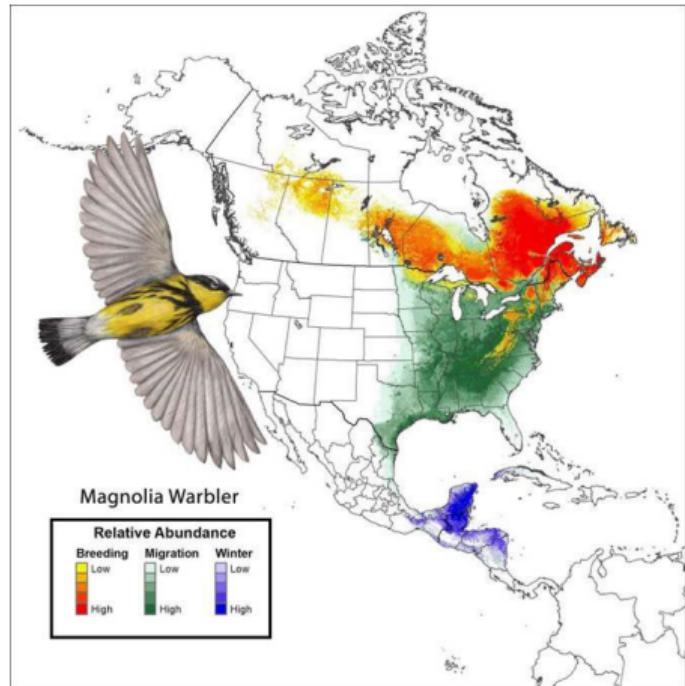


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Movement and conservation

- Conservation of mobile species must account for movement
(Thrigood et al. 2014; Torres et al. 2011)
- Need for: 1) sound research in movement ecology, 2) linking movement ecology to conservation



source: State of North American Birds report

In this work

QUANTITATIVE REVIEW



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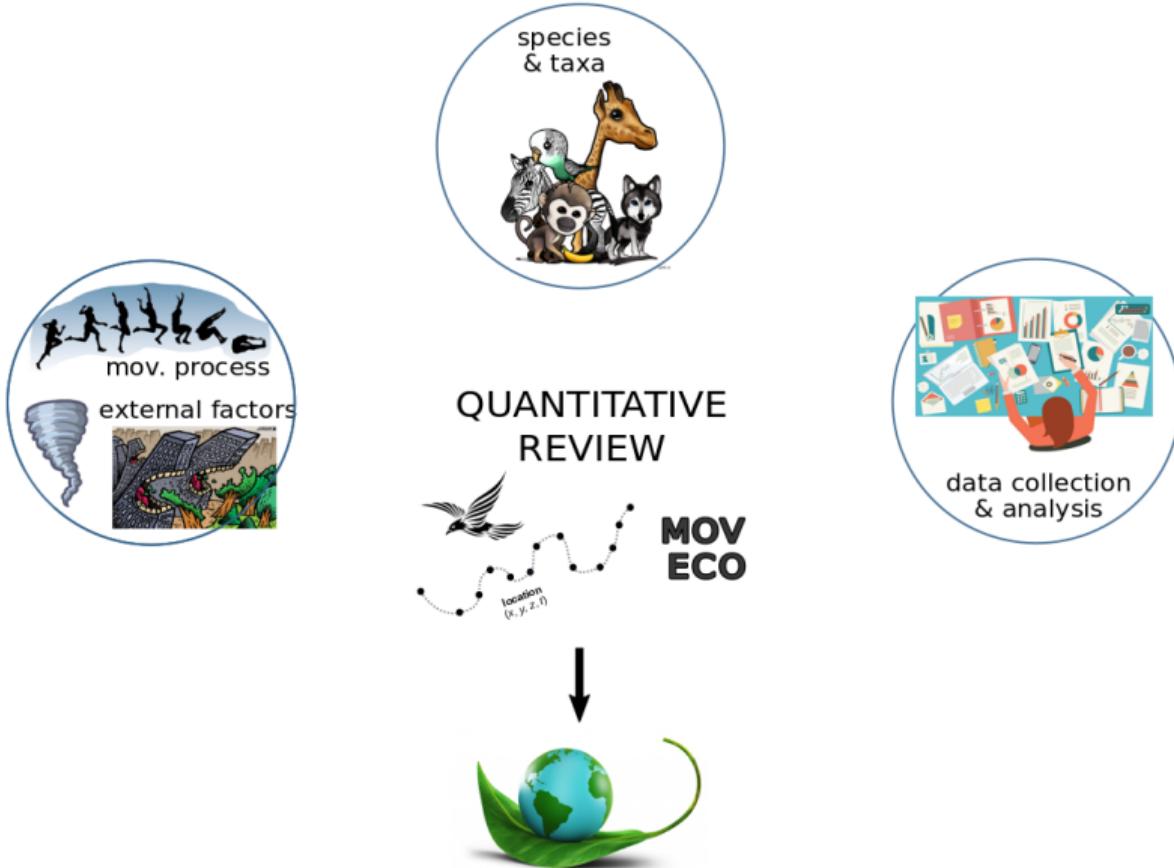
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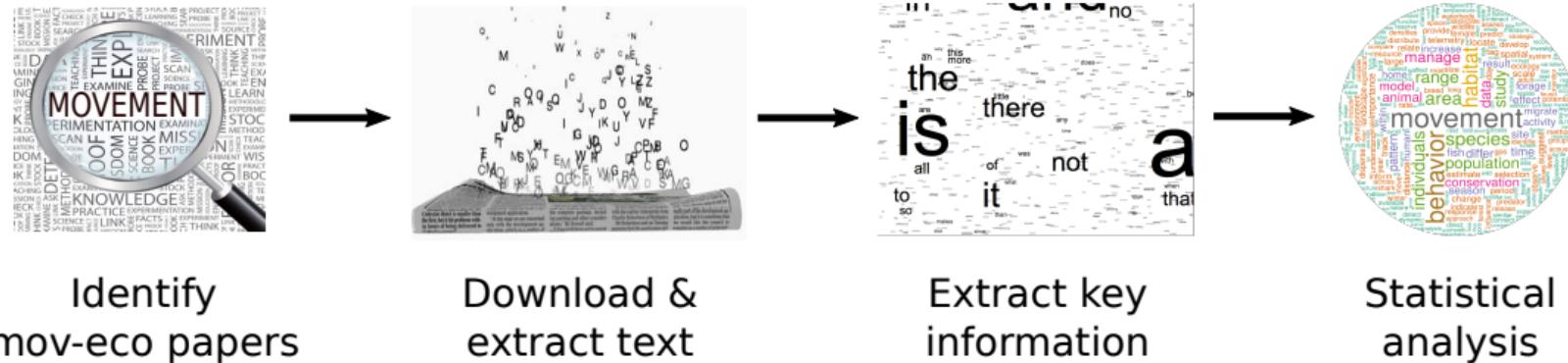
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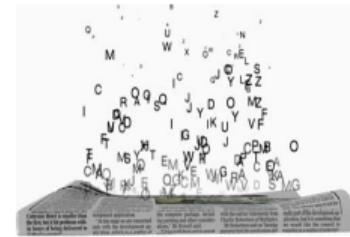
Methods



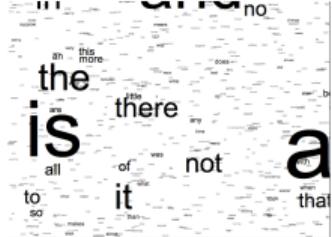
Methods



Identify
mov-eco papers



Download &
extract text



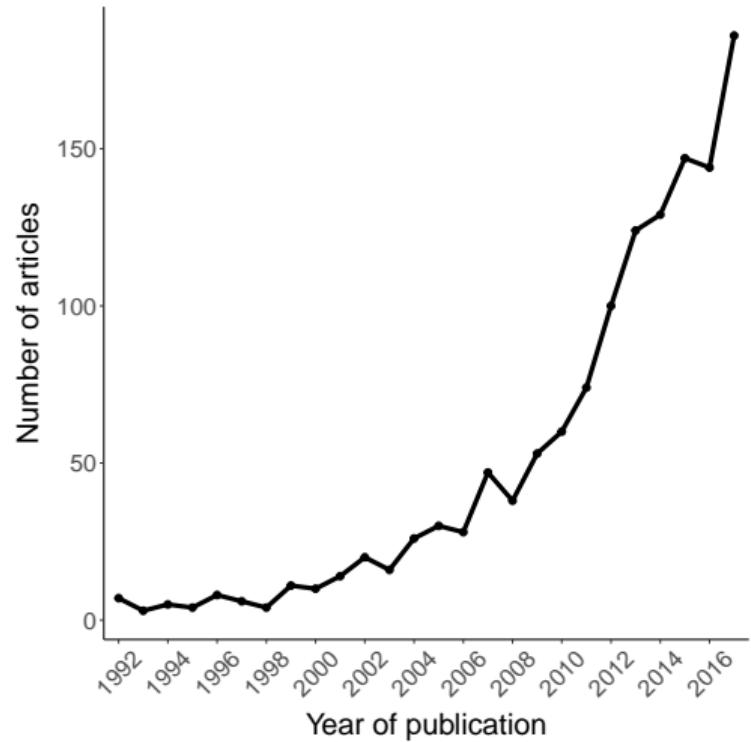
Extract key
information



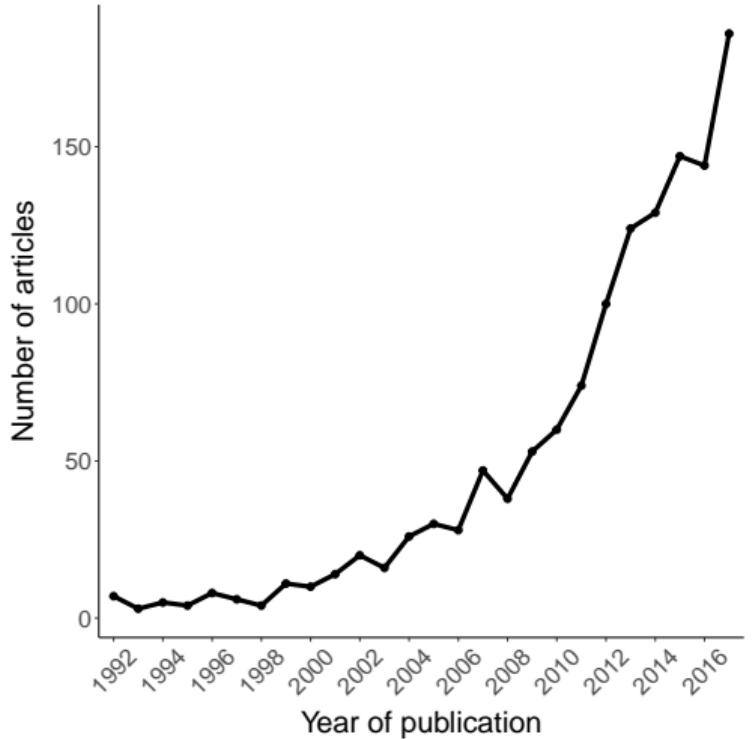
Statistical
analysis

1060 movement ecology papers related to conservation and management

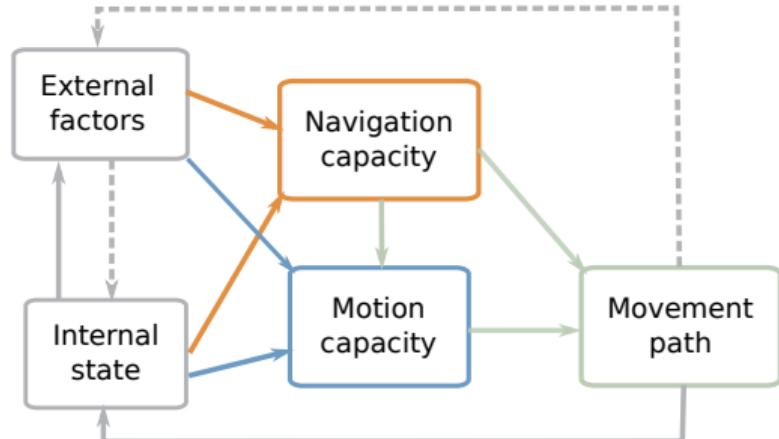
Overview



Overview

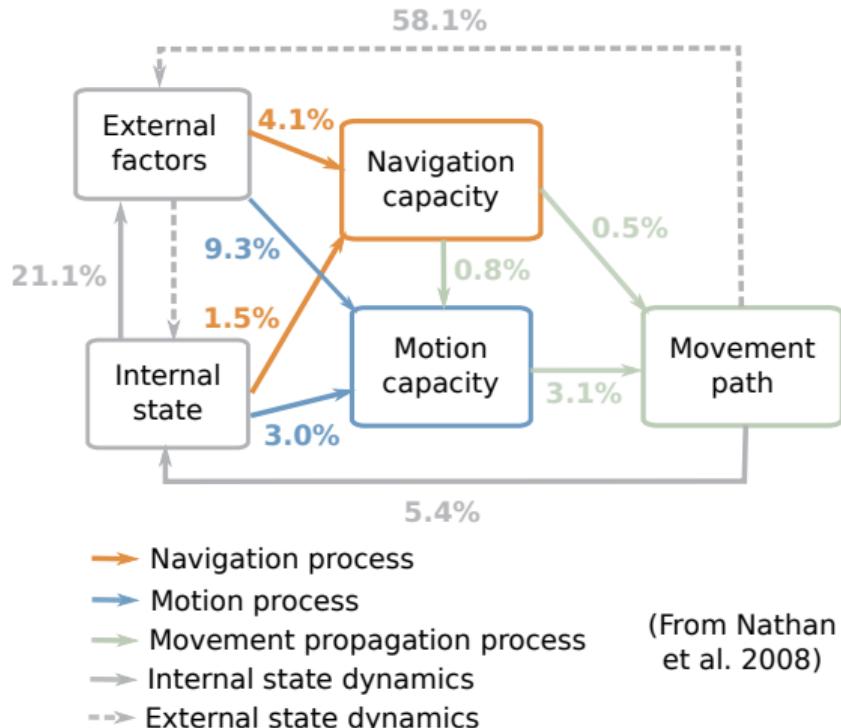


Movement ecology framework



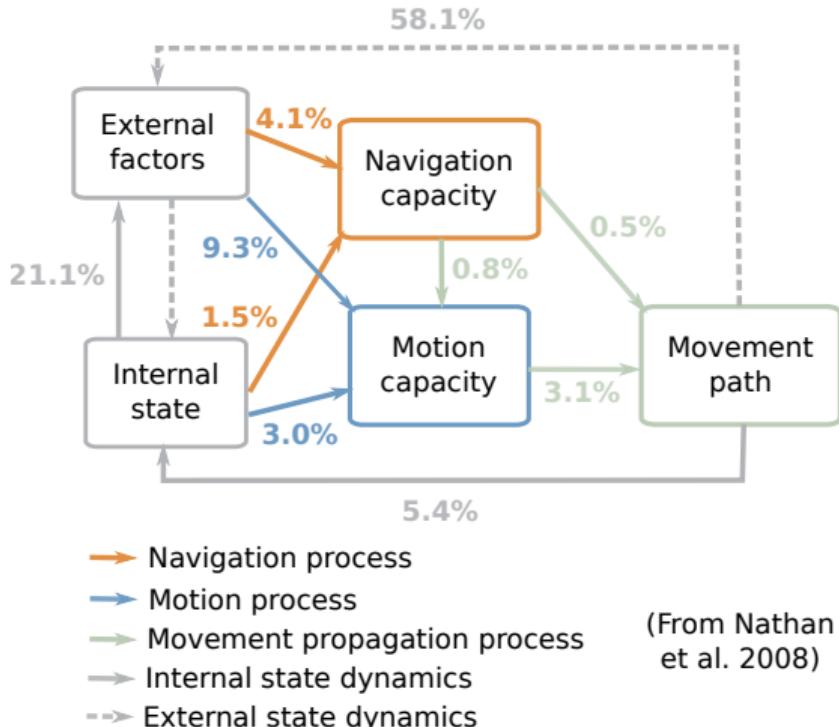
(From Nathan et al. 2008)

Movement ecology framework

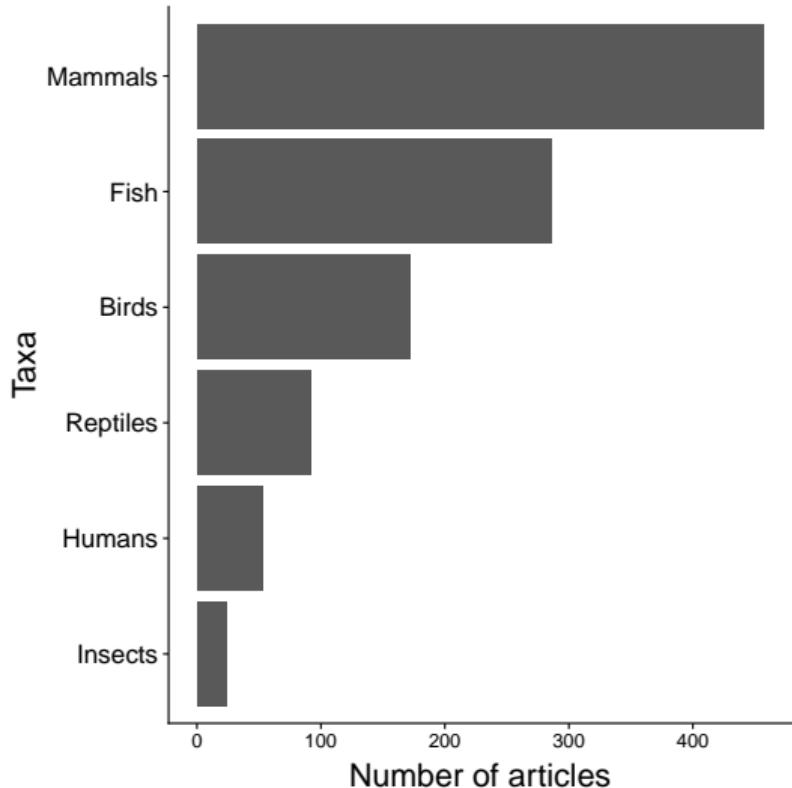


Movement ecology framework

| External factor | Perc. |
|----------------------|--------|
| 1 Environment | 64,7 % |
| 2 Anthropogenic | 14,1 % |
| 3 Animal interaction | 13,3 % |
| 4 Other | 0,1 % |

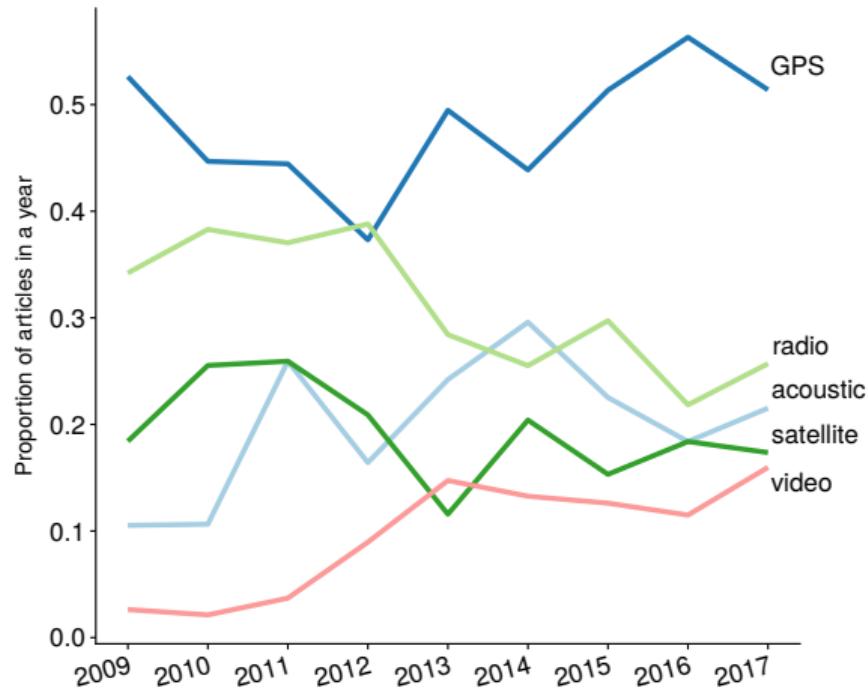


Species & Taxa

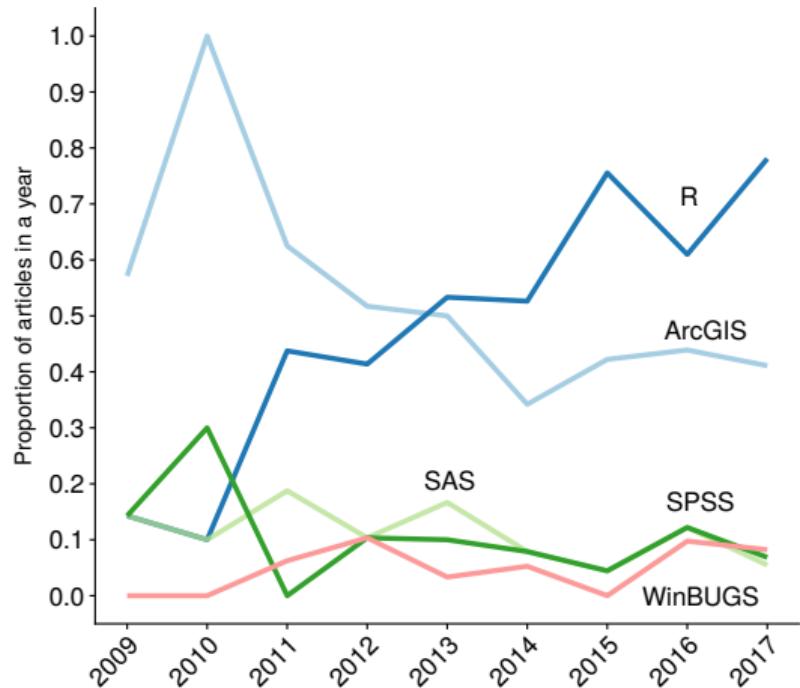


Data collection & analysis

Tracking devices

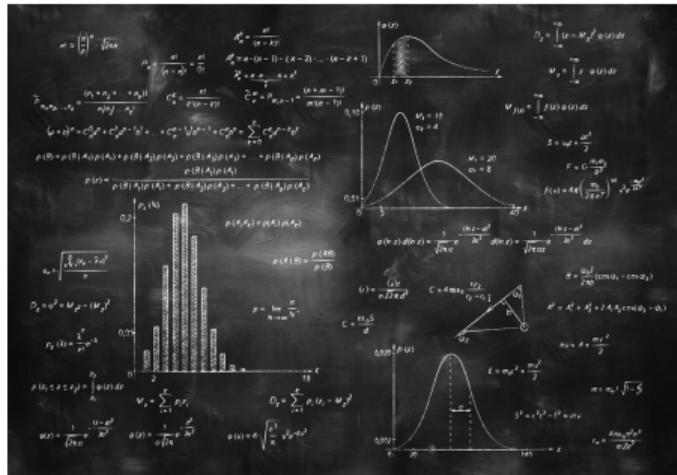


Data collection & analysis



Data collection & analysis

Statistical methods



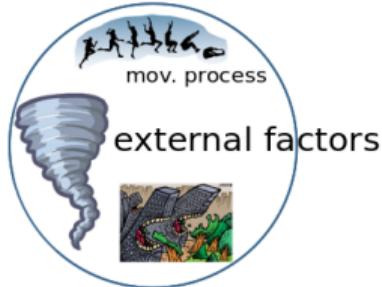
| Method | Perc. |
|------------------------|--------|
| ANOVA | 11,8 % |
| density kernel | 4,9 % |
| GLM | 4,2 % |
| min convex polygon | 3,3 % |
| individual-based model | 3,0 % |

Summary

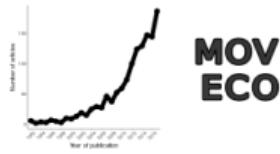
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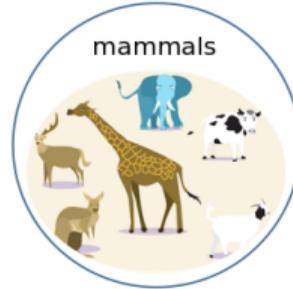
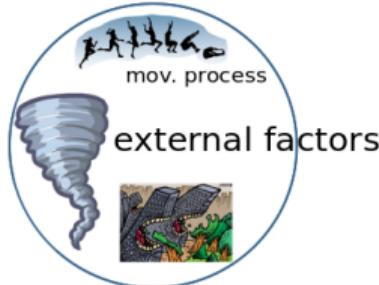
Summary



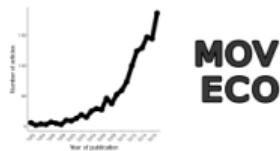
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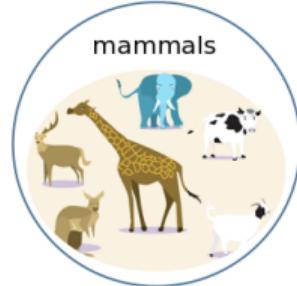
Summary



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Summary



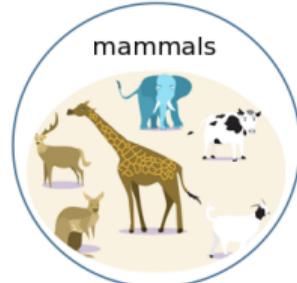
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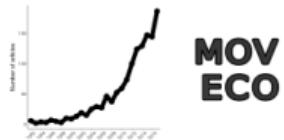
**MOV
ECO**



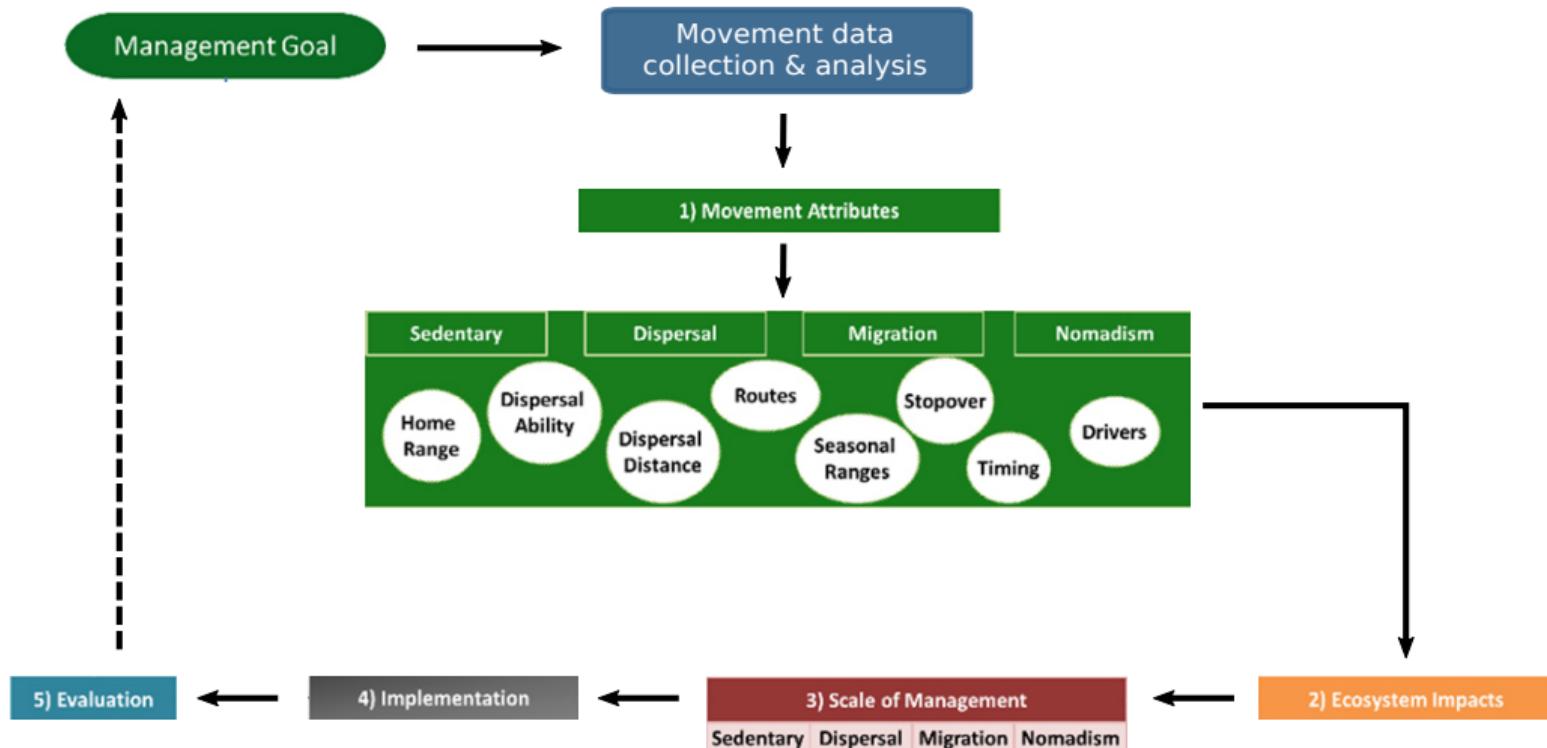
Summary



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Movement for conservation



(adapted from Allen & Singh 2016)

Thanks for your attention



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