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# Incorporating a Process-based Land Use Variable into a Habitat Suitability Modelling and a Species Habitat into a Land Change Model: a Case of Albania

COMBINING THEMES

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BY KUENDA LAZE

# What's new..?

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This study elaborates results of habitat suitability models for lynx and brown bear by incorporating, respectively:

- Process-based land use variables of:
  - Forest cover change from 2000 – 2007, forest data derived from satellite images of the year 2000 and 2007
  - Accessibility of forest calculated by using cost distance algorithm in Geographic Information System, ArcGIS 9.3 (ESRI, Redlands, California USA)
- In lynx and brown bear habitat suitability model calculated by Laze (2013)

= Habitat suitability model increased its performance in terms of model selection and model accuracy

# What's new..?

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This study elaborates results of forest cover change models by incorporating respectively:

- Estimated habitat of lynx and estimated habitat of brown bear into forest cover change model calculated by Laze (2013)

= Forest cover change model increased its performance in terms of model selection

= Recommendation: new variables using satellite image data be used in modelling to:

- test new explanatory variables
- calibrate land change models, species distribution models
- reduce model uncertainties

Thank you very much for  
your attention!