



# Science communication and engagement with the Biodiversity Offsetting Game

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# Offsetting Game Project

- Kone foundation funding 2018-2020
  - First full printable version online this week?
  
  - Leader: Dr (Sc.Admin.) Nina V. Nygren
  - Post doc researcher: PhD Lucas Brunet
  - Researcher, game design, gamification: Ville Kankainen (M.Sc.)
  
  
  - Illustrator: Julia Prusi
- Steering group:
    - PhD Jarmo Saarikivi, University of Helsinki
    - Dr (Sc.Admin.) Taru Peltola, Syke
    - Dr Heta Heiskanen (public law, now Climate panel Finland)
    - PhD Toni Lahtinen, Literature research
    - PhD Karoliina Lummaa, University of Turku, humanistic environmental research

...

## Biodiversity offsetting (BDO)





# What is biodiversity offsetting?

- Governance practice / policy tool that...  
**Links**  
(quantified, measured) damage to nature  
**To...**  
restoration / conservation efforts elsewhere
- Fungibility of biodiversity values
- Credits, markets



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# Hopes

- Developers etc hope offsetting makes constructing and planning easier
- Protected species can be traded for restoration / conservation elsewhere
- Conservationists hope offsetting makes destruction of nature more expensive and difficult
- More avoidance and mitigation of harm, more funds for restoration





# Fears

- Greenwashing
- Selling of unique biodiversity values
- Net loss of biodiversity
- Uncertainties
- ...





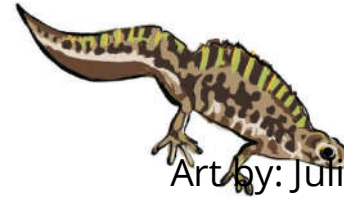
# Finland and France

- Finland
  - Voluntary
  - No legislation on BDO yet
    - ◁ (except EU legislation on Natura2000 and mistranslation of EIA legislation)
  - Practice in formation, "wild west", "implementation ambiguity" (Maarten Hajer 2005)



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- France
  - Mandatory
  - Legislation and established, developing practices
  - Standard practice in development projects
  - Biodiversity offsetting bank projects
  - Experience of problems, uncertainties, systemic issues



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# Offsetting Game


- Research output
- Science communication
- Research tool
- Interaction tool?
- Teaching / learning tool?



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**FILTHY RICH MONEY-MAKER**  
 MOOD: Greedy, invisible  
 GOAL: To construct profitable projects  
 Ability: Unlimited resources; can use the money deck.  
 Scoring: +1 point for each constructed profitable tile at the end of the game.  
 OPTIONAL: +1 point for each tile in a cluster of constructed tiles.



*You have fought long and hard to be able to invest in the most lucrative projects. You know how to betray, lie and deceive. Now that you are rich and powerful, nature and some hippies are not going to prevent to get what you desire the most: more money!*

**START-UP DREAMER**  
 MOOD: Optimistic and driven  
 GOAL: To save the world with his projects.  
 Ability: Unlimited resources; can use the money deck.  
 Scoring: +1 point for each constructed profitable tile at the end of the game.




**OFFSETTING LEGISLATION**

1 Flexible Offsetting <i>No like-for-like</i>	●	5 Ratio +1
2 Voluntary Offsetting <i>Half again after constructing on species</i>	3-4 Normal ratio Like-for-like	6 Offset Everything



Lito-orava

Siberian flying squirrel



Polatouche de Sibérie

*Pteromys volans*

This arboreal, nocturnal rodent lives in boreal mixed forests and nests in tree cavities and nest boxes.



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# Research tool

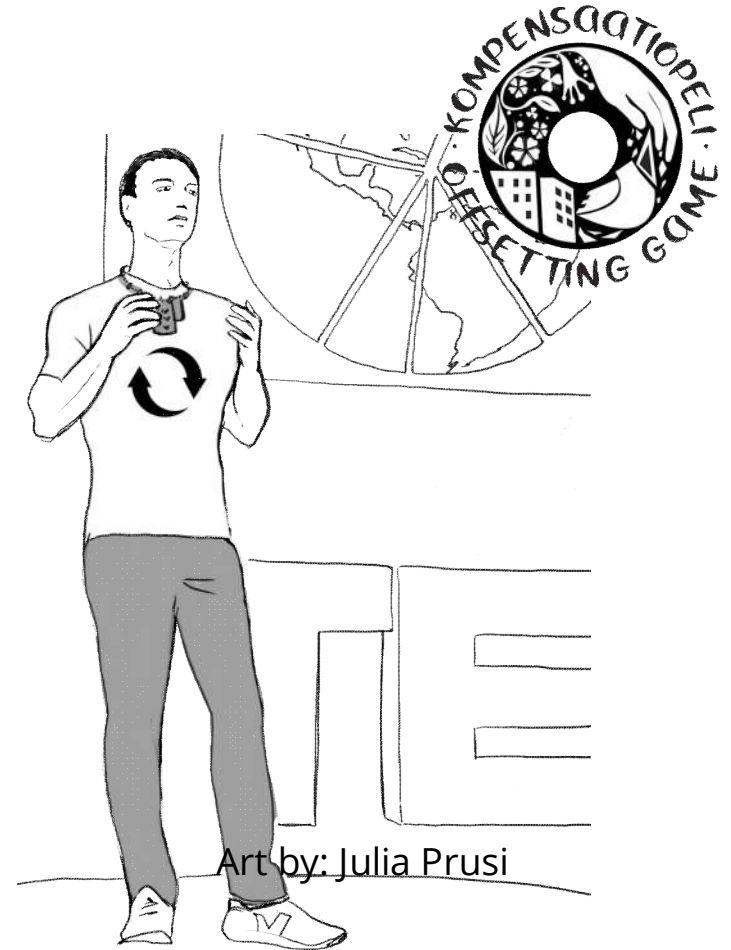
## Playing with experts

- Game design: our framing of BDO
  - Players reacting to these frames and reframing game elements, events, dynamics, BDO etc.
- Feedback
  - "who is this game for?"
  - Design feedback – what is missing or wrong in the simulation
  - Expecting a tool to learn / teach how to do offsetting processes correctly
- Curiosity, having fun
- Reticence, frustration



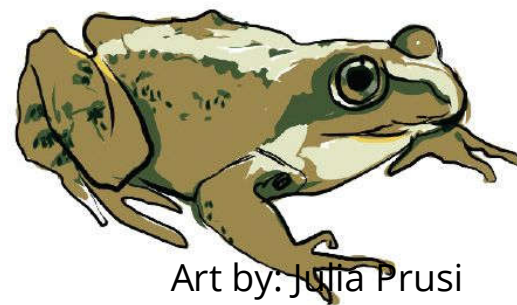
# Preliminary lessons

- Game design
  - Fun, new, challenging way to package and communicate research results
- **HOW** to simulate a complex practice with a game?
  - What to leave out, what to include
  - Design decisions
- Very difficult and time consuming!
- Desing is not an easy way out
- Domain knowledge combined with design expertise?



# Offsetting Game Project

- <https://research.uta.fi/offsetting-game/>
- Funded by Kone foundation
  - Special theme call on biodiversity offsetting
- <https://www.facebook.com/offsettinggame/>
- Presentation video:  
<https://vimeo.com/246304444>
- <https://twitter.com/GameOffsetting>



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# Thanks!

Do you have any questions?

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