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Plant Ecology Seminar
100206-FS2018-0

Autumn Semester 2018

Wednesday 16:15-17:30, Room 80

1.5 ECTS

Structure of seminar

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- Members of the Plant Ecology group present their on-going research, or ideas for future research
- Occasional presentations by guests and collaborators
- Talks should be 30-40 minutes
- Programme: ILIAS

Benefits for students

- Overview of research in plant ecology group
- Listen to research talks
- Learn how science is communicated
- Hear and participate in scientific debates

Requirements for 1.5 ECTS

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- Regular attendance, cannot pass if miss more than two talks (except for illness, family reasons, military service)
- Homework: short essay about one of the seminar topics
  - Email a **plan + figure sketch** to caterina.penone@ips.unibe.ch not more than **10 days** after the seminar
- Asking questions: read the papers in ILIAS before the Seminar

Writing the essay

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- Should be around 2000 words
- Three sections
  - Background,
  - Summary of the Seminar
  - Discussion & Outlook
- List of references cited in the text at the end of the essay

Background/ introduction

- Broader scientific context
- Why is this novel and interesting?
- What hypotheses are being tested?
- Start broad and progressively get more specific
- Use Web of Science to search for literature

Summary of talk

- Concisely and accurately summarise methods and results
  - How was the study designed?
  - How were data collected?
  - How were they analysed?
  - What effects were found? Significant?
- How did the speaker interpret the results?
- Do the results support the hypotheses?
- Put it in your own words and finish with a short summary paragraph

Discussion and Outlook

- Critically evaluate the talk
- Were there any methodological issues?
- What contribution does it make to the subject?
- What are the open questions? How could they be tackled in a future study?
- Finish with a conclusion giving your overall view of the talk

- Compare with literature
- Listen to the discussion and think about it

Abstract figure

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- Summarise the contents: background, methods, results, take-home message
- Helps to structure the essay and think about important messages
- Simple and clear, readable
- Provide short description in a caption

- Bonus for design (2 points max)

Abstract figure – example 1

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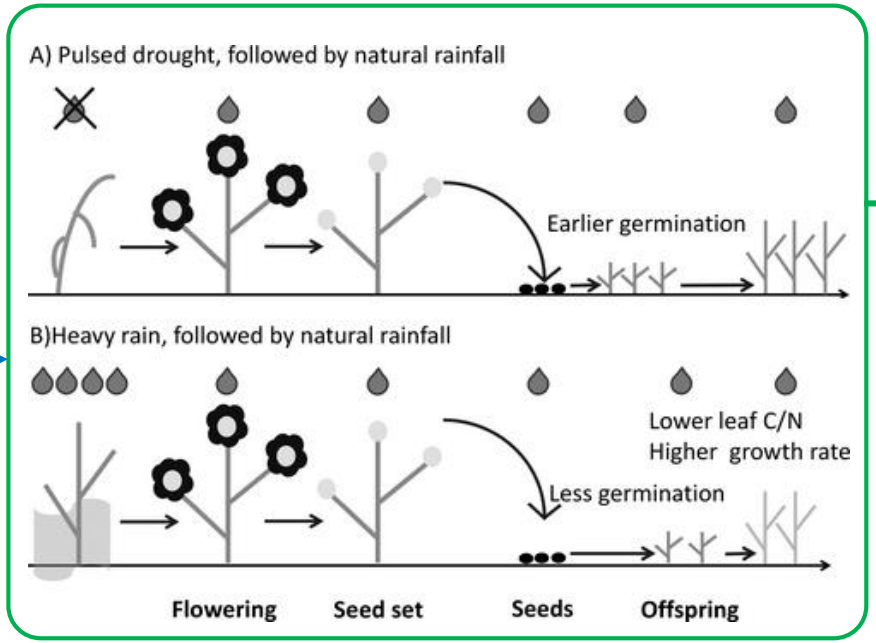
> Test of transgenerational effects on two species after extreme weather manipulations

Climate change: increase extreme climatic events

Transgenerational effects?



Transgenerational effects

Mediated by species richness

Improve models of species responses and adaptation under climate change

Adapted from http://onlinelibrary.wiley.com/doi/10.1111/1365-2745.12567/full

Abstract figure – example 2

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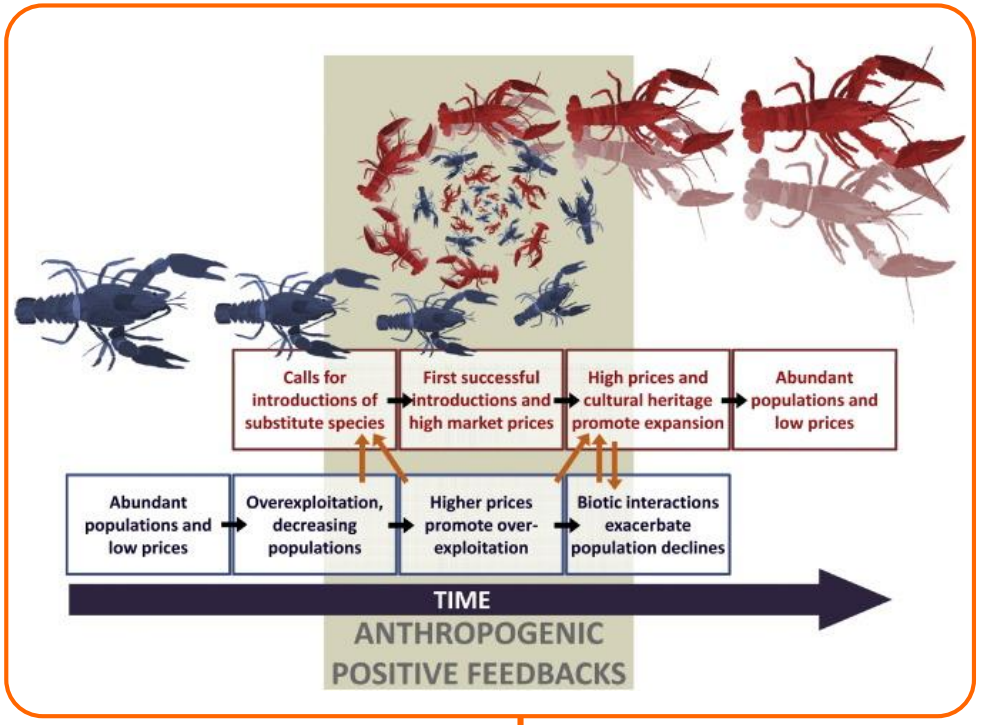
> Species substitutions driven by anthropogenic positive feedbacks: Spanish crayfish species as a case study

Anthropogenic positive feedbacks can drive species declines, invasions, substitutions

Analysis of information in newspapers between 1900 and 2000



Detect conservation problems
Improve conservation strategies

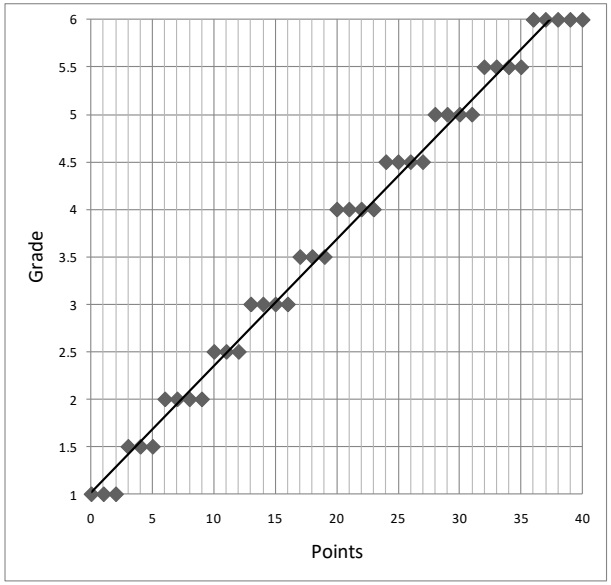
Adapted from http://www.sciencedirect.com/science/article/pii/S0006320715301658

Marking

	fail	okay	Good	excellent	Weight	Max. points
Seminar summarized *Text:7 points, Figure: 3 points*	0	2	3	4	25%	10
Explanation of broader context	0	2	3	4	18%	7.2
Criticism & further ideas	0	2	3	4	18%	3.2
Additional literature included	0	2	3	4	8%	3.2
Structure logical	0	2	3	4	8%	3.2
Language correct & precise	0	2	3	4	8%	3.2
Participation in discussions	0	2	3	4	15%	6
TOTAL						40

Participation in discussions:

- 0 - 1 : 0 points
- 2 - 4 : 2 points
- 5 - 8 : 3 points
- 9+ : 4 points



Bonus points for figure design: 2 points maximum

Deadlines

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- Select an essay topic within **one week after the first seminar**
- Send me (caterina.penone@ips.unibe.ch) a plan of your essay and a sketch of your figure latest **10 days after the seminar** you're writing about
- Send me your essays by January 07th

Date	Speaker	Title	Student essay
19.09.2018 **Students: please come at 16.00**	**Rafael Molina**	Linking plant evolution and human well-being: evo-service domains of usable plants at Mt. Kilimanjaro, Tanzania	
26.09.2018	**Tobias Züst**	Defense evolution in a rapid plant radiation › Agrawal et al. (2009) Evolution.pdf (278.31 KB)	
03.10.2018	**Katja Rembold**	Stand structural components and species richness across four land-use systems in Sumatra › Drescher et al. 2016-Ecological and socio-economic functions.pdf (511.35 KB)	Jil Schuller
10.10.2018	**Malte Jochum**	Do biodiversity experiments accurately represent "real-world" ecosystems? › Duffy 2008 Frontiers Ecol Evol.pdf (1.18 MB)	
17.10.2018	**Seraina Cappelli**	PaNDiving in China › Liu_et_al-2018-Ecology_and_Evolution.pdf (634.72 KB)	
24.10.2018	**Lina Xie**		

31.10.2018	**Markus Fischer**	IPBES	
07.11.2018	**Andrew Letten**		
14.11.2018	**Noémie Pichon**	Individual and interactive effects of diversity, functional composition and nitrogen on grassland litter decomposition › Cornwell_et_al-2008-Ecology_Letters.pdf (325.82 KB)	Chiara Durrer
21.11.2018	**Sarah Bürli**	Rare plant species	
28.11.2018	**Davnah Payne**	Biodiversity-related opportunities for sustainable mountain development › Wymann von Dach et al. 2016.pdf (7.37 MB)	
05.12.2018			
12.12.2018	**Abiel Rindisbacher**	Does ecosystem resilience change with land-use intensification and biodiversity loss? A meta-analysis of manipulative studies › Isbell et al 2015 Nature.pdf (4.77 MB)	
19.12.2018	No seminar		