DIGESTIBILITY IN GREYLAG GEESE (*Anser anser*) THE ROLE OF SOCIAL CONTEXT

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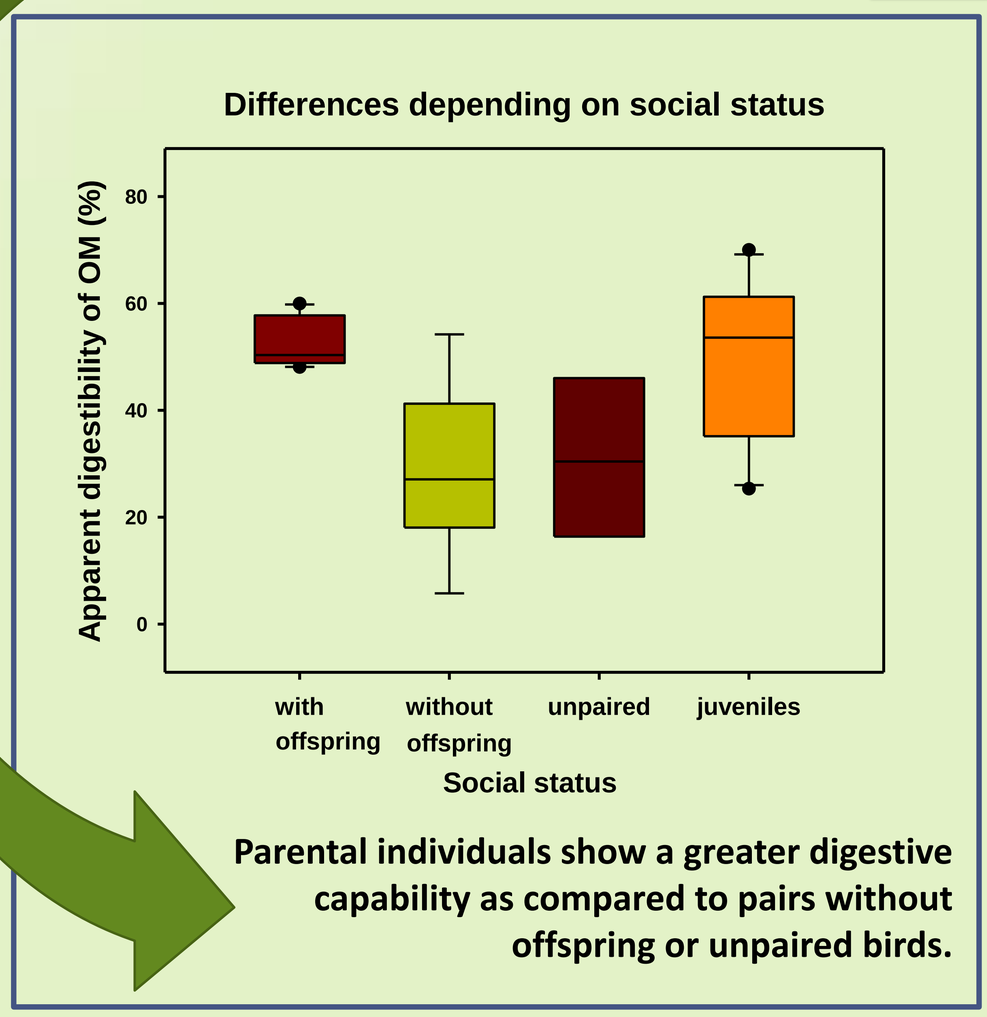
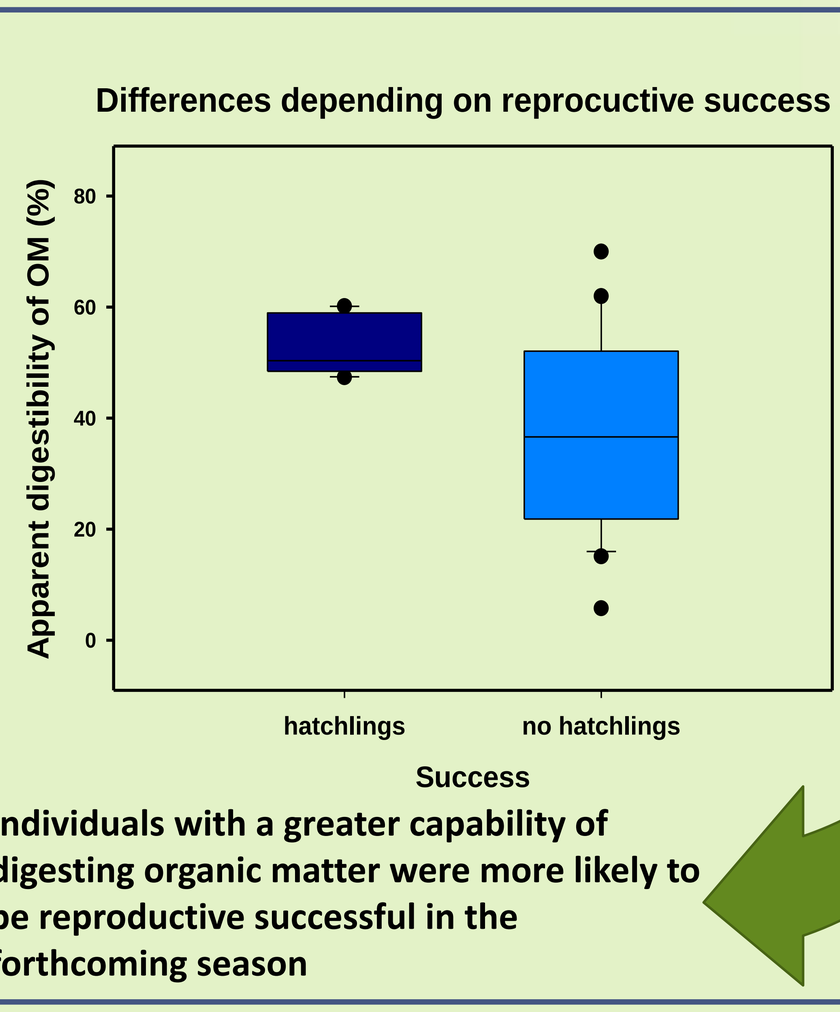
Social context is known to modulate physiology, behaviour, fertility and immune system of group living animals.

Is social context also affecting apparent digestibility?

Is apparent digestibility predicting reproductive success?



Parental individuals show a greater digestive capability as compared to pairs without offspring or unpaired birds.



Individuals with a greater capability of digesting organic matter were more likely to be reproductive successful in the forthcoming season

METHODS:

38 birds of the semi-tame and individually marked flock at the Konrad Lorenz Research Station in Upper Austria.
4 different social categories, i.e. paired with and without offspring, unpaired, juveniles
9 consecutive days in winter 2017 (closed snow pack)
184 individual droppings (mean = 4.8; standard deviation = 0.4)
Lignin as indigestible marker -> estimation of the apparent digestibility of organic matter (OM)

CONCLUSION:

Our findings suggest social status to modulate digestive capability, probably by dampening the stress response in socially well embedded individuals. Apparent digestibility seems to bear long term effects on breeding success and fitness.

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