

# Auslaufnutzung und Greifvogelverluste von Junghähnen in Hecke und KUP

Young cockerels in SRC and hedgerows: range use and losses due to predatory birds

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### Mix-Enable

- Mehr Tiere im Auslauf, weniger Verluste
- Übertragbarkeit

#### Project from before with young cattle & broilers on pasture:

Hübner et al. (2024): Mix it – cograzing with cattle reduces broiler losses (...) in: Poultry Science 103:103906

<https://doi.org/10.1016/j.psj.2024.103906>

Hübner et al. (2021): Hähnchen weiden mit Rindern. (German)

Orgprints: [\[#53691\]](#)



# Hintergrund Habicht & Co Background



Signs of a predatory bird. In our case mostly goshawks were seen, especially the juvenile form (top right).





ÖTZ Coffee (Bresse Gauloise X New Hampshire)

Per hen house: 50 animals (partly slaughtered at the age of 12 and 15 weeks and final slaughter with 18 weeks)

Only male animals were used

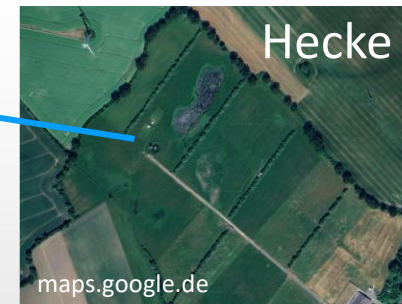
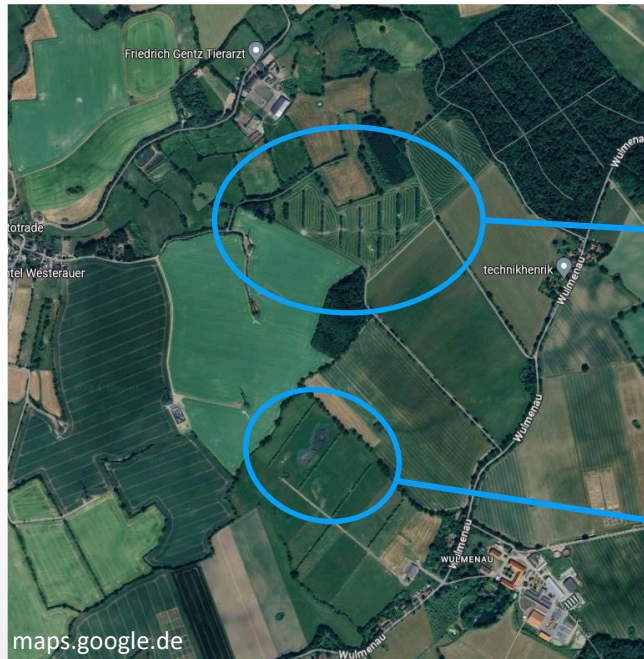
Perches: ca. 8m (16cm per cockerel before 1st saughter),

Indoor: ca. 5sqm (max 18kg/sqm)



# Hintergrund Standort Thünen-Institut

Experimental design: Locations



See next slide for explanation

Location of the farm in Germany (federal state: Schleswig-Holstein, between Hamburg and Lübeck).

Treatments:

- 1) KUP = short rotation coppices
- 2) Control group close to the SRC line (if you look closely you can see white squares which are the houses placed on the field during one of the trials – if you go on google maps and search for „Westerau“ you might be able to get a better look)
- 3) Hecke = Hedgerow
- 4) Control Group close to the hedge rows

Two groups of cockerels per treatment and trial

Hecke

# Versuchsaufbau - Hecke

Experimental design: Hedgerows

Hedgerows: Willow (*Salix Caprea*), dog rose (*rosa canina*), blackthorn (*Prunus spinosa*), whitethorn (*Crataegus*), Tilia. Originally planned as feed for grazing animals (goats, now partly used for cattle)  
Hedgerows were heterogeneous with sometimes one line and sometimes two/three lines of shrubs.

Frühjahr



Sommer/  
Herbst



# Versuchsaufbau - KUP Experimental design: Short rotation coppice (SRC)



summer / autumn



spring



Poplar trees/ aspens, few willow trees  
Originally planted 2009 with 6 rows of saplings per strip. We cut the western three rows in each strip and let it regrow for a year before letting the cockerels into it.

Length of strips: 70 – 100m

Width of strips: 13 – 15m



# Kontrolle

Experimental design: Control groups



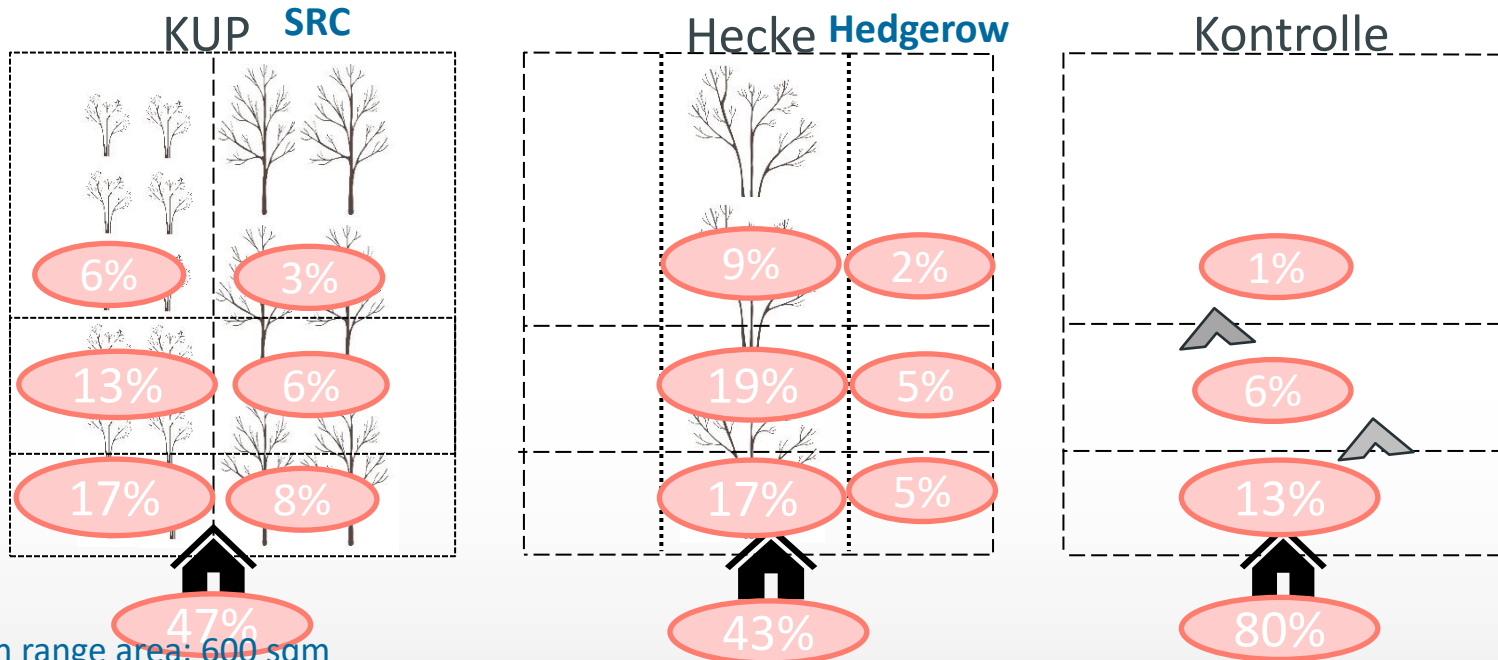
Ackergras (KUP)  
Grassland within crop rotation  
(control to SRC groups)

Permanent grassland  
(control to hedgerow groups)  
Dauergrünland (Hecke)



# Ergebnisse - Auslaufnutzung

Results: Range use



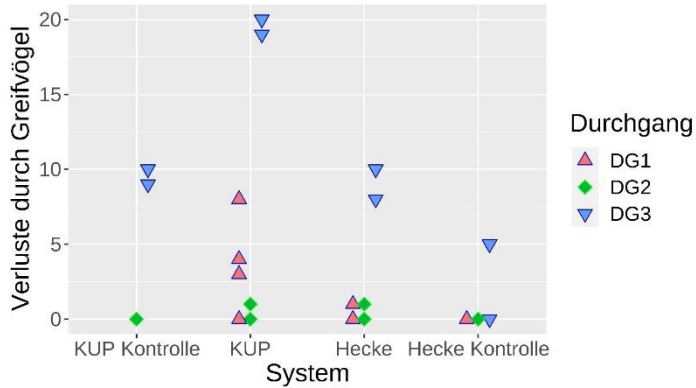
Each range area: 600 sqm

Length: 30-40m, width: 15-20m, 1. dotted line: 5-7m, 2. dotted line 5-15/20m

Observations: scan sampling, morning & evening (each 2-2.5h), three times per round and group (always the week before slaughter)

# Ergebnisse - Verluste

Results: Losses due to predatory birds



KUP = short rotation coppice

Hecke = hedgerow

DG1 = 1st trial in summer/autumn

(no control on the field with src but four groups inside src)

DG2 = 2nd trial in spring/summer

DG3 = 3rd trial in summer/autumn

Picture: Juvenile goshawk on bird.

Bottom picture: buzzard chasing away a young goshawk from its prey.



# Preliminary interpretation

- Surroundings need to be considered. In this case close-by patches of forest and distance to farm and other buildings provided breeding and hunting grounds preferred by goshawks.
- Structure of SRC and hedgerows need to be considered. They successfully encouraged cockerels to use the range area. Both SRC and hedgerows with cockerels using the range are more frequently and ranging further away from coop lead to a higher number of losses due to predatory birds. The structure of the SRC and hedgerows in this study did not prevent losses due to goshawks.