


**FreeBirds**  
 “Optimizing the use of the free range as the key to improve organic layer and broiler chicken production”









**Organic poultry production**

- Increasing over the last decade
- ~20% in some countries for egg production
- Broiler chicken meat still modest - ~1-2- %





## Organic poultry

### *Laying hens*

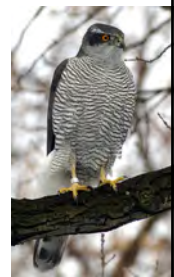
- Max 3000 birds per compartment, max 18 000 per house
- Max 6 birds/m<sup>2</sup> indoors, and outdoors min 4 m<sup>2</sup> per bird

### *Broiler chickens*

- Max 4800 birds per compartment; outdoors min 4 m<sup>2</sup> per bird
- 10 birds or 20 kg/m<sup>2</sup>
- No coccidiostats
- Slaughter at ~70 days



## Outdoor range



### Positive aspects

- Consumer expectation
- More enriched environment
- Promote more natural behaviours
  - Less injurious pecking
  - If more outdoors
  - If more foraging in range
- Decrease stocking density indoors

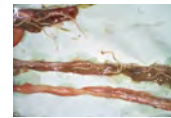
### Negative aspects

- Predators
- Biosecurity, in particular when feeding outdoors
- Soil nutrient overload



## What has been found so far?

- More laying hens outdoor
  - Smaller flocks
  - Low contrast in light intensity between indoor and outdoor
  - More and larger peep-holes
  - More vegetation and more shelters, varied structures outdoors
- Flocks of laying hens that are more outdoor
  - Less intestinal parasites
  - Reduced incidence of feather damages and pecking injuries



Less studied in broiler chickens



## FreeBirds

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CORE organic



This project has received funding under Coordination of European Transnational Research in Organic Food and Farming System Cofund (Core Organic Cofund) by the European Union's Horizon 2020 research and innovation programme under grant agreement No 727495.

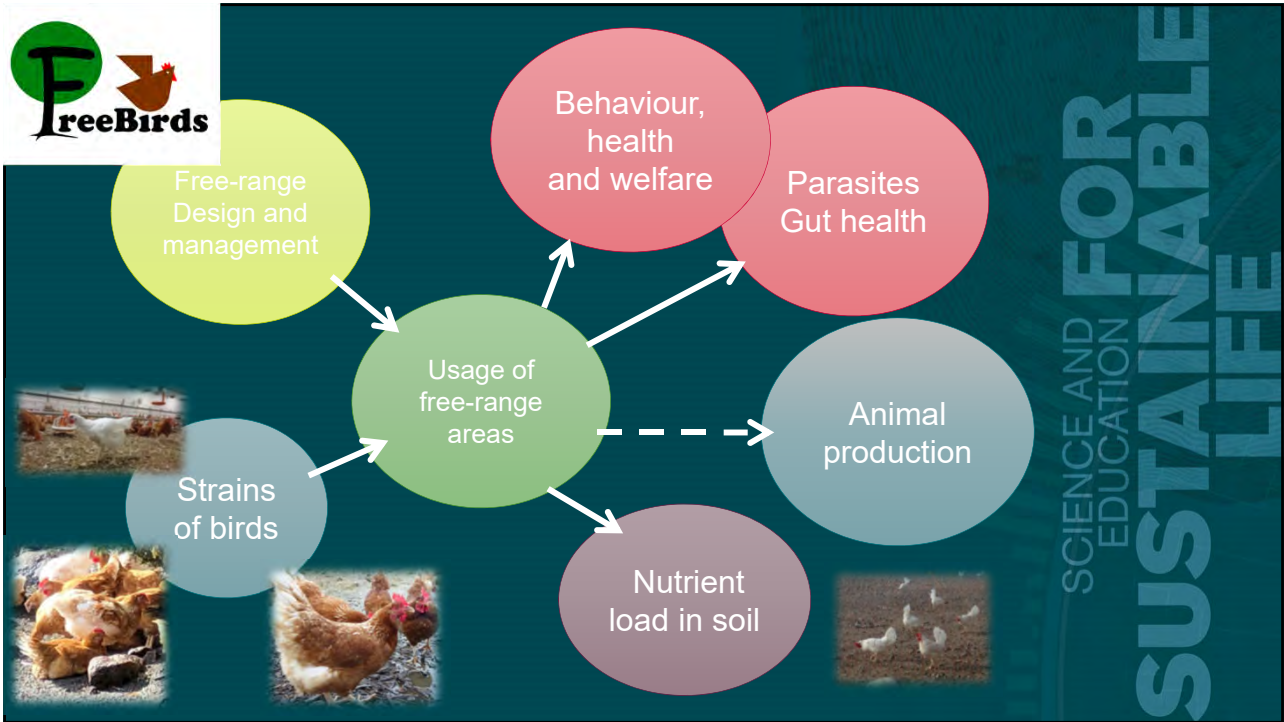
## FreeBirds (ERA-net Core organic 2018-2020)

“Optimizing the use of the free range as the key to improve organic layer and broiler chicken production”

- Behaviour and welfare Aspects. The relationships between range use and specific welfare issues (NL/BE- leader)
- Free range use and parasite infections in organic layers, and gut health in broiler chickens (NL)
- The waste of nutrients in the ranging areas and test of practical solutions to achieve an optimal use of the range area (IT)
- Suitability of different egg and meat strains regarding behaviour, health and welfare (DK)

Denmark, Italy, the Netherlands, Poland, Turkey, Belgium and Sweden





Time	Topic	Speaker
09.00-09.20	Welcome Introduction by Ivana Trkulja	Ivana Trkulja <i>CORE Organic coordinator</i>
	Presentation of FreeBirds project	Stefan Gunnarsson <i>Swedish Uni. of Agric. Sci. (SLU) coordinator of FreeBirds</i>
09.20-09.40	Tracking chickens in a free range	Bas Rodenburg <i>Utrecht University/ILVO Gent</i>
09.40-10.00	Gut parasite infections and free-range use in organic laying	Monique Bestman <i>Louis Bolk Institute</i>
10.00-10.20	Soil organic matter and nutrient levels in different organic outdoor runs	Valentina Ferrante <i>University of Milan</i>
10.20-10.40	Choosing the right commercial layer hybrid for organic egg production: a comparison of range use, welfare and performance in two strains	Anja Brinch Riber <i>Aarhus University</i>
10.40-11.00	Break	
11.00-11.20	Free-ranging profiles of commercial and heritage meat-purpose chickens, their welfare and gastrointestinal tract features	Joanna Marchewka <i>Polish Academy of Science</i>
11.20-11.40	Ranging and native layer strains in Turkey	Arda Sözcü <i>Ege University/Uludağ University, Turkey</i>
11.40-12.00	Ranging and welfare in organic broilers in Sweden	Lina Göransson <i>SLU</i>
12.00 - 12.55	Integrated insights. Future challenges and research topics. A general discussion	Stefan Gunnarsson, moderator
12.55 - 13.00	Wrapping up	Stefan Gunnarsson



Many thanks to the project group of FreeBirds,  
Core Organic and the national funders



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SCIENCE AND  
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**SUSTAINABLE  
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