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VETERINARY SERVICES

BVPA Winter Meeting

Higher Welfare Broiler Production: A Practitioner's View

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What is welfare?

- World Organisation for Animal Health

Animal welfare is a complex and multi-faceted subject with scientific, ethical, economic, cultural, social, religious and political dimensions. It is attracting growing interest from civil society and is one of the priorities of the World Organisation for Animal Health (WOAH).

According to the Terrestrial Code, animal welfare means ‘the physical and mental state of an animal in relation to the conditions in which it lives and dies.’





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Types of higher welfare production

- Free Range
- Organic
- BCC
- Retail brands
- Assurance schemes
- Bird type- slower growing
- Stocking density 30Kg/m²
- Thinning vs non-thinning





Better Chicken Commitment



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- By 2026, we will require our suppliers to meet the following requirements for 100% of the [fresh, frozen, and processed] chicken in our supply chain:
 1. Comply with all EU animal welfare laws and regulations, regardless of the country of production.
 2. Implement a maximum stocking density of 30kg/m² or less. Thinning is discouraged and if practiced must be limited to one thin per flock.
 3. Adopt breeds that demonstrate higher welfare outcomes: either the following breeds, Hubbard Redbro (indoor only), Norfolk Black, JACY57, JA757, 787, 957, or 987, Rambler Ranger, Ranger Classic, and Ranger Gold, or others that meet the criteria of the RSPCA Broiler Breed Welfare Assessment Protocol.
 4. Meet improved environmental standards including:
 1. At least 50 lux of light, including natural light.
 2. At least two metres of usable perch space, and two pecking substrates, per 1,000 birds.
 3. On air quality, the maximum requirements of Annex 2.3 of the EU broiler directive, regardless of stocking density.
 4. No cages or multi-tier systems.
 5. Adopt controlled atmospheric stunning using inert gas or multi-phase systems, or effective electrical stunning without live inversion.
 6. Demonstrate compliance with the above standards via third-party auditing and annual public reporting on progress towards this commitment.



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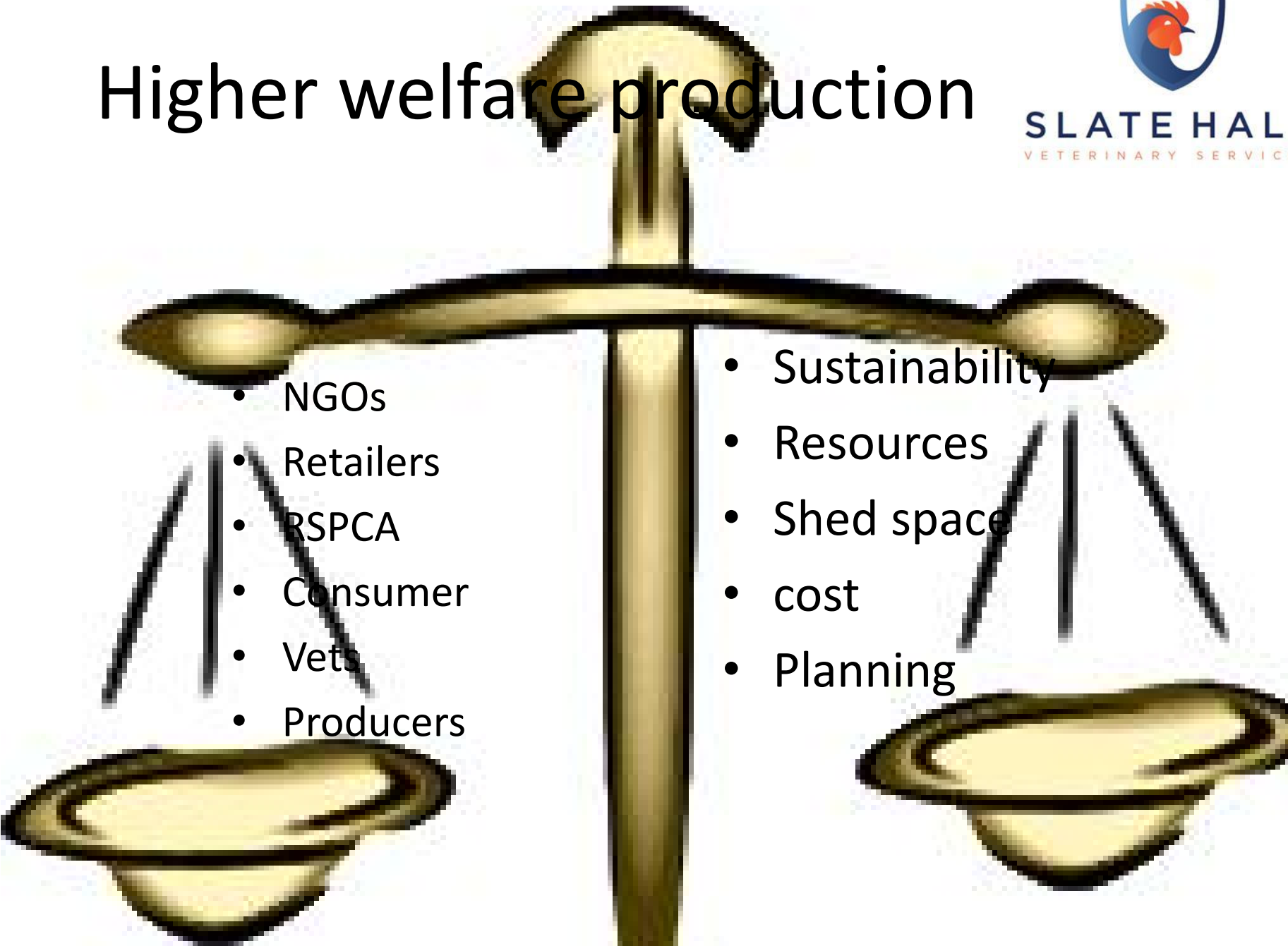
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Higher welfare production

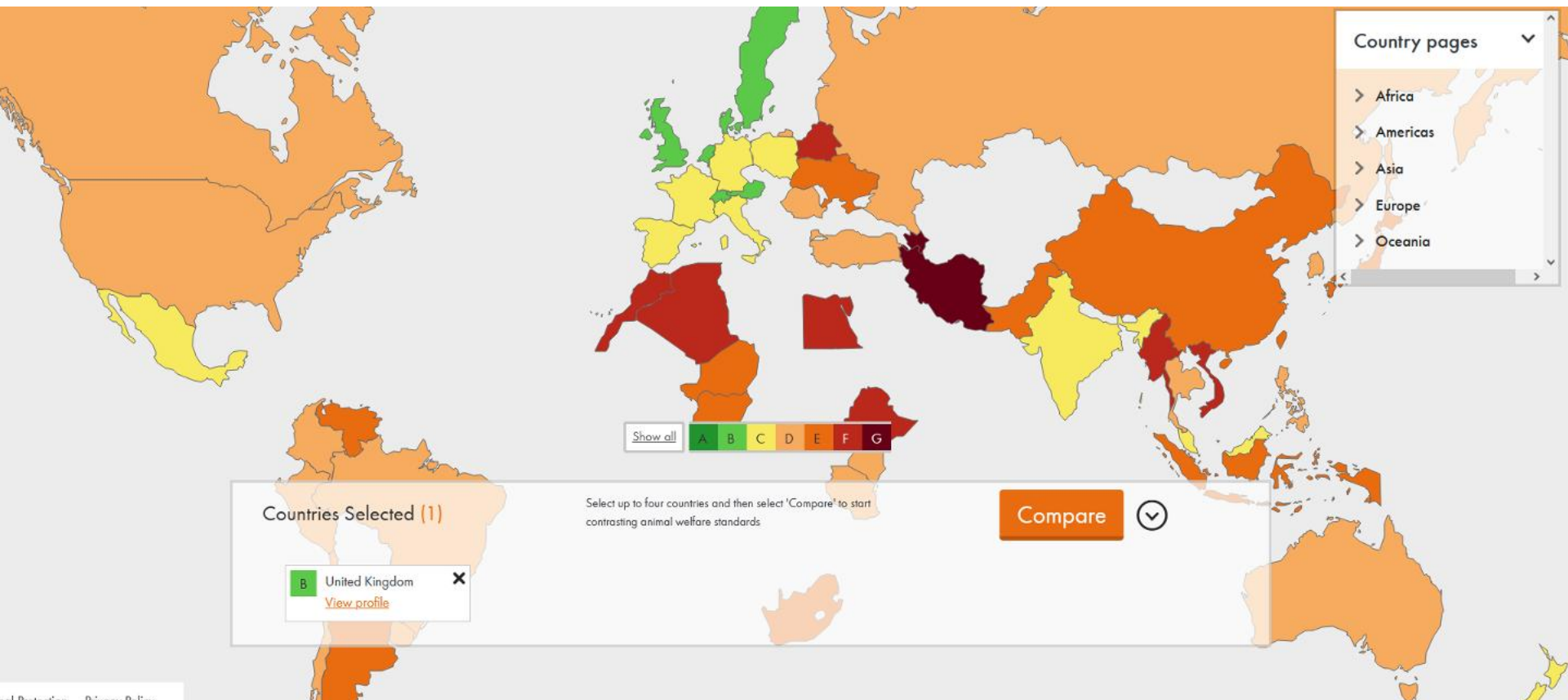
- 
- NGOs
 - Retailers
 - RSPCA
 - Consumer
 - Vets
 - Producers

- Sustainability
- Resources
- Shed space
- cost
- Planning



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Animal Protection Index



<https://api.worldanimalprotection.org/>



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Animal Protection Index

Sentience 

Legislation 

Governance 

Standards 

Presence of animal welfare legislation

This goal explores animal protection laws in relation to various categories of animals, namely: farm animals, animals in captivity, companion animals, working animals and animals used for entertainment, animals used for scientific research and wild animals.

-  Protecting animals used in farming >
-  Protecting animals in captivity >
-  Protecting companion animals >
-  Protecting animals used for draught and recreation >
-  Protecting animals used in scientific research >
-  Protecting the welfare of wild animals >

Sentience 

Legislation 

Governance 

Standards 

Support for international animal welfare standards

This goal looks at whether the World Organisation for Animal Health (OIE)'s animal welfare standards have been incorporated into law or policy, and whether the Government is supportive of the Universal Declaration on Animal Welfare.

-  OIE animal welfare standards >
- Support for the Universal Declaration on Animal Welfare >



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Example

- Assuming standard Ross 308 growth profile:
 - 20 chicks/m²:
 - 30Kg/m² by 28 days
 - 38Kg/m² by 32 days.
 - 15 chicks/m²:
 - 30Kg/m² by 33 days
 - 38Kg/m² by 39 days.



Assuming 1.9Kg kill weight, 32.5day of age.

Include 4% mortality and this pushes the SD threshold up by ~1 day.



Reduced incidence of thinning?

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- Increased stress associated with thinning
- Feed withdrawal
- Coccidial / Intestinal challenges
- Biosecurity challenges
- Campylobacter & Salmonella

Flock Thinning : A Delicate Process...





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Table 3.3: Chicks and poults placed per month in the UK by UK Hatcheries (millions)

	Aug 22	Jun 23	Jul 23	Aug 23	yr on yr
	4 weeks	4 weeks	5 weeks	4 weeks	% change
Commercial broilers (a)	92.0	96.2	109.4	93.3	1.4%
Broiler breeders (b)	0.6	0.6	0.8	0.7	6.4%
Turkey poults (c)	1.5	1.2	1.9	1.4	-10%
Commercial layers	2.4	3.7	3.2	2.7	12%

(a) Includes 'by-product' chicks

(b) Female parents only. Excludes grandparent chicks and 'by-product' chicks. Includes imported female parent chicks

(c) Including female breeder poults

Table 4.1: Number of poultry slaughtered per month in the UK (million birds)

	Aug 22	Jun 23	Jul 23	Aug 23	yr on yr
	4 weeks	4 weeks	5 weeks	4 weeks	% change
Broilers	86.4	90.7	102.4	87.8	1.7%
Boiling fowl (a)	3.4	3.0	3.5	3.3	-5.3%
Turkeys	0.6	0.5	0.6	0.6	6.7%

(a) Includes spent hens and spent breeders



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Impact on the bird - Positive

- Reduced stress:
 - Social stress
 - Corticosteroid levels
 - Immunosuppression
- Reduced disease challenges
- Reduced risk of heat stress
- Reduced metabolic disorders



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Impact on the bird - Positive

- Air quality
- Litter quality
- Lower Foot Pad Dermatitis levels
- Increased behavioural expression
- Less veterinary intervention





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Impact on the bird of reduced stocking density

- Lower litter moisture
- Lower FPD
- Increased behavioural expression
- Less veterinary intervention
- Reduced fear
- Less stress





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Impact on the bird - Negative

- MDA – relative to growth rate
- Population dynamics – live vaccine cycling (Gumboro, Coccidial)
- Air/litter quality etc ASI etc
- Flightiness/ scratching/ cellulitis
- Turnaround times



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Impact reduced stocking density

When adjusting for SD alone and not breed:

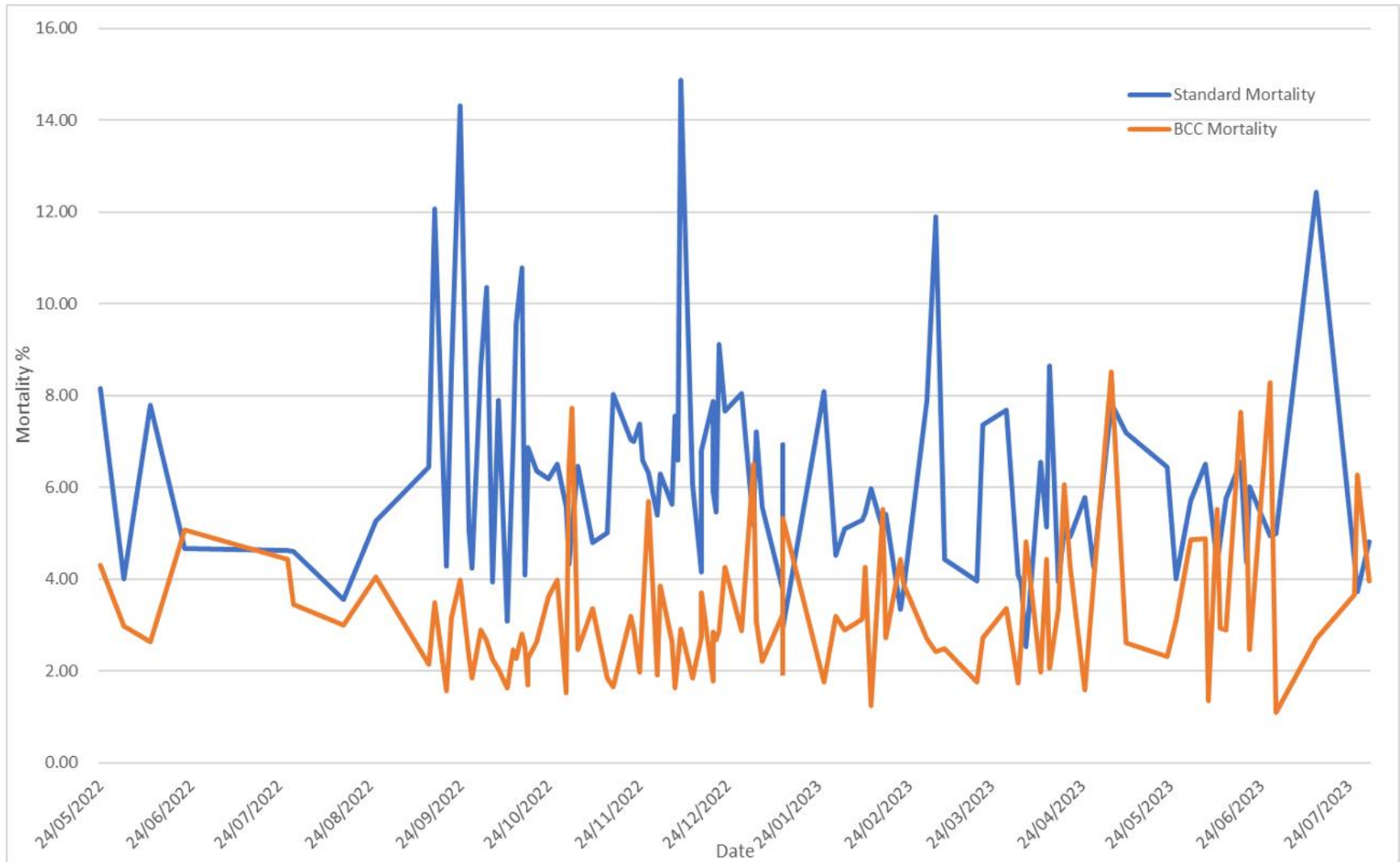
- Improved performance
- Increased BW gain
- Increased feed consumption
- Improved FCR

Could this be related to feeder and drinker availability or intestinal barrier function?



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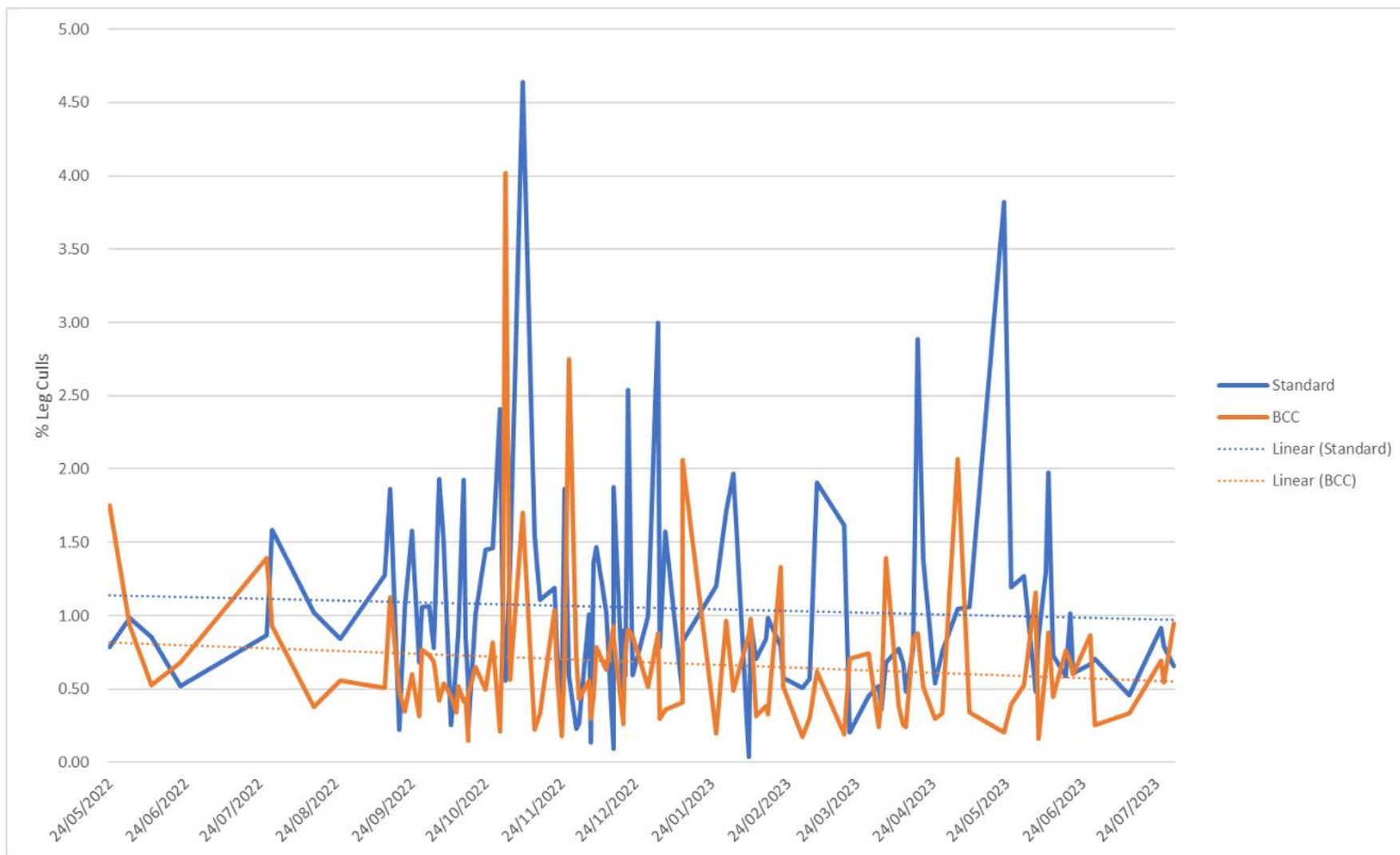
Field Data: Mortality





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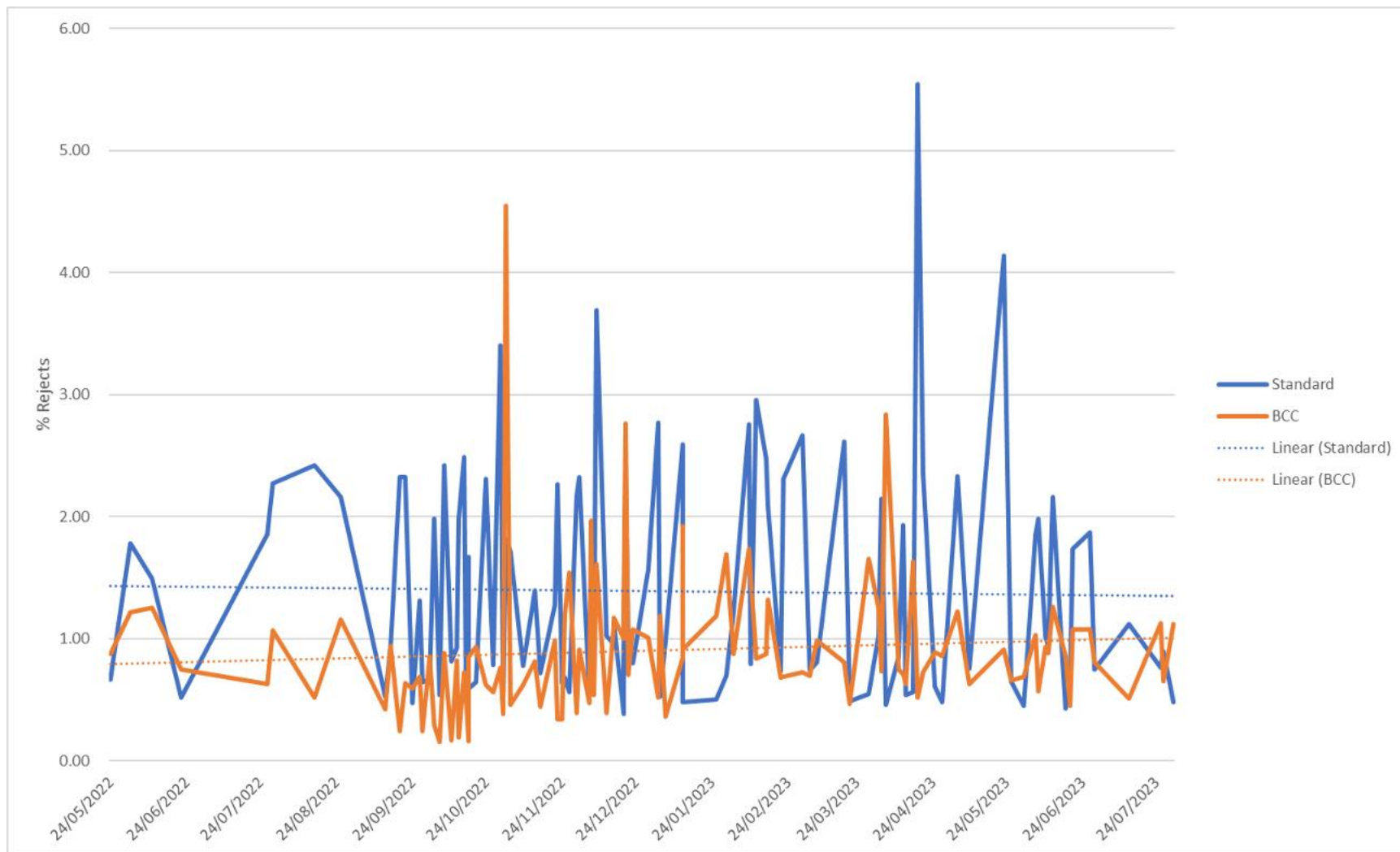
Field Data: Leg Culls





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Field Data: Rejects





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Higher Welfare Production

Do standard production systems become low or lower welfare production systems.

EU Broiler directive lays down “minimum” requirements for broiler production.



But what about the sustainability of slower growing higher welfare chicken production?

THE 17 GOALS

169
Targets

3855
Events

1345
Publications

7748
Actions



[See all](#)



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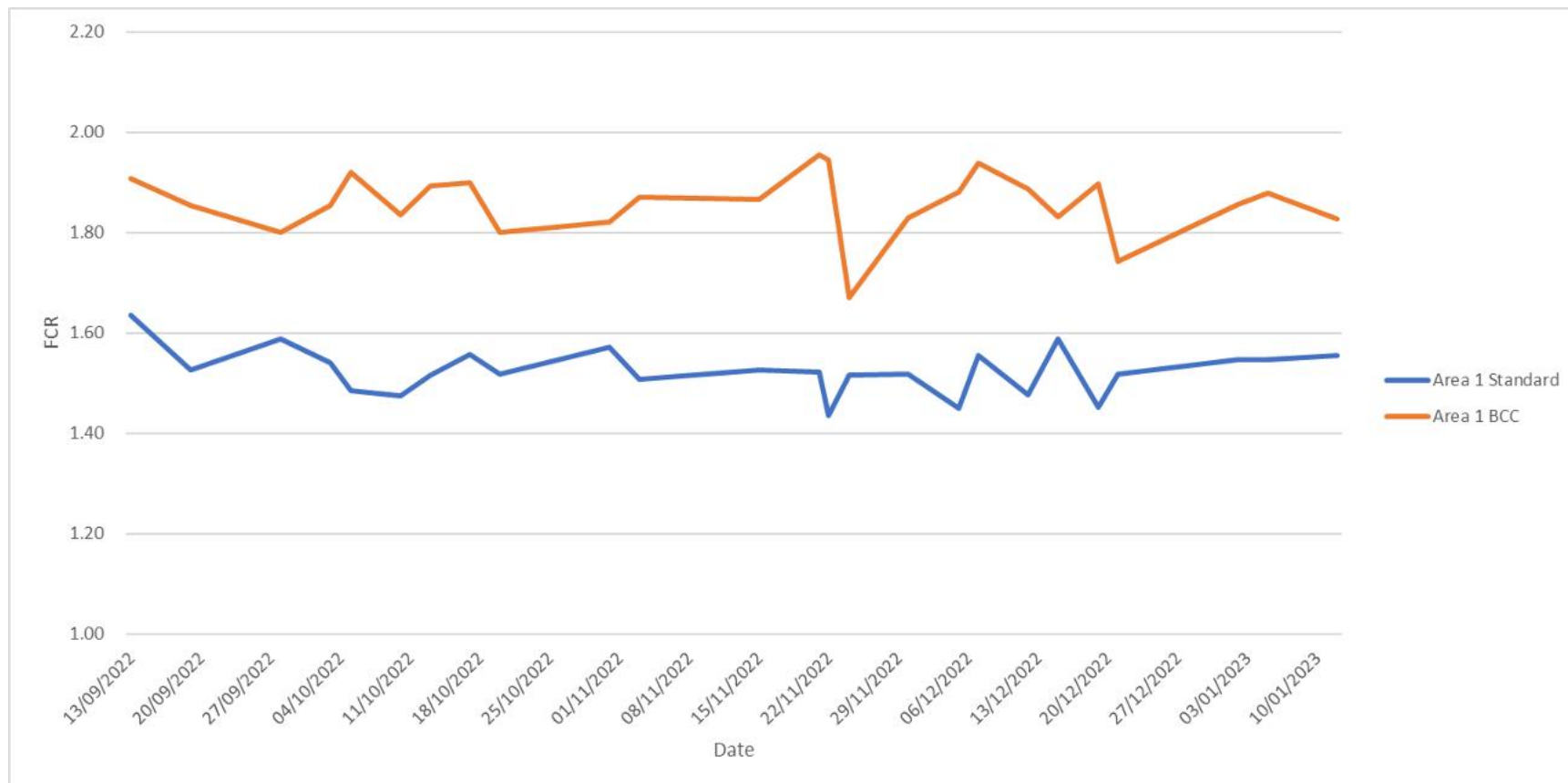
Cost of Production

- Increase housing require to sustain the current production levels
- Higher cost of production
- Higher fuel costs
- Increased feed costs
- Increased land usage for feed
- Increased water usage



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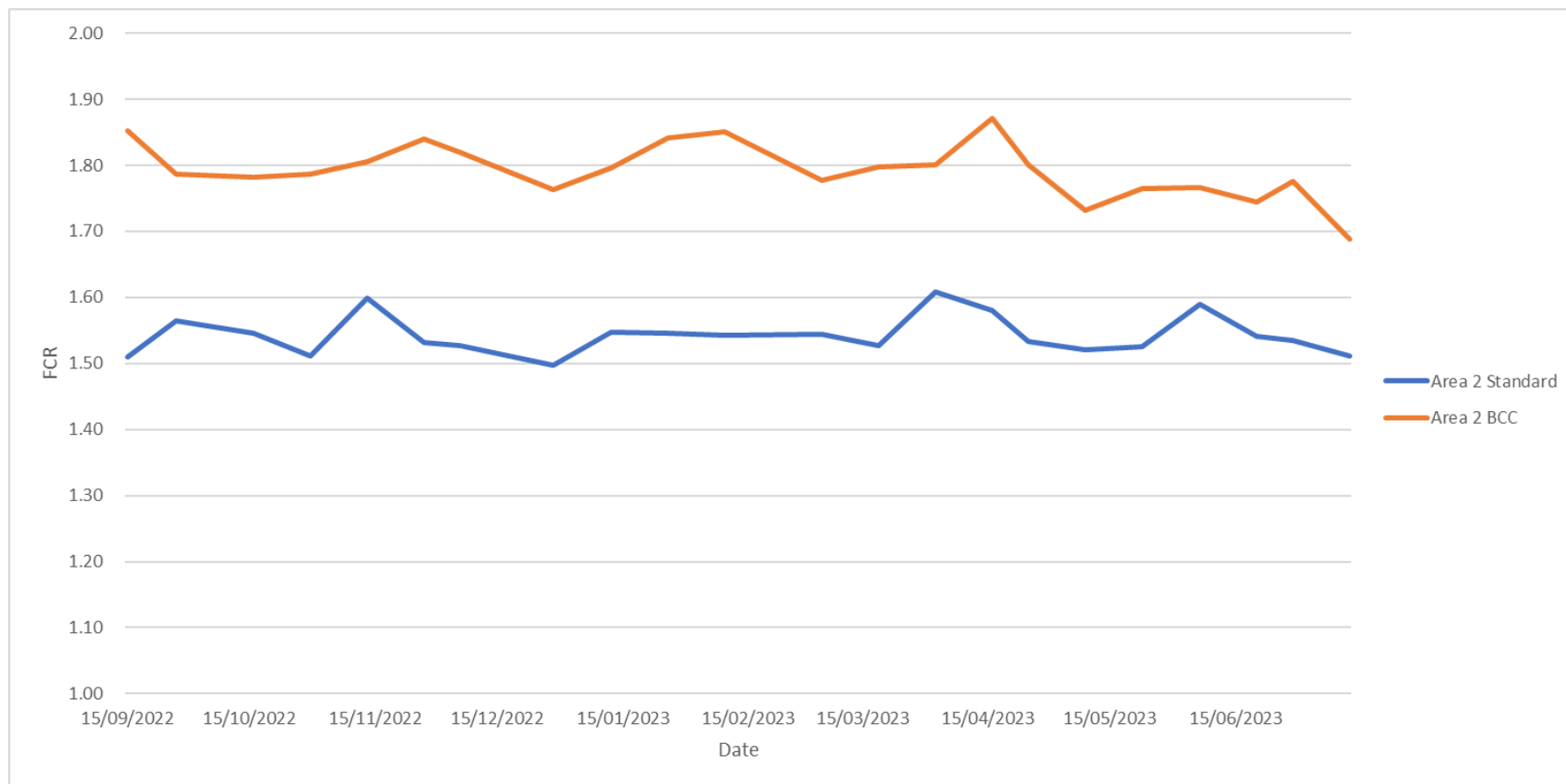
FCR - Region 1





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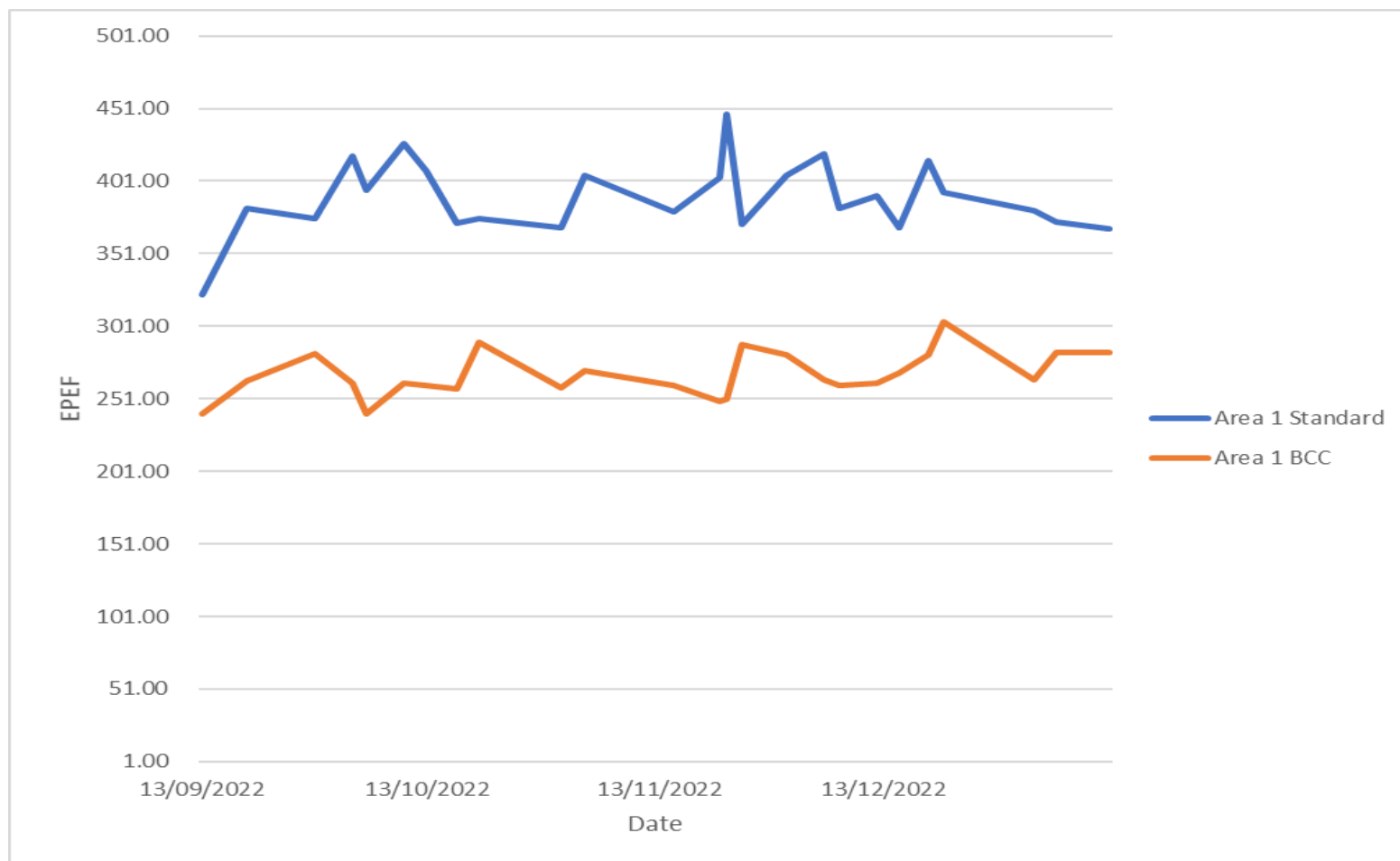
FCR - Region 2





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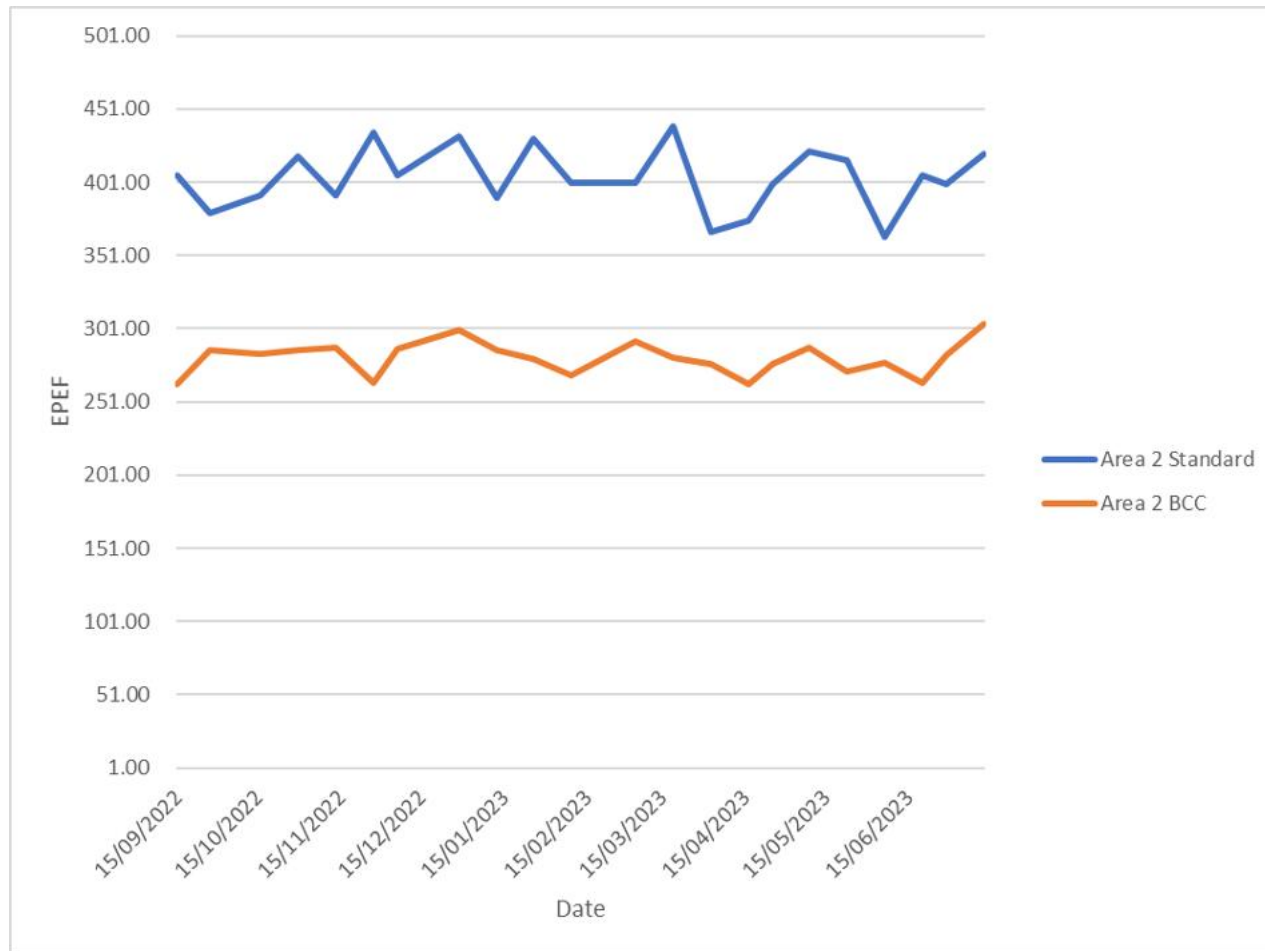
EPEF - Region 1





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EPEF - Region 2







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Diolch.
Thank you.

