



Hodnotenie welfare



Ako by ste ohodnotili potrebu nasýtiť sa (vyhnúť sa hladu) pri tomto ustajnení ošípaných?

Kritériá pre hodnotenie welfare:

Ukazovatele v správaní

- spôsobom chovu podmienené zmeny v priebehu, trvaní a početnosti prejavov prirodzeného správania
- spôsobom chovu podmienená absencia základných parametrov prirodzeného spôsobu správania
- spôsobom chovu podmienené poruchy správania

Fyziologické ukazovatele

- spôsobom chovu podmienené zmeny frekvencie dychu a tepu
- spôsobom chovu podmienené zmeny krvného tlaku
- spôsobom chovu podmienené zmeny krvných ukazovateľov (hemoglobín, hormóny, enzýmy a iné.)
- spôsobom chovu podmienené zmeny priebehu trávenia
- spôsobom chovu podmienené zmeny priebehu rozmnožovania

Patologické ukazovatele

- spôsobom chovu podmienené ochorenia
- spôsobom chovu podmienené zranenia
- spôsobom chovu podmienené straty (úhyn, nútená porážka)

Hodnotenie welfare

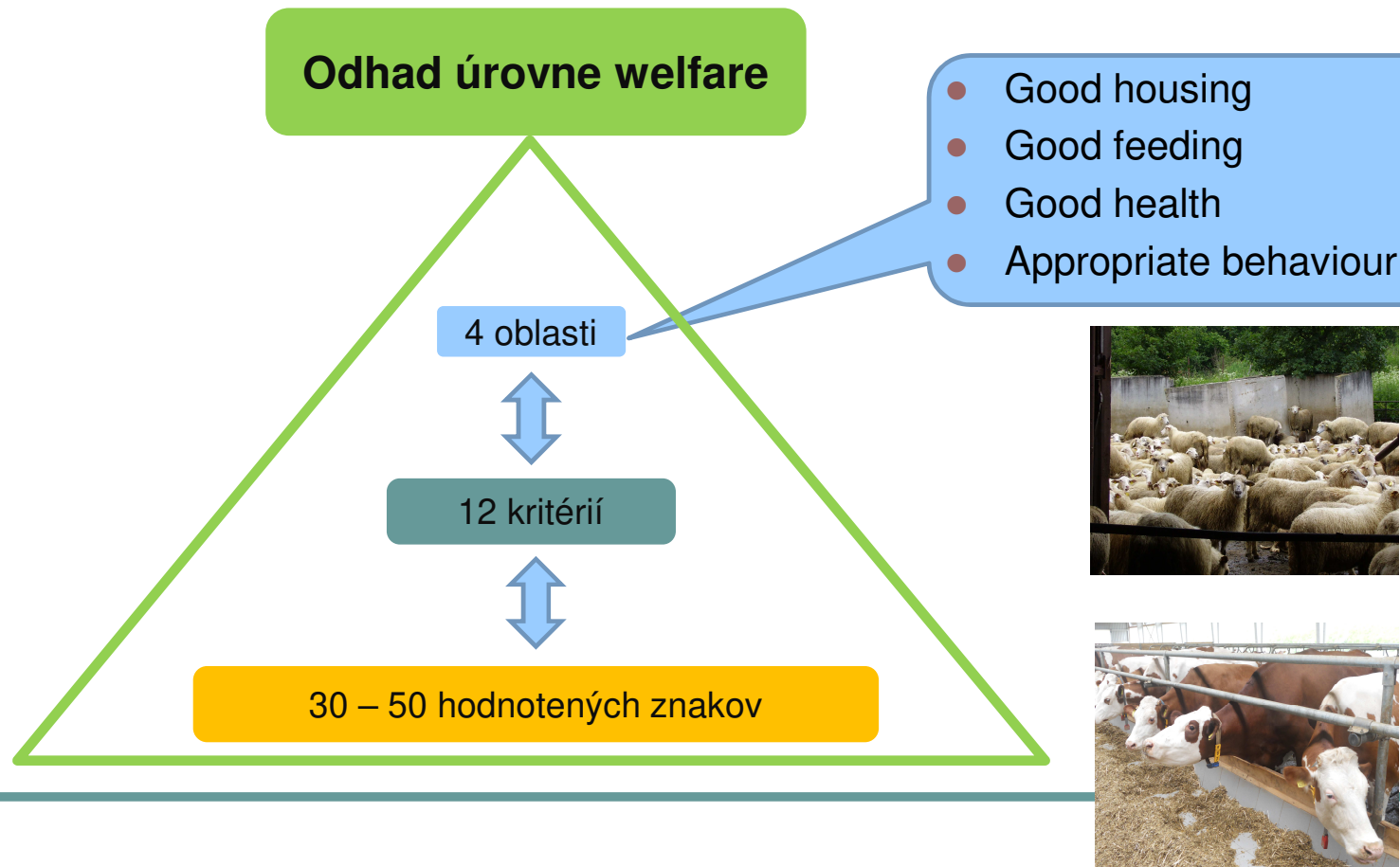
- 5 slobôd
- HACCP
- TGI 35L (ANI 35L)
- Welfare quality® - <http://www.welfarequality.net>
- Animal Welfare Indicators <https://www.facebook.com/Animal-Welfare-Indicators-AWIN-290853797594915/>
- Kontrola ochrany zvierat chovaných na farmárske účely (SK)
- Monitoring welfare na ekologických farmách (CZ)

Welfare quality®

The Welfare Quality® project focussed on integration of animal welfare in the food quality chain: from public concern to improved welfare and transparent quality. The project aimed to accommodate societal concerns and market demands, to develop reliable on-farm monitoring systems, product information systems, and practical species-specific strategies to improve animal welfare.

The research program was designed to develop European standards for on-farm welfare assessment and product information systems as well as practical strategies for improving animal welfare. The standards for on-farm welfare assessment and information systems have been based upon consumer demands, the marketing requirements of retailers and stringent scientific validation. The key was to link informed animal product consumption to animal husbandry practices on the farm. The project therefore adopted a “fork to farm” rather than the traditional “farm to fork” approach”.

Welfare quality[®] – postup hodnotenia



Welfare quality[®] - 12 kritérií

Good feeding

1. Animals should not suffer from prolonged hunger, i.e. they should have a sufficient and appropriate diet.
2. Animals should not suffer from prolonged thirst, i.e. they should have a sufficient and accessible water supply.

Good housing

3. Animals should have comfort around resting.
4. Animals should have thermal comfort, i.e. they should neither be too hot nor too cold.
5. Animals should have enough space to be able to move around freely.

Good health

6. Animals should be free of physical injuries.
7. Animals should be free of disease, i.e. farmers should maintain high standards of hygiene and care.
8. Animals should not suffer pain induced by inappropriate management, handling, slaughter, or surgical procedures (e.g. castration, dehorning).

Appropriate behaviour

9. Animals should be able to express normal, non-harmful, social behaviours, e.g. grooming.
10. Animals should be able to express other normal behaviours, i.e. it should be possible to express species-specific natural behaviours such as foraging.
11. Animals should be handled well in all situations, i.e. handlers should promote good human-animal relationships.
12. Negative emotions such as fear, distress, frustration or apathy should be avoided whereas positive emotions such as security or contentment should be promoted.

Welfare quality[®]

- Cattle Protocol without Veal Calves
- Pig Protocol – okrem kancov
- Poultry Protocol – nosnice a výkrm kurčiat

AWIN – Animal Welfare Indicators

Welfare Principles	Welfare Criteria	Welfare indicators
Good Feeding	Absence of prolonged hunger	Small size
	Absence of prolonged thirst	Small size
Good Housing	Comfort around resting	Dirtiness
	Thermal comfort	Featherless
	Ease of movement	Not available
Good Health	Absence of injuries	Head wounds
		Back wounds
		Tail wounds
	Absence of disease	Immobility
		Lameness
		Small size
		Sick
Absence of pain	Terminally ill	
	Dead	
Appropriate Behaviour	Expression of social behaviour	Lameness
		Aggression towards mate
		Featherless
		Mating
		Head wounds
	Expression other behaviours	Back wounds
		Tail wounds
Good human-animal relationship	Not available	
Positive emotional state	Not available	

- Kone
- Osly
- Ovce
- Morky

5 slobôd

1. Hlad a smäd
2. Pohodlie a odpočinok
 1. Tepelné podmienky
 2. Fyzické podmienky
3. Zdravie
 1. Choroby
 2. Bolesť
 3. Zranenia
4. Správanie
5. Strach a stress



Spolek poradců v ekologickém zemědělství ČR
Kotlářská 53, 602 00 Brno
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1. Svoboda od hladu a žízně

1.1. Tělesná kondice stáda

- 1 je dobrá, odpovídající plemeni a reprodukčnímu cyklu, stádo je vyrovnané
- 2 je dobrá, odpovídající plemeni, stádo je nevyrovnané
- 3 je u většiny jedinců je dobrá, stádo je nevyrovnané
- 5 je ve stádě nevyrovnaná

1.2. Kvalita vody

- 1 chovatel má rozbor napájecí vody (1x ročně), voda v napajedlech je čirá
- 2 chovatel neprovádí pravidelně rozbor napájecí vody, voda v napajedlech je čirá
- 3 napájecí voda je vizuálně nezávadná
- 4 napájecí voda jeví známky fyzikálního znečištění
- 5 napájecí voda jeví známky znečištění

1.3. Množství vody

- 1 napajedlo je pravidelně zásobeno čerstvou tlakovou vodou
- 2 napajedlo je pravidelně zásobeno čerstvou vodou
- 3 napajedlo je napojeno na zásobník s čerstvou vodou
- 4 napajedlo je zásobeno vodou s malým tlakem
- 5 napajedlo je nedostatečně zásobeno vodou

1.4. Kvalita krmení

- 1 velmi kvalitní krmivo, které odpovídá fyziologickým potřebám zvířat, jsou provedeny aktuální rozbor krmení.
- 2 kvalitní krmivo, které odpovídá fyziologickým potřebám zvířat, jsou provedeny aktuální rozbor krmení.
- 3 krmivo odpovídá fyziologickým potřebám zvířat, jsou provedeny aktuální rozbor krmení
- 4 krmivo odpovídá fyziologickým potřebám zvířat, nejsou provedeny rozbor

TGI 35L (ANI 35L)

Tier-Gerechtheits-Index (animal needs index, index potrieb zvierat)
Rakúsko, 80-te roky

ANI-35L-systems exist and are in use now for cows, young and beef cattle, calves, laying hens, fattening pigs (including piglets) and pregnant sows. The ANI principally considers five aspects of the animal's environment:

1. the possibility of mobility;
2. social contact;
3. condition of flooring for lying, standing and walking;
4. climatization (including ventilation, light and noise); and
5. the intensity or quality of human care.

TGI 35L (ANI 35L)

9 PRINCIPLES OF ANI 35 ANI-SYSTEM

- **ASSESSING HOUSING CONDITIONS** at farm level according animal welfare
- **SCALING CONDITIONS BY POINTS: better housing conditions get more points and vice versa (according scientific background)**
- **SUMMING UP POINTS** gives ANI-value (index system)
- **COMPENSATING POOR CONDITIONS** by better conditions above minimum requirements
- **MINIMUM REQUIREMENTS** to avoid suffering, damage and unacceptable stress by overstretching ability of adaptation (legal thresholds)
- **WELFARE - CATEGORIES** by grouping ANI-values (index numbers)
- covering **WHOLE RANGE** of husbandry systems in practice and **ALL SPECIES** and forms of utilization within one general system
- **WEIGHTING** of point scores according trial and error to achieve goal above
- system must be result of **BROAD NEGOTIATION** between parties involved

TGI 35L (ANI 35L)

STRUCTURE OF ANI (TGI-35L/1995) FOR LAYING HENS

<u>FIELDS OF INFLUENCE</u>	<u>CHARACTERISTICS</u>	<u>POINTS: Min. - Max.</u>
I. POSSIBILITY OF MOVEMENT	floor area per animal	-0.5 to 1.5
	% of floor littered for scraping	-0.5 to 1.5
	elevated perches available	0 to 1.0
	area of forcourt per animal	0 to 1.0
	days of outside exercise/year	0 to 1.5
	area of grassland per animal	0 to 1.5
	max. distance of grassland	-0.5 to 1.5
II. SOCIAL CONTACT	animals per separate group	0 to 1.5
	floor area per animal	-0.5 to 1.0
	availability of important outfit	-0.5 to 1.5
	elevated perches available	0 to 1.0
	cocks within herd	0 to 1.0
	width of exit hole	-0.5 to 1.0
	mean distance to exit hole	-0.5 to 1.0
	outfit of forcourt	0 to 1.0

TGI 35L (ANI 35L)

STRUCTURE OF ANI (TGI-35L/1995) FOR LAYING HENS

<u>FIELDS OF INFLUENCE</u>	<u>CHARACTERISTICS</u>	<u>POINTS: Min. - Max.</u>
III. QUALITY OF FLOORING	perch length perch per animal	-0.5 to 1.0
	quality of perches	0 to 1.0
	type of cover of dunging pit	0 to 1.0
	type/ amount of litter (scraping area)	0 to 1.0
	condition of litter	-0.5 to 1.5
	type of flooring in nest area	-0.5 to 1.5
	floor condition - forcourt	-0.5 to 1.0
	condition of grassland	-0.5 to 1.0
IV. CLIMATIZATION (LIGHT, VENTILATION, NOISE)	light within stable	-0.5 to 1.5
	airquality within stable	-0.5 to 1.5
	draughts in resting area	-0.5 to 1.0
	technical noise	-0.5 to 1.0
	days of outside exercise/year	0 to 1.5
	hours of outside exercise/day	0 to 1.0
	shadow on grassland	-0.5 to 1.5

TGI 35L (ANI 35L)

STRUCTURE OF ANI (TGI-35L/1995) FOR LAYING HENS

<u>FIELDS OF INFLUENCE</u>	<u>CHARACTERISTICS</u>	<u>POINTS: Min. - Max.</u>
V. CARE OF STOCKMAN	cleanliness of housing	-0.5 to 1.5
	state of techn. equipment	-0.5 to 1.5
	carcasses within stable	-0.5 to 1.0
	condition of plumage	-0.5 to 1.5
	condition of skin	-0.5 to 1.5
	recording of relevant data	0 to 1.0
	animal health	-0.5 to 1.5
SUM OF POINTS	absolute: 33.5	-11.5 to 45.0

TGI 35L (ANI 35L)

ANI-welfare categories on the basis of the ANI-35L-system

Sum of ANI Points	Names of categories of housing conditions with respect to welfare	Percentage of range of points	School grades	Verbal school grades	Symbols
< 11	Not suitable	< 35	5	Insufficient	No label
11-16	Scarcely suitable	35 - 44	4	Sufficient	*
16.5-21	Little suitable (mediocre)	45 - 54	3	Satisfactory	**
21.5 -24	Fairly suitable	55 - 62	2	Good	***
24.5-28	Suitable	63 - 70	1	Very good	****
> 28	Very suitable	> 70	E	Excellent	*****

TGI 200 (ANI 200)

This concept includes 60-70 criteria that are assessed for 7 functional classes with emphasis on prerequisites for the performance of goal directed behaviours and factors that have an impact on animal health. A maximum of 200 points can be assigned, ranging from 0 to 200

TGI 200 (ANI 200)

	TGI 35L (BARTUSSEK, 1995)	TGI 200 (SUNDRUM et al., 1994)
Scores Range	max. 46.5 -9 to 46.5	max. 200 0 to 200
Function classes	<ul style="list-style-type: none"> - movement - social contacts with other animals - floor design - climatic conditions in the housing - intensity of care by the farmer 	<ul style="list-style-type: none"> - Locomotion - Feeding behaviour - Social behaviour - Resting behaviour - Comfort behaviour (elimination [pigs] & nest building [hen]) - Hygiene - Care
Criteria	30 - 40	60 - 70
Emphasis	Housing technique: allowing compensation	a) Prerequisites for performing goal directed behaviours b) Animal health
Interpretation of index	assessment according to scores "bad welfare" "good welfare"	<ul style="list-style-type: none"> - enables comparisons between housings - documentation of deficits - emphasizing advantages
Application/User	State laws in Austria Consulting Organic farming organisations Control institution > 20.000 farms	Training of consultants Consulting Organic farming organisation

modified after Andersson, 1998

Prvky HACCP systému

1. Identifikácia a kvantifikácia rizikových faktorov problému.
2. Identifikácia kritických kontrolných bodov (CCP) pre rizikový faktor.
3. Určenie poplachových hodnôt pre jednotlivé CCP.
4. Popis systému monitorovania CCP pre podmienky stáda.
5. Vytvorenie plánu opatrení pre prípad prekročenia poplachových hodnôt.
6. Vytvorenie účelnej a jednoduchšej (user-friendly) dokumentácie HACCP systému.

Prvky HACCP systému

HACCP systémy boli pôvodne vytvorené ako systém potravinovej bezpečnosti, založený na prevencii.

Na princípe HACCP boli a stále sú vyvíjané systémy pre hodnotenie welfare.

Animal Welfare Audits for Cattle, Pigs, and Chickens that use the HACCP Principles of Critical Control Points with Animal Based Outcome Measures

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(Updated July 2019)

<https://www.grandin.com/welfare.audit.using.haccp.html>

Prvky HACCP systému - CCPs

Dairy Farms

1. Percentage of cows that are lame; use published lameness scoring methods. Scoring of lesions and swellings on the legs should also be tabulated because they are easy to observe indicators of leg problems.
2. Percentage of cows that are too thin and skinny; use published body condition scoring methods.
3. Percentage of calves that have not received colostrum.
4. Prevention of downer non-ambulatory cows; calculate the percentage of downers.
5. Dragging of sensible downers is prohibited and animals that will not recover should be euthanized on the farm.
6. Welfare guidelines for surgical procedures such as tail docking and dehorning.
7. Ammonia levels in indoor housing.
8. Space requirements for cows and specific welfare housing specifications.

Prvky HACCP systému - CCPs

Beef Ranch and Feedlot

1. Cattle handling - Score with an audit similar to the AMI guidelines:

Percentage of cattle moved with no electric prod.

Percentage that do not slip or fall.

Percentage that do not run into fences.

Percentage moved at a walk or trot.

2. Percentage of cows that are too thin and skinny; use published body condition scoring charts.

3. Percentage of animals that are lame; use published lameness scoring methods.

4. Welfare guidelines for surgical procedures.

5. Percentage of animals that appear to be in good health with no obvious problems such as bad eyes, injuries, warble grubs, swollen legs, or runny noses.

6. Heat stress in feedyards. This is one of the most important critical control points and conditions are highly variable around the world. It is also one of the more difficult things to measure.

7. Mud in feedlots. Can be monitored by mud scoring; use published scoring systems for mud on cattle.

8. Calf weaning methods. Weaning calves immediately before transport is not acceptable.

Prvky HACCP systému - CCPs

Pork Farm

1. Percentage of sows that are too thin and skinny; use published body condition scoring methods. If the vertebrae on her back show she is too thin.
2. Percentage of sows that are lame and scoring of lesions and swellings on the legs.
3. Percentage of market pigs that are lame.
4. Percentage of sows that have injuries. Count all injuries that are more severe than scratches that do not break the skin. Examples of injuries that should be counted are: shoulder pressure sores with a scab, tail bites, lacerations, and abrasions that break the skin. It is recommended to score different types of injuries as separate percentage scores, because injuries such as pressure sores, tail bites, and deep scratches from fighting have different causes.
5. Percentage of market pigs and piglets that have injuries.
6. Ammonia levels in the buildings.
7. Welfare guidelines on surgical procedures.
8. Life support backup procedures when the electricity fails in a mechanically ventilated building.
9. Space requirements. Score sows and pigs separately. Percentage of sows and market pigs that have enough space so that they can lie down in full lateral recumbancy all at the same time, without being on top of each other. Some welfare codes require even more space.
10. Specific housing specifications for welfare.
11. Percentage of animals engaged in abnormal behaviors such as bar biting or belly nosing.
12. Transport and handling. Use handling measures similar to cattle. In addition, measure the percentage of DOA (Dead On Arrival) pigs and the percentage of stress or non-ambulatory pigs. See pig transport guidelines.
13. Fear test. Measures the animal's willingness to approach people. Low fear pigs are more productive and less stressed. Use published tests.

Prvky HACCP systému - CCPs

Broiler Chicken and Turkeys

1. Handling Measures - Done at the slaughter plant. A separate slaughter audit is on this website.

Percentage of birds with broken wings (includes dislocated wings).

Percentage of broken legs.

Percentage of bruised birds.

Percentage of DOAs.

Percentage of birds that are not able to lie down in the transport crates without being on top of other birds.

2. Condition of litter.

At the slaughter plant, measure the percentage of birds that have foot pad lesions.

Percentage of dirty birds that have been soiled by dirty litter.

Percentage of birds with hock burn.

3. Ammonia levels in the buildings.

4. Welfare guidelines on surgical procedures.

5. Percentage of market ready birds that are lame. Use published gait scoring methods. Must be measured on the farm by walking through the birds. Birds with good legs will move away from the person. Score as lame the birds that can not walk or only walk 1 to 4 steps before laying down. Birds are too stressed to measure gait at the slaughter plant.

6. Life support backup procedures when the electricity fails in a mechanically ventilated building.

7. Percentage of injured hens in the breeder flock.

8. Other specific welfare specifications for housing.

Prvky HACCP systému - CCPs

Egg Laying Hens

1. Handling measures - Same as broilers.
2. Space requirements in cages or on litter must be calculated with the number of hens placed in the house and not on house averages due to death losses. Space requirements must also be based on the actual usable full height space in slant back cages. All birds must be able to lie down at the same time without being on top of each other.
3. Ammonia levels in the building.
4. Life support backup procedures when the electricity fails in a mechanically ventilated building.
5. Welfare guidelines on surgical procedures. If hens are beak trimmed, the percentage of birds that have been correctly trimmed should be measured.
6. Specific housing specifications for welfare.
7. In cage systems, measure the percentage of cages where all the birds have enough space to be able to eat all at the same time. This helps to reduce fighting.
8. Percentage of injured birds.
9. Percentage of birds with good feather condition at the end of the laying period. Use published feather scoring systems.



Ďakujem za pozornosť!

