

Reducing Stress in the Domestic Cat

Daniel Shaw

- Cat and dog behaviourist.
- Multi-species professional with the Pet Professional Guild.
- Student Member of the Association of Pet Behaviour Counsellors.
- Associate Certified Dog Behaviour Consultant with the IAABC.
- Currently completing a British Psychological Society accredited psychology BSc.
- Own and manage Animal Behaviour Kent.

About me

What we will cover today

What does stress do?

Understanding Brambell's Five Freedoms

Eating and drinking habits

Recognising pain and discomfort

What is normal for cats?

Meeting needs in the home

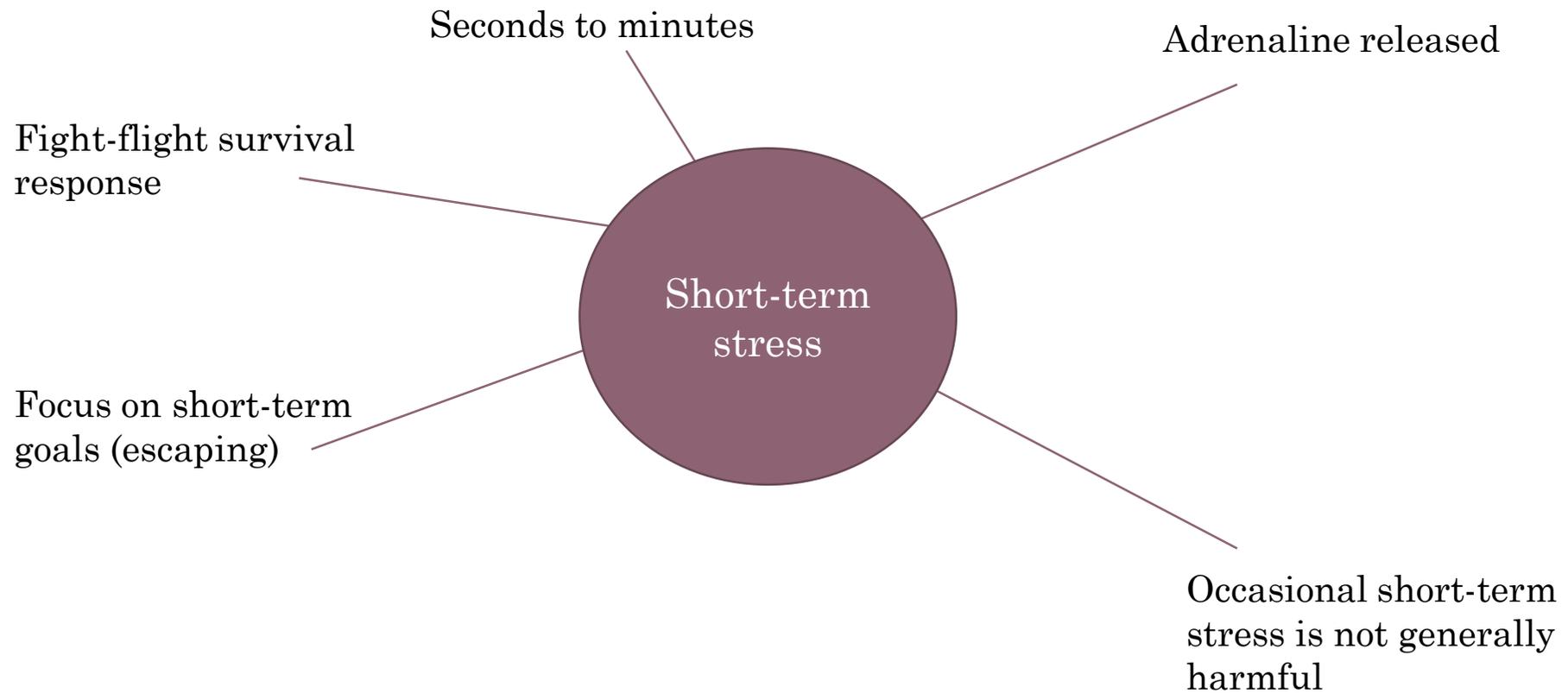
Reading cat body language

Preventing and overcoming fear

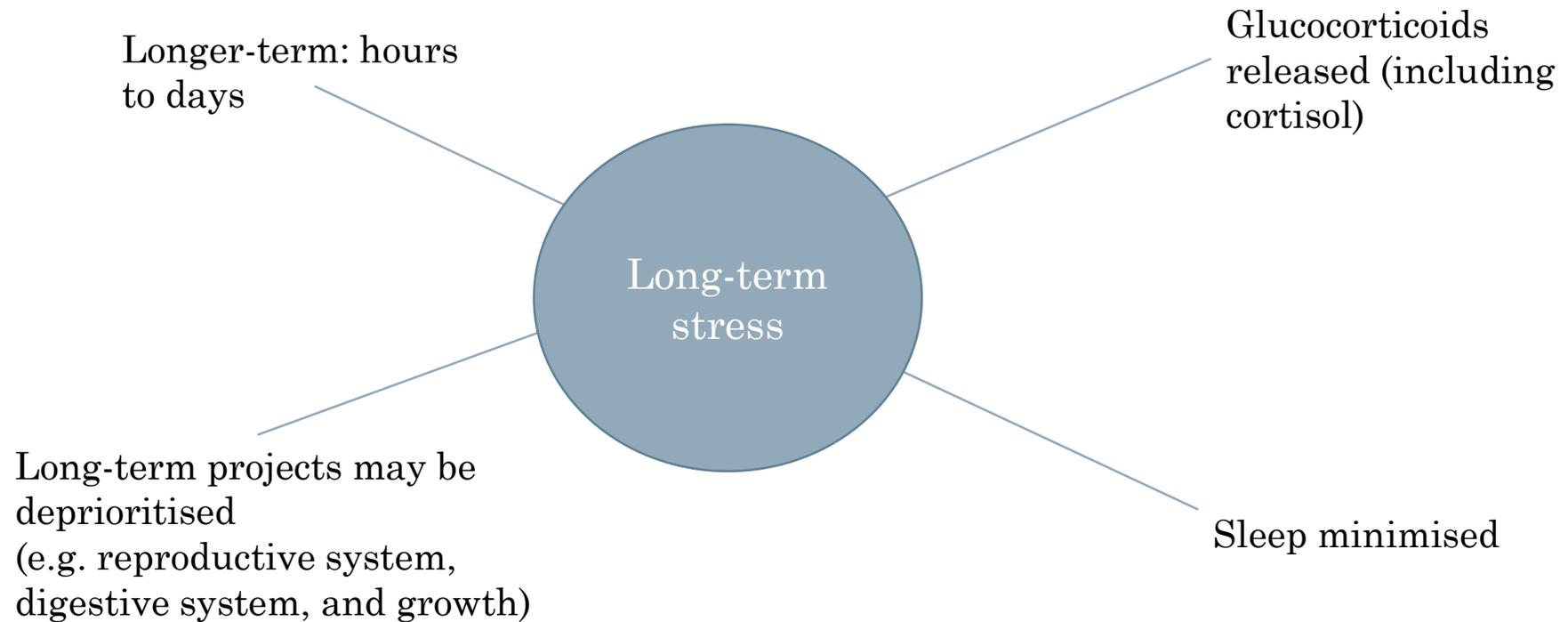
What is stress?

- **An adaptation to either internal or external pressure.**
- This can include:
 - Short term stress
 - Long term stress

Short vs long term stress



Short vs long term stress



The problem with long term stress

Effects of stress on **learning**:

- It is harder to consolidate new memories
- It becomes harder recall previous learning



Emotional fallout of stress:

- Poor mood regulation
- Poor sleep
- More likely to react badly
- Stress may be redirected
- Abnormal behaviours can develop

Physical fallout of stress:

- Immune system compromised
- Non-essential projects e.g. growth, digestion, are deprioritised

So how do we reduce stress and meet welfare needs?

The Five Freedoms Model

1. Freedom from **hunger** and **thirst**
2. Freedom from **discomfort**
3. Freedom from **pain, injury, or disease**
4. Freedom to **express normal behaviour**
5. Freedom from **fear** and **distress**

Animal Welfare Council (2012)

Feline eating and drinking habits



Tend to prefer moving water



Naturally would have approximately 10 meals a day



Solitary eaters (not solitary animals)



Water near food can signal contamination



Toilet and eating drinking spots should be separate



Cats are much less likely to eat or drink if they are scared

Ear position



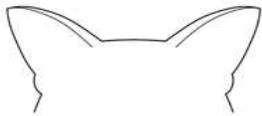
0 = absent



Ears facing forward



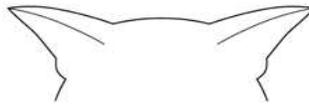
1 = moderately present



Ears slightly pulled apart



2 = markedly present



Ears rotated outwards

Muzzle tension



0 = absent



Relaxed (round shape)



1 = moderately present



Mild tension



2 = markedly present



Tense (elliptical shape)

Pain and behaviour

- A few common ‘problem’ behaviours that can be linked to pain are:
 - Aggression
 - Withdrawal
 - Fear
 - Eating more/less than normal
 - Drinking more/less than normal
 - Overgrooming
 - Self harming
- The *Feline Grimace Scale* is a great tool for assessing pain in cats
- Always check with a vet if in any doubt

What is normal for a cat?

Security behaviour:

- Preference for high places
- Urban cats often live in colonies
- Evidence suggests cats do look to their chosen humans for safety
- Cats are also prey animals – evolved to be highly vigilant
- Social rubbing and grooming indicates trust of other cats
- Scent marking their territory



Grooming and body care behaviour:

- Going to the toilet and being able to bury it
- Privacy when toileting
- Self grooming
- Scratching to shed claws

Eating behaviour:

- Approximately 10 meals per day
- Can attempt to catch up to 30 prey animals a day
- “Fishing paw” great for accessing food
- Obligate carnivores

Sleeping behaviour:

- On average 16≤ hours sleeping per day
- Crepuscular – most active at dawn and dusk
- Arboreal - naturally most often chose to live in trees
- Tend to change their sleeping location regularly



Security

- Height – cat trees, high surfaces
- Enclosed places, with multiple exits
- Scent marking:
 - Scratching posts
 - Rubbing – marks places as safe
- Human love, reassurance, and affection is good – **but**, on their terms.
- No unknown invaders in the house – microchip cat flap.
- Good relationship with other household cats. Look out for social sleeping, social rubbing, and social grooming.

Increasing the feeling of safety

Predictability

- Easy way to create predictability:
 - Always giving your cat some attention if they rub against your legs.
 - Always putting down dinner after you say “dinner”.
 - Consistent training rules and games.

Control

- Easy ways to increase control:
 - Teaching your cat if they go to their bed they will not be disturbed.
 - Not forcing your cat to face things they are afraid of until they choose to do so.
 - Give your cat **choices** – multiple sleeping spaces, multiple toys, water bowls to choose from.

What else could you do?

Eating

- In a free roaming environment, cats would have (6-10) small meals throughout the day.
- Eating is a solitary activity for cats.
- Follow chase games with a meal or snack to let the cat complete the hunting sequence – wand toys are a reliable option
- Separate feeding areas in multi-cat households
- Meat based diet
- Chew sticks
- Food games – puzzle feeders, snuffle mats, design your own!



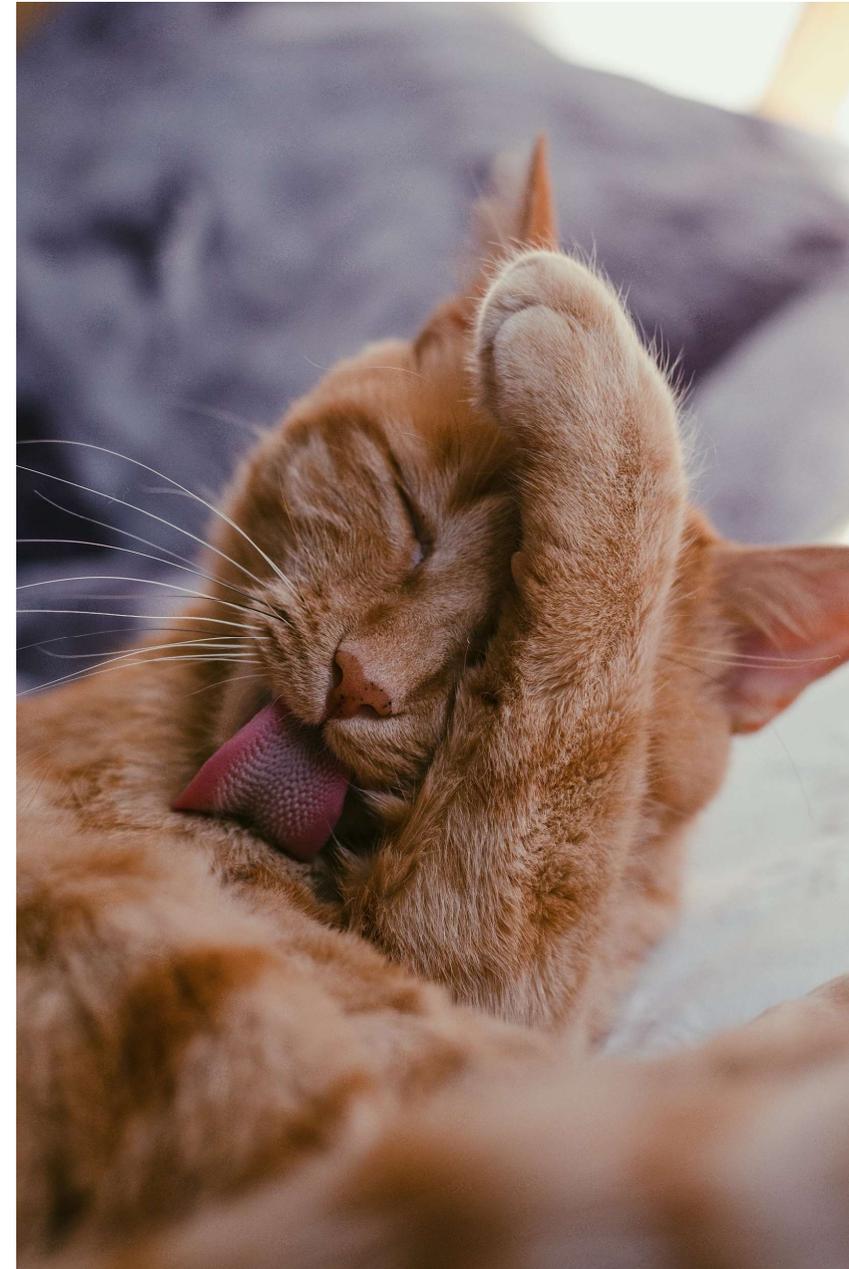


Sleeping

- Are they getting enough? Aim for 16 hours plus.
- Cats often love small spaces – instinctual behaviour likely linked to security – cardboard boxes, beds
- But still big enough to lie flat.
- Multiple sleeping spaces to choose from – high, low, enclosed, open.
- In a multi-cat household, there needs to be more sleeping spaces than cats.
- Peaceful, safe place to sleep. Prey animals struggle to let their guard down.

Grooming and body care

- Indoor litter tray needs to be:
 - Quiet and private – not a scary location.
 - Easy to escape – not enclosed.
 - Enough trays for each cat in the house (plus 1).
 - Big enough for the cat to turn around in.
 - Smaller litter is generally preferable (but this will depend on your cat).
 - Accessibility for older cats – low down may be preferred.
 - Cleaned regularly (scooped daily and litter replaced weekly).
- Regular brushing – this is enjoyable for many cats – but if not, a glove brush can help
- Indoor or less active cats may need their claws clipping
- Scratching post to shed claws





Choosing your cat's scratchers

Texture – sisal last longer and are great for scratching. Some cats may also like cardboard

Height – cats need to be able to stretch right out while using the scratcher

Dimensions – there may be individual preference for horizontal or vertical

Number of scratchers – number of cats plus one



Signs of a relaxed cat

Laid out on their side or back

Eyes closed or half open

Stomach exposed

Ears facing forward or half back

Legs and tail extended or loosely held

Tail pointing upwards or loosely downwards

Slow or normal breathing

Small pupils (not dilated)

Slow blinking



Signs of a fearful cat

Paws tucked inwards

Eyes wide, pupils dilated

Ears back, or partially to fully flattened

Body near the ground

Legs bent

Tail curled towards the body

Meowing, growling, yowling

Slow prowling movements, frozen, or running

Fast breathing, stomach not exposed

Cat Stress Score

(From Kassler & Turner 1997)

i: (or unspecified) = cat is inactive, a: = cat is active]

Score	Body	Stomach	Legs	Tail	Head	Eyes	Pupils	Ears	Whiskers	Vocal	Activity
1. Fully Relaxed	Laid out on side or on back	Exposed, slow ventilation	Fully extended	Extended or loosely wrapped	Laid on surface with chin up or on surface	Closed or half opened, may be blinking slowly	Normal	Half-back (normal)	Lateral (normal)	None	Sleeping or resting
2. Weakly Relaxed	i: laid ventrally or half on side or sitting a: standing or moving, back horizontal	Exposed or not, slow or normal ventilation	i: bent, hind legs may be laid out A: when standing, extended	i: extended or loosely wrapped a: up or loosely downwards	Laid on surface or over the body, some movement	Closed, half opened or normal opened	Normal	Half-back or erected to front or back and forward on head	Lateral or forward	None	Sleeping, resting, alert or active, may be playing
3. Weakly Tense	i: laid ventrally or sitting a: standing or moving, body behind lower than in front	Not exposed, normal ventilation	i: bent a: when standing, extended	May be twitching i: on the body or curved backwards a: up or tense downwards	Over the body, some movement	Normal opened	Normal	Half-back or erected to front or back and forward on head	Lateral or forward	Meow or quiet	Resting awake or actively exploring
4. Very Tense	i: laid ventral, rolled or sitting a: standing or moving, body behind lower than in front	Not exposed, normal ventilation	i: bent a: when standing, hind legs bent in front extended	i: close to the body a: tense downwards or curled forward, may be twitching	Over the body or pressed to body, little or no movement	Widely open or pressed together	Normal or partially dilated	Erected to front or back, or back and forward on head	Lateral or forward	Meow, plaintive meow or quiet	Cramped sleeping, resting or alert may be actively exploring, trying to escape
5. Fearful, Stiff	i: laid ventrally or sitting a: standing or moving, body behind lower than in front	Not exposed, normal or fast ventilation	i: bent a: bent near to surface	i: close to the body a: curled forward close to the body	On the plane of the body, less or no movement	Widely opened	Dilated	Partially flattened	Lateral or forward or back	Plaintive meow, yowling, growling or quiet	Alert, may be actively trying to escape
6. Very Fearful	i: laid ventrally or crouched directly on top of all paws, may be shaking a: whole body near to ground, crawling, may be shaking	Not exposed, fast ventilation	i: bent a: bent near to surface	i: close to the body a: curled forward close to the body	Near to surface, motionless	Fully opened	Fully dilated	Fully flattened	Back	Plaintive meow, yowling, growling or quiet	Motionless, alert or actively prowling
7. Terrified	Crouched directly on top of all fours, shaking	Not exposed, fast ventilation	Bent	Close to the body	Lower than the body, motionless	Fully opened	Fully dilated	Fully flattened back on head	Back	Plaintive meow, yowling, growling or quiet	Motionless

What happens when we force a cat to face something they are afraid of?



- **Flooding** – when an animal is exposed to a fearful stimuli at a high level from which it cannot escape.
- Occasionally used as a therapy for humans with mixed results
- Extremely unsuccessful as a therapy in cats – likely to intensify fear.

Reducing fear

- **Identify triggers** (e.g. strangers, other cats, loud noises, deliveries, vacuum cleaner).
- Put **avoidance strategies** in place (e.g. vacuum upstairs one day, downstairs the other day, quiet room available for when guests visit, vets that come to you).
- Give a scared cat **space**.
- **Meet their behavioural needs** to improve their coping ability.
- Nutritional and supplementary interventions:
 - Zylkene
 - Royal Canin Cat Calm
 - Pheromone Diffusers
- Behavioural medication:
 - Situational
 - Longer term



Training to reduce fear

- Training can help cats feel more comfortable around things they fear.
- Carrier training is a great way to help cats feel more comfortable with going to the vets
- A behaviourist can support with this

Your Reducing Stress Toolkit

Make sure food and water is set up appropriately.

Provide adequate sleeping and toilet areas. Regular grooming.

1. Freedom from **hunger and thirst**
2. Freedom from **discomfort**
3. Freedom from **pain, injury, or disease**
4. Freedom to **express normal behaviour**
5. Freedom from **fear and distress**

Regular vet checks and keep an eye out for pain or unusual behaviours.

Animal Welfare Council (2012)

Manage the situation to reduce fear and consider training longer term.

Ensure security, play, eating, hunting, sleeping, grooming, and body care needs are being met.

For cat behaviour support just visit our website:

<https://animalbehaviourkent.co.uk/>

And if you enjoyed the presentation, it would be great if you could leave us a google review:

<https://g.page/DogBehaviouristKent/review?rc>

Thank you for listening

Any Questions?



Great cat resources!

- International Cat Care - Website
(<https://icatcare.org/>)
- Feline Grimace Scale - Test
(<https://www.felinegrimacescale.com/>)
- The Trainable Cat – Book
(<https://www.goodreads.com/book/show/29101479-the-trainable-cat>)
- Cat Sense – Book
(<https://www.goodreads.com/book/show/17290708-cat-sense>)
- What your cat wants – Blog
(<http://whatyourcatwants.com/>)

References

- Bradshaw, J. W. S. (2006). The evolutionary basis for the feeding behaviour of domestic dogs (*canis familiaris*) and cats (*felis catus*). *The Journal of Nutrition*, *136*(7), 1927S-1931S.
- Bradshaw, J. W. S. (2016). Sociality in cats: A comparative review. *The Journal of Veterinary Behaviour*, *11*, 113-124.
- Bradshaw, J. W. S., Casey, R. A., & Brown, S. L. (2012). *The Behaviour of the Domestic Cat*. CABI.
- Bunford, N., Reicher, V., Kis, A., Pogány, A., Gombos, F., Bódizs, R., & Gácsi, M. (2018). Differences in pre-sleep activity and sleep location are associated with variability in daytime/nighttime sleep electrophysiology in the domestic dog. *Scientific Reports*, *8*, 7109.
- Kessler, M. R. & Turner, D. C. (1997). Stress and adaptation of cats (*felis silvestris catus*) housed singly, in pairs and in groups in boarding catteries. *Animal Welfare*, *6*, 243-254.
- McCulloch, S. P. (2013). A critique of FAWC's Five Freedoms as a framework for the analysis of animal welfare. *Journal of Agricultural and Environmental Ethics*, *26*, 959–975.
- Moreira, P. S., Almeida, P. R., Leite-Almeida, H., Sousa, N., Costa, P. (2016). Impact of chronic stress protocols in learning and memory in rodents: Systematic review and meta-analysis. *PLOS ONE*, *11*(9), e0163245. <https://doi.org/10.1371/journal.pone.0163245>
- Overall, K. L. (2013). *Manual of Clinical Behavioural Medicine for Dogs and Cats*. Elsevier.
- Sapolsky, R. M. (1994). *Why Zebras Don't Get Ulcers: A Guide To Stress, Stress-related Diseases, And Coping*. Freeman.
- Tobler, I. & Scherschlicht, R. (1990). Sleep and EEG slow-wave activity in the domestic cat: Effect of sleep deprivation. *Behavioural Brain Research*, *37*(2), 109-118.
- Turner, D. C. & Bateson, P. (Eds.). (2014). *The Domestic Cat: The Biology of its Behaviour*. Cambridge.
- Vinke, C. M., Godijn, L. M., & van der Leij, W. J. R. (2014). Will a hiding box provide stress reduction for shelter cats? *Applied Animal Behaviour Science*, *160*, 86-93.