

URGENT SUBMISSION TO DEFRA

in respect of

Spatial and rectilinear requirements for comfort, health and welfare of captive snakes: the need for immediate reinstatement of the ‘1 x snake length’ provision
and

The Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018 Guidance notes for conditions for selling animals as pets July 2018

Summary

Following extensive consultation since 2015, the Department for Environment, Food and Rural Affairs (Defra) compiled guidance on animal establishments for local authorities. A consultation outcome was agreement to include a provision allowing snakes to fully extend their bodies - the so-called ‘1 x snake length’ provision. For at least nine months, this provision held, but was suddenly deleted on or about 30th July 2018 following a submission (correspondence with no accompanying published scientific evidence) by a veterinarian (or veterinarians) acting closely for the pet/hobby industry. It is scientifically and morally unacceptable that snakes should remain the only animal group prevented by flawed evidence and policy from fully stretching their bodies in captivity.

In reference to the above issues we submit this document for the primary purposes of:

1. strong contestation of opinion provided to and used by Defra to delete the former ‘1 x snake length’ provision;
2. summarising relevant evidence and other objective information concerning spatial needs for snake health and welfare;
3. providing justification for immediate reinstatement of the ‘1 x snake length’ guidance including for business-to-business activities.

Background

Following extensive consultation since 2015, the Department for Environment, Food and Rural Affairs (Defra) compiled guidance on animal establishments for local authorities. One component of that guidance as agreed by the relevant multi-stakeholder committee was a provision allowing captive snakes to fully extend their bodies within their enclosures. That provision had been in place for at least nine months, but was deleted on or about 30th July following a submission (correspondence with no accompanying published scientific evidence) by a veterinarian (or veterinarians) acting closely for the pet/hobby industry. Documentation provided by Defra under Freedom of Information rules discovered six emailed letters between the pet trade/veterinarian(s) and Defra civil servants. The contents of that correspondence are clear, and that Defra actioned various changes to the guidance, which was to be published imminently, including ‘last minute’ deletion of the ‘1 x snake length’ provision. The pet trade/veterinarian(s) correspondence made the following statements or claims:

“The guidelines for enclosure sizes for snakes are especially problematic as they currently stand. It is our belief that the minimum enclosure sizes (2/3 length STL x 1/3 length STL) are suitable as a minimum, even for the “end consumer”, in a household situation. The higher standard, which requires enclosures to be 1 x the length of the snake is in excess of what is required for good welfare. For example, it is perfectly reasonable for a four and a half or five-foot corn snake to be housed in a four-foot vivarium. Equally, it is perfectly reasonable for a six or seven-foot carpet python to be housed in a 4x2x2 vivarium. There is much herpetocultural literature and veterinary literature to support this. We would support that the “minimum” enclosure sizes for snakes should be valid long term, not only for the initial 3 months. For some specimens, especially juveniles, there is evidence that smaller enclosures, offering greater security are preferable. This is also the case for certain species, for example the royal python – with many individuals of this species thriving in more confined/secure spaces. If a hard and fast rule for enclosure sizes for snakes is to be provided, then our feeling is that the present minimum sizes should be valid in perpetuum.” (veterinary clinic, Swindon, Wilshire, UK)

It was on the foundation of these statements or claims that the ‘1 x snake length’ provision was urgently deleted. Defra acknowledges to having relied wholly on these statements or claims and to have consulted neither the stakeholder team who originally agreed inclusion of the ‘1 x snake length’ provision nor any other party to test the veracity of the statements or claims presented by the pet trade/veterinarian(s).

Counter statement

For reasons we will set out below, in respect of the deletion of the '1 x snake length' provision, we do not accept the claims or statements provided to Defra nor the decision-making founded on those claims or statements. Relatedly, we argue that both the scientific evidence and the objective opinion bases significantly contradict the claims and statements relied on by Defra in reaching its decision to delete the '1 x snake length' provision. In addition, we submit this document as an independent ad hoc group of relevant biological and veterinary scientists representing no formal organisation or special vested interest parties. We consider that our independence and conjoined positions both reflect and provide important objectivity, and that this fact is appropriately and relevantly recognised and weighted when considering submissions by others.

Snakes have at least five well-defined locomotor patterns, and all regularly involve 'rectilinear' (straight line) or 'near-rectilinear' posturing behaviour. Likewise, rectilinear posturing is also commonly involved when snakes are at rest. At least 10 peer-reviewed scientific articles and research reports (Warwick, 1990a,b, 1995; Astley & Jayne, 2007; Hu et al., 2009; Cannon & Johnson, 2012; Warwick et al., 2013; Jepson, 2015; Wilkinson, 2015; Warwick, et al., 2018; Warwick et al. [under journal peer review*]), and five veterinary and animal welfare documents, conclude that snakes require enclosures providing the ability to fully straighten their bodies (BVZS, 2014; Hedley, 2014; RSPCA, 2018) or as much space as possible (RVC, 2018a,b) as an integral component of normal behaviour, health and welfare.

In addition, studies of natural home ranges across a diversity of snake species have found that these animals commonly occupy large areas (including extensive activity patterns), for example: 0.24ha - 1.52ha (Brito 2003); 59.9ha (Gerald et al. 2006); 92 - 396ha (Baxley & Qualis 2009); 21.1ha - 39ha (Hamilton, 2009); 59.2 ± 50.8 ha (Miller et al. 2012); 33ha and 1,528ha (Hyslop et al. 2013); 156ha - 202ha (Breininger et al. 2011); 22.5km² (Hart et al. 2015).

Furthermore, we are aware of no scientific evidence indicating harmful behavioural, psychological or physical effects arising from enclosures that allow snakes to fully extend their bodies. In contrast, at least 22 signs of stress, injury and disease are

reported by clinicians to be particularly associated with small enclosures (Warwick et al. [under journal peer review*]). In addition, a recent study of captive snakes found that within one hour observation periods approximately one-third of snakes actively perform rectilinear or near rectilinear posturing during both movement and rest, even among so-called 'sedentary' species including ball ('royal') pythons (*Python regius*) (Warwick et al. [under journal peer review*]).

Essentially, there is a dearth of scientific evidence indicating problematic issues arising from spacious enclosures, and there exists high-level evidence and objective recommendation for more spacious enclosures at least 1 x snake length. Setting aside those situations for the moment, at the generalised 'common-sense' husbandry level, were the suggestion true that larger enclosures 'cause problems' then many established zoological facilities would have reported such problems and reduced spatial provisions accordingly. In contrast, nowadays zoos commonly house snakes of diverse species in facilities significantly larger (i.e. longer) than the animals. Thus it cannot be accepted that larger enclosures compromise welfare. Regardless, in the 1 x snake length scenario, animals can adopt either coiled or rectilinear postures, whereas in lesser situations they cannot, thus the precautionary principle should be applied.

It is correct that within the broader literature several texts and online resources advise that enclosures with combined primary and secondary lengths equal to the total length of the snake (*ergo* approximately 2/3 snake length) are generally adequate housing (e.g. McCurley, 2005; Mader, 2006). However, no scientific evidence is provided within those items to support the claims. Other sources indicate that while certain sedentary snake species are adequately housed in small enclosures 2/3 snake length, more active species require enclosures longer than their full body length (e.g. 1.2x) (e.g. Kaplan, 2014 [a respected hobby web resource]; Divers, 2018). However, again no scientific evidence is provided to support those claims.

It is now widely recognised that within the herpetological community unsubstantiated and anecdotal information is regularly handed down and is responsible for the perpetuation of erroneous beliefs and incorrect practices (known as 'folklore husbandry'), which frequently leads to animal welfare concerns (Arbuckle, 2013; Mendyk, 2018). Folklore science and husbandry recommendations should not

influence or be relied on to alter or form government policy and guidance under the Animal Welfare Act (2006).

Moreover, even if it were correct (which we do not accept) that ‘sedentary’ species and active species could or should be considered separately for enclosure sizes, neither the pet trade/veterinarian(s) nor Defra positions would be tenable because the ‘active’ species would continue to require cages as long or longer than themselves as a minimum criterion. In any event, as indicated previously we do not accept that ‘sedentary’ species are adequately housed in enclosures less than their body length because there is no evidence to support that perspective, and recent scientific husbandry guidance has been provided that demonstrates that a ‘one size fits all’ approach involving enclosure size minimums of 1 x snake length is workable (Warwick et al., 2018). In addition we maintain that ‘1 x snake length’ provision is relevant to all wholesale (including business-to-business activities), retail and home environments. Further, we would question the impression that Defra’s actions may convey to the wider communities of science and global public opinion on this matter, *ergo* that it would be considered acceptable by the UK government to keep an animal in an enclosure in which all dimensions are too small for it to stretch out to full length.

Conclusions

Across their diversity of species, snakes regularly adopt rectilinear posturing as part of normal active, restful and recuperative behaviour, and this is fully consistent within the contexts of providing for essential comfort, health and welfare. In our view, no information, objective, credible or otherwise, was provided to Defra on which a defensible decision to delete the ‘1 x snake length’ provision could be reasonably justified. Relatedly, we do not consider that it is defensible for Defra to accept unsubstantiated claims and statements resulting in alteration of agreed content with the effect that those changes are then transferred into law. In contrast, the objective evidence and opinion presents an entirely different conclusion in which snakes ought to be provided with enclosures at least as long as their fully extended bodies. It is scientifically and morally unacceptable that snakes should remain the only animal group prevented by flawed evidence and policy from fully stretching their bodies in captivity. Accordingly, it is a matter of urgency that the wrongly emergent deletion

of the '1 x snake length' provision is immediately reinstated within Defra's guidance in order for that information to be consistent with the objective of that guidance and the Animal Welfare Act (2006).

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