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# Applied Animal Behaviour Science

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## Preface for the Special Issue ISAE 2020: COVID-19 and confinement



In 2020, the International Society for Applied Ethology (ISAE) held their first virtual conference due to the emergence of the COVID-19 pandemic. While at that time the pandemic was comparatively still in the early stages, it was clear that the pandemic did not only have consequences on human health and well-being, but also on the health and welfare of animals. The theme of the Special Issue was therefore focused on the consequences of the COVID-19 pandemic on animals and the consideration of confinement, as the majority of the human population suddenly faced restrictions on their own freedom of movement.

Rebeca García Pinillos, founder of One Welfare, provided a perspective on how the COVID-19 affects each of the five pillars of the One Welfare framework (Pinillos, 2021). This clearly shows the close connection between humans and animals, and the vulnerability of the animal sector to changes in the human population. It became apparent that the impact of the pandemic reaches much further than what can be covered in one paper and she therefore recommended the publication as a starting point for further research into how the pandemic affects humans and animals, from a One Health and One Welfare perspective.

Hockenhull and Furtado (2021) provided an overview of how the restrictions to human movement may provide horse caretakers with a new perspective on how they keep and manage their horses. They drew parallels between the temporary human confinement and horse confinement, with the related behavioural problems. Human opinion on pig confinement was covered by Vandresen and Hötzel (2021). They surveyed a large number of people with and without pets, to find out more about their attitude to sow farrowing crates. They found that there was in general low support for farrowing crates, and that attitudes depended on pet ownership and whether respondents had links with livestock farming.

Further insight into pet ownership during the pandemic was reported on by Jezierski et al. (2021) who surveyed dog owners globally to determine impacts of the pandemic on household canine pets. Overall, more positive than negative changes were reported in companion dogs and the dogs served as a source of support for their owners. The study does highlight how pandemic changes affect both human and animal household members.

The COVID-19 pandemic also affected zoo animals as the number of

zoo visitors dropped or visitors were (temporarily) not allowed. Williams et al. (2021) looked at the behaviour of meerkats and penguins in various zoos and indeed found behavioural changes. For many humans and animals, the pandemic changed the daily rhythm of activities. While unrelated to the pandemic, Meneses et al. (2021) reported on the hourly activity patterns of feedlot cattle with and without a brush. Provision of this enrichment reduced aggressive and stereotypic behaviour highlighting improvements that can be made to these types of cattle housing systems.

Two companion papers focused on human behaviour and well-being rather than animal behaviour. Kappel et al. (2021) and Camerlink et al. (2021) both conducted a survey among researchers to assess the impact of the pandemic on researchers and their research, with a focus on animal behaviour and welfare researchers. They both concluded that some groups faced more difficulties in their research work than others due to the pandemic, and these are especially early career researchers (notably PhD students) and caretakers of children. The studies also concluded that the experience of the pandemic contrasts strongly between researchers, with some benefiting from the opportunities to work from home whereas others faced many disadvantages from the restrictions, including the inability to work properly from home (e.g., due to homeschooling children) and the inability to conduct experiments or field/lab work.

In line with pandemic impacts on animal researchers, Chou and Camerlink (2021) provided an in-depth analysis of the first ISAE virtual conference that was held following the postponement of the in-person international congress. The paper described how the virtual event ran consecutively across time with back-to-back sessions accommodating all identified global ISAE regions and the success of this delivery method when global travel was unsafe or prohibited. A post-conference survey was summarised to detail the attendance rates and attendees' perceptions of its relative success. Overall, a virtual event was valued for the reduced cost, easier access, and reduced environmental footprint. However, the lack of social interaction opportunities was viewed as a disadvantage. A virtual event can improve accessibility for members of developing countries and is a mode of scientific delivery to be considered moving forward.

With the topic of this special issue we went quite outside of the original scope of the journal, in order to cover the wider aspects of the unique situation of the COVID-19 pandemic. With the grace of the then editors-in-chief and the journal manager, we were allowed to accept manuscripts that would normally be marked as out-of-scope for *Applied Animal Behaviour Science*. We emphasize that such exceptions are only made on a case-by-case basis for ISAE Special Issues.

As the articles in the Special Issue are published when accepted, they

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