

Worry and fear of large carnivore encounters in nature settings

Worry and fear of encountering large carnivores such as brown bears and wolves in nature settings is a specific type of animal fear. This fear is characterised by a) the feeling of fear of an encounter or an attack in a nature setting, b) the avoidance of situations or locations where an encounter might occur, and sometimes c) bodily changes in for example heartbeat frequency, and d) impaired ability to solve cognitively demanding tasks. These effects are relatively weak, in comparison with other more well-known types of animal fear including fear of spiders or snakes. There is no direct association between the feeling of worry and fear of a brown bear or wolf encounter and a general tendency to be anxious.

The understanding of what thoughts that are relevant to people's feeling of worry and fear of brown bears and wolves has made it possible to develop and evaluate the effects of activities aimed to support people to cope with their worry and fear. Participation in such activities must always be voluntary and build on people's personal motivation to cope with their worry and fear. Adequate activities should support people to think in a new way and reconsider what an encounter with a brown bear or wolf in a nature setting would be to

POPULAR SUMMARY:

What do we know from research, and what can managing authorities do?



them. How people think regarding an encounter with a brown bear or a wolf is important to the feeling of worry and fear. Thoughts about a large carnivore encounter as dangerous, and difficulties in predicting how the animal would act in an encounter situation are associated with stronger worry and fear. Insecurity or low control concerning how oneself will react if the feared animal suddenly appears also triggers worry and fear. Moreover, low social trust in managing authorities is associated with stronger worry and fear of wolf, but not bears.

Managing authorities and other actors may offer people to participate in an information meeting about brown bear or wolf, and guided walks in brown bear habitat to provide people with opportunities to develop strategies to cope with their worry and fear. Providing possibilities to visit a large carnivore exhibition dealing with these themes are also useful. Access to a sound deterrent to be used in an unwanted encounter with wolf does not seem to change how people think about a wolf encounter or their feelings of worry and fear.

Regardless of the activity offered, the knowledge communicated about the large carnivores should relate to the participants' own thoughts about a large carnivore encounter. Any lecturer or guide should be experienced with large carnivores and well-prepared. A lecturer or guide should explain to participants what the appropriate behaviour would be to avoid the large carnivore and should demonstrate how to behave in a potential encounter with the animal. It would also be desirable to show or bring participants to a habitat typical for what the large carnivore prefer. A lecturer or guide should also be able to establish trust in their competence and secure time to talk with the participants.

Current knowledge about humans and large carnivores is largely focused on people's attitudes towards these animals. Whereas knowledge about worry and fear of large carnivores and how managing authorities may contribute to reduce worry and fear is limited. This research has been carried out by a research group, with competences in environmental psychology, emotion psychology, ecology and wildlife biology, who has especially focused on the emotions of worry and fear of brown bear and wolf. The research group has in collaboration with managing authorities and large carnivore centres in Sweden and Norway developed and evaluated different interventions that could support people to cope with worry and fear of brown bear and wolf.