

Management of a bold wolf on the Hoge Veluwe National Park:

Statement of the Large Carnivore Initiative for Europe (LCIE), IUCN Species Survival Commission Specialist Group, 23/11/2022. This statement supplements and replaces a previous one posted on 9/11/2022.

In early October 2022, reports in the media came about a bold wolf in the National Park De Hoge Veluwe (Netherlands). At least one wolf was reported to be approachable within <30 m (at the Wildbaanweg), and was at times surrounded by up to a dozen photographers. Later encounters with humans in November include a wolf approaching people up to a few m distance. These observations indicate there is a bold wolf (a wolf that repeatedly tolerates the presence of people being recognizable as such within 30 m) (LCIE 2019), and actions need to be taken urgently.

The Netherlands have a wolf management plan that includes how to deal with bold wolves (IPO 2019). This section is similar to Reinhardt et al. (2018, 2020), and reflects the view of the LCIE on the management of bold wolves. However, the lack of intervention since the first reports on these close encounters and clear signs of habituation is worrisome, which motivates us to write this statement.

The European continent is home to some 23.000 wolves that coexist with approximately 750 million humans. The presence of large predators among that many people poses certain challenges, among which the safety of humans themselves. A safe coexistence is possible when all parties involved (policy, local managers, citizens, ...) adhere to a set of simple rules.

In the past 22 years, no documented deadly accident has happened as a result of a wolf encounter in Europe, and only a handful of dangerous incidents with humans have been registered (Linnell et al. 2020).

Wolves naturally fear humans and keep their distance from humans. However, wolves can get accustomed (habituated) to human presence and perceive that humans pose no threat, becoming used to the presence of humans. Such habituation is not considered problematic as long as wolves don't actively approach humans (LCIE 2019). It is, however, a first step in an escalation towards positive conditioning towards humans, which can be further accelerated by the presence of human-provided food, and should be actively discouraged. The vast majority of the few wolf incidents with humans in the recent past have involved habituated and/or food-conditioned wolves (Linnell et al. 2021; Nowak et al. 2021).

During the summer of 2021 a wolf first recolonized the Hoge Veluwe National Park (Netherlands), and in December 2021 a second individual was observed. Currently, a breeding pair is present with their pups.

Young wolves are especially prone to habituation, so extra care should be taken to avoid contact with humans in areas where humans and wolves have the opportunity to frequently interact. Close encounters with humans (<30 m) should be avoided, and any such encounter

requires the attention of policy and management, with an evaluation of the situation, for the sake of human safety. Not every encounter is a cause for concern, as often wolves will not recognize people as such, e.g. when sitting in a car, on a tractor, or even on horse-back. A clear definition of what kinds of situations are causes for concern is given in a policy support statement by the LCIE (2019).

The current situation in the Hoge Veluwe calls for immediate action. The IPO protocol (IPO 2019) states that for this situation (a wolf repeatedly approaching humans) the management strategy is to collar the wolf, apply aversive conditioning, monitor the situation, and kill the wolf if aversive conditioning is not effective. No attempts to collar the wolf have been made, only aversive conditioning is being considered. Given

- that the habituation of this wolf to humans is already very advanced, and that bad habits are hard to reverse in large carnivores (Reinhardt et al. 2020; Austrian Bear Habituation Team 2006),
- 2. the apparent reluctance of Dutch authorities to fully adhere to their own bold wolves intervention protocol, and the failure to intervene earlier

we feel compelled to state that there is no other choice than to remove the bold wolf.

We further call for all parties to take their responsibility in adhering to guidelines for human behaviour towards wolves and avoiding actions that promote the habituation of wolves to humans. We repeat in Table 1 earlier guidelines on bold wolf management, and further refer the reader to LCIE (2019).

Table. 1: Assessment of wolf behaviour and an assessment of the risk it may pose for human safety with recommendations for action.

| Behaviour | Assessment | Recommendation for action |
|--|--|--|
| Wolf passes close to settlements in the dark. | Not dangerous. | No need for action. |
| Wolf moves within sighting distance of settlements / scattered houses during daylight. | Not dangerous. | No need for action. |
| Wolf does not run away immediately when seeing vehicles or humans. Stops and observes. | Not dangerous. | No need for action. |
| Wolf is seen over several days <30m from inhabited houses (multiple events over a longer time period). | Demands attention. Possible problem of strong habituation or positive conditioning. | Analyze situation. Search for attractants and remove them if found. Consider aversive conditioning. |
| Wolf repeatedly allows people to approach it within 30m. | Demands attention. Indicates strong habituation. Possible problem of positive conditioning. | Analyze situation. Consider aversive conditioning. |
| Wolf repeatedly approaches people by itself closer than 30m. Seems to be interested in people. Demands attention / critical situation. | Positive conditioning and strong habituation may lead to an increasingly bold behaviour. Risk of injury. | Consider aversive conditioning. Remove the wolf if appropriate aversive conditioning is not successful or practical. |
| Wolf attacks or injures a human without being provoked. | Dangerous. | Removal. |

The Large Carnivore Initiative for Europe is a Specialist group of the Species Survival Commission of the International Union for the Conservation of Nature, IUCN. www.lcie.org

LCIE consists of 60+ experts, who bring experience from the fields of ecological and social science research, wildlife management, hands-on conservation, and from international conservation organisations.

The members do not formally represent their institutions when working for the LCIE, thereby ensuring their independence.

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