

The Vanishing Viper 2025: Themes from a meeting to discuss better conservation for *Vipera berus*, with emphasis on landscape-level approaches

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Feedback on a workshop on ‘Challenges and opportunities for *Vipera berus* translocations in Britain’

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This was a whole conference workshop with all 120 delegates present in a single auditorium. Answers were gathered using an online interactive polling programme, SLIDO.

Workshop outputs

Challenges:

Question 1 asked “What do you think are the challenges for viper translocations?”. Numerous challenges were identified from the 376 responses, these covered various topics with the largest number relating to public perception, declining source populations, genetic viability, lack of long-term monitoring & funding and disease (see **Figure 1**).

Opportunities:

Question 2 asked “What do you think are the opportunities for viper translocations?”. Of the 351 responses received the majority related to public engagement, genetic rescue and research. Other opportunities identified related to averting local extinctions, establishing new populations and creating resilient populations (see **Figure 2**).

Ranking Priorities for Viper Conservation

Question 3 asked participants to rank the nine top priorities (from a previous workshop) for viper conservation, see **Figure 3**. The top 3 were: Habitat management, Resources, and

Research & ecology. The bottom 3 were: Information management, Translocation, and Development mitigation.

Q&A Session

The key questions raised during discussions on viper translocation in the UK are grouped into thematic categories below to give an overview. Whilst some of the 85 questions were able to be answered, the majority are questions that we still require more data and research for, which highlights the extent of the unknowns for adders in the UK.

Summary of main points

- Monitoring and long-term success — It's hard to track translocated vipers and know if releases work over years.
- Genetics and disease — Keeping genetic diversity and avoiding illness (including SFD) are major worries.
- Habitat and prey — Suitable sites, enough food, and realistic carrying capacity are often lacking.
- Source population risks — Taking animals from donor sites can harm those populations.
- Funding and costs — Limited money threatens planning, monitoring, and long-term care.
- Captive breeding – further exploration is needed in this area
- Public perception and politics — Negative attitudes, persecution, and political obstacles can stop or undermine projects.

Conclusions & Potential Recommendations

Successful viper translocations require good site selection, strong biosecurity and genetics planning, reliable long-term monitoring, stable funding, and community and political support. There are still many unknowns in relation to adder translocations - prioritising research, having more collaborative approaches and clear decision-making frameworks could help with this.



Q1: What do you think are the challenges for adder translocations?

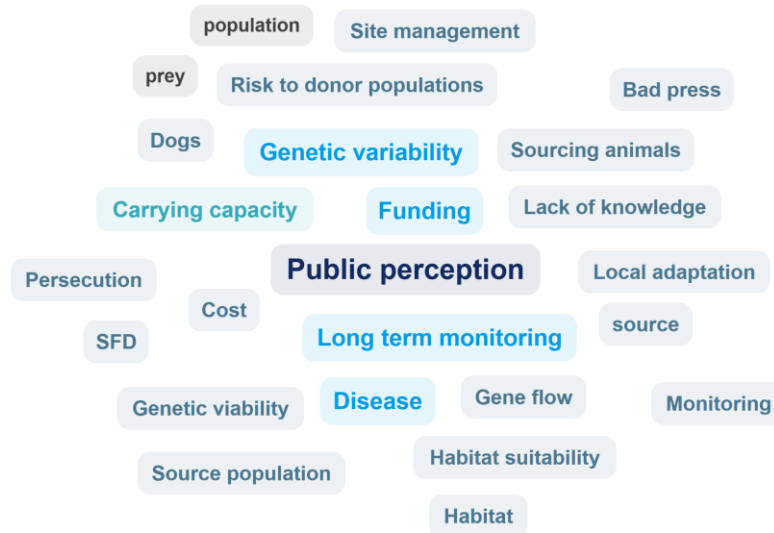
Wordcloud Poll



376 responses



87 participants



slido

Figure 1. Word cloud of the challenges for viper translocations



Q2: What do you think are the opportunities for adder translocations?

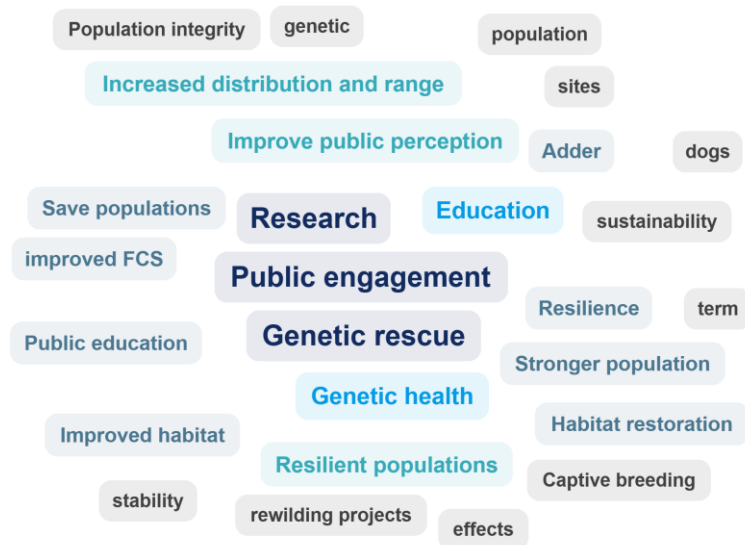
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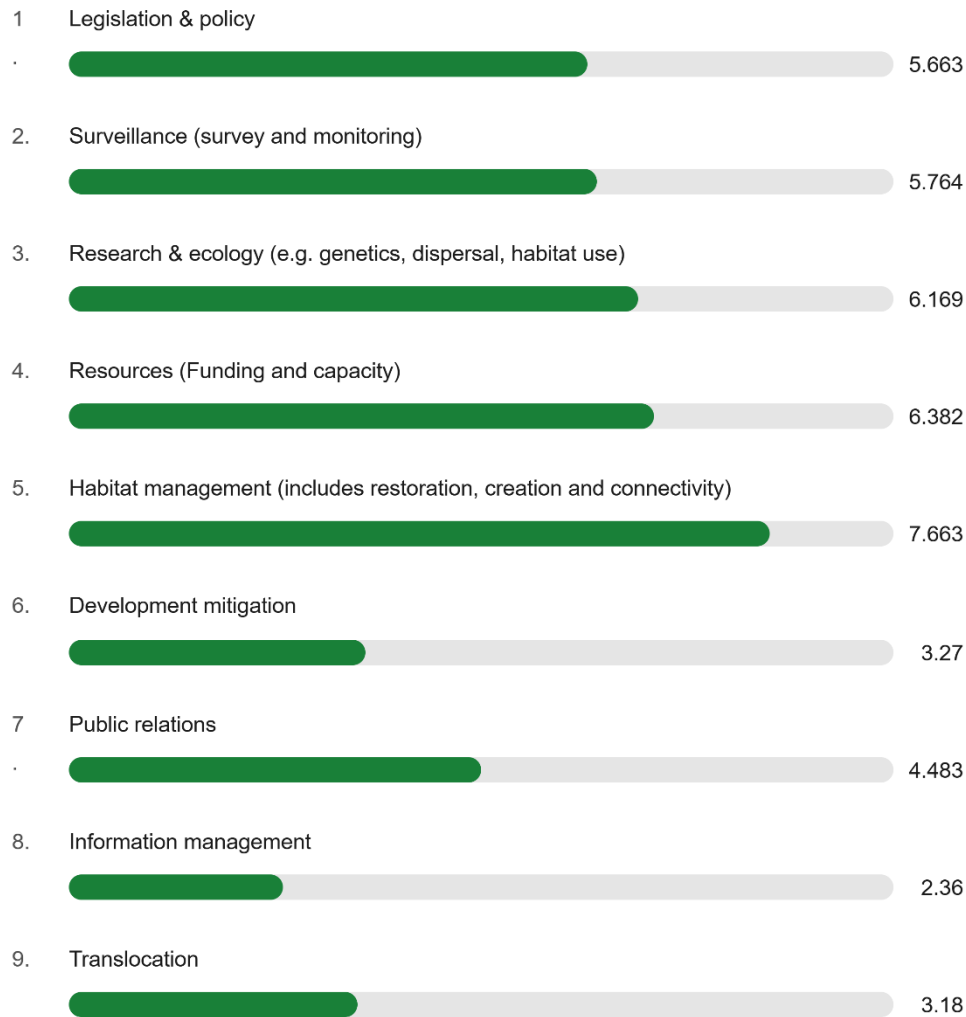
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Figure 2. Word cloud of the opportunities for viper translocations



Q3: Please place the following in what you consider to be order of importance for viper conservation in the UK (1 being your highest priority and 9 lowest): *You can reorder them before your final submission*

Ranking Poll  89 votes  89 participants



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Figure 3. Rankings of the priorities for viper conservation

Q&A Session Overview

Population Viability & Genetics

- What is the minimum viable population for *Vipera berus*?
- What is the population demographic of a viable population (age, sex ratio)?

- How far should individuals be moved?
- What is a suitable population density for donor sites?
- Should we translocate to sites with good connectivity?
- How quickly can newly created hibernacula be used?
- What does good viper status look like at landscape and national scales?
- Are there traits for local adaptation, and how can they be assessed?

Captive Breeding & Translocation

- How many captive breeding programmes exist in the UK?
- Why consider or avoid captive breeding?
- What's the minimum size of wild populations to take specimens from?
- How would captive-bred adders adapt to the wild?
- Should juveniles be live-fed before release?
- How long would a captive breeding programme take?
- Is translocation a "quick fix" or a long-term solution?
- Should we prioritize moderate-risk populations over high-risk ones?

Monitoring, Surveying & Data Gaps

- Is anyone studying successful vs. unsuccessful translocations?
- How accurate are current survey methods?
- Why are short-distance translocations under-discussed?
- Can drones or thermal imaging be used for surveys?
- Lack of monitoring data—how do we fill gaps and share best practice?

Habitat & Ecology

- What is the prey base for adders (juvenile to adult)?
- What are the environmental parameters of hibernacula?
- What does an optimum hibernaculum look like?
- More research needed into vegetation structure (e.g. bracken use).
- Should NE prescriptions for priority habitats be revised?

Ethics, Welfare & Public Engagement

- How do we ensure actions are in the best interest of individual adders?
- Should adders be moved to areas where people must learn to live with them?

- Are humans the biggest disturbance to adders?
- How can we educate and engage the public?
- Should dogs be trained to find or avoid adders?
- Should dogs be banned from sensitive reserves?

Policy, Funding & Governance

- Is there funding for translocation research?
- Who is lobbying for full legal protection for adders?
- What is the media management plan?
- Should there be a minimum skill set for translocation practitioners?
- Should we develop consensus and clear guidance before translocations?

Broader Conservation Context

- Can adder conservation be grouped with other species (e.g. black grouse)?
- Are there lessons from other reptile translocations?
- Should we act proactively before declines become critical?
- How much time do we have before population decline becomes irreversible?