MRes Wildlife Conservation

In the personal statement of your application, please include information on your preferred topic area. This should include what skills you have, and what skills you would hope to gain.

Short-listed candidates will be invited for interview. As a part of the interview process, programme leaders will assess candidate's interests, experience and strengths, with reference to available research projects.

Research project costs are not included in course fees. Research areas include projects that range in price from next to nothing, such as desk-based data analyses projects, to potentially up to £4500 for an overseas project to Kenya.

Focal Research Areas for 2025 entry

Marwell Wildlife's research supports the 2024-2028 Conservation Strategy centred on the interdependency between animals, people and ecosystems. Our interdisciplinary and collaborative approach uses research-based evidence to develop solutions to complex problems leading to conservation action with real-world impact.

Our five focal areas encompass some of the greatest challenges in modern conservation:

1. **Ecosystem regeneration, connectivity, and management**

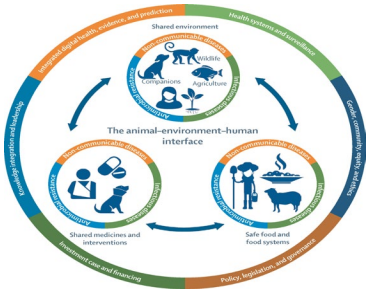
Marwell develops nature-based solutions to recover ecosystems and restore and protect the species that they support. Our work benefits global natural capital, including the sequestration and storing of carbon within functional and connected ecosystems. We have a particular focus on the Marwell estate within and around Marwell Zoo in Hampshire located within the South Downs National Park. The Estate has a mosaic of habitats including new and ancient woodlands and meadows with key landscape features such as hedgerows. Additionally, Marwell has been managing and restoring the Eelmoor Marsh SSSI near Farnborough in conjunction with the landowner for the last 25-years. Key research underpinning this work includes:

- Methods to evaluate and maximise ecosystem services from Marwell-managed land and the surrounding landscape.
- The impact of habitat connectivity including landscape partnerships to recover landscape connectivity for wildlife and ensure resilience for threatened species.
- How to manage modern multi-use landscapes with competing land use to maximise biodiversity benefits.
- Biodiversity restoration including evaluating potential conservation translocations.
- The impact of rewetting and water quality to provide clean water for people and wildlife.

2. One Health

The One Health model recognises the interdependencies between animal, human, and ecosystem health. Marwell seeks to find innovative solutions to health issues across the breadth of the conservation spectrum within our zoo, across our UK sites, and in our overseas conservation projects. Key research underpinning this work includes:

- Health and welfare of animals in the wild, in the zoo, and at the human-livestock-wildlife interface on our UK and overseas conservation projects.
- Disease risk analysis including the identification and response to disease risk, including zoonoses and emerging infectious diseases.
- Advances in our understanding of animal health and conservation nutrition.
- The development and advancement of animal welfare assessment tools within zoos, semi-wild settings, and wild populations. This includes the application of assessment tools to conservation translocations.
- Assessing and delivering novel technology-based approaches to animal welfare monitoring.



3. Connecting people with nature

Connecting people with nature not only improves human health and wellbeing but can lead to nature-positive behaviours that yield further benefits for the environment. Marwell seeks to inspire pro-nature awareness and behaviours in our guests, stakeholders, and future conservationists through education, social impact and learning activities. We develop and support community-led conservation projects both in the UK and overseas. Key research underpinning this work includes:

- Evaluation of community-led conservation projects and development and analysis of novel education programmes.
- The impact that connecting people to nature has on human health and wellbeing.
- The efficacy of community engagement initiatives to deliver biodiversity gains.
- Evaluation of education programmes that transfer knowledge and provide opportunities for experiential learning through participative engagement and pro-nature behaviours.
- The social impact of educational and experiential learning.

4. Sustainable living

This area crosses over with ecosystem regeneration, connectivity, and management in evaluating methods to sequester and store carbon within dynamic and resilient ecosystems on the Marwell estate and beyond. It also overlaps with connecting people to nature in its focus on developing and evaluating sustainable behaviours. The aims are to understand and develop sustainable behaviours within Marwell and beyond to increase sustainable living for individuals, communities, and businesses. Key research underpinning this work includes:

- The environmental and social impact of providing solar power to communities in northern Kenya and sustainable water for people, livestock, and wildlife.
- Advancements in sustainable living.
- Sustainable technology: the efficacy of demonstrating sustainable energy solutions on individual behaviour.
- Development and initiation of the circular economy within a business context.
- How to reduce environmental impacts from supply chains.
- The development and implementation of regenerative business models.
- The security of energy, food and water supplies for people around the world.
- Carbon sequestration and storage across conservation project locations.

5. Creating sustainable wildlife populations

Marwell Wildlife has owned and run Marwell Zoo in Hampshire for over 50-years. Creating, managing, maintaining, and restoring wildlife populations of threatened species is a fundamental cornerstone of our conservation work. Our projects include the restoration or management of wild, semi-wild, and *ex situ* populations including conservation translocations to ensure a future for threatened species. Key research underpinning this work includes:

- Working with natural biological processes to improve biological fitness and ensure animal adaptations are appropriate for the long-term survival of recovering populations.
- Evaluation and improvements in population management theory and practice.
- Fundamentals of population and reintroduction biology.
- Integrated pest management.
- Recovering sustainable populations globally.
- Using big data and advanced analytical techniques to assist saving species, including through the better management of sustainable populations.
- The development of innovative technologies to evaluate, assess, and analyse population health and connectivity across challenging landscapes.