

**Sa\100040**

**Socio-ecological impacts of  
exclusion fencing in the Greater Mara  
Ecosystem**

**Thompson, Stewart | Oxford Brookes University**

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**Funding sought**  
**Project start/end**

**£8,736.50**  
**8 Jul 2018 - 28 Jul 2018**

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## 1. Contact Details

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### Q1. Lead applicant contact details

Please enter the contact details for the lead applicant. The lead applicant is the same as the Flexi-Grant account holder. Please note that the Flexi-Grant account holder will be the only contact point for the application.

Stewart Thompson

Oxford Brookes University

Primary Applicant

[https://www.brookes.ac.uk/bms/research / groups/evolution-ecology-environment-and-conservation/conserv](https://www.brookes.ac.uk/bms/research/groups/evolution-ecology-environment-and-conservation/conserv) (Work)

Stork Cottage, Cassington, Witney,  
Oxfordshire, OX29 4DW, United Kingdom  
(Home)

### Q2. Lead organisation contact details

Please enter the applicant organisation details

Oxford Brookes University

BMS, Oxford Brookes University, Gipsy Lane,  
Headington, Oxford, OX3 0BP, United  
Kingdom (Work)

Please add any 'Committee Feedback' to the field below:

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**Please add any 'Specific Ineligibility' feedback to the field below:**

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**Please add any 'Conditions' to the field below:**

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**Please add any 'Positive Feedback' to the field below:**

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## 2. Title & Location

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### Q3. Working title of the proposed Darwin project

Socio-ecological impacts of exclusion fencing in the Greater Mara Ecosystem

### Q4a. Host country (of proposed Scoping trip)

Kenya

### Q4b. Other collaborating country/ies

### Q5. Is this a resubmission of a previous scoping application?

No

### 3. Scoping Principals & Lead Organisation Summary

#### Q6. Principals in Scoping work i.e. the travellers

Please give the details of the individuals (up to 2) from the lead organisation who would be directly involved in the Scoping work - i.e. making a visit to a host country. One page CVs must be provided.

Details	Main traveller	Second traveller
<b>Surname</b>	Thompson	
<b>Forename(s)</b>	Stewart	
<b>Post held</b>	Professor in Biodiversity Conservation	
<b>Department</b>	Biological & Medical Sciences	
<b>Telephone/Skype</b>		
<b>Email</b>		
<b>Country travelling from</b>	England	
<b>Please attach the traveller's CV</b>		

#### Q7a. About the lead applicant organisation

Briefly discuss your expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record you have in this field. You may be asked to provide evidence of this track record.

The Centre for Ecology, Environment & Conservation (CEEC) at Oxford Brookes University is part of the Department of Biological & Medical Sciences. CEEC provides a central focus for the expertise the Department has in ecology, environmental

management and conservation. CEEC seeks to facilitate first class research and training in environmental/ecological issues and to work in partnership to integrate their expertise into practical solutions. Some of their research is undertaken by The Spatial Ecology and Landuse Unit have been in existence for over 20 years and has initiated and delivered a variety of applied conservation management projects, all of which they translate into practical tools for relevant conservation practitioners. Much of their work explores the linkages between wildlife protection mechanisms/policies and landscape scale ecology, with the majority of their research underpinned by the use of Geographic Information Systems as data repositories and predictive management tools. Some of their work is supported by mobile data collection and management software devised by the group, who have established particular expertise in the use of real-time data capture protocols for field-based ecological and environmental surveys.

**Q7b. Would you like to include a letter of support from the lead applicant?**

Yes

**The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.**

## 5. Project Partners

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### Q8. About the partner organisation(s)

Please list all the partners involved and explain their roles and responsibilities in the Scoping work. Briefly discuss your partner's expertise in sustainable use or conservation of biodiversity and/or development. Please refer to recent track record they have in this field. You may be asked to provide evidence of this track record. If there is more than 1 partner organisation, you can enter the details of more partners below. Please specify which of the partners is new to the partnership.

<b>1. Partner Name:</b>	Maasai Mara Wildlife Conservancies Association
<b>Website address:</b>	<a href="https://www.maraconservancies.org/">https://www.maraconservancies.org/</a>
<b>Details of anticipated roles and responsibilities:</b>	This is a new partnership, with MMWCA providing support on the ground both in terms of securing access to areas of interest, existing datasets and project assistance in country. MMWCA will support OBU in delivering any necessary workshops and assist grant application formulation in consultation with their specialist teams.

**Expertise in sustainable use or conservation of biodiversity and/or development:**

MMWCA was established in 2013 to act as an overall umbrella body for the Mara conservancies. Their mission is to conserve the greater Mara ecosystem through a network of community protected areas for the prosperity of biodiversity and wildlife and the regional Maasai population.

MMWCA works in an advisory/advocacy capacity to promote strong and thriving conservancies across the Greater Mara Ecosystem. This is achieved by prioritizing efforts that contribute to the creation and sustainability of conservancies as a mechanism to improve the health of the entire landscape, MMWCA's specific expertise is to work with and on behalf of stakeholders to:

Develop, create and sustain conservancies and conservation areas; and

Facilitate, implement and coordinate conservation and social development.

Further details can be found at:

[https://www.maraconservancies.org/wp-content/uploads/2017/05/MMWCA\\_Strategy\\_2017\\_FINAL1.pdf](https://www.maraconservancies.org/wp-content/uploads/2017/05/MMWCA_Strategy_2017_FINAL1.pdf)

Currently almost 3,000 local landowners and their families (approx. 24,000 people) benefit directly from their participation in Conservancies in the greater Mara ecosystem which holds approximately 30% of Kenya's wildlife. Importantly, conservancies create safe dispersal areas, wet season pastures, migratory corridors, breeding and feeding areas for migratory and resident wild grazers as well as carnivores.

**Name of main contact point and post held:**

Daniel Ole Sopia  
CEO  
P.O. Box 984 - 20500  
Narok  
Kenya



<p><b>Would you like to include a letter of support from this organisation?</b></p>	<p><input checked="" type="radio"/> Yes</p>
<p><b>Letter of Support:</b></p>	<p><b>The limit for any single file uploaded as supporting materials with your application is 6MB. Please ensure documents are saved in PDF form where possible in order to minimise size.</b></p> <div data-bbox="564 481 1390 600" style="border: 1px solid #ccc; height: 50px; width: 100%;"></div>

**Do you have more than one partner involved in the Scoping work?**

No

**Q9. Can you confirm that none of the partners (excluding the lead applicant) have led a Darwin Initiative Main Project before?**

Yes

## 6. Justification & Concept Notes

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### Q10. Justification of need for a Scoping Award

**Please provide written details of why alternative funding is not available from within your own organisation or from other sources. Will matched funding be provided?**

Funding for socio-ecological impact projects requires a truly interdisciplinary approach with very few (if any) funding sources available for this work other than Darwin, as they seek to balance the sometimes conflicting requirements for people and for wildlife, in order to balance the benefits to both. For the majority of funding initiatives, including my own organisation, this is beyond their immediate remit, with priority is given to single discipline proposals. The partner organisation (MMWCA) have a small team and limited resources with which to deliver their own diverse remit across a large portion of the GME. As a consequence scoping studies do not feature within their annual workload plan. Matched funding is not available.

### Q11. Concept note for the Scoping Award

**This question concentrates on the scoping study work and should demonstrate the objectives of the Award including:**

- objectives of the visit
- what work (including research, remote communications or other collaborations) has been carried out prior to applying for this Award
- what work will be carried out under the Award – please see the guidance for advice on what type of activity can be funded
- evidence of the proposed partners' intentions to collaborate in your Scoping work

The Greater Mara Ecosystem (GME) is a biodiversity hotspot and stronghold of Maasai culture. However, the ecosystem has experienced significant wildlife declines recently. One response has been the creation of 'conservancies' - initiatives designed to protect areas for wildlife whilst generating income for landowners and the wider Maasai community through land-leasing and employment opportunities. These conservancy lands remain unfenced and are contiguous with the Maasai Mara National Reserve, with their success as sources of income dependent upon the thriving wildlife populations that offer visitors excellent opportunities to see a range of indigenous species.

The lead applicant has a long-standing research presence in the GME, having previously worked on a study of the impacts of the wildlife tourism industry to it's wildlife. The research group have monitored wild ungulate and livestock numbers in and around conservancies within the GME for 6 years, demonstrating that wild ungulate and predator populations have increased markedly, thus confirming the value of conservancies as wildlife protection initiatives. However, increasingly widespread fencing in areas adjacent to conservancies could reverse these positive trends, threatening conservancy long-term viability as key wildlife protection areas and

sources of community income. In addition, fencing reduces landscape connectivity and accessibility for livestock, jeopardising Maasai livelihoods and social cohesion, especially since livestock continue to be the main income stream, even in households with conservancy lease agreements.

As a consequence of our in-field research we have noted how recent changes to land tenure, and associated agricultural diversification have led to land privatisation, with thousands of hectares of formerly communal grazing areas outside the conservancy lands being fenced. This large-scale fencing may well result in radical environmental and cultural change in the GME, threatening the traditional freedom of movement of people, wildlife and livestock, possibly leading to the collapse of this unique ecosystem. The highest priority therefore, is understanding the impact of current, and possible future, fencing patterns on the long-term viability of conservancies.

The overarching objective of the award will be to meet with key stakeholders in the GME conservancies, namely the owners, managers, community representatives and other NGO's to identify the key components of an impact assessment of fencing within the GME and the implications for conservancies as both wildlife protection areas and sources of tourism revenue. The award will allow for discussion of the likely parameters required for the construction of a socio-ecological framework with which to achieve the impact assessment. In particular we will use the award to identify knowledge gaps which must be filled in order to explore the linkages between biophysical and socio-ecological factors that will identify priority areas for mitigation efforts.

We are well known to the proposed partner organisation, generically though our work monitoring the ungulates of the GME and specifically as a consequence of advising on elements of their recent cultural and natural resource conservation action plan. Whilst we have not collaborated together to date, our mutual aspirations for the future direction of the GME conservancies will ensure a focused/targeted approach to final project formulation and delivery.

## **Q12. Concept note for the resultant project**

**This question concentrates on the full Darwin application you intend to submit after the Scoping Award and should discuss:**

- the expected outcome and outputs of the resultant Darwin project
- how the resultant Darwin project would meet a need in the host country (and the wider region if applicable e.g. if the proposed project would be based in a UMIC)
- how the project would contribute to any or all of the following Conventions: the Convention on Biological Diversity (CBD); the Nagoya Protocol on Access and Benefit-sharing (ABS); the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA); the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- how the project will contribute to sustainable development in the country concerned
- briefly what the proposed partner's/s' expected role in the resultant Darwin project will be
- briefly the expected role of the Scoping travellers in the resultant Darwin project.

There is strong, yet largely anecdotal, evidence that fencing in the greater Mara ecosystem (GME) has increased rapidly since land subdivision. If this continues, both in the GME in general and around conservancies specifically, previous occurrences of large scale fencing in wildlife hotspots indicate that impacts on wildlife will be considerable.

The GME is essential as the provider of seasonal dry grazing to migratory ungulates. Approximately 1.3 million wildebeest, 200,000 zebra and numerous antelope species access the grasslands annually for forage, also attracting tens of thousands of wildlife tourism visitors. As the conservancy income model is based on providing wildlife viewing opportunities for tourists, any significant reduction/change in wildlife numbers and distribution patterns caused by fencing will reduce conservancies' income. Ultimately, without income conservancies will be unable to meet land leasing payments, resulting in loss of community employment and secondary income sources for the Maasai.

The overarching project objectives will be to identify the socio-ecological advantages and disadvantages of fencing to the Maasai community in and around the conservancies network, establishing potential ecological/environmental, social and economic costs of fencing and their drivers. Specifically we will identify locational fencing increases in and around conservancies, analysing in tandem the drivers and feedbacks responsible for fencing, developing predictive models/tools to explore impacts of fencing scenarios on wildlife and Maasai households.

The proposal will be underpinned by a series of queries which link two central lines of enquiry:

- (i) why are people fencing in areas adjacent to GME conservancies, and
- (ii) what are the impacts/effects of current and future fencing patterns to wildlife and people?

To address these questions the proposal will use a novel combination of survey techniques together with semi-structured interviews to generate data to reveal the social and environmental drivers of fencing and the associated impacts.

The full application will directly support several Articles of the CBD in that the findings will be used to develop national strategies, plans or programmes for the conservation and sustainable use of biological diversity, identify processes and categories of activities which have or are likely to have significant adverse impacts on the conservation and sustainable use of biological diversity, In particular the proposal will reinforce/advance several key aspects of Article 8 of the CBD, making a valuable contribution to in-situ conservation of the GME's biodiversity.

MMWCA will play a key role in the design and delivery of the proposed project as they will assist with grant proposal formulation, facilitate the project on the ground and utilise the findings in their site selection and management strategies.

Although general effects of fencing can be hypothesised, specific, localised impacts on wildlife, landscape and people and the drivers behind the fencing "boom" remain poorly understood. By investigating possible impacts of fencing on wildlife populations

and communities invested in wildlife conservancies, the final project will provide stakeholders, policy makers and conservation managers with evidence-based frameworks to mitigate fencing impacts.

## 7. Costs

### Q13. Costs

Provide a detailed breakdown of costs to be funded by the Darwin Initiative in GBP.

	Main traveller	Second traveller	Total
Airfare including travel to airport			680.00
Visas and other travel documents			36.50
Total daily subsistence claimed (please provide details below)			2,300.00
Workshop costs (please provide details below)			£800.00
Other costs (please provide details below)			£4,920.00
		<b>Total request from Darwin (must not exceed £10,000)</b>	8,736.50

### Additional details to support the figures above

	Main traveller	Second traveller
Daily subsistence rate per day	£115.00	
Number of days subsistence claimed (max 30 days per traveller)	20	

### Workshop costs

Please provide further details on your workshops costs.

Hire of workshop venue - £400

Catering for 20 attendees - £400

### **Other costs**

**Please provide further details on your other costs.**

Vehicle hire + driver for field visits - £90 per day (including fuel) - £1080 (12 days in total)

Accommodation & subsistence for MMWCA on field visits - £115 per day x2 staff - £2300 (10 days in total)

Driver accommodation and subsistence - £115 per day - £1380 (12 days in total)

Internal travel to meetings - £20 per meeting (to and from accommodation) - £160 (8 meetings in total)

## 8. Timetable & Activities

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### Q14. Activities and timings

Please complete the Scoping Award Timetable to include your anticipated dates of travel (start and finish) and activities to be undertaken on your trip. **N.B.:** this question is specifically about your travel plans – your dates and specific milestones during travel – NOT your timetable to Stage 1 application. Your application will be considered ineligible if this section does not specifically cover your planned scoping trip.

Date	Milestone
08/07/2018	<b>START</b>
09/07/2018	Arrive Nairobi. Meet with Daniel Sopia = relevant staff at MMWCA to outline current knowledge extent and gaps. Prioritise key areas to address.
10/07/2018	Meet with Irene Amoke. Technical adviser to MMWCA. Update on existing research in the GME to include access to data sets currently held.
11/07/2018	Meet with Allan Earnshaw. MMWCA Board member. Discuss current concerns/directions of travel held by Board and relationship of proposal to other GME NGO activities.
12/07/2018	Travel to Narok (MMWCA HQ). Workshop with conservancy owners/managers, local community representatives, KWS representative(s), existing research units, NGOs (KWT, NRT) and MMWCA staff.



13/07/2018	Meet with Daniel Muli and Eric Nkadula - MMWCA regional coordinators for western/central and eastern conservancy clusters respectively.
14/07/2018	Field visits to conservancy clusters - meetings with conservancy managers and local community representatives to identify key elements/requirements of research proposal (8 days).
23/07/2018	Return to Nairobi. Meet with Jake Grieves Cook/ Mohanjeet Braar (OI Kinyei Conservancy) to outline project proposal and to enlist support.
24/07/2018	Meet with Kenya Wildlife Service staff (Erustus Kanga - Assistant Director of Biodiversity Research and Monitoring) to discuss proposal and logistics/permits.
25/07/2018	Preliminary study finding - analysis and presentation collation
27/07/2018	Final meeting with MMWCA staff + Dickson Kaeolo, (CEO, Kenya Wildlife Conservancies Association), to present preliminary scoping study findings/formulate key proposal elements
28/07/2018	Return to UK
28/07/2018	<b>FINISH</b>

**Q15. In what year would you expect to submit the full Darwin project application?**

Round 25

## 9. Certification

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### Q16. Certification

On behalf of the

company

of

Oxford Brookes University

I apply for a grant of

£8,736.50

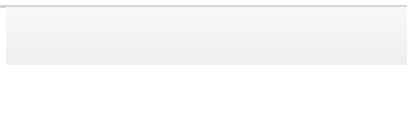
in respect of all expenditure to be incurred during the lifetime of this project based on the activities and dates specified in the above application.

I certify that, to the best of our knowledge and belief, the statements made by us in this application are true and the information provided is correct. I am aware that this application form will form the basis of the scoping schedule should this application be successful.

*(This form should be signed by an individual authorised by the applicant institution to submit applications and sign contracts on their behalf.)*

- I have uploaded CVs for project principals
- I have uploaded letters of support from the lead application organisation and the partner(s)



<b>Name</b>	Sarah Taylor
<b>Position in the organisation</b>	Research Support Director
<b>Signature (please upload e-signature)</b>	

<b>Date</b>	01/02/2018
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**If this section is incomplete the entire application will be rejected.**

## 10. Submission Checklist

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### Checklist for submission

	Check
Have you provided anticipated start and end dates for your Scoping trip?	<input checked="" type="checkbox"/>
Has your application been signed by a suitably authorised individual?	<input checked="" type="checkbox"/>
Have you read the Guidance documents for both <u>Main projects</u> and <u>Scoping awards</u> , and are you satisfied that your concept would be eligible for a main project application?	<input checked="" type="checkbox"/>
Have you read the current <u>Terms and Conditions</u> for this fund and can you confirm you are willing to be bound by these if your application is successful?	<input checked="" type="checkbox"/>
Have you uploaded 1 page CVs and letters of support as required?	<input checked="" type="checkbox"/>
Have you checked the <u>Darwin website</u> immediately prior to submission to ensure there are no late updates?	<input checked="" type="checkbox"/>