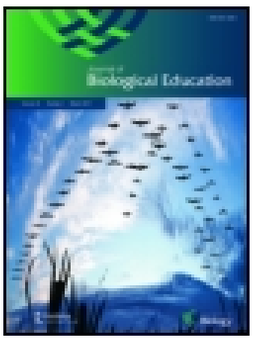

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COMMENTARY

Overseas Conservation Education and research: the new colonialism?

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ABSTRACT

The overseas field course is a common feature of European and North American undergraduate degrees and increasingly students are seeking out volunteering opportunities abroad in order to gain career-related experience in the overcrowded conservation sector. We argue that, without careful consideration, both activities run the twin risks of becoming 'parachute' science and perpetuating harmful neo-colonial attitudes. We propose a series of guidelines for those running overseas university field courses and volunteering activities to reduce these risks.

KEYWORDS

Education; parachute science; neo-colonialism

Introduction

Conservation issues, particularly those concerning charismatic species and habitats, are often high-profile, feature on news outlets globally and attract considerable attention. This is especially the case when those issues concern species considered to be 'iconic', and even more so it seems, if those animals are also African mammals (e.g. lions (Somerville 2017)). The current high-profile campaigns being waged against trophy hunting provide good examples of how conservation narratives are often presented. Western organisations (especially larger NGOs) and governments with the support of well-known celebrities, pursue approaches (in this case both for and against) that play well with sectors of the home audience but which only very rarely feature indigenous voices from the regions directly affected (e.g. McCubbin 2019). The portrayal of other overseas conservation narratives in Western media tend to be similarly biased towards Western commentators, and this bias can extend to the scientists and practitioners who contribute to the public debate. The 'intrepid naturalist', 'explorer' or 'explorer-naturalist' stereotypes prevalent on television, featuring typically lone white men 'discovering' nature in far-flung countries, further feeds this biased representation. The overall impression on western audiences is that conservation is the preserve of predominantly 'white saviours' from Western nations, regardless of the reality of the situation. This 'white saviour' motif also came to prominence in development funding through a well-known UK charity, Comic Relief, in 2019 (e.g. Badshah 2019).

University students studying subjects directly or indirectly related to conservation and wildlife management are an important pool of new recruits for the global conservation sphere. These students are inevitably exposed to, and influenced by, the choice of people and voices used to portray conservation in the media but they are also influenced by what they experience on their taught courses. The potential for field courses to take rather than give, and to be unethical with respect to local participation and benefit, has been relatively well-explored for geographical field courses (Hammett, Jackson, and Vickers 2019). The need to 'decolonise' geography teaching overseas

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(Griffiths 2017) and the danger of such trips becoming a 'safari of the poor' (Robson 2002) are the sort of themes that clearly have potential relevance to overseas trips taken within the biosciences. Here, we explore the role of the ever-popular 'overseas field trip' and the development of overseas volunteering opportunities (often deemed essential to get employment in the conservation sector) in perpetuating the neo-colonialism some believe to be prevalent in conservation (e.g. Mbari and Ogada 2016). We argue that both activities could, without care, perpetuate detrimental attitudes and approaches in students and therefore future scientists, conservationists and practitioners.

How does neo-colonialism arise?

Neo-colonialism in conservation can be characterised by the influence (and sometimes dominance) of governments, organisations and individuals from outside the focal country or region in the management of habitat, wildlife and other natural resources within the focal country or region. Many authors have highlighted the problems of neo-colonialism in conservation (Garland 2008; Mbari and Ogada 2016; Liu and Leung 2019; Mkono 2019) while many more have worked to develop integrated conservation and development approaches that are sensitive to the need for local community involvement, empowerment, participation, benefit and sustainability (Brown 2002). The involvement and participation of local communities in conservation is agreed by many to be crucial for success of conservation schemes (e.g. Bajracharya, Furley, and Newton 2005). Future challenges in conservation will without doubt involve accommodating the needs of people with those of the natural world and finding such an accommodation will require buy-in from local communities. The need for water, power, agricultural land, infrastructure and other development are all fundamentally issues of space and will have to be balanced with competing conservation objectives. People who may be competing directly with wildlife for space may also suffer the costs of consequences of living with that wildlife, including reduced crop yields (for example from field raiding by elephants (Nsonsi et al. 2018)), livestock losses by predation, injury from animal attacks and potentially death (Packer et al. 2019). Western conservation approaches, such as so-called 'fortress conservation' (fenced national parks and reserves from which local people are removed, excluded or both) will clearly need to be balanced by community focussed initiatives if conservation as we currently understand it is to be successful.

Beyond conservation, engaging with local people has clear benefits for scientists and potential knock-on benefits for conservation initiatives. Knowledge and understanding built up by people living within an area (and often engaging closely with the natural world) is an enormous potential resource, while historical knowledge built up over single lifetimes and across generations can provide insights that are simply unobtainable in any other way (Garibaldi and Turner 2004; Drew 2005). Despite these advantages, local people in developing world countries are often excluded from scientific studies being undertaken in the areas in which they live. 'Parachute science' is a term that has been used to describe the practice whereby Western scientists drop into, collect data and leave without training or investing in the region, an approach that 'cripples conservation' and is 'patronising' (Evans 2017). Researchers might be carrying out research while on holiday or while teaching on overseas field trips without appropriate permissions and visas and, crucially, without collaboration locally, subsequent sharing of data, dissemination or implementation of any beneficial findings. In a cut-and-dried case of neo-colonialism, 'parachute scientists' are benefitting from the resources of a country, and often the efforts of local people, without putting anything back. Much of the overseas conservation science is focused on 'charismatic mega-fauna' and it is obvious from the social media pages of many of those involved in overseas research that there is a distinct 'on holiday being a tourist' attitude to their field work. Renowned institutions such as the Zoological Society of London whose scientists have worked overseas for many decades, sadly, also sometimes reflect this lack of acknowledgement to the indigenous communities that they work among. For example, the information leaflet for their cheetah conservation programme (ZSL 2014) reveals a marked lack of ethnic diversity. Papers arising

from the programme (e.g Hilborn et al. 2012), have, in the past only recognised local contributions in the acknowledgements section. It is refreshing to see that recent papers emanating from the ZSL are much more representative of the various contributions from local staff (e.g. Durant et al. 2019). Much, however, remains to be done, and in an effort to gain local and appropriate scientific recognition, some countries, such as Indonesia, are suggesting legislation (Rochmyaningsih 2018), while scientists have started to develop guidance for early career researchers to avoid being parachute scientists (Chapman et al. 2015)

The need for attitudinal shifts

Conservation requires a more inclusive approach to succeed; parachute science in general is exploitative and for both science and conservation initiatives engagement with local people has the potential to improve the outcome, because of local knowledge and novel insights (e.g. Parry and Peres 2015). Against this background, instilling the next generation of scientists, conservationists and practitioners with the right attitude has never been more important. The obvious time to develop such attitudes is during an undergraduate degree, when students are developing the knowledge, understanding and criticality of thought that will help to form the opinions and attitudes that will underpin their subsequent careers. Overseas field courses are a critical component of developing students (Goodenough et al. 2014) and immersion in novel environments can be highly influential in the academic, intellectual and personal development of those students able to take part (Hart, Stafford, and Goodenough 2011). We believe though, that despite the clear benefits of such courses, without careful management they have a strong potential to develop and reinforce negative attitudes.

The overseas field trip has become an important part of biology, ecology, conservation and geography (Hammett, Jackson, and Vickers 2019) oriented undergraduate courses. It is easy to find 1–3 week courses being offered in a long list of far-flung and 'exotic' locations that, in the UK alone, include Borneo, The Azores, Belize, Panama, Brazil, South Africa, Uganda, Botswana, Trinidad and Kenya. Students, some of whom have never been abroad before (AH pers. obs.), are typically accommodated in field centres or custom-built accommodation and during their trip they will experience a range of field-based activities and undertake short research projects. Trips off-site allow students to experience different environments or undertake additional activities. Field trips are a hugely positive experience (Hart, Stafford, and Goodenough 2011; Goodenough et al. 2014) but can be in danger of becoming a 'translocated classroom' if staff from the home institution provide much of the teaching and project supervision. Local involvement in academic aspects of the field course may be minimal while meaningful local collaboration in research non-existent. If staff carry out research during the field course then accusations of 'parachute science' could be made if that research is not collaborative locally. The attitudes, and perhaps more importantly, the actions of teaching staff will inevitably influence the attitudes and future actions of students. How staff talk about local people, how they treat them, the roles of local people within the field course setting, their involvement with research and the level of collaboration (perhaps measured by authorship on research outputs) are all factors that can build up or break down neo-colonial attitudes within this setting. Likewise, how staff conduct themselves with respect to research and collaboration, how they deal with permitting and legalities and how they communicate these crucial points to students could all be instrumental in shaping undergraduate attitudes.

We suggest that those undertaking overseas field courses need to be sensitive to the effect that such courses could have in shaping science and conservation in the future. To facilitate this, we propose the following guidelines:

(1) People local to the field site and beyond should be regarded as collaborators both in education and research.
(2) Opportunities should be sought out and developed to work closely with people living and working in field locations in meaningful and mutually beneficial ways.

(3) Remember at all times that as an educator your attitude, language and behaviour are influential.
(4) Permitting, permissions, visas and other legal requirements for undertaking publishable research should be respected and, importantly, discussed openly and honestly with students.
(5) Any data collected should be freely available to collaborators in the host country provided that such data sharing does not break any national or international data protection laws.
(6) Research undertaken with the aim of publication (however slight the chances) should include an explicit discussion of authorship.
(7) Anyone involved in the research should at the very least be named (correctly) in the acknowledgements of any output, whether it be an undergraduate assignment or a peer-reviewed paper.
(8) Any publication resulting from any data collected on-site should be shared.
(9) Arrangements should be made to train local collaborators on equipment brought to the field site as appropriate.
(10) If you know it, share it; be generous with your knowledge.
(11) Be willing and open to learn from local collaborators, and make sure your students see this.
(12) That these guidelines be formally incorporated into the ethical approval mechanisms that universities already use to oversee research and educational activities.

Recognising the hosts

It is the stated desire of many undergraduates on degrees related to conservation to work in the conservation sector and very often to do so overseas (AH pers. obs.) The lure of charismatic species living in beautiful environments in exotic locations is strong and in part perhaps leads to the conservation sector being highly competitive even in less exotic locations. To get a job, or even an unpaid internship position, requires a strong CV that demonstrates experience and commitment over and above that expected from an undergraduate degree. Aware of this pressure, there is a push for undergraduates to sign up for opportunities to work with organisations abroad and this is often supported by universities who are themselves under pressure to increase the employability of their graduates. The traditional route of working as an individual with a particular group is still prevalent but in addition there are now schemes that offer particular conservation-linked experiences in overseas locations. In effect, these are operating in a similar way to a university field course, often offering training and experience as well as the chance to take part in research or specific initiatives.

Many of the organisations offering overseas experiences target undergraduate courses and may visit universities to give introductory talks and recruit students. In some cases, the opportunity exists for students to collect data for final year dissertation projects. There are many such schemes, which are often badged as conservation organisations, research centres or expeditions. Such organisations run the same risk of perpetuating poor attitudes as overseas field courses, especially when they involve PhD students and post-docs funded with European and North American research grants. Indeed, a common complaint, voiced very coherently by Aditya Gangadharan, an Indian conservation scientist, in a series of Tweets a couple of years ago, is the large number of PhD students and post-docs who expect indigenous help and resources with no expectation that they should learn the indigenous language or collaborate on publications. On the completion of their PhD or grant, assisted by people seeking overseas field work experience, they return to their home country to reap the rewards, taking up a prestigious conservation or academic position.

We should stress that we are not in a position to judge formally or accurately the extent to which such organisations might be guilty of perpetuating neo-colonial attitudes or in exemplifying parachute science, but the opportunity clearly exists. We suggest that the same guidelines we proposed for field courses could be applied to the increasing number of organisations offering opportunities to experience overseas research and conservation. After all, we cannot help to develop new attitudes in science if the next generation are being indoctrinated in old attitudes (implicitly or otherwise) as part of their training.

Disclosure statement

No potential conflict of interest was reported by the authors.

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