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To cite this version:

Mathieu Guérin, Teckwyn Lim, Ange S L Tan, Ahimsa Campos-Arceiz. A favourable shift towards public acceptance of wildlife conservation in Peninsular Malaysia: comparing the findings of the Wild Life Commission of Malaya (1932) with a recent survey of attitudes in Kuala Lumpur and Taiping, Perak. Malayan Nature Journal, Special Edition, 2017, pp.21 - 31. hal-01845024

HAL Id: hal-01845024

https://hal.science/hal-01845024v1

Submitted on 20 Jul 2018

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A favourable shift towards public acceptance of wildlife conservation in Peninsular Malaysia: comparing the findings of the Wild Life Commission of Malaya (1932) with a recent survey of attitudes in Kuala Lumpur and Taiping, Perak.

Mathieu Guerin[1], Teckwyn Lim[2], Ange S.L. Tan[2] and Ahimsa Campos-Arceiz[2,3]

Abstract

Peninsular Malaysia is rich in wildlife including elephants and tigers but local attitudes towards conserving these species varies. With the aim of understanding the factors affecting these attitudes we analysed the data of the 1932 report of the Wild Life Commission of Malaya and compare them with the findings of a 2016 survey carried out in the city of Kuala Lumpur and the town of Taiping, Perak. We identify the limitations of using the full dataset of the Commission and instead focused on the 722 Asian respondents, stratified according to social status, looking at the attitudes of the Asian colonial elite, the kampong elite and farmers; as well as looking at the attitudes of individuals that had engaged in hunting. We compared these results with 525 respondents from the 2016 urban survey and found that the profile of the recent responses is comparable to that of the colonial elite – both being favourable to conservation. We suggest that the dramatic urbanisation and increase in literacy experienced by the peninsula since the 1930s has also seen an overall shift in favour of conservation and we recommend several steps to ensure that the costs of wildlife conservation be shared more equitably.

Keywords

Wildlife Commission Report; British Malaya; Peninsular Malaysia; Theodore R. Hubback; Taiping, Kuala Lumpur, tiger perception

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Introduction

Malaysia is a biodiversity hotspot, rich in charismatic wildlife. Peninsular Malaysia in particular is one of the strongholds for the survival of Asia's elephants (*Elephas maximus*), tigers (*Panthera tigris*) and leopards (*Panthera pardus;* e.g. Rostro-García et al. 2016). Perhaps due to this abundant natural heritage, Malaysians are sometimes not fully appreciative of the value of conservation and face accusations of not caring enough for wildlife (Nagulendran et al. 2016). Opinion surveys can reveal the actual extent to which Malaysian attitudes towards nature varies according to ethnicity, along the urban-rural divide and with income. However, such surveys seldom look at how public attitudes have changed over time.

Here we take advantage of a historical dataset to examine people's attitudes towards wildlife in the 1930s. We then compare the results with recent datasets produced for similar purposes. Our aim is to understand the factors affecting local people's attitudes towards wildlife. Specifically, our objectives are to analyse the results of the report of the Wild Life Commission of Malaya (WLCM 1932), compare them with the findings of a recent survey, and identify any trends.

Background

Hubback's Wildlife Commission

At the end of the 1920s, wildlife conservation in the Malay Peninsula was a highly controversial issue. In 1929, the colonial authorities supported the rapid expansion of rubber plantations by removing the legal protection for elephants and sambar deer (*Rusa unicolor*) as well as abolishing game reserves in Pahang and Negeri Sembilan (Kathirithamby-Wells 2005). These moves resulted in an outcry among conservationists who were led by Theodore Rathbone Hubback, Honorary Game Warden for the Sultanate of Pahang.

Hubback, himself an experienced planter and former big game hunter felt that there was a need for stronger protection for endangered wildlife by setting up a centralised game department and creating a large national park. On 28 July 1930, Hubback, after intense lobbying, managed to get himself commissioned by King George V to conduct an inquiry into (i) the existing regulations for the protection of wildlife in the Straits Settlements; (ii) the extent of damage done to agriculture by wildlife and suggesting methods for dealing with it; and (iii) the organisation required to manage wildlife preservation (Straits Settlements *Gazette* Notification No. S 1523/1930). Hubback later received a similar commission by the High Commissioner to the Federated Malay States (Selangor, Perak, Negeri Sembilan, and Pahang). This second commission also included the preliminary study of a project to establish a national park in the vicinity of Gunung Tahan. The administrations of the Unfederated Malay States (Johor, Kedah, Perlis, Kelantan and Terengganu) also agreed to be part of the Commission. Hubback found himself at the head of a commission to conduct an inquiry on the preservation of wildlife in the whole of British Malaya.

In order to conduct this inquiry, Hubback and an "independent and impartial Assessor", George Hawkins (a British civil servant also based in Pahang), launched a large public consultation on the relations between the people of Malaya and wildlife. They designed a questionnaire that was sent out to Europeans and a few high-ranking Malayans.

Between August 1930 to March 1931, Hubback and Hawkins conducted a series of 64 public meetings in different places across British Malaya in order to allow interested parties to make their views known to the authorities. In Selangor, for which the minutes of the Commission have been preserved, they held six meetings in Kajang, Banting, Klang, Kuala Selangor, Kuala Lumpur, and Ulu Selangor in January 1931. Before the meetings, posters in English, Chinese, Jawi and Tamil were put up in the villages, inviting people with a special interest in wildlife to come forward and to provide testimonies. The posters said:

> "A commission has been appointed to inquire about the Preservation of the Wild Life of Malaya. One of the terms of reference of this Commission is as follows: "to inquire into the allegations of damage done to agriculture by Wild Life, to call for and record evidence bearing

> on such matters and to suggest methods of dealing with any situations which may be revealed." Members of the Public of Malaya who are able to give evidence on the above matters, as well as on other subjects relating to the preservation of Wild Life, are requested to testify before the Commission, which desire to receive and record information, from all sources, which will be of value to this investigation."

People who wished to testify were invited to contact Hubback by letter. This approach gave ordinary Malayans an opportunity to meet the Commission, although the procedure was focused on the educated elite rather than the illiterate masses. Indigenous forest-dwelling communities and manual labourers were not the focus but from the report of the Commission, it seems that many Malay villagers actually attended the meetings, most of the time with village headmen leading them. Through the questionnaires or during the meetings, at least 722 people provided statements to the Commission that were recorded, translated into English and published.

The contents of the Hubback report

The final report – nearly 1000 pages in three volumes – was edited by Hubback and Hawkins and published in 1932. The submissions to the Commission show a wide variety of opinions, from strong supporters of conservation to those who considered wildlife mainly as pests and a danger to mankind and agriculture. Kathirithamby-Wells (2005) notes how the Commission "presented a remarkable and unprecedented account of the human-animal encounter in a variety of situations" and "press reports of the evidence of witnesses fanned passions".

From the minutes that survived and the content published, it seems that the report honestly represents the submissions received. The report includes opinions totally opposed to the ideas of Hubback right alongside those that supported his views.

The testimonies can be divided into four categories: (1) those that insist on the need to preserve the wildlife of Malaya, (2) those that acknowledge the importance of wildlife preservation but consider that it should not infringe on the interests of agriculturalists, (3) those that consider wildlife mainly as a pest, and (4) those that did not show any particular opinion on wildlife conservation.

Although the detailed results presented in the report seems accurate, the analysis and final conclusions reached by Hubback appear somewhat distorted. He claimed that "there was, throughout Malaya, a very strong consensus of support" for the preservation of wildlife through the methods that he advocated. He dismisses opposition to conservation as simply a misunderstanding by deluded peasants: "in a few places, chiefly in Pahang, peasant witnesses, who may have been labouring under the delusion that this inquiry was primarily appointed to deprive them of the admitted rights of protection, or who may have been afraid that they might be asked to pay for something which at present they take for nothing, were hostile towards any steps for conservation" (WLCM 1932).

It is true that a majority of the respondents supported Hubback's views on wildlife conservation (Fig. 1). Out of 722 respondents, 230 considered wildlife preservation as a priority, and 213 considered it as important as long as protection for agriculturalists was provided, totalling 61% of the testimonies. Those who primarily saw wildlife as pests were a minority, representing only 28% of the respondents. The testimonies of the other respondents did not provide information on their views on the issue of wildlife preservation. At any rate, having only 61% in favour of conservation is far from a "very strong consensus".

Hubback seemed unwilling to delve into the complexities of the impressive dataset that he had assembled. Tan (2014) notes that several of Hubback's contemporaries respected his views on conservation "while deploring his lack of balance, misdirected enthusiasm and inability to give a true value to the real facts" (John Kempe of the Malayan Civil Service in a letter to the Colonial Office, 29 April 1934).

Importantly, Hubback failed to mention that the demographics of his respondents were not representative of the general population of British Malaya. The split by age group is not reported and only one respondent was a woman – Lady Colina Hussey, Vice-President, Society for the Prevention of Cruelty to Animals. Chinese and Indians were largely under-represented (6% and 1% of the respondents, respectively) while British and other Europeans were over-represented in the sample (24%).

Methods and Results

A window to Malayan attitudes towards wildlife in the 1930s

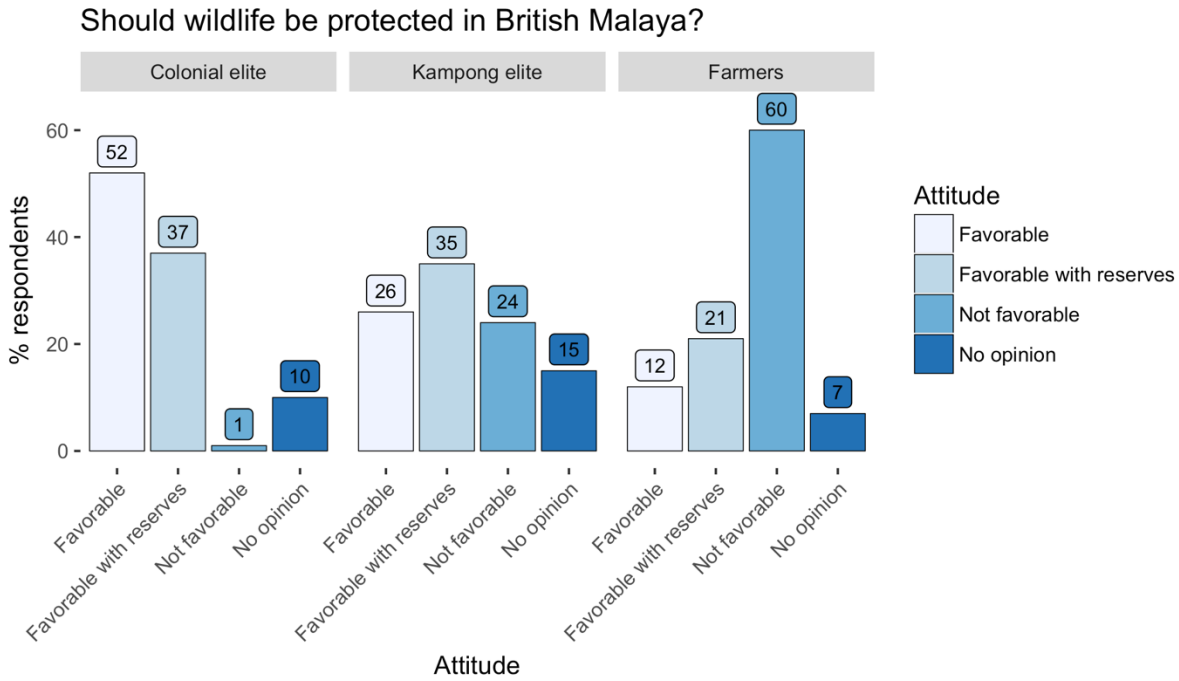
Making appropriate stratification to the data from the Hubback report allows us to draw a more accurate picture of the attitudes of the general population and several specific segments of society. In particular, by excluding the answers of the 171 European respondents the data can be used to gauge the opinion of Asian Malayans. This provides a more appropriate point of reference for comparison with the attitudes of the public in Peninsular Malaysia today.

Of the 551 Asians who testified in front of the Commission, 24% were in favour of the protection of wildlife, 28% considered it as important as long as protection for agriculturalists was provided, 36% saw wildlife primarily as pests, and 12% did not make any clear statement on how they viewed wildlife. We need to stress that the sample of Asians who responded to the survey was in no way representative of the Asian population of British Malaya.

Social status and attitudes towards wildlife

Further stratification of the sample yields additional insights. From the testimonies and the presentation of the witnesses, we were able to determine the social status of 467 of the Asian respondents, i.e. 85% of the sample. The social status of these respondents fell into three groups: (1) the colonial elite (civil servants and dignitaries, merchants, physicians, etc.), people who were closely connected with the British; (2) the kampong elite (*penghulus*, village headmen, imams, etc.), people of influence in their own village community; and (3) farmers (including planters and agriculturalists). The result shows a strong correlation between the social status and the perception of wildlife:

Figure 1. Attitudes towards wildlife among Asians in British Malaya according to social status.



A majority of farmers, i.e. 60% of respondents, considered wildlife mainly as a pest and as a threat to their source of income. Some were very vocal in their detestation of wildlife. For example, H. Abdul Manan bin Hussin, planter at Kluang, Johor, testified that "the worst pest are pigs, the next are birds, the next sambhur, the next monkey. I require the right of defence of my crops." (WLCM 1932: I-81); and Muhammad Sidik bin Kadir from Negri Sembilan who "would like to see Malaya stripped of all its deer." (WLCM 1932: I-133).

One in four village headmen shared similar opinions, especially some who appeared as the spokesperson for their community. For example, Wan Aim bin Wan Lambut, penghulu of Gerik, Perak, said: "I would like to see elephant and deer exterminated. Wild animals used to do some damage and my people were frightened of getting mixed up in a law suit if they shot. If [the farmers] are clear that they can shoot animals doing damage they will be pleased to return to the old system of licenses. I don't think kampong people with inadequate weapons should shoot elephants and that if there is a rogue elephant, government should deal with it." (WLCM: I).

However, 35% of the village headmen emphasized the need to protect wildlife from extinction as long as it was no direct threat to crops, livestock, and human lives, and as many as 26% considered the protection of wildlife as a priority. Respectively, 21% and 12% of the planters and agriculturalists shared the same views. Some of them even considered that it was the responsibility of the farmers to keep their estate safe.

For example, Yeap Seng was a Chinese planter in Batu Pahat, Johor, who managed 2000 acres of rubber and coconut. He considered that "if we planters have a fence, the estate is reasonably safe, an owner is partly responsible for damage by Wild Life." (WLCM: I-79). The penghulu Abdul Kadir bin Rahmat shared a similar view: "Clean estates are reasonably safe".

We find that generally, the higher the social status and the closer the connection with the British, the more the respondent would support measures to protect wildlife. In the survey, 60% of the European respondents considered wildlife preservation as a priority and 34% that wildlife should be protected but the interests of the agriculturalists should be taken into account. The colonial elite, people who were working or interacting on a daily basis with the British, supported very similar views to those of the colonial masters sympathetic with wildlife conservation. Some of them, like Che Abdul Dahim bin Che Wik, Chief Kathi of Kedah, former district officers of Baling and Langkawi, have been quite active. Che Abdul Dahim said that he "addressed the government on the necessity of wild life preservation and asked that laws should be passed."

The stratification we use here manages to elucidate some interesting findings despite the inevitable bias of the approach of the Commission in that they only captured the views of those that actually came forward and testified to them. As mentioned, there was no special effort to seek the views of illiterate rural communities such as the Orang Asli. Also there was little effort to seek the input of labourers in plantations or in the tin mines and thus the proportion of Chinese and Indian respondents was far below that found in the wider population. There was also a bias towards those with views on wildlife strong enough to motivate them to attend the consultations.

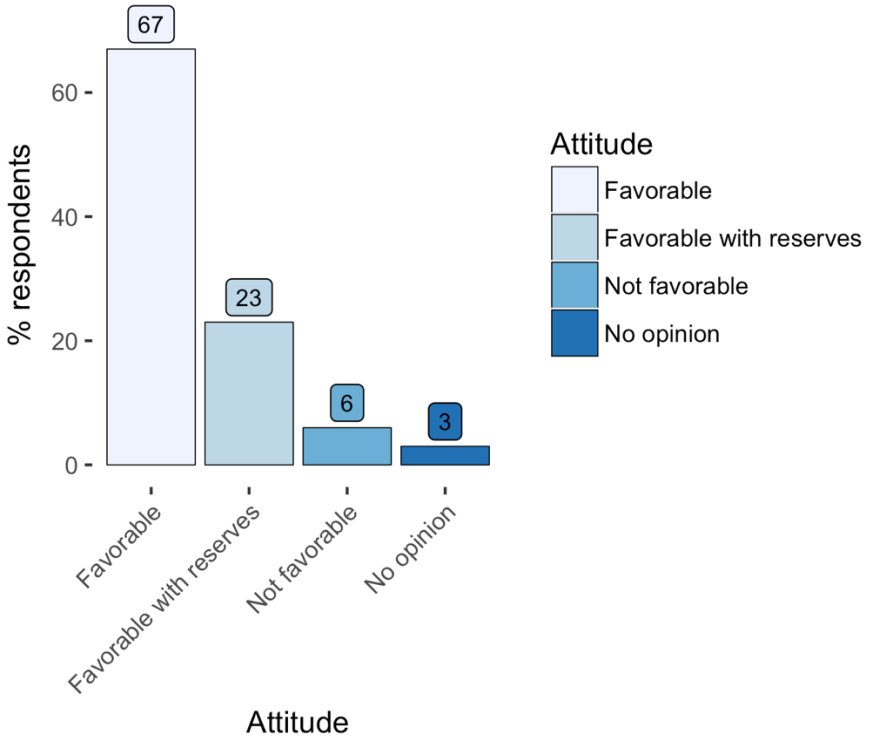
Hunting and attitudes towards wildlife

The practice of hunting was strongly correlated with a positive perception of wildlife. Among the 98 respondents who mentioned that they hunted occasionally or regularly, 68% supported measures to protect wildlife, including the licensing of hunting; 24% favoured wildlife protection as long as it did not prevent agriculturalists to protect their crops and livestock; and only 7% considered wildlife primarily as pests that should be eradicated (Fig. 2). This profile was independent of social status and was also found among most farmers who hunted. Only 18% of farmers who hunted considered wildlife to be pests and 82% were in favour of wildlife protection.

In Malaya, as elsewhere in the British Empire and in the United States, hunters were largely sympathetic to the protection of wildlife (MacKenzie, 1988; Reiger, 1975). They were the first to witness its disappearance. From their testimonies, we can see that it was not only a question of game management, but more of a will to preserve "the beauty of the world". The testimony of

Haji Mohamed Khatib bin Aman, penghulu of Setul, is enlightening: "I used to do some [hunting] but now Sambhur are all gone. They have been wiped out since removal of protection [1929]. Some of my people go elsewhere to [hunt]. I think protection of Sambhur should be restored and that there should be prohibition of shooting for some years to let them breed. Deer used to [do] damage but my people did not fence. I would like to see the Deer back again so long as they did only a little damage. If the Wild Life is wiped out, the world will be as it were naked." (WLCM: I-128). Yahaya bin Abu Talib, a Major in the Johor military who used to hunt with the Sultan explained that "in the future, Wild Life will be extinguished. It would be a pity if the Wild Life were extinguished. I am fond of Wild Life." (WLCM: I-78).

Figure 2. Attitudes towards wildlife among Asians in British Malaya: respondents who were hunters.



These views explain why some hunters joined the Game Department of their State as Game Rangers or even Honorary Game Rangers (Guérin 2017). Ahmad bin Lebai Jamal worked as Game Ranger in Pahang and Negri Sembilan for eight years when he testified in front of the Commission: "I have been a professional hunter, tracker and guide for the last 32 years and have hunted in Burma, Negri Sembilan, and Pahang, having shot everything but a Rhinoceros. I personally have shot 20 elephant, 1 seladang, 4 tiger, and about 20 sambhur. Deer have much decreased since the removal of protection. It is impossible to say how many have been shot, but I estimate that through the state three-quarters of the sambhur have been killed. Complete extermination is within sight. It would be a disgrace if the wild life of Malaya was lost. (…) Reserves for game ought to be made." (WLCM 1932: I-131).

Motivations to protect wildlife

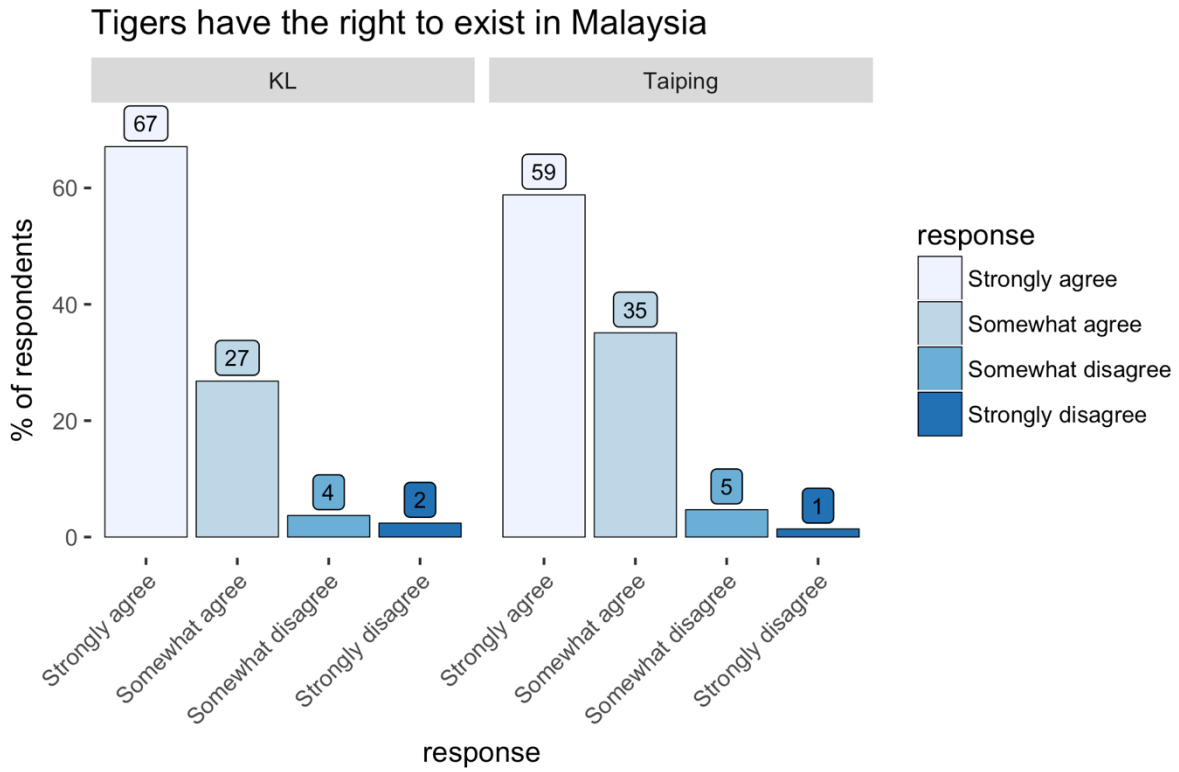
The purpose of why wildlife should be protected varied widely among respondents. While for Hubback and many Europeans it was a question of progress and civilisation that perfectly fitted the colonial rhetoric, Malayan witnesses came forward with quite different reasons when they explained their point of view. For Tungku Abdul Muluk bin Tungku Yahaya, Penghulu of Ulu Klawang, "wild animals are pretty, in danger of extinction, a food supply, and a source of amusement". Abdul Kadir bin Rahmar praised the ecological role of animals, "Tiger are rare in my

mukim, here they are not very dangerous to man and keep down Deer and Pig", while Yop bin H. Mohammad, a forest ranger in Johor emphasized their action as seed dispersers (WLCM 1932: I-83). Like many hunters, most of Malaysian respondents who supported actions to protect wildlife highlighted the fact that wildlife is part of the world and its disappearance would have an impact on its beauty. The phrase "Wild Life is an ornament to the country" appears in several testimonies (WLCM 1932: I -91, I-132). Its origin could not be traced. Some of the respondents even used religious reasons to justify the protection to wildlife such as "The Lord God created man and beast" (WLCM 1932: I-135).

Local attitudes towards wildlife in 2016

How do the attitudes towards wildlife of 1930s Malaya compare with those of present day Peninsular Malaysia? While we do not have data that allows us to make exact comparisons we do, however, have some recent data that suggests a favourable trend.

Figure 3. Present-day attitudes towards tiger conservation in Peninsular Malaysia.



In 2016, as part of a study about knowledge, attitudes, and practices towards wildlife conservation, we asked 525 Malaysian citizens whether they believed that tigers had the right to exist in their country. Our sample was from two urban locations in Peninsular Malaysia, including 246 respondents in Kuala Lumpur (the capital city of ~7.3 million people) and 279 respondents in Taiping (a town in Perak of ~215,000 people).

The overwhelming majority of our sample held positive values towards tigers, with 94% of the respondents either agreeing or agreeing strongly that tigers have the right to exist in the country (Fig. 3). We found no differences in attitudes between people in Kuala Lumpur and Taping (χ^2=5.3, df=3, P=0.15; Fig. 3). When asked to justify positive responses, their comments included, "I love animals"; "My religion teaches me that all living things live with a reason"; "They have an important role in the food chain"; "For educational purposes, so that future generations can learn about them"; "To maintain the natural balance"; and, "We can make money with them from tourism". The most common rationale for negative responses was "For safety reasons". The

attitudes of these urban populations in 2016 resemble those of the colonial elite surveyed by Hubback (Figs. 1 and 3).

Discussion

The Hubback report provides us with an extraordinary glimpse at attitudes towards wildlife in the early 1930s, nearly fifty years after the first laws and regulations taken by the British and the Sultans to protect the Malaysian Wildlife were drawn up (Kathirithamby-Wells, 2005) and two decades before public awareness campaigns were launched by the Game Department, the Education Department, the Malayan Nature Society and later other NGOs. When Hubback conducted his inquiry, wildlife in the Peninsula (particularly rhinos, gaur, elephants and sambar deer) were on the decline due to the withdrawal of legal protection, increased hunting with firearms, deforestation and the development of the plantations and mines frontier. Many Asian Malayans, especially within the elite, were already concerned that wildlife could disappear and supported actions to protect it. It is actually worth emphasizing that more than a third of farmers – people whose livelihoods were often directly affected by wild animals – supported increased measures to protect wildlife.

The respondents to Hubback's inquiry raised a number of issues that are still very important today. These include recognising that locals have to take responsibility for the mitigation of human-wildlife conflict (e.g. farmers constructing and maintaining their own fences). Hubback's respondents also showed a good understanding of ecological interactions such as trophic cascades (e.g. that tigers are needed to keep deer populations in check) and the role of mammals in plant population dynamics through seed dispersal.

Stratification of Hubback's respondents makes it clear that people's attitudes towards wildlife conservation varied according to their social group. There were very few Asian urban respondents in Hubback's survey, and even those living in Kuala Lumpur and Singapore could experience the threat of animal raids[1]. The farmers whose livelihood could be jeopardized by wildlife were much less keen on conservation than the elite. This is not surprising since wildlife poses much smaller a risk for the safety and livelihoods of the elite and urbanites.

This sympathetic attitude towards conservation among the 'sheltered' groups is reflected in the attitudes of present-day urban Malaysians. The respondents both in Kuala Lumpur and in a relatively small town (Taiping) showed attitudes with levels of favourability to wildlife comparable to those of the 1930s elite. The reasons provided to justify the importance of conserving wildlife are also remarkably similar, with people in the recent survey still considering that wildlife "Are God's creation", "Belong here", and "Are important for ecosystems".

Since the 1930s Malaya has undergone many changes. Plantations continued to expand and forest cover dropped from more than 80% in 1930 to around 44% in 2010 (Miyamoto et al., 2014). There was a large increase in total population from around 3 million then to around 20 million today and there has also been a significant trend towards urbanisation. In 1930, the Malayan population was more than 80% rural but since 1990, the majority of the population has been urban and today less than 25% of the people lives outside town and cities in Peninsular Malaysia (Populstat 2017).

If the urban attitudes of wildlife in our survey are reflective of those of urban Malaysians throughout the Peninsula, we can tentatively say that favourable attitudes towards conservation have accompanied urbanisation in Malaysia. However, this is not enough to entirely explain the shift towards a more open mind-set in favour of conservation. Penghulu, Ketua Kampong, imams…, who in 1930 were much more in favour of the protection of wildlife than the other village dwellers, shared with them a very similar way of life. The main differences were their role as leaders and their access to education. The vast majority of the village elite mastered reading and writing, while literacy rate in British Malaya was only 32% for the overall population, 25% among

[1] Peter Boomgaard and Cedric Tan &al. have shown that tigers' attacks in Singapore could occur in the city (Tan & al. 2015; Boomgaard 2001), while elephants were still raiding rubber plantations and gardens in Damansara, Bukit Kiara or Kuala Lumpur itself in the 1920s (Guérin 2017).

the Malays, in 1947 (Vandenbosch & Butwell, 1957). Literacy was most probably lower in the 1930s. In 2010, adults' literacy rate was 93% in Malaysia (Unesco Institute for Statistics). We can confidently come forward with the hypothesis that literacy and primary education had an impact on wildlife perception in Malaysia, even if this needs to be confirmed by further studies. Our results are in accordance with trends seen elsewhere. Manfredo et al. (2003), for example, found positive effects of income, education, and urbanization on positive shifts in values towards wildlife in the U.S. Urban dwellers in Croatia also show more positive towards wildlife (i.e. wolves; Majić & Bath 2005), and the level of education has a positive influence on attitudes towards conservation among rural communities in Ecuador (Fiallo & Jacobson 1995). Moreover, public awareness campaigns can have positive effects on people's attitudes towards conservation (van der Ploeg et al. 2011), hence, the impact of the conservation campaigns and nature education conducted by environment orientated organisation such as the Malayan and then Malaysian Nature Society, the World Wild Fund for Nature, the Ministry of Education, etc. would also need to assessed.

The fact that urbanisation could result in a more sympathetic attitude towards conservation would not be surprising but it does have implications for the way wildlife is managed, particularly how the financial burden for conservation is shared between people living in the cities and those in the countryside. At present the rural population has to bear most of the cost of crop raiding by animals such as deer, pigs and elephants. This financial burden, which is often coupled with physical risks, has a direct influence on rural people's attitudes towards conservation. A more equitable split in the cost via subsidised insurance schemes (Chen et al., 2013) or electric fences (Ponnusamy et al., 2016) would improve rural attitudes and ultimately increase the potential for effective conservation. Recent studies (Kafashi et al., 2015) suggest that Malaysians are willing to pay to see elephants in captivity and even to contribute to a trust fund for the protection of wild elephants (Poh and Shahwahid, 2008).

All in all, this study shows how adopting interdisciplinary approaches, in this case using methods from history and sociology can shed light on key aspects of conservation biology that would not be apparent to natural scientists working solely within their own disciplines such as zoology and ecology. The Hubback report deserves additional analysis and we hope to have shown how it can, when treated with the appropriate caveats, be used as a baseline for attitude surveys for many years to come.

Acknowledgements

M.G.'s research was financed with support from the Soutien à la mobilité internationale (SMI) program of the Institut des Sciences humaines et sociales of the French National Center for Scientific Research (CNRS). The University of Nottingham Malaysia Campus, welcomed him as a visiting-scholar. Arkib Negara Malaysia gave M.G. access to their records and resource persons. The 2016 survey was carried out as part of Management & Ecology of Malaysian Elephants (MEME), a joint research project between the Department of Wildlife and National Parks (DWNP) Peninsular Malaysia and the University of Nottingham Malaysia Campus (UNMC). MEME is partially funded by Yayasan Sime Darby (grant M0005.54.04), including an MSc scholarship to A.S.L.T. and a PhD scholarship to T.L. We are very grateful to all the people who entertained our questions, management of Zoo Negara, Taiping Sentral Mall and Zoo Taiping and volunteers who helped to conduct the survey in Kuala Lumpur and Taiping.

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